Crown Castle
300 Barr Harbor Drive
Suite 300
Conshohocken, PA 19428

June 5, 2024

Via Fedex # 776714489120

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

RE: **Notice of Exempt Modification for Verizon Wireless: 5000382932**
Crown Site ID# 826222
201 South Main Street, Newtown, CT 06470
Latitude: 41° 22′ 41.32″/ Longitude: -73° 16′ 26.94″

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless currently maintains fifteen (15) antennas at the 126-foot mount on the existing 150-foot monopole tower located at 201 South Main Street, Newtown, CT 06470. The property is owned by RV Retailer New Hampshire Real Estate LLC and the tower is owned by Crown Castle. Cellco Partnership d/b/a Verizon Wireless now intends to remove three (3) antennas and replace with three (3) new antennas with 12 remaining antennas and ancillary antenna equipment at the 126-ft level. This Eligible Facilities Request for antenna modification/proposal of an existing telecommunications facility includes hardware that is both 4G (LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

Planned Modification:

Tower:
Install New:
(3) SAMSUNG – MT6413-77A ANTENNAS
(3) SAMSUNG – RF4461D-13A RADIOS
(3) SAMSUNG – RF4439D-25A RADIOS
(3) COMMSCOPE – BSAMNT-SBS-1-2 SIDE BY SIDE MOUNTING BRACKET

Remove:
(3) COMMSCOPE-SBNHH-1D65B ANTENNAS
(3) ALCATEL-LUCENT- UHIC B4 RRH 2X60-4R RADIOS
(3) ALCATEL-LUCENT – UHBA B13 RRH 4X30 RADIOS

Relocate:
(6) COMMSCOPE – SBNHH-1D65B ANTENNAS

The original date and conditions of the zoning of this facility are unknown despite diligent search efforts to obtain the same.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to A. Jeffrey Capeci, First Selectman, Town of Newtown, Rob Sibley, Director of Planning & Land Use, Town of Newtown and RV Retailer New Hampshire Real Estate LLC, Property Owner. Crown Castle is the tower owner.

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

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

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

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

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

6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, Cellco Partnership d/b/a Verizon Wireless respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to Attn: Jenifer Bachi.

Sincerely,

Jenifer Bachi
Permitting Specialist
300 Barr Harbor Drive, Ste. 300
Conshohocken, PA 19428
(610) 635-3221
Jenifer.bachi@crowncastle.com

Attachments are as follows:

Exhibit A – Original Facility Approval
Exhibit B – Property Card
Exhibit C – Property Map
Exhibit D – Construction Drawings
Exhibit E – Structural Analysis Report
Exhibit F – Mount Analysis Report
Exhibit G – Power Density / RF Emissions Report
Exhibit H – Recipient Mailing Records
Check #2967706 for $625 Application Fee

cc:

Via Fedex #776713497316
A.Jeffrey Capeci, First Selectman
Town of Newtown
Newtown Municipal Center
3 Primrose Street
Newtown, CT 06470
203-270-4101

Via Fedex #776713569319
Rob Sibley, Director of Planning & Land Use
Town of Newtown
Newtown Municipal Center
3 Primrose Street
Newtown, CT 06470
203-270-4276

Via Fedex #776713614782
RV Retailer New Hampshire Real Estate LLC
301 East Las Olas Blvd
Suite 700
Fort Lauderdale, FL 33301

Crown Castle, Tower Owner

EXHIBIT A

Original Facility Approval

-none found.

EXHIBIT B

Property Card

201 SOUTH MAIN STREET

Location	201 SOUTH MAIN STREET	**M/B/L**	36/ 12/ 10/ /
Acct#	00383600	**Owner**	RV RETAILER NEW HAMPSHIRE REAL ESTATE LLC
Assessment	$4,935,490	**Appraisal**	$7,050,690
PID	8311	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2022	$4,154,140	$2,896,550	$7,050,690
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2022	$2,907,900	$2,027,590	$4,935,490

Owner of Record

Owner	RV RETAILER NEW HAMPSHIRE REAL ESTATE LLC	**Sale Price**	$7,500,000
Co-Owner	ATTN JONATHAN P FERRANDO	**Book & Page**	1194/591
Address	301 EAST LAS OLAS BLVD SUITE 700 FORT LAUDERDALE, FL 33301	**Sale Date**	05/12/2022
		Instrument	38

Ownership History

Ownership History				
Owner	**Sale Price**	**Book & Page**	**Instrument**	**Sale Date**
RV RETAILER NEW HAMPSHIRE REAL ESTATE LLC	$7,500,000	1194/591	38	05/12/2022
201 SOUTH MAIN STREET REAL ESTATE LLC	$2,000,000	1173/0829	07	07/01/2021
CHRISTIAN OXFORD ASSOCIATES LLC	$1,350,000	1132/0873	00	10/25/2019
BLUELINX CORP	$0	1005/0848	03	03/22/2012
ABP CT(NEWTOWN) LLC	$1,285,486	0813/0903	00	05/17/2004

Building Information

Building 1 : Section 1

Year Built: 2022

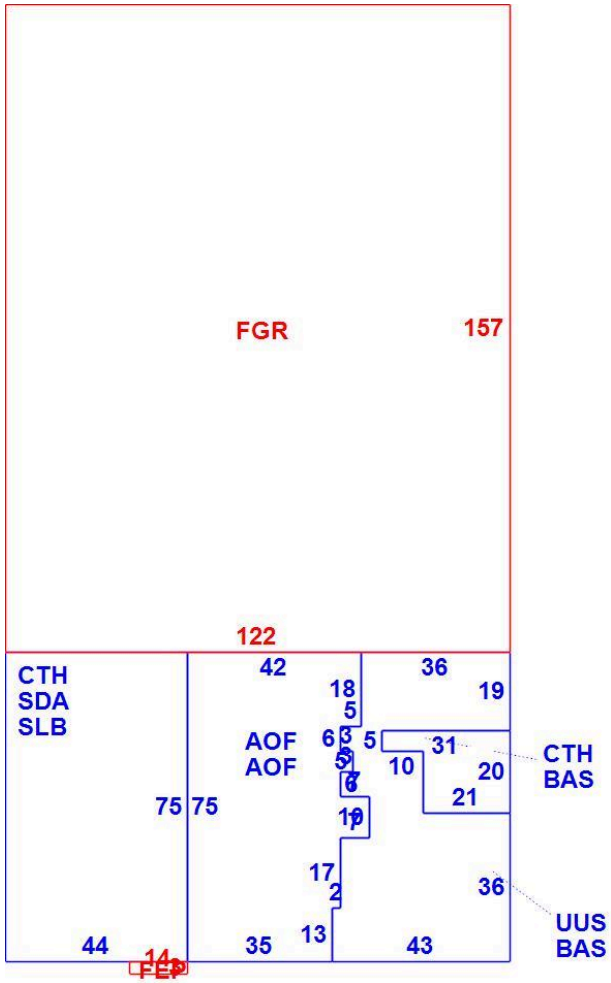
Living Area: 12,074

Building Attributes	
Field	**Description**
Style:	Auto Repair
Model	Comm/Ind
Grade	B+
Stories:	2
Occupancy	1.00
Exterior Wall 1	Pre-Fin Metal
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Rolled Compos
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	Laminated Wood
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Struct Class	
Bldg Use	COMM BLDG
Total Rooms	16
Total Bedrms	
Total Baths	6
1st Floor Use:	
Heat/AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths/Plumbing	ABOVE AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	ABOVE AVERAGE
Wall Height	30.00
% Comn Wall	

Building Photo

(https://images.vgsi.com/photos/NewtownCTPhotos//\00\01\93\93.jpg)

Building Layout



(ParcelSketch.ashx?pid=8311&bid=8311)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
AOF	Office	5,848	5,848
SDA	Store Display Area	3,300	3,300

BAS	First Floor	2,926	2,926
CTH	Cathedral Ceiling	3,770	0
FEP	Finished Enclosed Porch	42	0
FGR	Garage	19,154	0
SLB	Slab	3,300	0
UUS	Unfinished Upper Story	2,456	0
		40,796	12,074

Extra Features

Extra Features				Legend
Code	**Description**	**Size**	**Value**	**Bldg #**
ELV1	Elevator	1.00 UNITS	$80,000	1
MEZ1	Mezzanine - Unf.	1750.00 S.F.	$21,000	1

Land

Land Use

Use Code 3300
Description AUTO V S&S
Zone SDD1
Neighborhood C110
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 22.73
Frontage
Depth
Assessed Value $2,027,590
Appraised Value $2,896,550

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
FN1	Fence			20000.00 L.F.	$84,000	1
PAV1	Paving	AS	Asphalt	30000.00 S.F.	$31,500	1
PTO	Patio	CN	Concrete	280.00 S.F.	$1,180	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2023	$4,154,140	$2,896,550	$7,050,690
2022	$4,154,140	$2,896,550	$7,050,690
2021	$80,940	$1,697,274	$1,778,214

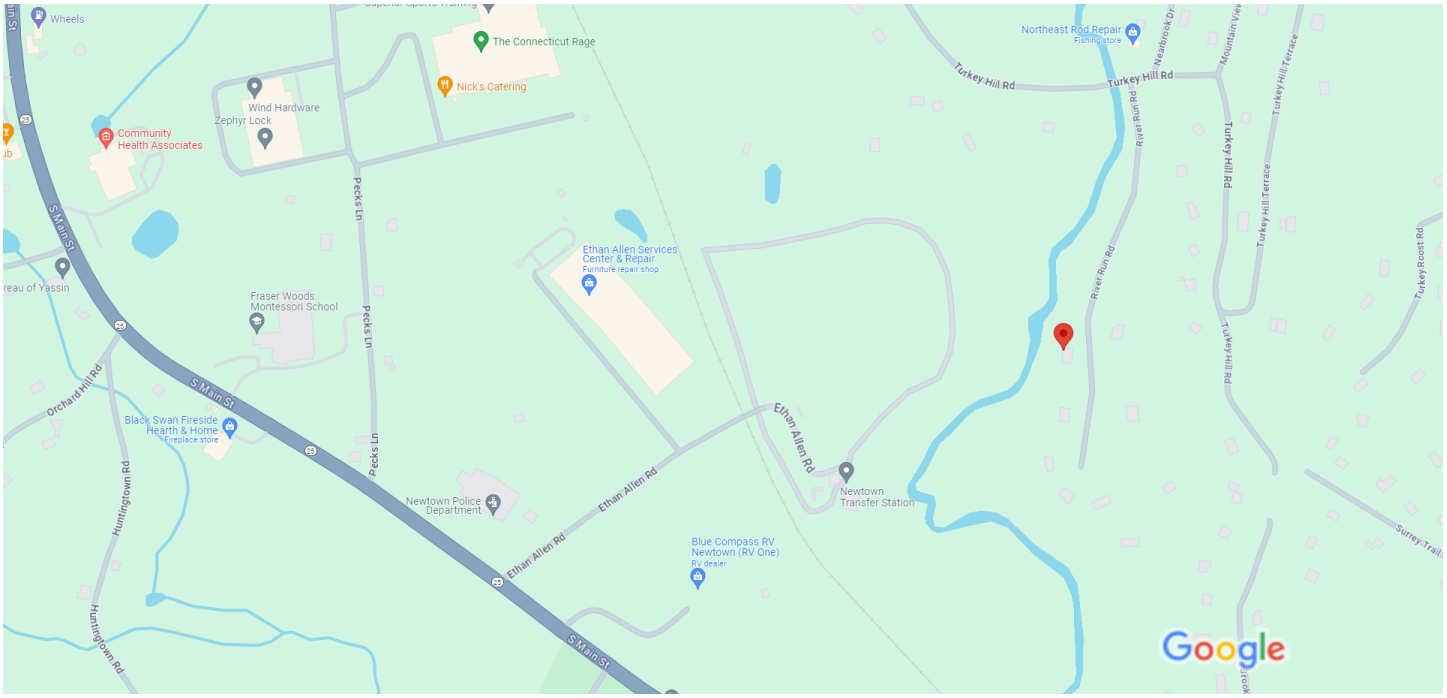
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2023	$2,907,900	$2,027,590	$4,935,490
2022	$2,907,900	$2,027,590	$4,935,490

2021	$56,660	$1,188,090	$1,244,750

EXHIBIT C

Property Map

Google Maps 201 S Main St



Map data ©2024 Google 200 ft

201 S Main St

Directions Save Nearby Send to phone Share

201 S Main St, Newtown, CT 06470

9PJJ+72 Newtown, Connecticut

EXHIBIT D

Construction Drawings

verizon

VERIZON SITE NUMBER: 5000382932
VERIZON SITE NAME: NEWTOWN SOUTH CT
VERIZON PROJECT: 16092597
SITE TYPE: MONOPOLE
TOWER HEIGHT: 150'-0"

BUSINESS UNIT #: 826222
SITE ADDRESS: 201 SOUTH MAIN STREET
NEWTOWN, CT 06470
COUNTY: FAIRFIELD
JURISDICTION: TOWN OF NEWTOWN

SITE INFORMATION

CROWN CASTLE USA INC.

SITE NAME:	NEWTOWN/RT-25
BU NUMBER:	826222
TOWER OWNER:	CROWN CASTLE USA, INC. 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	VERIZON WIRELESS 1095 AVENUE OF THE AMERICAS NEW YORK, NY 10036
SITE ADDRESS:	201 SOUTH MAIN STREET NEWTOWN, CT 06470
COUNTY:	FAIRFIELD
LATITUDE:	41° 22' 41.4" / 41.3782°
LONGITUDE:	-73° 16' 26.74" / -73.2741°
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	397'+/- AMSL
AREA OF CONSTRUCTION:	EXISTING
CURRENT ZONING:	UNKNOWN
MAP/PARCEL #:	NEWT-000038-003600
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	GLOBAL SIGNAL ACQUISITION PO BOX 277455 ATLANTA, GA 30384-7455
JURISDICTION:	TOWN OF NEWTOWN 3 PRIMROSE STREET NEWTOWN , CT 06470
ELECTRIC PROVIDER:	NORTHEAST UTILITIES (800) 286-2000

PROJECT TEAM

A&E FIRM:	CROWN CASTLE USA, INC. 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CROWN CASTLE USA INC. DISTRICT CONTACTS:	2000 CORPORATE DRIVE CANONSBURG, PA 15317 ALEXANDER MABBETT - PROJECT MANAGER ALEXANDER.MABBETT@CROWNCASTLE.COM HEATHER MILLER - AES HEATHER.MILLER@CROWNCASTLE.COM

NOTE:
PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1	SITE PLAN
C-2	TOWER ELEVATIONS
C-3	ANTENNA PLANS
C-4	FINAL EQUIPMENT SCHEDULE
C-5	EQUIPMENT DETAILS & SPECIFICATIONS
C-6	COLOR CODE MATRIX
G-1	GROUNDING DETAILS
ATTACHED	MOUNT MODIFICATION (BY OTHERS)
ATTACHED	RFDS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 22X34. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL CONNECTICUT ONE CALL
(800) 922-4455 CBYD.COM
CALL 2 WORKING DAYS
BEFORE YOU DIG!
811

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT	https://pmi.vzwsmart.com
SMART TOOL VENDOR PROJECT NUMBER	10218077
VzW LOCATION CODE (PSLC)	467565

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

MOUNT MODIFICATION REQUIRED	Y

VzW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VzW SMART KIT APPROVED VENDORS

APPROVALS

VERIZON SIGNATURE BLOCK

APPROVAL	SIGNATURE	DATE
SITE ACQUISITION		
CONSTRUCTION		
RADIO		
MICROWAVE		
TELCO		
EQUIPMENT		
PROJECT ADMINISTRATOR		
WO ADMINISTRATOR		

CROWN CASTLE USA INC. SIGNATURE BLOCK

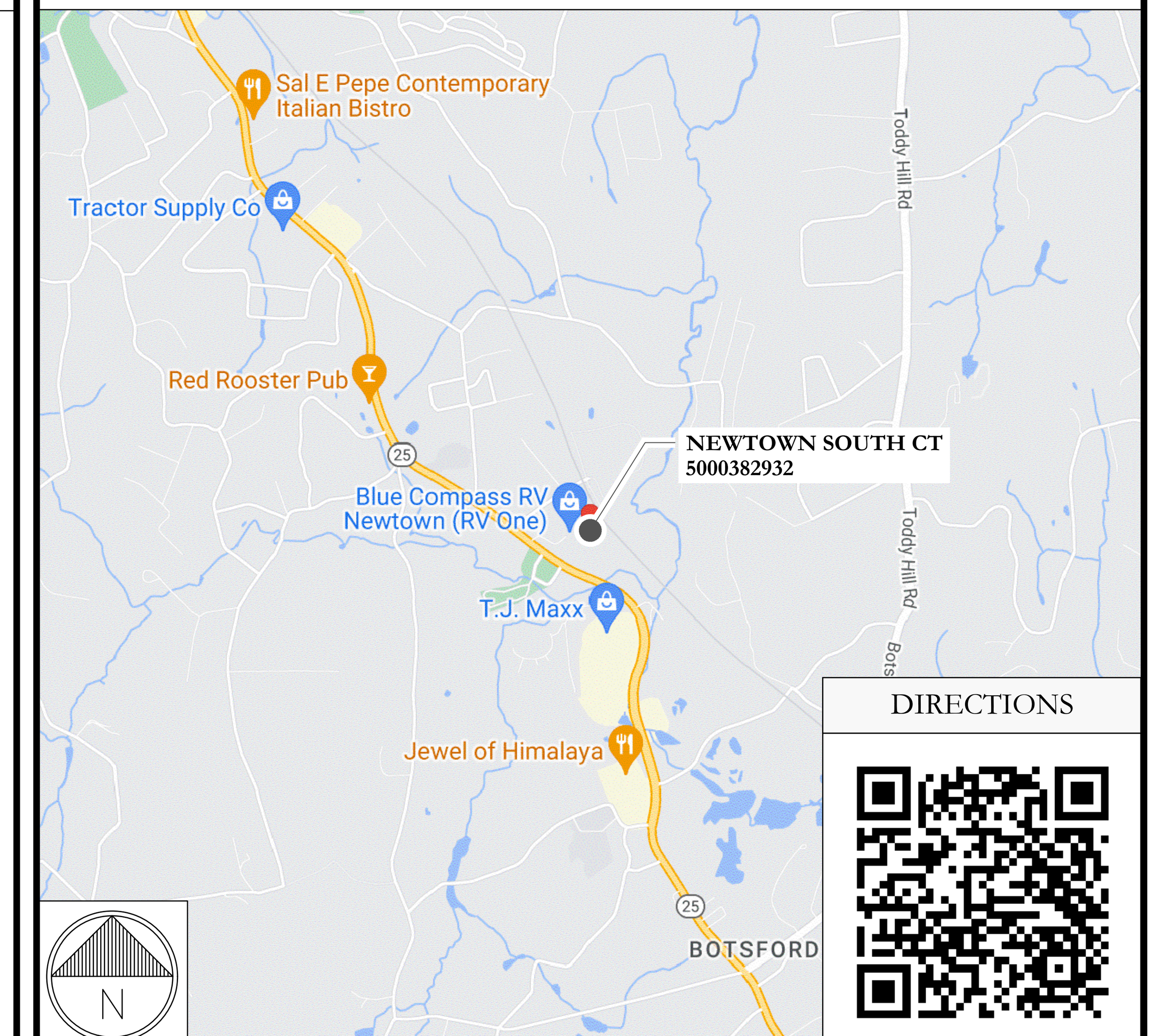
APPROVAL	SIGNATURE	DATE
SITE ACQUISITION		
PLANNER		
CONSTRUCTION		
PROJECT MANAGER		
UTILITY MANAGER		
LANDLORD		

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK:
- REMOVE (3) COMMSCOPE - SBNHH-1D65B ANTENNA
- REMOVE (3) ALCATEL LUCENT - UHIC B4 RRH 2X60-4R RADIO
- REMOVE (3) ALCATEL LUCENT - UHBA B13 RRH 4X30 RADIO
- RELOCATE (6) COMMSCOPE - SBNHH-1D65B ANTENNA
- INSTALL (3) SAMSUNG - MT6413-77A ANTENNA
- INSTALL (3) SAMSUNG - RF4461D-13A RADIO
- INSTALL (3) SAMSUNG - RF4439D-25A RADIO
- INSTALL (3) COMMSCOPE - BSAMNT-SBS-1-2 SIDE BY SIDE MOUNTING BRACKET
- INSTALL MOUNT MODIFICATIONS PER MOUNT MODIFICATION DESIGN BY COLLIERS ENGINEERING & DESIGN DATED 03/08/24

LOCATION MAP



NO SCALE

APPLICABLE CODES & REFERENCE DOCUMENTS

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

CODE TYPE	CODE
BUILDING	2022 CT STATE BUILDING CODE/2021 IBC W/ CT AMENDMENTS
MECHANICAL	2022 CT STATE BUILDING CODE/2021 IMC W/ CT AMENDMENTS
ELECTRICAL	2022 CT STATE BUILDING CODE/2020 NEC W/ CT AMENDMENTS

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS:	MORRISON HERSHFIELD
DATED:	04/30/24
MOUNT ANALYSIS:	COLLIERS ENGINEERING & DESIGN
DATED:	03/08/24
RFDS REVISION:	REV2
DATED:	04/18/24
ORDER ID:	662914
REVISION:	0

INSTALLER NOTE:
NO PROPOSED LOADING TO BE ADDED UNTIL MOUNT MODIFICATIONS ARE INSTALLED PER MOUNT MODIFICATION DESIGN BY COLLIERS ENGINEERING & DESIGN DATED 03/08/24.

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	05/22/24	CDM	FINAL	GMA

DocuSigned by:
Graham Andres
9575EC119634479...
STATE OF CONNECTICUT GRAHAM M. ANDRES 29538 LICENSED PROFESSIONAL ENGINEER
5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

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

SHEET NUMBER:	REVISION:
T-1	0

CC VERIZON NATIONAL ANTENNA AMENDMENT_2024-05-03

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED– NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800–788–7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
2. "LOOK UP" – CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:
   THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED–STD–10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).
5. ALL SITE WORK TO COMPLY WITH QAS–STD–10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED–STD–10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
   CARRIER: VERIZON
   TOWER OWNER: CROWN CASTLE USA INC.
2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CROWN CASTLE.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE–THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER–TO–CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
   #4 BARS AND SMALLER......40 ksi
   #5 BARS AND LARGER......60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH......3"
   CONCRETE EXPOSED TO EARTH OR WEATHER:
      #6 BARS AND LARGER......2"
      #5 BARS AND SMALLER......1–1/2"
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
      SLAB AND WALLS......3/4"
      BEAMS AND COLUMNS......1–1/2"
7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL–OF–POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON–ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON–METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON–METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD–WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
   - 4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
   - 4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI–CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL–CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC ON STRAIGHTS AND SCHEDULE 80 PVC UNDER ALL TRAFFIC EASEMENTS AND ALL ELBOWS/90s. ABOVE GRADE CONDUIT TO BE SCH 80 PVC OR IMC/RMC CONDUIT. EMT IS ALLOWED AT STUB UP LOCATIONS AND INDOORS ONLY.
18. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON–PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER–ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "VERIZON".
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE

SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
277/480V, 3Ø	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
DC VOLTAGE	POS (+)	RED**
	NEG (–)	BLACK**

* SEE NEC 210.5(C)(1) AND (2)
** POLARITY MARKED AT TERMINATION

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

ABBREVIATIONS:

ANT	ANTENNA
(E)	EXISTING
FIF	FACILITY INTERFACE FRAME
GEN	GENERATOR
GPS	GLOBAL POSITIONING SYSTEM
GSM	GLOBAL SYSTEM FOR MOBILE
LTE	LONG TERM EVOLUTION
MGB	MASTER GROUND BAR
MW	MICROWAVE
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
(P)	PROPOSED
PP	POWER PLANT
QTY	QUANTITY
RECT	RECTIFIER
RBS	RADIO BASE STATION
RET	REMOTE ELECTRIC TILT
RFDS	RADIO FREQUENCY DATA SHEET
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
SIAD	SMART INTEGRATED DEVICE
TMA	TOWER MOUNTED AMPLIFIER
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
W.P.	WORK POINT

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	05/22/24	CDM	FINAL	GMA

DocuSigned by:
Graham Andres
9575EC119634479...

GRAHAM M. ANDRES
29538

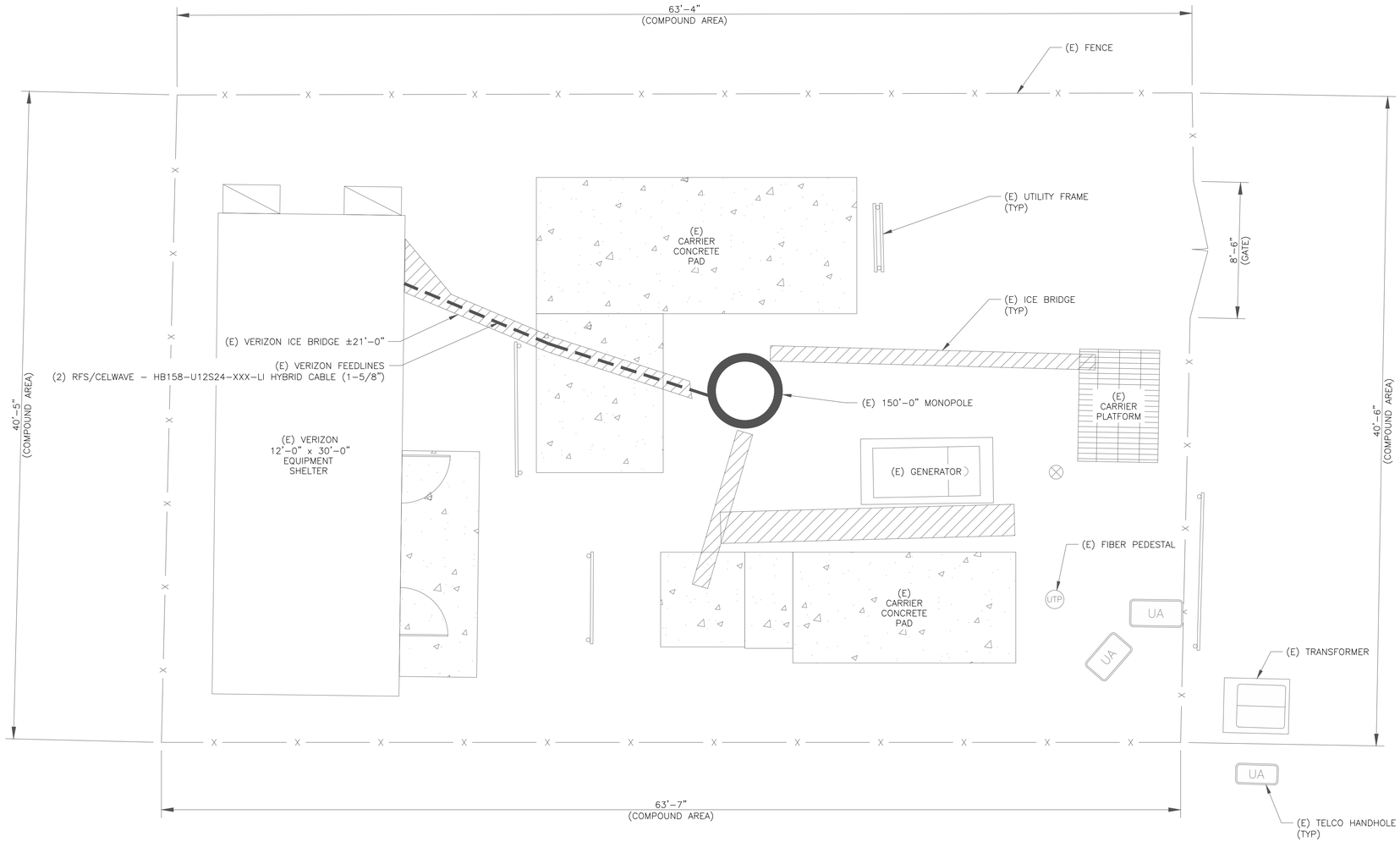
5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

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

SHEET NUMBER: T-2

REVISION: 0



1 SITE PLAN
SCALE: 4' 3' 2' 1' 0 4' 1/4"=1'-0" (FULL SIZE) 1/8"=1'-0" (11x17)

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	05/22/24	CDM	FINAL	GMA

DocuSigned by:
Graham Andres
9575EC1196344F9...

STATE OF CONNECTICUT
GRAHAM M. ANDRES
29538
LICENSED
PROFESSIONAL ENGINEER

5/22/2024 | 4:15:58 PM CDT

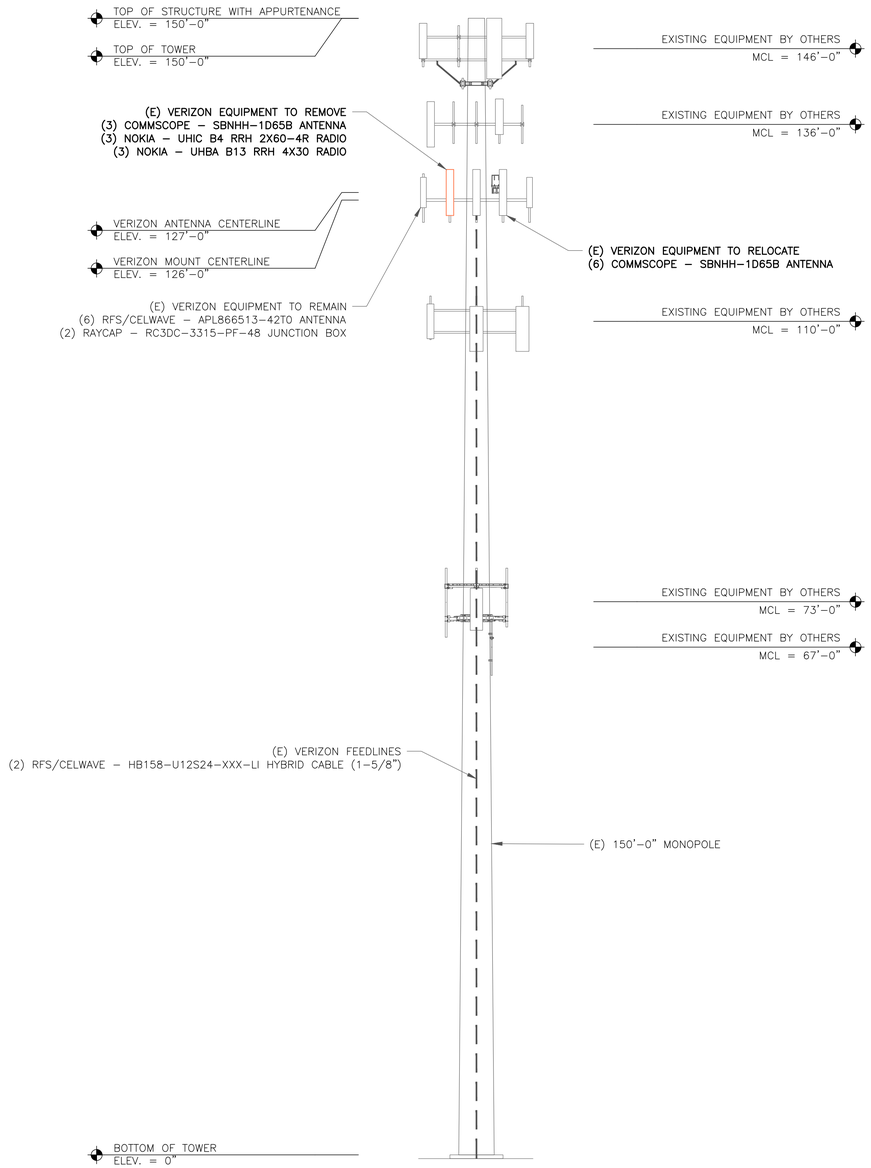
CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

SHEET NUMBER: C-1

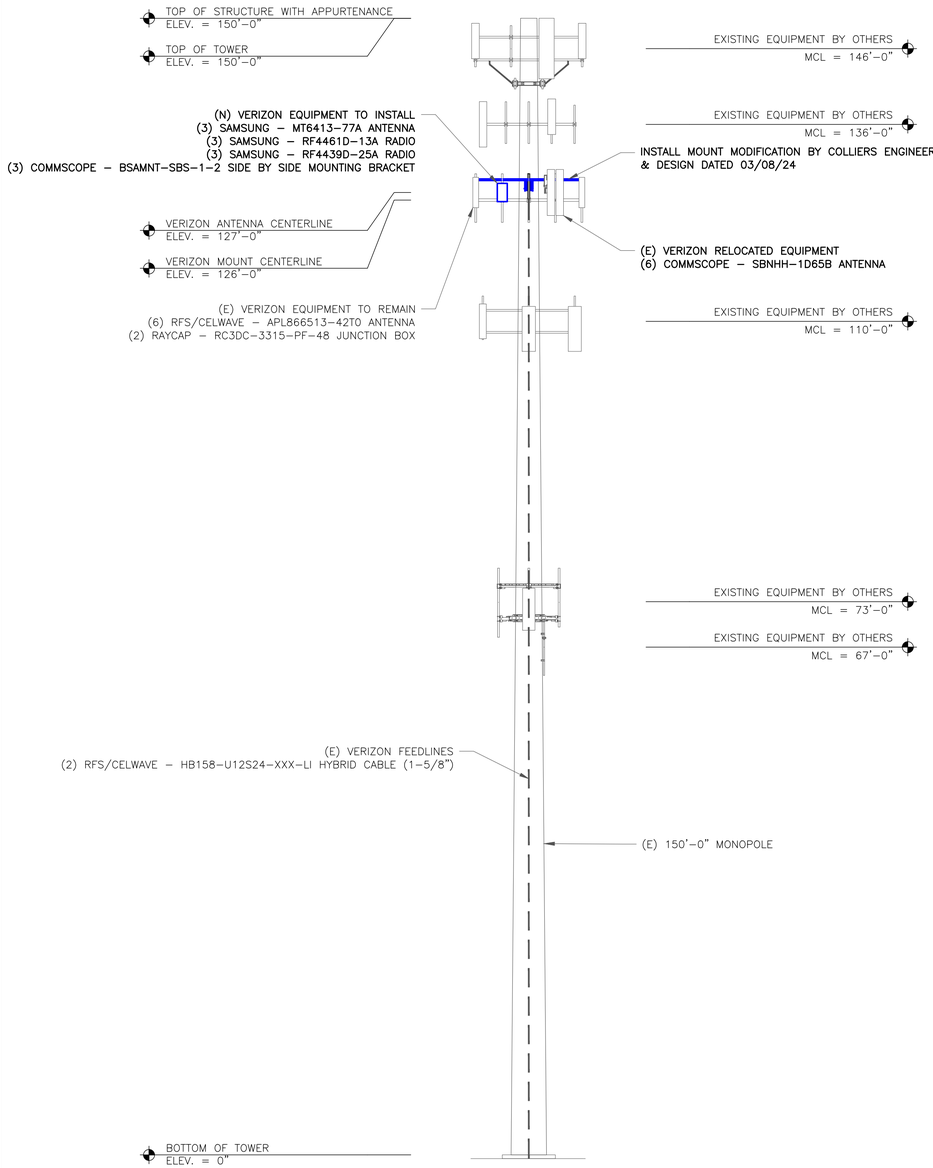
REVISION: 0

VERIZON EQUIPMENT

ANTENNA CL: 127'–0"
MOUNT CL: 126'–0"



1 EXISTING TOWER ELEVATION
SCALE: 10' 5' 0 10' 1"=10'–0" (FULL SIZE) 1"=20'–0" (11x17)



2 FINAL TOWER ELEVATION
SCALE: 10' 5' 0 10' 1"=10'–0" (FULL SIZE) 1"=20'–0" (11x17)

INSTALLER NOTE:

NO PROPOSED LOADING TO BE ADDED UNTIL MOUNT MODIFICATIONS ARE INSTALLED PER MOUNT MODIFICATION DESIGN BY COLLIERS ENGINEERING & DESIGN DATED 03/08/24.

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	05/22/24	CDM	FINAL	GMA

DocuSigned by:
Graham Andres
9575EC1196344F3...

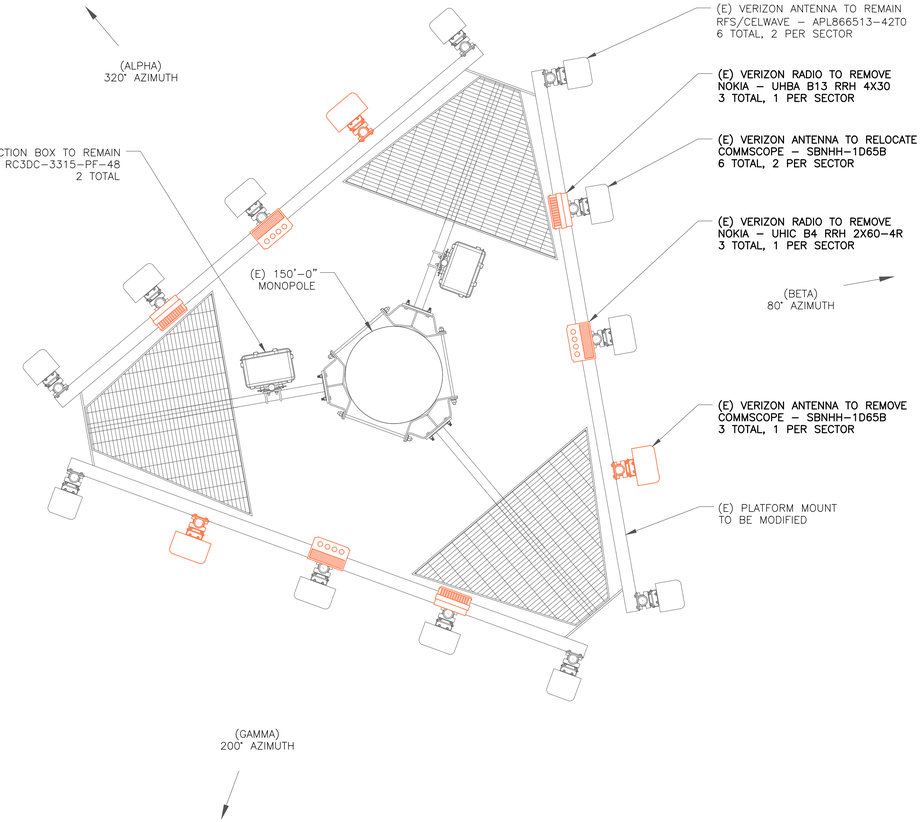
STATE OF CONNECTICUT
GRAHAM M. ANDRES
29538
LICENSED
PROFESSIONAL ENGINEER

5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

SHEET NUMBER: C-2

REVISION: 0



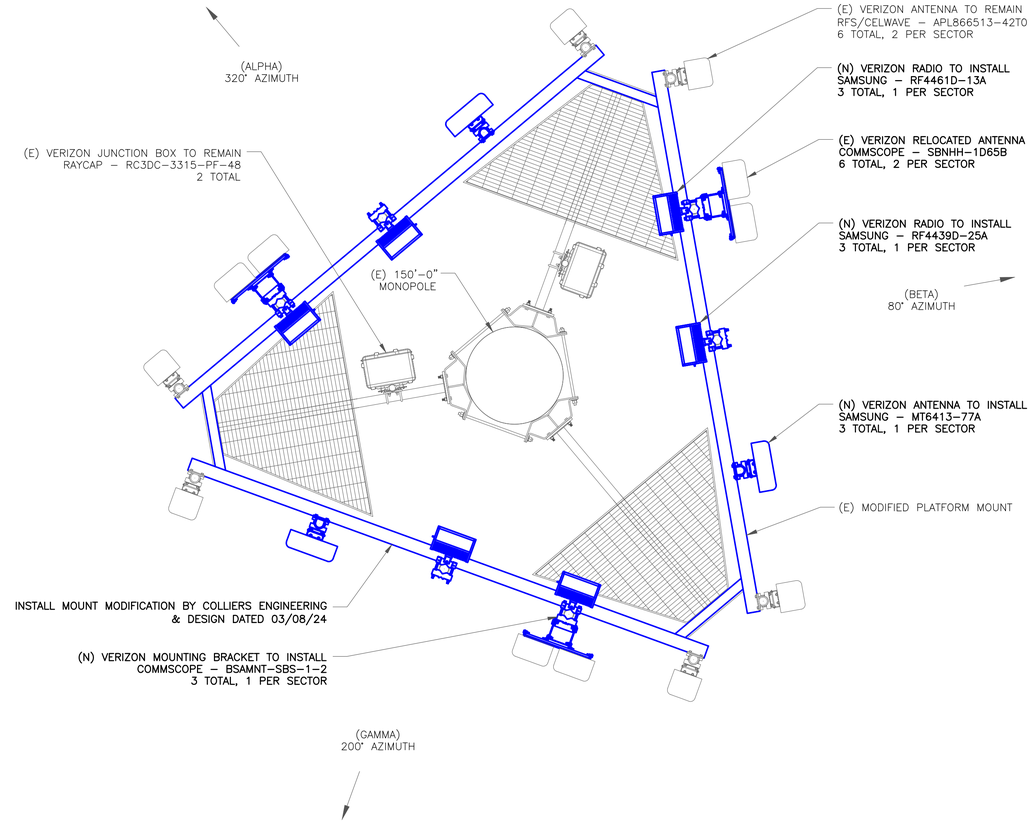
1 EXISTING ANTENNA PLAN

SCALE: 2' 1' 0 2' 1/2"=1'-0" (FULL SIZE) 1/4"=1'-0" (11x17)

N

INSTALLER NOTE:

NO PROPOSED LOADING TO BE ADDED UNTIL MOUNT MODIFICATIONS ARE INSTALLED PER MOUNT MODIFICATION DESIGN BY COLLIERS ENGINEERING & DESIGN DATED 03/08/24.



2 FINAL ANTENNA PLAN

SCALE: 2' 1' 0 2' 1/2"=1'-0" (FULL SIZE) 1/4"=1'-0" (11x17)

N

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	05/22/24	CDM	FINAL	GMA

DocuSigned by:
Graham Andres
9575EC1190344F8...

STATE OF CONNECTICUT
GRAHAM M. ANDRES
29538
LICENSED
PROFESSIONAL ENGINEER

5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

SHEET NUMBER: C-3

REVISION: 0

FINAL EQUIPMENT SCHEDULE
(VERIFY WITH CURRENT RFDS)

POSITION	ANTENNA				RADIO			DIPLEXER			TMA		SURGE PROTECTION		CABLES			
	TECH	STATUS/MANUFACTURER MODEL	AZIMUTH	RAD CENTER	QTY.	STATUS/MODEL	LOCATION	QTY.	STATUS	LOCATION	QTY.	STATUS	QTY.	STATUS/MODEL	QTY.	STATUS/TYPE	SIZE	LENGTH
A1	850	(E) RFS/CELWAVE – APL866513-42T0	320°	127'-0"	–	–	–	–	–	–	–	–	–	–	2	(E) HYBRID CABLE	1-5/8"	–
A2	700 850 1900 AWS	(E) COMMSCOPE – SBNHH-1D65B	320°	127'-0"	1	(N) SAMSUNG – RF4461D-13A	TOWER	–	–	–	–	–	1	(E) RAYCAP – RC3DC-3315-PF-48		–	–	–
		(E) COMMSCOPE – SBNHH-1D65B	320°	127'-0"														
A3	–	–	–	–	1	(N) SAMSUNG – RF4439D-25A	TOWER	–	–	–	–	–	–	–	–	–	–	–
A4	CBAND	(N) SAMSUNG – MT6413-77A	320°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
A5	850	(E) RFS/CELWAVE – APL866513-42T0	320°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B1	850	(E) RFS/CELWAVE – APL866513-42T0	80°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B2	700 850 1900 AWS	(E) COMMSCOPE – SBNHH-1D65B	80°	127'-0"	1	(N) SAMSUNG – RF4461D-13A	TOWER	–	–	–	–	–	1	(E) RAYCAP – RC3DC-3315-PF-48	–	–	–	–
		(E) COMMSCOPE – SBNHH-1D65B	80°	127'-0"														
B3	–	–	–	–	1	(N) SAMSUNG – RF4439D-25A	TOWER	–	–	–	–	–	–	–	–	–	–	–
B4	CBAND	(N) SAMSUNG – MT6413-77A	80°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B5	850	(E) RFS/CELWAVE – APL866513-42T0	80°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
G1	850	(E) RFS/CELWAVE – APL866513-42T0	200°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
G2	700 850 1900 AWS	(E) COMMSCOPE – SBNHH-1D65B	200°	127'-0"	1	(N) SAMSUNG – RF4461D-13A	TOWER	–	–	–	–	–	–	–	–	–	–	–
		(E) COMMSCOPE – SBNHH-1D65B	200°	127'-0"														
G3	–	–	–	–	1	(N) SAMSUNG – RF4439D-25A	TOWER	–	–	–	–	–	–	–	–	–	–	–
G4	CBAND	(N) SAMSUNG – MT6413-77A	200°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–
G5	850	(E) RFS/CELWAVE – APL866513-42T0	200°	127'-0"	–	–	–	–	–	–	–	–	–	–	–	–	–	–

UNUSED FEEDLINES

–	–	–	–
–	–	–	–

1 FINAL EQUIPMENT SCHEDULE
SCALE: NOT TO SCALE

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	05/22/24	CDM	FINAL	GMA

DocuSigned by:
Graham Andres
9575EC1196324F3...

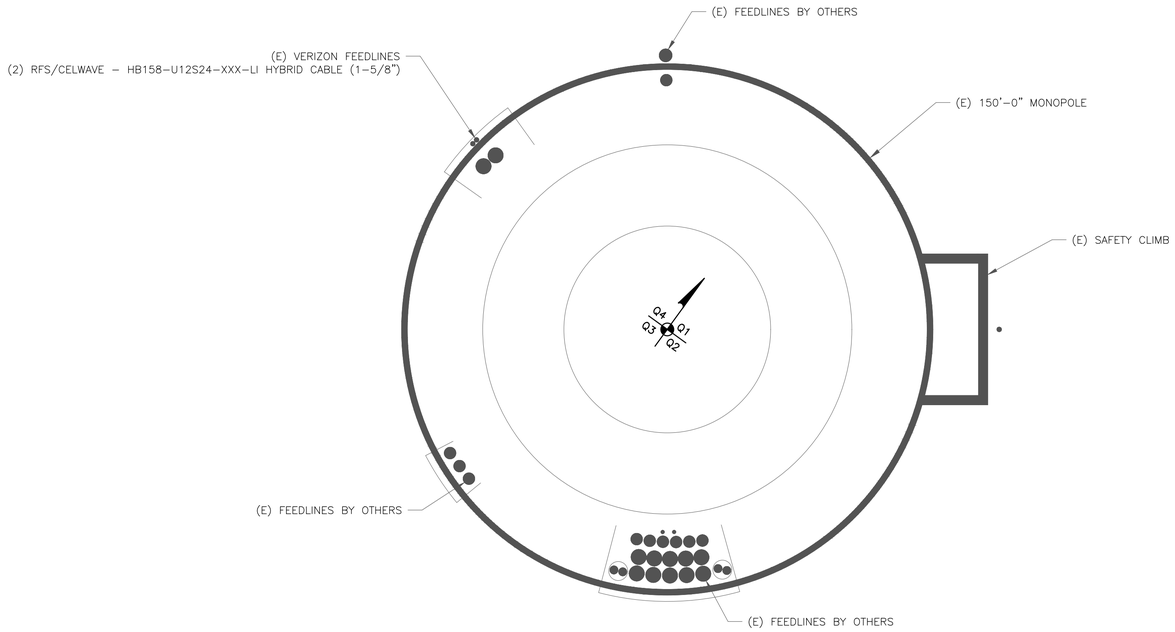
STATE OF CONNECTICUT
GRAHAM M. ANDRES
29538
LICENSED
PROFESSIONAL ENGINEER

5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

SHEET NUMBER: C-4

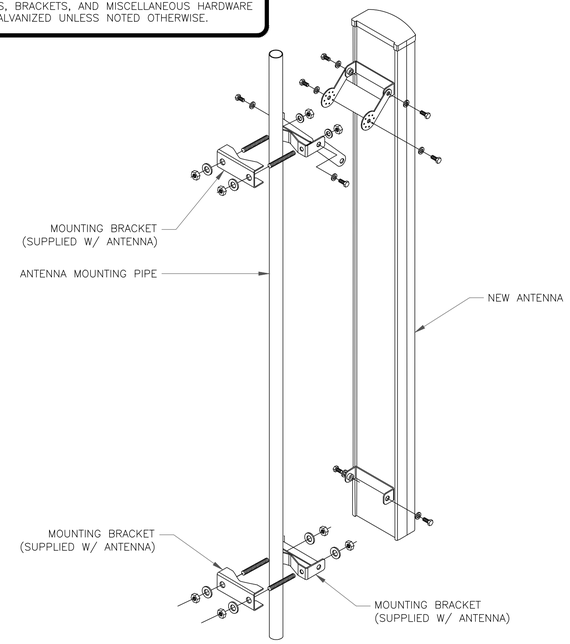
REVISION: 0



1 BASE LEVEL DETAIL
SCALE: NOT TO SCALE

INSTALLER NOTE:

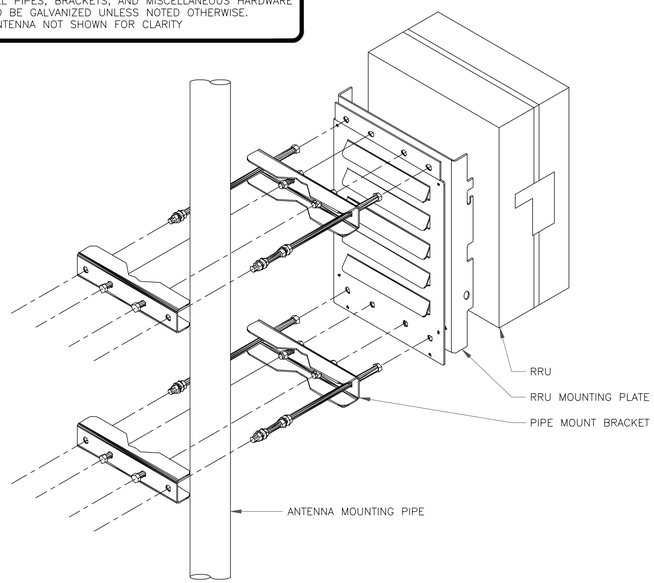
1. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.



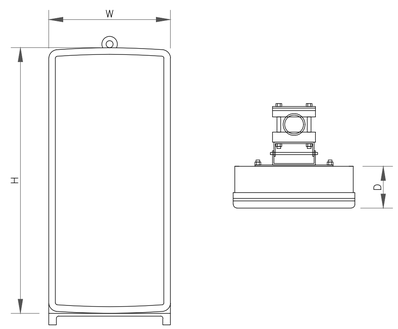
2 ANTENNA MOUNTING DETAIL
SCALE: NOT TO SCALE

INSTALLER NOTES:

1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRUs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRU PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.
4. ANTENNA NOT SHOWN FOR CLARITY

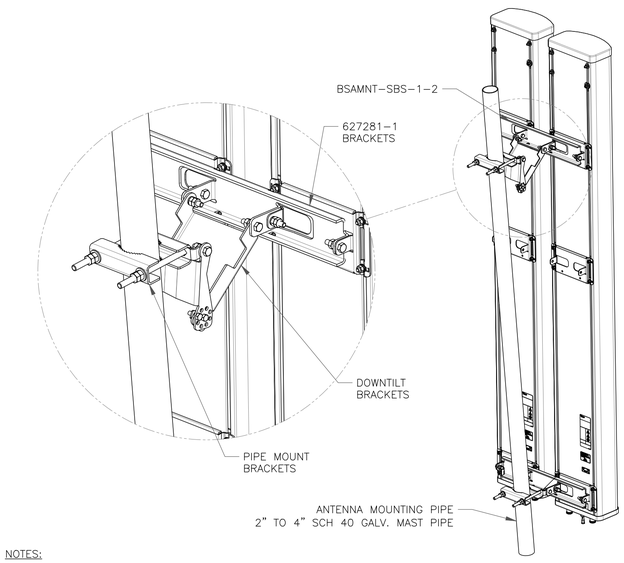


3 RRU MOUNTING DETAIL
SCALE: NOT TO SCALE



ANTENNA SPECS	
MANUFACTURER	SAMSUNG
MODEL #	MT6413–77A
HxWxD	28.9" x 15.75" x 5.51"
WEIGHT	57.3 LBS

4 SAMSUNG – MT6413–77A
SCALE: NOT TO SCALE



NOTES:

– BSAMNT–SBS–1–2 KIT CONTAINS
(2) 627281 MOUNTING BRACKETS.
– TORQUE THE M10 BOLT ASSEMBLY TO 37 N.m.
– PER MANUFACTURE'S RECOMMENDATIONS.

5 COMMSCOPE – BSAMNT–SBS–1–2
SCALE: NOT TO SCALE

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

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DocuSigned by:
Graham Andres
0575EC1106344...

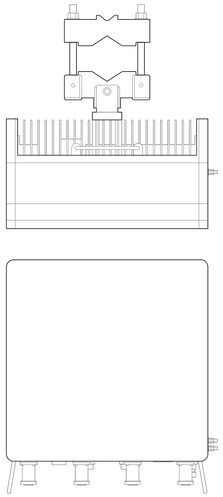
STATE OF CONNECTICUT
GRAHAM M. ANDRES
29538
LICENSED
PROFESSIONAL ENGINEER

5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

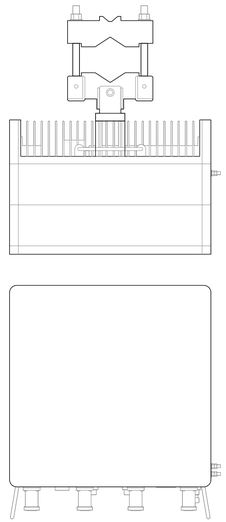
SHEET NUMBER: C-5.1

REVISION: 0



RADIO SPECS	
MANUFACTURER	SAMSUNG
MODEL #	RF4439D-25A
HxWxD	14.96" x 14.96" x 10.04"
WEIGHT	74.7 LBS

1 SAMSUNG – RF4439D-25A
SCALE: NOT TO SCALE



RADIO SPECS	
MANUFACTURER	SAMSUNG
MODEL #	RF4461D-13A
HxWxD	14.96" x 14.96" x 10.23"
WEIGHT	79.1 LBS

2 SAMSUNG – RF4461D-13A
SCALE: NOT TO SCALE

3 NOT USED
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

5 NOT USED
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

201 SOUTH MAIN STREET
NEWTOWN, CT 06470

EXISTING 150'-0"
MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
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DocuSigned by:
Graham Andres
9575EC1196344F6...

STATE OF CONNECTICUT
GRAHAM M. ANDRES
29538
LICENSED
PROFESSIONAL ENGINEER

5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

SHEET NUMBER: C-5.2

REVISION: 0

Azimuth (1) Alpha					
Cell (850 CDMA)	Red				
PCS2 (1900 LTE)	Pink	Red	Pink		
700 LTE	Lt. Green	Red	Lt. Green		
850 LTE	Purple	Red	Purple		
2100 LTE	Orange	Red	Orange		
High Band Dual Band (Shared Lines)	Orange	Pink	Red	Pink	Orange
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Red	Lt. Green	Purple
5G 28GHz	Brown	Red	Brown		
5G 39GHz	Blue	Red	Blue		
LAA	Gray	Red	Gray		
CBRS	White	Red	White		
L-Sub6 (C-Band)	Red	Red	Red		

Azimuth (2) Beta					
Cell (850 CDMA)	Blue				
PCS2 (1900 LTE)	Pink	Blue	Pink		
700 LTE	Lt. Green	Blue	Lt. Green		
850 LTE	Purple	Blue	Purple		
2100 LTE	Orange	Blue	Orange		
High Band Dual Band (Shared Lines)	Orange	Pink	Blue	Pink	Orange
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Blue	Lt. Green	Purple
5G 28GHz	Brown	Blue	Brown		
5G 39GHz	Blue	Blue	Blue		
LAA	Gray	Blue	Gray		
CBRS	White	Blue	White		
L-Sub6 (C-Band)	Red	Blue	Red		

Azimuth (3) Gamma					
Cell (850 CDMA)	Yellow				
PCS2 (1900 LTE)	Pink	Yellow	Pink		
700 LTE	Lt. Green	Yellow	Lt. Green		
850 LTE	Purple	Yellow	Purple		
2100 LTE	Orange	Yellow	Orange		
High Band Dual Band (Shared Lines)	Orange	Pink	Yellow	Pink	Orange
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Yellow	Lt. Green	Purple
5G 28GHz	Brown	Yellow	Brown		
5G 39GHz	Blue	Yellow	Blue		
LAA	Gray	Yellow	Gray		
CBRS	White	Yellow	White		
L-Sub6 (C-Band)	Red	Yellow	Red		

Azimuth (4) Delta					
Cell (850 CDMA)	Orange				
PCS2 (1900 LTE)	Pink	Orange	Pink		
700 LTE	Lt. Green	Orange	Lt. Green		
850 LTE	Purple	Orange	Purple		
2100 LTE	Orange	Orange	Orange		
High Band Dual Band (Shared Lines)	Orange	Pink	Orange	Pink	Orange
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Orange	Lt. Green	Purple
5G 28GHz	Brown	Orange	Brown		
5G 39GHz	Blue	Orange	Blue		
LAA	Gray	Orange	Gray		
CBRS	White	Orange	White		
L-Sub6 (C-Band)	Red	Orange	Red		

Azimuth (5) Epsilon					
Cell (850 CDMA)	White				
PCS2 (1900 LTE)	Pink	White	Pink		
700 LTE	Lt. Green	White	Lt. Green		
850 LTE	Purple	White	Purple		
2100 LTE	Orange	White	Orange		
High Band Dual Band (Shared Lines)	Orange	Pink	White	Pink	Orange
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	White	Lt. Green	Purple
5G 28GHz	Brown	White	Brown		
5G 39GHz	Blue	White	Blue		
LAA	Gray	White	Gray		
CBRS	White	White	White		
L-Sub6 (C-Band)	Red	White	Red		

Azimuth (6) Zeta					
Cell (850 CDMA)	Gray				
PCS2 (1900 LTE)	Pink	Gray	Pink		
700 LTE	Lt. Green	Gray	Lt. Green		
850 LTE	Purple	Gray	Purple		
2100 LTE	Orange	Gray	Orange		
High Band Dual Band (Shared Lines)	Orange	Pink	Gray	Pink	Orange
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Gray	Lt. Green	Purple
5G 28GHz	Brown	Gray	Brown		
5G 39GHz	Blue	Gray	Blue		
LAA	Gray	Gray	Gray		
CBRS	White	Gray	White		
L-Sub6 (C-Band)	Red	Gray	Red		

1 COLOR CODE MATRIX
SCALE: NOT TO SCALE

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
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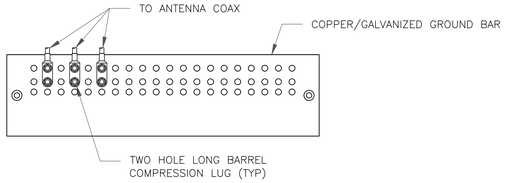
DocuSigned by: Graham Andres 9575EC11963447B...
STATE OF CONNECTICUT · GRAHAM M. ANDRES · 29538 · LICENSED PROFESSIONAL ENGINEER
5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

SHEET NUMBER: C-6

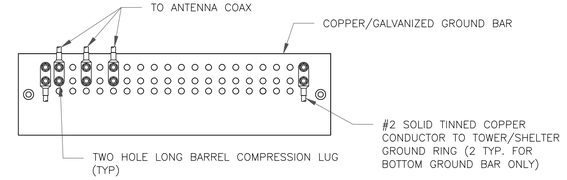
REVISION: 0



NOTES:

1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE

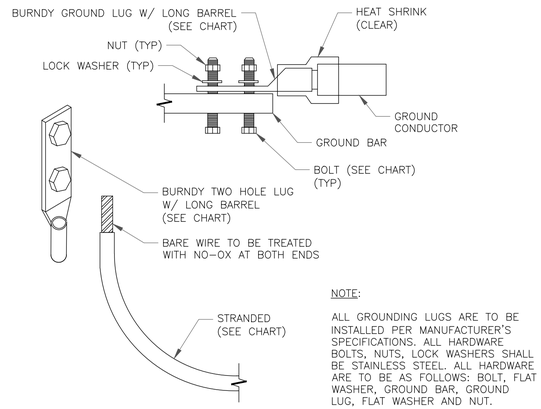


NOTES:

1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE

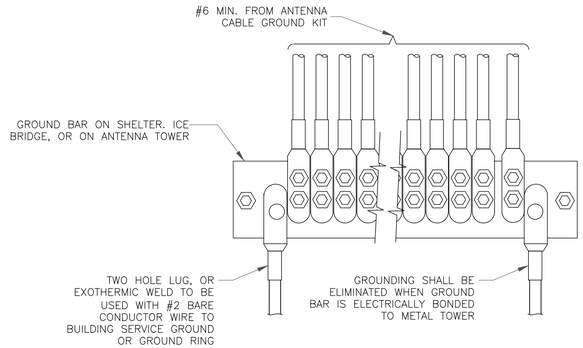
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



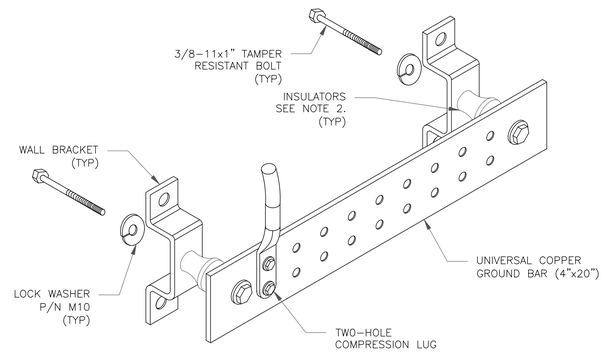
NOTE:

ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

3 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



4 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE

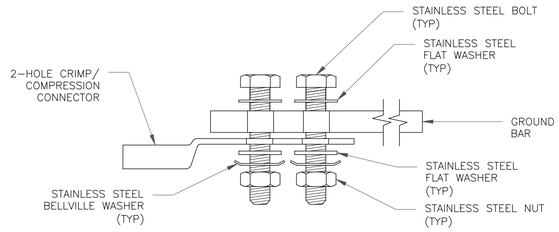


NOTES:

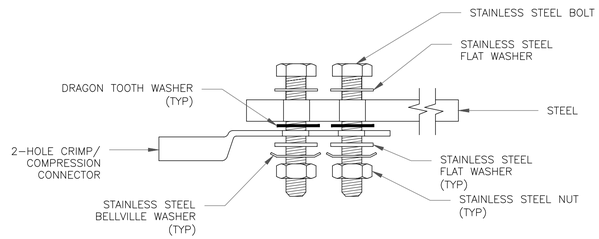
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.

2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

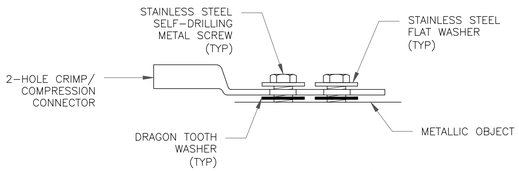
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

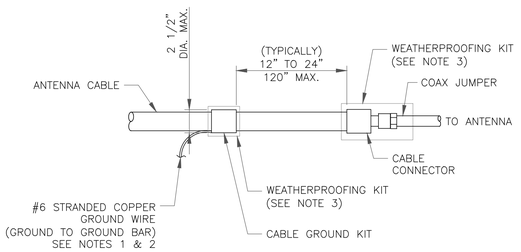


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

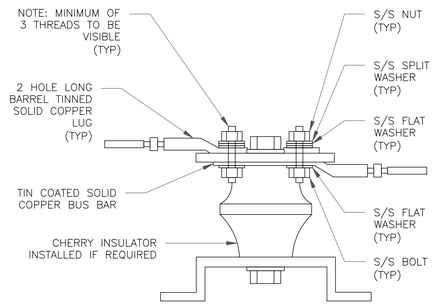
8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

6 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

verizon

CROWN CASTLE

VERIZON SITE NUMBER:
5000382932

BU #: **826222**

CROWN CASTLE SITE NAME
NEWTOWN/RT-25

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EXISTING 150'-0"
MONOPOLE

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DocuSigned by:
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9575EC1196344F3...

STATE OF CONNECTICUT
GRAHAM M. ANDRES
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5/22/2024 | 4:15:58 PM CDT

CROWN CASTLE USA INC.
CERTIFICATE OF REGISTRATION #PEC.0001101

SHEET NUMBER: G-1

REVISION: 0

EXHIBIT E

Structural Analysis Report

Date: **April 29, 2024**

Morrison Hershfield
1455 Lincoln Parkway, Suite 500
Atlanta, GA 30346
(770) 379-8500

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Site Number:	5000382932
	Site Name:	Newtown South CT
Crown Castle Designation:	**BU Number:**	826222
	Site Name:	Newtown/RT-25
	JDE Job Number:	2107963
	Work Order Number:	2297838
	Order Number:	662914 Rev. 0
Engineering Firm Designation:	**Morrison Hershfield Project Number:** CN13-451 / 2400001	
Site Data:	**201 South Main Street, Newtown, Fairfield County, CT 06470** **Latitude *41° 22' 41.32"*, Longitude *-73° 16' 26.94"*** **150 Foot – PiRod Monopole Tower**	

Morrison Hershfield is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC5: Proposed Equipment Configuration **Sufficient Capacity – 92.0%**

This analysis utilizes an ultimate 3-second gust wind speed of 116 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Respectfully submitted by:

G. Lance Cooke, P.E. (CT License No. PEN.0028133)
Senior Engineer

EXP 1/31/2024

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1) INTRODUCTION

This tower is a 150 ft monopole tower designed by PiRod Manufacturers Inc.

The tower has been modified multiple times to accommodate additional loading. All the above modifications have been considered in this analysis per their respective post modification reports.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	116 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	1 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
126.0	127.0	6	commscope	SBNHH-1D65B	2	1-5/8
		6	rfs celwave	APL866513-42T0 w/ Mount Pipe		
		3	samsung telecommunications	MT6413-77A w/ Mount Pipe		
		2	raycap	RC3DC-3315-PF-48		
		3	samsung telecommunications	RF4439D-25A		
		3	samsung telecommunications	RF4461D-13A		
	126.0	3	-	Side By Side Mounting Kit		
		1	-	Support Rail Kit [#VZWSMART-PLK1]		
		1	tower mounts	Platform Mount [LP 303-1]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
146.0	147.0	3	ericsson	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	10	1-5/8
		3	ericsson	ERICSSON AIR 21 B4A B2P w/ Mount Pipe		
	146.0	3	rfs/celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	ericsson	KRY 112 144/1_T-MOBILE		
		3	ericsson	RADIO 4449 B12/B71		
		1	-	Platform Mount [LP 304-1_KCKR-HR-1]		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
136.0	137.0	3	rfs/celwave	APXVTM14-C-120 w/ Mount Pipe	4	1-1/4
	136.0	3	rfs/celwave	APXVSPP18-C-A20 w/ Mount Pipe		
		3	alcatel lucent	1900MHZ RRH		
		3	alcatel lucent	800MHZ RRH		
		3	alcatel lucent	TD-RRH8X20-25		
		1	-	Platform Mount [LP 601-1]		
110.0	110.0	3	powerwave technologies	7770.00 w/ Mount Pipe	6 4 2	1-1/4 7/8 3/8
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 8843 B2/B66A_CCIV2		
		6	powerwave technologies	LGP21401		
		1	raycap	DC6-48-60-18-8C-EV		
		1	raycap	DC6-48-60-18-8F		
		1	-	Platform Mount [LP 303-1_HR-1]		
	109.0	3	cci antennas	DMP65R-BU6D w/ Mount Pipe		
		3	cci antennas	OPA65R-BU6D w/ Mount Pipe		
73.0	73.0	3	fujitsu	TA08025-B604	1	1-3/8
		3	fujitsu	TA08025-B605		
		1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Valmont SNP8HR-396		
	72.0	3	commscope	FFVV-65B-R2 w/ Mount Pipe		
67.0	68.0	1	gps	GPS_A	1	1/2

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	3536527	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	3917010	CCISITES
4-TOWER MANUFACTURER DRAWINGS	3536528	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3963744	CCISITES
4-POST-MODIFICATION INSPECTION	5156735	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	5982445	CCISITES
4-POST-MODIFICATION INSPECTION	6139913	CCISITES

3.1) Analysis Method

tnxTower (version 8.2.4.3), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

3.2) Assumptions

1) Tower and structures were maintained in accordance with the TIA-222 Standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. Morrison Hershfield should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	150 - 133	Pole	TP26x21.83x0.25	1	-7.65	1220.16	6.9	Pass
L2	133 - 98.42	Pole	TP34.0625x24.7837x0.3125	2	-19.33	1998.51	32.4	Pass
L3	98.42 - 64.75	Pole	TP41.75x32.4898x0.375	3	-30.23	2940.66	42.0	Pass
L4	64.75 - 31.92	Pole	TP49.0625x39.8468x0.375	4	-39.89	3460.78	53.8	Pass
L5	31.92 - 0	Pole	TP56.125x46.9609x0.375	5	-52.94	4075.94	63.1	Pass
							Summary	
						Pole (L5)	63.1	Pass
						Rating =	63.1	Pass

Table 5 - Tower Component Stresses vs. Capacity – LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	69.2	Pass
1	Base Plate		47.6	Pass
1	Base Foundation (Structure)	0	92.0	Pass
1	Base Foundation (Soil Interaction)		80.6	Pass

Structure Rating (max from all components) =	92.0%*

Notes:
1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed.
2) *Rating per TIA-222H, Section 15.5.

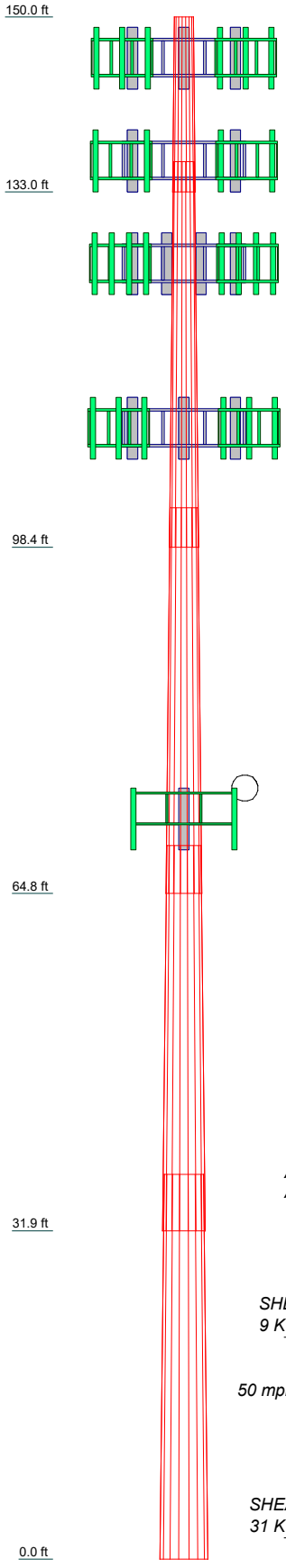
4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	17.0000	18	0.2500	2.9200	21.8300	26.0000		1.1
2	37.5000	18	0.3125	3.8300	24.7837	34.0625		3.7
3	37.5000	18	0.3750	4.6700	32.4898	41.7500		5.6
4	37.5000	18	0.3750	5.5000	39.8468	49.0625		6.7
5	37.4200	18	0.3750		46.9609	56.1250		7.8
							A572-65	24.8



MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 116 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 63.1%

ALL REACTIONS ARE FACTORED

AXIAL 74 K

SHEAR 9 K *MOMENT 878 kip-ft*

TORQUE 0 kip-ft

50 mph WIND - 1.0000 in ICE

AXIAL 53 K

SHEAR 31 K *MOMENT 3175 kip-ft*

TORQUE 1 kip-ft

REACTIONS - 116 mph WIND

MORRISON HERSHFIELD
Stantec
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Job: ***CN13-451 / 2400001***			
Project: ***826222 / Newtown/RT-25***			
Client: Crown Castle USA	Drawn by: ANS	App'd:	
Code: TIA-222-H	Date: 04/29/24	Scale: NTS	
Path:		Dwg No. E-1	

Tower Input Data

The tower is a monopole.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower is located in Fairfield County, Connecticut.
Tower base elevation above sea level: 399.00 ft.
Basic wind speed of 116 mph.
Risk Category II.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.00 ft.
Nominal ice thickness of 1.0000 in.
Ice thickness is considered to increase with height.
Ice density of 56.00 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Maximum demand-capacity ratio is: 1.05.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Assume Legs Pinned		Calculate Redundant Bracing Forces
	Consider Moments - Horizontals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Consider Moments - Diagonals	√	Use Clear Spans For Wind Area		SR Leg Bolts Resist Compression
	Use Moment Magnification		Use Clear Spans For KL/r		All Leg Panels Have Same Allowable
√	Use Code Stress Ratios		Retension Guys To Initial Tension		Offset Girt At Foundation
√	Use Code Safety Factors - Guys	√	Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Escalate Ice	√	Use Azimuth Dish Coefficients		Include Angle Block Shear Check
	Always Use Max Kz	√	Project Wind Area of Appurtenances		Use TIA-222-H Bracing Resist. Exemption
	Use Special Wind Profile	√	Alternative Appurt. EPA Calculation		Use TIA-222-H Tension Splice Exemption
	Include Bolts In Member Capacity		Autocalc Torque Arm Areas		Poles
	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination	√	Include Shear-Torsion Interaction
	Secondary Horizontal Braces Leg		Sort Capacity Reports By Component		Always Use Sub-Critical Flow
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Use Top Mounted Sockets
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Pole Without Linear Attachments
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs		Pole With Shroud Or No Appurtenances
	Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules		Outside and Inside Corner Radii Are Known

Tapered Pole Section Geometry

Section	*Elevation*	*Section Length*	*Splice Length*	*Number of Sides*	*Top Diameter*	*Bottom Diameter*	*Wall Thickness*	*Bend Radius*	*Pole Grade*
	ft	*ft*	*ft*		*in*	*in*	*in*	*in*	
L1	150.0000-133.0000	17.0000	2.92	18	21.8300	26.0000	0.2500	1.0000	A572-65 (65 ksi)
L2	133.0000-98.4200	37.5000	3.83	18	24.7837	34.0625	0.3125	1.2500	A572-65 (65 ksi)
L3	98.4200-64.7500	37.5000	4.67	18	32.4898	41.7500	0.3750	1.5000	A572-65 (65 ksi)
L4	64.7500-31.9200	37.5000	5.50	18	39.8468	49.0625	0.3750	1.5000	A572-65 (65 ksi)

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L5	31.9200-0.0000	37.4200		18	46.9609	56.1250	0.3750	1.5000	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	22.1282	17.1237	1007.4853	7.6609	11.0896	90.8492	2016.2962	8.5635	3.4021	13.608
	26.3625	20.4326	1711.6544	9.1412	13.2080	129.5922	3425.5610	10.2183	4.1360	16.544
L2	25.8515	24.2724	1836.3793	8.6873	12.5901	145.8585	3675.1749	12.1385	3.8119	12.198
	34.5398	33.4758	4817.4335	11.9812	17.3038	278.4040	9641.2058	16.7411	5.4450	17.424
L3	33.8935	38.2247	4980.7243	11.4008	16.5048	301.7737	9968.0023	19.1160	5.0582	13.489
	42.3362	49.2466	10650.9822	14.6881	21.2090	502.1916	21315.9793	24.6280	6.6880	17.835
L4	41.5690	46.9813	9247.7576	14.0125	20.2422	456.8559	18507.6837	23.4951	6.3530	16.941
	49.7615	57.9503	17355.1378	17.2841	24.9238	696.3293	34733.1119	28.9807	7.9750	21.267
L5	48.9952	55.4488	15203.3084	16.5380	23.8561	637.2918	30426.6216	27.7297	7.6051	20.28
	56.9330	66.3564	26056.1506	19.7913	28.5115	913.8821	52146.5865	33.1845	9.2180	24.581

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 150.0000-133.0000				1	1	1			
L2 133.0000-98.4200				1	1	1			
L3 98.4200-64.7500				1	1	1			
L4 64.7500-31.9200				1	1	1			
L5 31.9200-0.0000				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
******										
Climbing Rungs	B	No	Surface Ar (CaAa)	150.0000 - 0.0000	1	1	-0.100 0.000	0.7050		1.80
Safety Line 3/8	B	No	Surface Ar (CaAa)	150.0000 - 0.0000	1	1	-0.050 -0.050	0.3750		0.22
******										
CU12PSM9P8XXX(1-3/8)	A	No	Surface Ar (CaAa)	73.0000 - 0.0000	1	1	0.400 0.400	1.4110		1.66
******										
LDF4-50A(1/2)	A	No	Surface Ar (CaAa)	68.0000 - 0.0000	2	2	-0.200 -0.150	0.6250		0.15
******										

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
******									
HCS 6X12 4AWG(1-5/8)	C	No	No	Inside Pole	146.0000 - 0.0000	3	No Ice	0.0000	2.40
							1/2" Ice	0.0000	2.40
							1" Ice	0.0000	2.40
LDF7-50A(1-5/8)	C	No	No	Inside Pole	146.0000 - 0.0000	6	No Ice	0.0000	0.82
							1/2" Ice	0.0000	0.82
							1" Ice	0.0000	0.82
MLE Hybrid 9Power/18Fiber RL 2(1 5/8)	C	No	No	Inside Pole	146.0000 - 0.0000	1	No Ice	0.0000	1.07
							1/2" Ice	0.0000	1.07
							1" Ice	0.0000	1.07
******									
HB114-1-0813U4-M5J(1-1/4)	C	No	No	Inside Pole	136.0000 - 0.0000	3	No Ice	0.0000	1.20
							1/2" Ice	0.0000	1.20
							1" Ice	0.0000	1.20
HB114-21U3M12-XXXF(1-1/4)	A	No	No	Inside Pole	136.0000 - 0.0000	1	No Ice	0.0000	1.22
							1/2" Ice	0.0000	1.22
							1" Ice	0.0000	1.22
******									
******									
HB158-U12S24-XXX-LI(1-5/8)	A	No	No	Inside Pole	126.0000 - 0.0000	2	No Ice	0.0000	3.20
							1/2" Ice	0.0000	3.20
							1" Ice	0.0000	3.20
******									
FB-L98B-034-XXX(3/8)	C	No	No	Inside Pole	110.0000 - 0.0000	2	No Ice	0.0000	0.06
							1/2" Ice	0.0000	0.06
							1" Ice	0.0000	0.06
WR-VG66ST-BRD_CCIV2(7/8)	C	No	No	Inside Pole	110.0000 - 0.0000	4	No Ice	0.0000	0.88
							1/2" Ice	0.0000	0.88
							1" Ice	0.0000	0.88
LDF6-50A(1-1/4)	C	No	No	Inside Pole	110.0000 - 0.0000	6	No Ice	0.0000	0.60
							1/2" Ice	0.0000	0.60
							1" Ice	0.0000	0.60
2" Conduit	C	No	No	Inside Pole	110.0000 - 0.0000	2	No Ice	0.0000	2.80
							1/2" Ice	0.0000	2.80
							1" Ice	0.0000	2.80
******									

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	150.0000-133.0000	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	1.836	0.000	0.03
		C	0.000	0.000	0.000	0.000	0.18
L2	133.0000-98.4200	A	0.000	0.000	0.000	0.000	0.22
		B	0.000	0.000	3.735	0.000	0.07
		C	0.000	0.000	0.000	0.000	0.73
L3	98.4200-64.7500	A	0.000	0.000	1.570	0.000	0.27
		B	0.000	0.000	3.636	0.000	0.07
		C	0.000	0.000	0.000	0.000	1.00
L4	64.7500-31.9200	A	0.000	0.000	8.736	0.000	0.31
		B	0.000	0.000	3.546	0.000	0.07
		C	0.000	0.000	0.000	0.000	0.97
L5	31.9200-0.0000	A	0.000	0.000	8.494	0.000	0.31
		B	0.000	0.000	3.447	0.000	0.06
		C	0.000	0.000	0.000	0.000	0.95

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	150.0000-133.0000	A	0.983	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	8.521	0.000	0.10
		C		0.000	0.000	0.000	0.000	0.18
L2	133.0000-98.4200	A	0.963	0.000	0.000	0.000	0.000	0.22
		B		0.000	0.000	17.332	0.000	0.20
		C		0.000	0.000	0.000	0.000	0.73
L3	98.4200-64.7500	A	0.930	0.000	0.000	4.043	0.000	0.30
		B		0.000	0.000	16.607	0.000	0.19
		C		0.000	0.000	0.000	0.000	1.00
L4	64.7500-31.9200	A	0.883	0.000	0.000	23.502	0.000	0.48
		B		0.000	0.000	15.759	0.000	0.18
		C		0.000	0.000	0.000	0.000	0.97
L5	31.9200-0.0000	A	0.790	0.000	0.000	22.171	0.000	0.45
		B		0.000	0.000	14.718	0.000	0.16
		C		0.000	0.000	0.000	0.000	0.95

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	150.0000-133.0000	0.6763	-0.4914	1.5886	-1.1542
L2	133.0000-98.4200	0.6823	-0.4957	1.6563	-1.2033
L3	98.4200-64.7500	0.5121	-0.7941	1.3912	-1.5814
L4	64.7500-31.9200	-0.4779	-1.6177	-0.2390	-2.4398
L5	31.9200-0.0000	-0.4843	-1.6389	-0.2555	-2.4663

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L1	2	Climbing Rungs	133.00 - 150.00	1.0000	1.0000
L1	3	Safety Line 3/8	133.00 - 150.00	1.0000	1.0000
L2	2	Climbing Rungs	98.42 - 133.00	1.0000	1.0000
L2	3	Safety Line 3/8	98.42 - 133.00	1.0000	1.0000
L3	2	Climbing Rungs	64.75 - 98.42	1.0000	1.0000
L3	3	Safety Line 3/8	64.75 - 98.42	1.0000	1.0000
L3	22	CU12PSM9P8XXX(1-3/8)	64.75 - 73.00	1.0000	1.0000
L3	24	LDF4-50A(1/2)	64.75 - 68.00	1.0000	1.0000
L4	2	Climbing Rungs	31.92 - 64.75	1.0000	1.0000
L4	3	Safety Line 3/8	31.92 - 64.75	1.0000	1.0000
L4	22	CU12PSM9P8XXX(1-3/8)	31.92 - 64.75	1.0000	1.0000
L4	24	LDF4-50A(1/2)	31.92 - 64.75	1.0000	1.0000
L5	2	Climbing Rungs	0.00 - 31.92	1.0000	1.0000
L5	3	Safety Line 3/8	0.00 - 31.92	1.0000	1.0000
L5	22	CU12PSM9P8XXX(1-3/8)	0.00 - 31.92	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L5	24	LDF4-50A(1/2)	0.00 - 31.92	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
*******									
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	A	From Leg	4.0000 0.00 1.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	3.1446 3.4537 3.7717	2.5851 2.8843 3.1923	0.11 0.16 0.23
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	B	From Leg	4.0000 0.00 1.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	3.1446 3.4537 3.7717	2.5851 2.8843 3.1923	0.11 0.16 0.23
ERICSSON AIR 21 B2A B4P w/ Mount Pipe	C	From Leg	4.0000 0.00 1.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	3.1446 3.4537 3.7717	2.5851 2.8843 3.1923	0.11 0.16 0.23
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	14.6935 15.4553 16.2297	6.8734 7.5537 8.2466	0.19 0.31 0.46
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	14.6935 15.4553 16.2297	6.8734 7.5537 8.2466	0.19 0.31 0.46
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	14.6935 15.4553 16.2297	6.8734 7.5537 8.2466	0.19 0.31 0.46
ERICSSON AIR 21 B4A B2P w/ Mount Pipe	A	From Leg	4.0000 0.00 1.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	3.1446 3.4537 3.7717	2.5851 2.8843 3.1923	0.11 0.16 0.22
ERICSSON AIR 21 B4A B2P w/ Mount Pipe	B	From Leg	4.0000 0.00 1.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	3.1446 3.4537 3.7717	2.5851 2.8843 3.1923	0.11 0.16 0.22
ERICSSON AIR 21 B4A B2P w/ Mount Pipe	C	From Leg	4.0000 0.00 1.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	3.1446 3.4537 3.7717	2.5851 2.8843 3.1923	0.11 0.16 0.22
KRY 112 144/1_T-MOBILE	A	From Leg	4.0000 0.00 0.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	0.3500 0.4259 0.5093	0.1750 0.2343 0.3009	0.01 0.01 0.02
KRY 112 144/1_T-MOBILE	B	From Leg	4.0000 0.00 0.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	0.3500 0.4259 0.5093	0.1750 0.2343 0.3009	0.01 0.01 0.02
KRY 112 144/1_T-MOBILE	C	From Leg	4.0000 0.00 0.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	0.3500 0.4259 0.5093	0.1750 0.2343 0.3009	0.01 0.01 0.02
RADIO 4449 B12/B71	A	From Leg	4.0000 0.00 0.00	0.00	146.0000	No Ice 1/2" Ice 1" Ice	1.6500 1.8104 1.9781	1.1625 1.3012 1.4473	0.07 0.09 0.11
RADIO 4449 B12/B71	B	From Leg	4.0000 0.00	0.00	146.0000	No Ice	1.6500 1.8104	1.1625 1.3012	0.07 0.09

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1/2" Ice	1.9781	1.4473	0.11
						1" Ice			
RADIO 4449 B12/B71	C	From Leg	4.0000	0.00	146.0000	No Ice	1.6500	1.1625	0.07
			0.00			1/2" Ice	1.8104	1.3012	0.09
			0.00			1" Ice	1.9781	1.4473	0.11
8' x 2" Mount Pipe	A	From Leg	4.0000	0.00	146.0000	No Ice	1.9000	1.9000	0.03
			0.00			1/2" Ice	2.7281	2.7281	0.04
			0.00			1" Ice	3.4009	3.4009	0.06
8' x 2" Mount Pipe	B	From Leg	4.0000	0.00	146.0000	No Ice	1.9000	1.9000	0.03
			0.00			1/2" Ice	2.7281	2.7281	0.04
			0.00			1" Ice	3.4009	3.4009	0.06
8' x 2" Mount Pipe	C	From Leg	4.0000	0.00	146.0000	No Ice	1.9000	1.9000	0.03
			0.00			1/2" Ice	2.7281	2.7281	0.04
			0.00			1" Ice	3.4009	3.4009	0.06
Platform Mount [LP 304-1_KCKR-HR-1]	C	None		0.00	146.0000	No Ice	32.6300	32.6300	1.88
						1/2" Ice	40.8400	40.8400	2.47
						1" Ice	49.0500	49.0500	3.20
******									
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	4.0000	0.00	136.0000	No Ice	4.0914	2.8622	0.08
			0.00			1/2" Ice	4.4801	3.2290	0.13
			1.00			1" Ice	4.8798	3.6069	0.19
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	4.0000	0.00	136.0000	No Ice	4.0914	2.8622	0.08
			0.00			1/2" Ice	4.4801	3.2290	0.13
			1.00			1" Ice	4.8798	3.6069	0.19
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	4.0000	0.00	136.0000	No Ice	4.0914	2.8622	0.08
			0.00			1/2" Ice	4.4801	3.2290	0.13
			1.00			1" Ice	4.8798	3.6069	0.19
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.0000	0.00	136.0000	No Ice	4.6007	4.0112	0.10
			0.00			1/2" Ice	5.0453	4.4476	0.16
			0.00			1" Ice	5.5003	4.8944	0.23
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.0000	0.00	136.0000	No Ice	4.6007	4.0112	0.10
			0.00			1/2" Ice	5.0453	4.4476	0.16
			0.00			1" Ice	5.5003	4.8944	0.23
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.0000	0.00	136.0000	No Ice	4.6007	4.0112	0.10
			0.00			1/2" Ice	5.0453	4.4476	0.16
			0.00			1" Ice	5.5003	4.8944	0.23
800MHZ RRH	A	From Leg	4.0000	0.00	136.0000	No Ice	2.1342	1.7730	0.05
			0.00			1/2" Ice	2.3195	1.9461	0.07
			0.00			1" Ice	2.5123	2.1267	0.10
800MHZ RRH	B	From Leg	4.0000	0.00	136.0000	No Ice	2.1342	1.7730	0.05
			0.00			1/2" Ice	2.3195	1.9461	0.07
			0.00			1" Ice	2.5123	2.1267	0.10
800MHZ RRH	C	From Leg	4.0000	0.00	136.0000	No Ice	2.1342	1.7730	0.05
			0.00			1/2" Ice	2.3195	1.9461	0.07
			0.00			1" Ice	2.5123	2.1267	0.10
1900MHZ RRH	A	From Leg	4.0000	0.00	136.0000	No Ice	2.4917	3.2583	0.04
			0.00			1/2" Ice	2.6954	3.4843	0.08
			0.00			1" Ice	2.9065	3.7176	0.11
1900MHZ RRH	B	From Leg	4.0000	0.00	136.0000	No Ice	2.4917	3.2583	0.04

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1/2"	2.6954	3.4843	0.08
			0.00			Ice	2.9065	3.7176	0.11
						1" Ice			
1900MHZ RRH	C	From Leg	4.0000	0.00	136.0000	No Ice	2.4917	3.2583	0.04
			0.00			1/2"	2.6954	3.4843	0.08
			0.00			Ice	2.9065	3.7176	0.11
						1" Ice			
TD-RRH8X20-25	A	From Leg	4.0000	0.00	136.0000	No Ice	3.7042	1.2939	0.07
			0.00			1/2"	3.9462	1.4646	0.09
			0.00			Ice	4.1956	1.6424	0.12
						1" Ice			
TD-RRH8X20-25	B	From Leg	4.0000	0.00	136.0000	No Ice	3.7042	1.2939	0.07
			0.00			1/2"	3.9462	1.4646	0.09
			0.00			Ice	4.1956	1.6424	0.12
						1" Ice			
TD-RRH8X20-25	C	From Leg	4.0000	0.00	136.0000	No Ice	3.7042	1.2939	0.07
			0.00			1/2"	3.9462	1.4646	0.09
			0.00			Ice	4.1956	1.6424	0.12
						1" Ice			
(3) 8' x 2" Mount Pipe	A	From Leg	4.0000	0.00	136.0000	No Ice	1.9000	1.9000	0.03
			0.00			1/2"	2.7281	2.7281	0.04
			0.00			Ice	3.4009	3.4009	0.06
						1" Ice			
(3) 8' x 2" Mount Pipe	B	From Leg	4.0000	0.00	136.0000	No Ice	1.9000	1.9000	0.03
			0.00			1/2"	2.7281	2.7281	0.04
			0.00			Ice	3.4009	3.4009	0.06
						1" Ice			
(3) 8' x 2" Mount Pipe	C	From Leg	4.0000	0.00	136.0000	No Ice	1.9000	1.9000	0.03
			0.00			1/2"	2.7281	2.7281	0.04
			0.00			Ice	3.4009	3.4009	0.06
						1" Ice			
Platform Mount [LP 601-1]	C	None		0.00	136.0000	No Ice	28.5000	28.5000	1.12
						1/2"	31.6900	31.6900	1.68
						Ice	34.8700	34.8700	2.28
						1" Ice			
******									
(2) APL866513-42T0 w/ Mount Pipe	A	From Leg	4.0000	0.00	126.0000	No Ice	3.9566	4.2548	0.03
			0.00			1/2"	4.4375	4.7419	0.07
			1.00			Ice	4.9347	5.2453	0.12
						1" Ice			
(2) APL866513-42T0 w/ Mount Pipe	B	From Leg	4.0000	0.00	126.0000	No Ice	3.9566	4.2548	0.03
			0.00			1/2"	4.4375	4.7419	0.07
			1.00			Ice	4.9347	5.2453	0.12
						1" Ice			
(2) APL866513-42T0 w/ Mount Pipe	C	From Leg	4.0000	0.00	126.0000	No Ice	3.9566	4.2548	0.03
			0.00			1/2"	4.4375	4.7419	0.07
			1.00			Ice	4.9347	5.2453	0.12
						1" Ice			
(2) SBNHH-1D65B	A	From Leg	4.0000	0.00	126.0000	No Ice	4.1600	2.4900	0.04
			0.00			1/2"	4.5700	2.8800	0.09
			1.00			Ice	4.9900	3.2700	0.15
						1" Ice			
(2) SBNHH-1D65B	B	From Leg	4.0000	0.00	126.0000	No Ice	4.1600	2.4900	0.04
			0.00			1/2"	4.5700	2.8800	0.09
			1.00			Ice	4.9900	3.2700	0.15
						1" Ice			
(2) SBNHH-1D65B	C	From Leg	4.0000	0.00	126.0000	No Ice	4.1600	2.4900	0.04
			0.00			1/2"	4.5700	2.8800	0.09
			1.00			Ice	4.9900	3.2700	0.15
						1" Ice			
6' x 2" Mount Pipe	A	From Leg	2.0000	0.00	126.0000	No Ice	1.4250	1.4250	0.02
			0.00			1/2"	1.9250	1.9250	0.03
			0.00			Ice	2.2939	2.2939	0.05
						1" Ice			
6' x 2" Mount Pipe	B	From Leg	2.0000	0.00	126.0000	No Ice	1.4250	1.4250	0.02

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00				1/2" Ice	1.9250	1.9250	0.03
			0.00				1" Ice	2.2939	2.2939	0.05
Side By Side Mounting Kit	A	From Leg	4.0000		0.00	126.0000	No Ice	1.9000	1.9000	0.03
			0.00				1/2" Ice	2.7281	2.7281	0.04
			0.00				1" Ice	3.4009	3.4009	0.06
Side By Side Mounting Kit	B	From Leg	4.0000		0.00	126.0000	No Ice	1.9000	1.9000	0.03
			0.00				1/2" Ice	2.7281	2.7281	0.04
			0.00				1" Ice	3.4009	3.4009	0.06
Side By Side Mounting Kit	C	From Leg	4.0000		0.00	126.0000	No Ice	1.9000	1.9000	0.03
			0.00				1/2" Ice	2.7281	2.7281	0.04
			0.00				1" Ice	3.4009	3.4009	0.06
Platform Mount [LP 303-1]	C	None			0.00	126.0000	No Ice	14.6900	14.6900	1.25
							1/2" Ice	18.0100	18.0100	1.57
							1" Ice	21.3400	21.3400	1.94
***										
MT6413-77A w/ Mount Pipe	A	From Leg	4.0000		0.00	126.0000	No Ice	3.9964	2.1548	0.07
			0.00				1/2" Ice	4.3101	2.5546	0.10
			1.00				1" Ice	4.6338	2.9706	0.14
MT6413-77A w/ Mount Pipe	B	From Leg	4.0000		0.00	126.0000	No Ice	3.9964	2.1548	0.07
			0.00				1/2" Ice	4.3101	2.5546	0.10
			1.00				1" Ice	4.6338	2.9706	0.14
MT6413-77A w/ Mount Pipe	C	From Leg	4.0000		0.00	126.0000	No Ice	3.9964	2.1548	0.07
			0.00				1/2" Ice	4.3101	2.5546	0.10
			1.00				1" Ice	4.6338	2.9706	0.14
RF4439D-25A	A	From Leg	4.0000		0.00	126.0000	No Ice	1.8650	1.2517	0.07
			0.00				1/2" Ice	2.0349	1.3942	0.09
			1.00				1" Ice	2.2123	1.5442	0.11
RF4439D-25A	B	From Leg	4.0000		0.00	126.0000	No Ice	1.8650	1.2517	0.07
			0.00				1/2" Ice	2.0349	1.3942	0.09
			1.00				1" Ice	2.2123	1.5442	0.11
RF4439D-25A	C	From Leg	4.0000		0.00	126.0000	No Ice	1.8650	1.2517	0.07
			0.00				1/2" Ice	2.0349	1.3942	0.09
			1.00				1" Ice	2.2123	1.5442	0.11
RF4461D-13A	A	From Leg	4.0000		0.00	126.0000	No Ice	1.8650	1.2753	0.08
			0.00				1/2" Ice	2.0349	1.4190	0.10
			1.00				1" Ice	2.2123	1.5700	0.12
RF4461D-13A	B	From Leg	4.0000		0.00	126.0000	No Ice	1.8650	1.2753	0.08
			0.00				1/2" Ice	2.0349	1.4190	0.10
			1.00				1" Ice	2.2123	1.5700	0.12
RF4461D-13A	C	From Leg	4.0000		0.00	126.0000	No Ice	1.8650	1.2753	0.08
			0.00				1/2" Ice	2.0349	1.4190	0.10
			1.00				1" Ice	2.2123	1.5700	0.12
RC3DC-3315-PF-48	A	From Leg	4.0000		0.00	126.0000	No Ice	3.7922	2.5116	0.03
			0.00				1/2" Ice	4.0441	2.7247	0.06
			1.00				1" Ice	4.3033	2.9449	0.10
RC3DC-3315-PF-48	B	From Leg	4.0000		0.00	126.0000	No Ice	3.7922	2.5116	0.03
			0.00				1/2" Ice	4.0441	2.7247	0.06
			1.00				1" Ice	4.3033	2.9449	0.10
8' x 2" Mount Pipe	A	From Leg	4.0000		0.00	126.0000	No Ice	1.9000	1.9000	0.03

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00 0.00			1/2" Ice 1" Ice	2.7281 3.4009	2.7281 3.4009	0.04 0.06
8' x 2" Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.00	126.0000	No Ice 1/2" Ice 1" Ice	1.9000 2.7281 3.4009	1.9000 2.7281 3.4009	0.03 0.04 0.06
8' x 2" Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.00	126.0000	No Ice 1/2" Ice 1" Ice	1.9000 2.7281 3.4009	1.9000 2.7281 3.4009	0.03 0.04 0.06
Support Rail Kit [#VZWSMART-PLK1]	A	None		0.00	126.0000	No Ice 1/2" Ice 1" Ice	4.5600 6.3900 8.1800	4.5600 6.3900 8.1800	0.24 0.31 0.40
******									
DMP65R-BU6D w/ Mount Pipe	A	From Leg	4.0000 0.00 -1.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	11.9614 12.7031 13.4607	5.9692 6.6268 7.3002	0.11 0.20 0.30
DMP65R-BU6D w/ Mount Pipe	B	From Leg	4.0000 0.00 -1.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	11.9614 12.7031 13.4607	5.9692 6.6268 7.3002	0.11 0.20 0.30
DMP65R-BU6D w/ Mount Pipe	C	From Leg	4.0000 0.00 -1.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	11.9614 12.7031 13.4607	5.9692 6.6268 7.3002	0.11 0.20 0.30
OPA65R-BU6D w/ Mount Pipe	A	From Leg	4.0000 0.00 -1.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	12.2484 12.9982 13.7639	6.0471 6.7098 7.3885	0.09 0.18 0.27
OPA65R-BU6D w/ Mount Pipe	B	From Leg	4.0000 0.00 -1.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	12.2484 12.9982 13.7639	6.0471 6.7098 7.3885	0.09 0.18 0.27
OPA65R-BU6D w/ Mount Pipe	C	From Leg	4.0000 0.00 -1.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	12.2484 12.9982 13.7639	6.0471 6.7098 7.3885	0.09 0.18 0.27
7770.00 w/ Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	3.3853 3.7457 4.1169	2.3226 2.6638 3.0156	0.06 0.10 0.15
7770.00 w/ Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	3.3853 3.7457 4.1169	2.3226 2.6638 3.0156	0.06 0.10 0.15
7770.00 w/ Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	3.3853 3.7457 4.1169	2.3226 2.6638 3.0156	0.06 0.10 0.15
RRUS 4449 B5/B12	A	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.9675 2.1439 2.3278	1.4081 1.5637 1.7267	0.07 0.09 0.11
RRUS 4449 B5/B12	B	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.9675 2.1439 2.3278	1.4081 1.5637 1.7267	0.07 0.09 0.11
RRUS 4449 B5/B12	C	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.9675 2.1439 2.3278	1.4081 1.5637 1.7267	0.07 0.09 0.11

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
RRUS 8843 B2/B66A_CCIV2	A	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.9800 2.1570 2.3415	1.6950 1.8615 2.0354	0.08 0.10 0.12
RRUS 8843 B2/B66A_CCIV2	B	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.9800 2.1570 2.3415	1.6950 1.8615 2.0354	0.08 0.10 0.12
RRUS 8843 B2/B66A_CCIV2	C	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.9800 2.1570 2.3415	1.6950 1.8615 2.0354	0.08 0.10 0.12
DC6-48-60-18-8C-EV	A	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	2.7357 2.9620 3.1953	2.7357 2.9620 3.1953	0.03 0.05 0.08
(2) LGP21401	A	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.1040 1.2388 1.3810	0.2070 0.2738 0.3475	0.01 0.02 0.03
(2) LGP21401	B	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.1040 1.2388 1.3810	0.2070 0.2738 0.3475	0.01 0.02 0.03
(2) LGP21401	C	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	1.1040 1.2388 1.3810	0.2070 0.2738 0.3475	0.01 0.02 0.03
DC6-48-60-18-8F	B	From Leg	4.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	0.9167 1.4583 1.6431	0.9167 1.4583 1.6431	0.02 0.04 0.06
4' x 2" Pipe Mount	A	From Leg	2.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	0.7852 1.0284 1.2809	0.7852 1.0284 1.2809	0.03 0.04 0.04
4' x 2" Pipe Mount	B	From Leg	2.0000 0.00 0.00	0.00	110.0000	No Ice 1/2" Ice 1" Ice	0.7852 1.0284 1.2809	0.7852 1.0284 1.2809	0.03 0.04 0.04
Platform Mount [LP 303-1_HR-1] ******	C	None		0.00	110.0000	No Ice 1/2" Ice 1" Ice	17.0900 21.4700 25.7200	17.0900 21.4700 25.7200	1.50 1.88 2.35
FFVV-65B-R2 w/ Mount Pipe	A	From Leg	4.0000 0.00 -1.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	7.1400 7.6000 8.0600	3.8300 4.2400 4.6600	0.11 0.19 0.29
FFVV-65B-R2 w/ Mount Pipe	B	From Leg	4.0000 0.00 -1.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	7.1400 7.6000 8.0600	3.8300 4.2400 4.6600	0.11 0.19 0.29
FFVV-65B-R2 w/ Mount Pipe	C	From Leg	4.0000 0.00 -1.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	7.1400 7.6000 8.0600	3.8300 4.2400 4.6600	0.11 0.19 0.29
TA08025-B605	A	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9635 2.1378 2.3195	1.1295 1.2666 1.4112	0.08 0.09 0.11
TA08025-B605	B	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9635 2.1378 2.3195	1.1295 1.2666 1.4112	0.08 0.09 0.11

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
TA08025-B605	C	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9635 2.1378 2.3195	1.1295 1.2666 1.4112	0.08 0.09 0.11
TA08025-B604	A	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9635 2.1378 2.3195	0.9811 1.1117 1.2496	0.06 0.08 0.10
TA08025-B604	B	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9635 2.1378 2.3195	0.9811 1.1117 1.2496	0.06 0.08 0.10
TA08025-B604	C	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9635 2.1378 2.3195	0.9811 1.1117 1.2496	0.06 0.08 0.10
RDIDC-9181-PF-48	A	From Leg	2.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	2.0119 2.1886 2.3727	1.1682 1.3109 1.4611	0.02 0.04 0.06
6' x 2" Mount Pipe	A	From Leg	2.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.4250 1.9250 2.2939	1.4250 1.9250 2.2939	0.02 0.03 0.05
(2) 8' x 2" Mount Pipe	A	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9000 2.7281 3.4009	1.9000 2.7281 3.4009	0.03 0.04 0.06
(2) 8' x 2" Mount Pipe	B	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9000 2.7281 3.4009	1.9000 2.7281 3.4009	0.03 0.04 0.06
(2) 8' x 2" Mount Pipe	C	From Leg	4.0000 0.00 0.00	0.00	73.0000	No Ice 1/2" Ice 1" Ice	1.9000 2.7281 3.4009	1.9000 2.7281 3.4009	0.03 0.04 0.06
Valmont SNP8HR-396	C	None		0.00	73.0000	No Ice 1/2" Ice 1" Ice	26.8000 32.2000 37.6000	26.8000 32.2000 37.6000	1.51 1.81 2.11
******									
GPS_A	A	From Leg	0.5000 0.00 1.00	0.00	67.0000	No Ice 1/2" Ice 1" Ice	0.2550 0.3205 0.3934	0.2550 0.3205 0.3934	0.00 0.00 0.01
******									

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice

Comb. No.	Description
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	150 - 133	Pole	Max Tension	2	0.00	0.00	-0.00
			Max. Compression	26	-14.40	-0.08	0.05
			Max. Mx	8	-7.65	-49.01	0.02
			Max. My	2	-7.65	-0.03	49.00
			Max. Vy	8	8.82	-49.01	0.02
			Max. Vx	2	-8.82	-0.03	49.00
			Max. Torque	22			0.00
L2	133 - 98.42	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-33.44	-1.37	0.95
			Max. Mx	8	-19.33	-521.11	-0.14
			Max. My	2	-19.33	-0.03	521.55
			Max. Vy	8	19.58	-521.11	-0.14
			Max. Vx	2	-19.60	-0.03	521.55
			Max. Torque	23			-1.05
L3	98.42 - 64.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.45	-1.57	1.54
			Max. Mx	8	-30.23	-1221.79	-0.56
			Max. My	2	-30.23	0.55	1223.30
			Max. Vy	8	25.05	-1221.79	-0.56
			Max. Vx	2	-25.11	0.55	1223.30
			Max. Torque	23			-1.31

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L4	64.75 - 31.92	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-58.76	-1.53	1.93
			Max. Mx	8	-39.89	-2070.30	-1.07
			Max. My	2	-39.89	1.19	2073.59
			Max. Vy	8	27.90	-2070.30	-1.07
			Max. Vx	2	-27.95	1.19	2073.59
			Max. Torque	23			-1.33
L5	31.92 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-73.70	-1.42	2.43
			Max. Mx	8	-52.94	-3169.05	-1.63
			Max. My	2	-52.94	1.94	3174.43
			Max. Vy	8	30.68	-3169.05	-1.63
			Max. Vx	2	-30.73	1.94	3174.43
			Max. Torque	23			-1.33

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	27	73.70	0.00	8.53
	Max. H_x	20	52.95	30.65	0.02
	Max. H_z	2	52.95	0.02	30.70
	Max. M_x	2	3174.43	0.02	30.70
	Max. M_z	8	3169.05	-30.65	-0.02
	Max. Torsion	11	1.33	-26.56	-15.37
	Min. Vert	19	39.71	26.54	-15.33
	Min. H_x	8	52.95	-30.65	-0.02
	Min. H_z	14	52.95	-0.02	-30.70
	Min. M_x	14	-3172.39	-0.02	-30.70
	Min. M_z	20	-3167.63	30.65	0.02
	Min. Torsion	23	-1.33	26.56	15.37

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	44.13	0.00	0.00	-0.81	-0.55	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	52.95	-0.02	-30.70	-3174.43	1.94	0.76
0.9 Dead+1.0 Wind 0 deg - No Ice	39.71	-0.02	-30.70	-3139.41	2.10	0.76
1.2 Dead+1.0 Wind 30 deg - No Ice	52.95	15.31	-26.58	-2747.97	-1582.59	0.11
0.9 Dead+1.0 Wind 30 deg - No Ice	39.71	15.31	-26.58	-2717.62	-1565.08	0.11
1.2 Dead+1.0 Wind 60 deg - No Ice	52.95	26.54	-15.33	-1585.45	-2743.27	-0.57
0.9 Dead+1.0 Wind 60 deg - No Ice	39.71	26.54	-15.33	-1567.83	-2713.03	-0.57
1.2 Dead+1.0 Wind 90 deg - No Ice	52.95	30.65	0.02	1.63	-3169.05	-1.09
0.9 Dead+1.0 Wind 90 deg - No Ice	39.71	30.65	0.02	1.86	-3134.16	-1.09
1.2 Dead+1.0 Wind 120 deg - No Ice	52.95	26.56	15.37	1587.99	-2745.90	-1.33
0.9 Dead+1.0 Wind 120 deg - No Ice	39.71	26.56	15.37	1570.85	-2715.63	-1.33

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 150 deg - No Ice	52.95	15.34	26.60	2748.57	-1587.17	-1.20
0.9 Dead+1.0 Wind 150 deg - No Ice	39.71	15.34	26.60	2718.72	-1569.60	-1.21
1.2 Dead+1.0 Wind 180 deg - No Ice	52.95	0.02	30.70	3172.39	-3.35	-0.76
0.9 Dead+1.0 Wind 180 deg - No Ice	39.71	0.02	30.70	3137.90	-3.13	-0.76
1.2 Dead+1.0 Wind 210 deg - No Ice	52.95	-15.31	26.58	2745.93	1581.18	-0.11
0.9 Dead+1.0 Wind 210 deg - No Ice	39.71	-15.31	26.58	2716.11	1564.04	-0.11
1.2 Dead+1.0 Wind 240 deg - No Ice	52.95	-26.54	15.33	1583.41	2741.85	0.57
0.9 Dead+1.0 Wind 240 deg - No Ice	39.71	-26.54	15.33	1566.32	2711.99	0.57
1.2 Dead+1.0 Wind 270 deg - No Ice	52.95	-30.65	-0.02	-3.66	3167.63	1.09
0.9 Dead+1.0 Wind 270 deg - No Ice	39.71	-30.65	-0.02	-3.37	3133.12	1.09
1.2 Dead+1.0 Wind 300 deg - No Ice	52.95	-26.56	-15.37	-1590.02	2744.49	1.33
0.9 Dead+1.0 Wind 300 deg - No Ice	39.71	-26.56	-15.37	-1572.35	2714.60	1.33
1.2 Dead+1.0 Wind 330 deg - No Ice	52.95	-15.34	-26.60	-2750.61	1585.76	1.21
0.9 Dead+1.0 Wind 330 deg - No Ice	39.71	-15.34	-26.60	-2720.22	1568.56	1.21
1.2 Dead+1.0 Ice+1.0 Temp	73.70	0.00	-0.00	-2.43	-1.42	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	73.70	-0.00	-8.53	-878.18	-1.02	0.20
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	73.70	4.26	-7.39	-760.60	-438.37	0.05
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	73.70	7.38	-4.26	-439.92	-758.67	-0.12
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	73.70	8.52	0.00	-2.06	-876.11	-0.25
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	73.70	7.38	4.27	435.66	-759.21	-0.32
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	73.70	4.26	7.39	755.95	-439.29	-0.30
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	73.70	0.00	8.53	872.99	-2.09	-0.20
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	73.70	-4.26	7.39	755.42	435.26	-0.05
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	73.70	-7.38	4.26	434.74	755.57	0.12
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	73.70	-8.52	-0.00	-3.13	873.00	0.25
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	73.70	-7.38	-4.27	-440.85	756.10	0.32
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	73.70	-4.26	-7.39	-761.14	436.19	0.30
Dead+Wind 0 deg - Service	44.13	-0.01	-7.74	-795.33	0.08	0.20
Dead+Wind 30 deg - Service	44.13	3.86	-6.70	-688.56	-396.62	0.03
Dead+Wind 60 deg - Service	44.13	6.69	-3.86	-397.52	-687.20	-0.14
Dead+Wind 90 deg - Service	44.13	7.73	0.01	-0.18	-793.80	-0.27
Dead+Wind 120 deg - Service	44.13	6.69	3.87	396.97	-687.86	-0.34
Dead+Wind 150 deg - Service	44.13	3.87	6.70	687.53	-397.77	-0.31
Dead+Wind 180 deg - Service	44.13	0.01	7.74	793.64	-1.25	-0.20
Dead+Wind 210 deg - Service	44.13	-3.86	6.70	686.87	395.45	-0.03
Dead+Wind 240 deg - Service	44.13	-6.69	3.86	395.83	686.03	0.14
Dead+Wind 270 deg - Service	44.13	-7.73	-0.01	-1.51	792.63	0.27

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Dead+Wind 300 deg - Service	44.13	-6.69	-3.87	-398.66	686.69	0.34
Dead+Wind 330 deg - Service	44.13	-3.87	-6.70	-689.22	396.60	0.31

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX	PY	PZ	PX	PY	PZ	% Error
	K	K	K	K	K	K	
1	0.00	-44.13	0.00	0.00	44.13	0.00	0.000%
2	-0.02	-52.95	-30.70	0.02	52.95	30.70	0.000%
3	-0.02	-39.71	-30.70	0.02	39.71	30.70	0.000%
4	15.31	-52.95	-26.58	-15.31	52.95	26.58	0.000%
5	15.31	-39.71	-26.58	-15.31	39.71	26.58	0.000%
6	26.54	-52.95	-15.33	-26.54	52.95	15.33	0.000%
7	26.54	-39.71	-15.33	-26.54	39.71	15.33	0.000%
8	30.65	-52.95	0.02	-30.65	52.95	-0.02	0.000%
9	30.65	-39.71	0.02	-30.65	39.71	-0.02	0.000%
10	26.56	-52.95	15.37	-26.56	52.95	-15.37	0.000%
11	26.56	-39.71	15.37	-26.56	39.71	-15.37	0.000%
12	15.34	-52.95	26.60	-15.34	52.95	-26.60	0.000%
13	15.34	-39.71	26.60	-15.34	39.71	-26.60	0.000%
14	0.02	-52.95	30.70	-0.02	52.95	-30.70	0.000%
15	0.02	-39.71	30.70	-0.02	39.71	-30.70	0.000%
16	-15.31	-52.95	26.58	15.31	52.95	-26.58	0.000%
17	-15.31	-39.71	26.58	15.31	39.71	-26.58	0.000%
18	-26.54	-52.95	15.33	26.54	52.95	-15.33	0.000%
19	-26.54	-39.71	15.33	26.54	39.71	-15.33	0.000%
20	-30.65	-52.95	-0.02	30.65	52.95	0.02	0.000%
21	-30.65	-39.71	-0.02	30.65	39.71	0.02	0.000%
22	-26.56	-52.95	-15.37	26.56	52.95	15.37	0.000%
23	-26.56	-39.71	-15.37	26.56	39.71	15.37	0.000%
24	-15.34	-52.95	-26.60	15.34	52.95	26.60	0.000%
25	-15.34	-39.71	-26.60	15.34	39.71	26.60	0.000%
26	0.00	-73.70	0.00	-0.00	73.70	0.00	0.000%
27	-0.00	-73.70	-8.53	0.00	73.70	8.53	0.000%
28	4.26	-73.70	-7.39	-4.26	73.70	7.39	0.000%
29	7.38	-73.70	-4.26	-7.38	73.70	4.26	0.000%
30	8.52	-73.70	0.00	-8.52	73.70	-0.00	0.000%
31	7.38	-73.70	4.27	-7.38	73.70	-4.27	0.000%
32	4.26	-73.70	7.39	-4.26	73.70	-7.39	0.000%
33	0.00	-73.70	8.53	-0.00	73.70	-8.53	0.000%
34	-4.26	-73.70	7.39	4.26	73.70	-7.39	0.000%
35	-7.38	-73.70	4.26	7.38	73.70	-4.26	0.000%
36	-8.52	-73.70	-0.00	8.52	73.70	0.00	0.000%
37	-7.38	-73.70	-4.27	7.38	73.70	4.27	0.000%
38	-4.26	-73.70	-7.39	4.26	73.70	7.39	0.000%
39	-0.01	-44.13	-7.74	0.01	44.13	7.74	0.000%
40	3.86	-44.13	-6.70	-3.86	44.13	6.70	0.000%
41	6.69	-44.13	-3.86	-6.69	44.13	3.86	0.000%
42	7.73	-44.13	0.01	-7.73	44.13	-0.01	0.000%
43	6.69	-44.13	3.87	-6.69	44.13	-3.87	0.000%
44	3.87	-44.13	6.70	-3.87	44.13	-6.70	0.000%
45	0.01	-44.13	7.74	-0.01	44.13	-7.74	0.000%
46	-3.86	-44.13	6.70	3.86	44.13	-6.70	0.000%
47	-6.69	-44.13	3.86	6.69	44.13	-3.86	0.000%
48	-7.73	-44.13	-0.01	7.73	44.13	0.01	0.000%
49	-6.69	-44.13	-3.87	6.69	44.13	3.87	0.000%
50	-3.87	-44.13	-6.70	3.87	44.13	6.70	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00076403
3	Yes	4	0.00000001	0.00046418
4	Yes	6	0.00000001	0.00006153
5	Yes	5	0.00000001	0.00055555
6	Yes	6	0.00000001	0.00006173
7	Yes	5	0.00000001	0.00055744
8	Yes	4	0.00000001	0.00084955
9	Yes	4	0.00000001	0.00052673
10	Yes	6	0.00000001	0.00005993
11	Yes	5	0.00000001	0.00054088
12	Yes	6	0.00000001	0.00006291
13	Yes	5	0.00000001	0.00056852
14	Yes	4	0.00000001	0.00084676
15	Yes	4	0.00000001	0.00052263
16	Yes	6	0.00000001	0.00006073
17	Yes	5	0.00000001	0.00054863
18	Yes	6	0.00000001	0.00006052
19	Yes	5	0.00000001	0.00054670
20	Yes	4	0.00000001	0.00093448
21	Yes	4	0.00000001	0.00058581
22	Yes	6	0.00000001	0.00006295
23	Yes	5	0.00000001	0.00056892
24	Yes	6	0.00000001	0.00005998
25	Yes	5	0.00000001	0.00054132
26	Yes	4	0.00000001	0.00000778
27	Yes	5	0.00000001	0.00032409
28	Yes	5	0.00000001	0.00039158
29	Yes	5	0.00000001	0.00039144
30	Yes	5	0.00000001	0.00032373
31	Yes	5	0.00000001	0.00038756
32	Yes	5	0.00000001	0.00039030
33	Yes	5	0.00000001	0.00032156
34	Yes	5	0.00000001	0.00038478
35	Yes	5	0.00000001	0.00038463
36	Yes	5	0.00000001	0.00032126
37	Yes	5	0.00000001	0.00039018
38	Yes	5	0.00000001	0.00038773
39	Yes	4	0.00000001	0.00008765
40	Yes	4	0.00000001	0.00043283
41	Yes	4	0.00000001	0.00043610
42	Yes	4	0.00000001	0.00009046
43	Yes	4	0.00000001	0.00039988
44	Yes	4	0.00000001	0.00045885
45	Yes	4	0.00000001	0.00008825
46	Yes	4	0.00000001	0.00041478
47	Yes	4	0.00000001	0.00041164
48	Yes	4	0.00000001	0.00009111
49	Yes	4	0.00000001	0.00045943
50	Yes	4	0.00000001	0.00040036

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 133	19.45	39	1.05	0.00
L2	135.92 - 98.42	16.35	39	1.04	0.00
L3	102.25 - 64.75	9.51	39	0.86	0.00
L4	69.42 - 31.92	4.44	39	0.60	0.00
L5	37.42 - 0	1.31	39	0.32	0.00

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
146.0000	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	39	18.57	1.05	0.00	71417
136.0000	APXVTM14-C-120 w/ Mount Pipe	39	16.37	1.04	0.00	25416
126.0000	(2) APL866513-42T0 w/ Mount Pipe	39	14.22	1.01	0.00	14506
110.0000	DMP65R-BU6D w/ Mount Pipe	39	10.97	0.92	0.00	8581
73.0000	FFVV-65B-R2 w/ Mount Pipe	39	4.90	0.63	0.00	7343
67.0000	GPS_A	39	4.13	0.58	0.00	7123

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 133	77.73	2	4.22	0.01
L2	135.92 - 98.42	65.34	2	4.17	0.01
L3	102.25 - 64.75	38.00	2	3.44	0.00
L4	69.42 - 31.92	17.73	24	2.39	0.00
L5	37.42 - 0	5.24	24	1.27	0.00

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
146.0000	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	2	74.19	4.21	0.01	18034
136.0000	APXVTM14-C-120 w/ Mount Pipe	2	65.41	4.17	0.01	6417
126.0000	(2) APL866513-42T0 w/ Mount Pipe	2	56.82	4.03	0.01	3660
110.0000	DMP65R-BU6D w/ Mount Pipe	2	43.82	3.66	0.00	2162
73.0000	FFVV-65B-R2 w/ Mount Pipe	24	19.60	2.51	0.00	1842
67.0000	GPS_A	24	16.52	2.30	0.00	1786

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	150 - 133 (1)	TP26x21.83x0.25	17.0000	0.0000	0.0	19.8643	-7.65	1162.06	0.007
L2	133 - 98.42 (2)	TP34.0625x24.7837x0.3125	37.5000	0.0000	0.0	32.5358	-19.33	1903.34	0.010
L3	98.42 - 64.75 (3)	TP41.75x32.4898x0.375	37.5000	0.0000	0.0	47.8740	-30.23	2800.63	0.011
L4	64.75 - 31.92 (4)	TP49.0625x39.8468x0.375	37.5000	0.0000	0.0	56.3415	-39.89	3295.98	0.012
L5	31.92 - 0 (5)	TP56.125x46.9609x0.375	37.4200	0.0000	0.0	66.3564	-52.94	3881.85	0.014

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	150 - 133 (1)	TP26x21.83x0.25	49.02	748.47	0.065	0.00	748.47	0.000
L2	133 - 98.42 (2)	TP34.0625x24.7837x0.3125	521.55	1587.37	0.329	0.00	1587.37	0.000
L3	98.42 - 64.75 (3)	TP41.75x32.4898x0.375	1223.56	2847.69	0.430	0.00	2847.69	0.000
L4	64.75 - 31.92 (4)	TP49.0625x39.8468x0.375	2073.98	3755.80	0.552	0.00	3755.80	0.000
L5	31.92 - 0 (5)	TP56.125x46.9609x0.375	3174.98	4897.52	0.648	0.00	4897.52	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	150 - 133 (1)	TP26x21.83x0.25	8.82	348.62	0.025	0.00	764.28	0.000
L2	133 - 98.42 (2)	TP34.0625x24.7837x0.3125	19.60	571.00	0.034	0.76	1640.30	0.000
L3	98.42 - 64.75 (3)	TP41.75x32.4898x0.375	25.11	840.19	0.030	1.20	2959.50	0.000
L4	64.75 - 31.92 (4)	TP49.0625x39.8468x0.375	27.96	988.79	0.028	1.21	4098.98	0.000
L5	31.92 - 0 (5)	TP56.125x46.9609x0.375	30.74	1164.56	0.026	1.21	5685.72	0.000

Pole Interaction Design Data

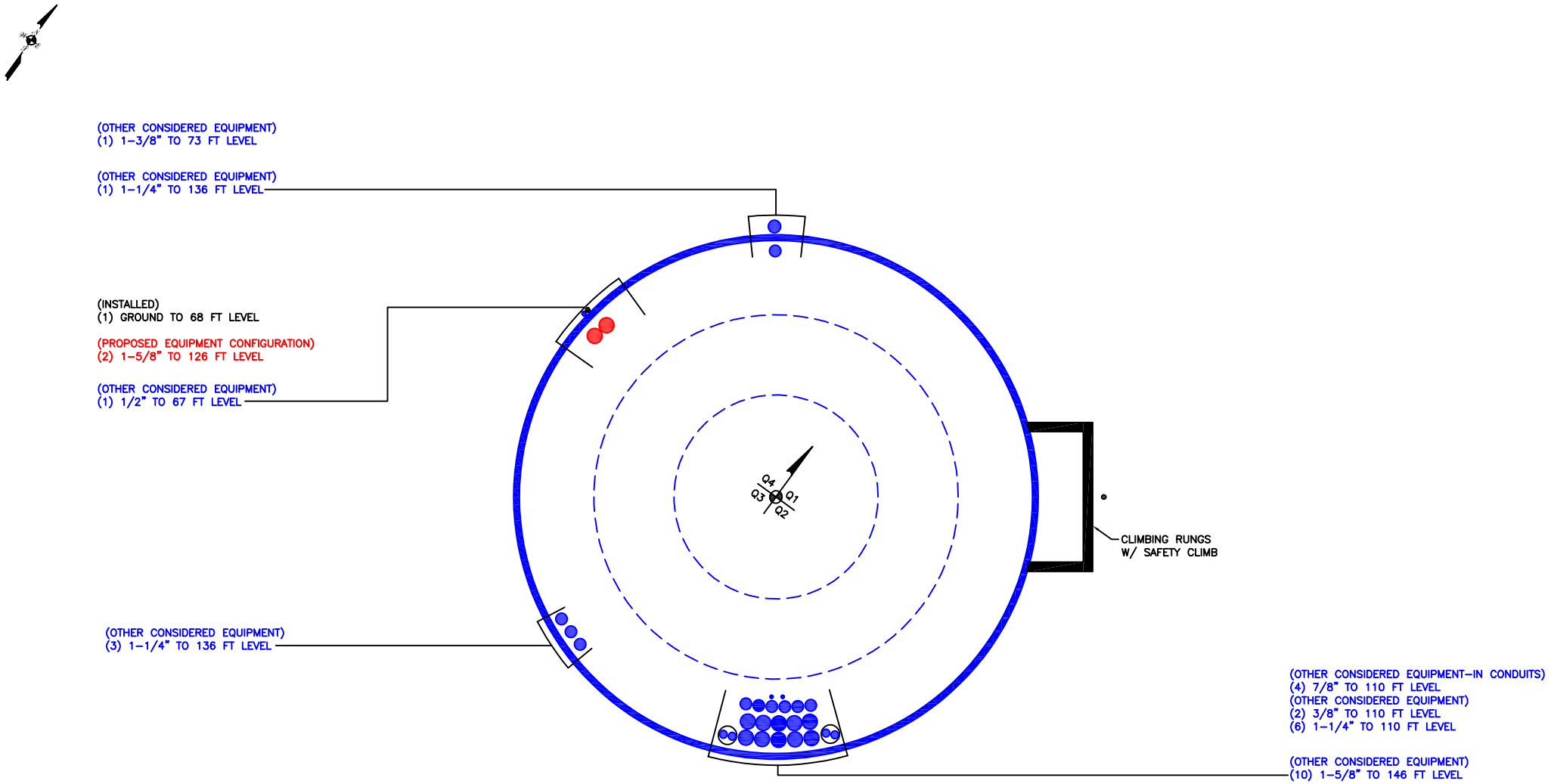
Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	150 - 133 (1)	0.007	0.065	0.000	0.025	0.000	0.073	1.050	
L2	133 - 98.42 (2)	0.010	0.329	0.000	0.034	0.000	0.340	1.050	
L3	98.42 - 64.75 (3)	0.011	0.430	0.000	0.030	0.000	0.441	1.050	
L4	64.75 - 31.92 (4)	0.012	0.552	0.000	0.028	0.000	0.565	1.050	
L5	31.92 - 0 (5)	0.014	0.648	0.000	0.026	0.000	0.663	1.050	

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	150 - 133	Pole	TP26x21.83x0.25	1	-7.65	1220.16	6.9	Pass
L2	133 - 98.42	Pole	TP34.0625x24.7837x0.3125	2	-19.33	1998.51	32.4	Pass
L3	98.42 - 64.75	Pole	TP41.75x32.4898x0.375	3	-30.23	2940.66	42.0	Pass
L4	64.75 - 31.92	Pole	TP49.0625x39.8468x0.375	4	-39.89	3460.78	53.8	Pass
L5	31.92 - 0	Pole	TP56.125x46.9609x0.375	5	-52.94	4075.94	63.1	Pass
							Summary	
						Pole (L5)	63.1	Pass
						RATING =	**63.1**	**Pass**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 826222 TOWER ID: C_BASELEVEL

APPENDIX C

ADDITIONAL CALCULATIONS

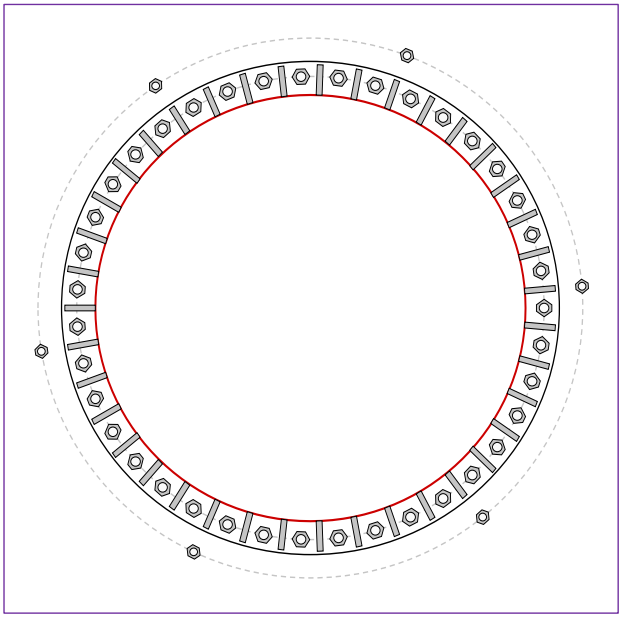
Monopole Base Plate Connection

Site Info	
BU #	826222
Site Name	Newtown/RT-25
Order #	662914 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	See Custom Sheet
l_{ar} (in)	See Custom Sheet

Applied Loads	
Moment (kip-ft)	3174.98
Axial Force (kips)	52.94
Shear Force (kips)	30.74

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

GROUP 1: (39) 1-1/4" ø bolts (A687 N; Fy=105 ksi, Fu=125 ksi) on 61" BC

GROUP 2: (6) 1" ø bolts (DWYIDAG N; Fy=125 ksi, Fu=125 ksi) on 71.13" BC

Base Plate Data

65" OD x 1.5" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

Stiffener Data

(39) 12"H x 4"W x 0.75"T, Notch: 0.5"

plate: Fy= 50 ksi ; weld: Fy= 70 ksi

horiz. weld: 0.5" fillet

vert. weld: 0.5" fillet

Pole Data

56.125" x 0.375" 18-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

Anchor Rod Summary *(units of kips, kip-in)*

GROUP 1:		
Pu_t = 55.28	ϕPn_t = 90.84	**Stress Rating**
Vu = 0.79	ϕVn = 57.52	**58.0%**
Mu = n/a	ϕMn = n/a	**Pass**
GROUP 2:		
Pu_t = 41.3	ϕPn_t = 56.81	**Stress Rating**
Vu = 0	ϕVn = 36.82	**69.2%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	4.83	(Shear)
Allowable Stress (ksi):	29.25	
Stress Rating:	**15.7%**	**Pass**

Stiffener Summary

Horizontal Weld:	**47.6%**	**Pass**
Vertical Weld:	**15.8%**	**Pass**
Plate Flexure+Shear:	**7.0%**	**Pass**
Plate Tension+Shear:	**31.9%**	**Pass**
Plate Compression:	**33.5%**	**Pass**

Pole Summary

Punching Shear:	**5.7%**	**Pass**

CCIplate

Elevation (ft)	0	*(Base)*

note: Bending interaction not considered when Grout Considered = "Yes"

Bolt Group	Resist Axial	Resist Shear	Induce Plate Bending	Grout Considered	Apply at BARB Elevation	BARB CL Elevation (ft)
1	Yes	Yes	Yes	No	No	
2	No	No	No	No	No	

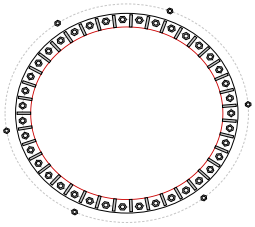
Custom Bolt Connection

Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, η:	l_{sr} (in):	Thread Type	Area Override, in^2	Tension Only
1	1	0	1.25	A687	61	0.5	1.25	N-Included		No
2	1	9.23076923	1.25	A687	61	0.5	1.25	N-Included		No
3	1	18.4615385	1.25	A687	61	0.5	1.25	N-Included		No
4	1	27.6923077	1.25	A687	61	0.5	1.25	N-Included		No
5	1	36.9230769	1.25	A687	61	0.5	1.25	N-Included		No
6	1	46.1538462	1.25	A687	61	0.5	1.25	N-Included		No
7	1	55.3846154	1.25	A687	61	0.5	1.25	N-Included		No
8	1	64.6153846	1.25	A687	61	0.5	1.25	N-Included		No
9	1	73.8461538	1.25	A687	61	0.5	1.25	N-Included		No
10	1	83.0769231	1.25	A687	61	0.5	1.25	N-Included		No
11	1	92.3076923	1.25	A687	61	0.5	1.25	N-Included		No
12	1	101.538462	1.25	A687	61	0.5	1.25	N-Included		No
13	1	110.769231	1.25	A687	61	0.5	1.25	N-Included		No
14	1	120	1.25	A687	61	0.5	1.25	N-Included		No
15	1	129.230769	1.25	A687	61	0.5	1.25	N-Included		No
16	1	138.461538	1.25	A687	61	0.5	1.25	N-Included		No
17	1	147.692308	1.25	A687	61	0.5	1.25	N-Included		No
18	1	156.923077	1.25	A687	61	0.5	1.25	N-Included		No
19	1	166.153846	1.25	A687	61	0.5	1.25	N-Included		No
20	1	175.384615	1.25	A687	61	0.5	1.25	N-Included		No
21	1	184.615385	1.25	A687	61	0.5	1.25	N-Included		No
22	1	193.846154	1.25	A687	61	0.5	1.25	N-Included		No
23	1	203.076923	1.25	A687	61	0.5	1.25	N-Included		No
24	1	212.307692	1.25	A687	61	0.5	1.25	N-Included		No
25	1	221.538462	1.25	A687	61	0.5	1.25	N-Included		No
26	1	230.769231	1.25	A687	61	0.5	1.25	N-Included		No
27	1	240	1.25	A687	61	0.5	1.25	N-Included		No
28	1	249.230769	1.25	A687	61	0.5	1.25	N-Included		No
29	1	258.461538	1.25	A687	61	0.5	1.25	N-Included		No
30	1	267.692308	1.25	A687	61	0.5	1.25	N-Included		No
31	1	276.923077	1.25	A687	61	0.5	1.25	N-Included		No
32	1	286.153846	1.25	A687	61	0.5	1.25	N-Included		No
33	1	295.384615	1.25	A687	61	0.5	1.25	N-Included		No
34	1	304.615385	1.25	A687	61	0.5	1.25	N-Included		No
35	1	313.846154	1.25	A687	61	0.5	1.25	N-Included		No
36	1	323.076923	1.25	A687	61	0.5	1.25	N-Included		No
37	1	332.307692	1.25	A687	61	0.5	1.25	N-Included		No
38	1	341.538462	1.25	A687	61	0.5	1.25	N-Included		No
39	1	350.769231	1.25	A687	61	0.5	1.25	N-Included		No
40	2	4.61538462	1	DWYIDAG	71.13	0.5	0	N-Included		No
41	2	69.2307692	1	DWYIDAG	71.13	0.5	0	N-Included		No
42	2	124.615385	1	DWYIDAG	71.13	0.5	0	N-Included		No
43	2	189.230769	1	DWYIDAG	71.13	0.5	0	N-Included		No
44	2	244.615385	1	DWYIDAG	71.13	0.5	0	N-Included		No
45	2	309.230769	1	DWYIDAG	71.13	0.5	0	N-Included		No

Custom Stiffener Connection

Stiffener	Stiffener Group ID	Location (deg.)	Width (in)	Height (in)	Thickness (in)	H. Notch (in)	V. Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg.)	H. Fillet Weld Size (in)	V. Fillet Weld Size (in)	Weld Strength (ksi)
1	1	4.61538462	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
2	1	13.8461539	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
3	1	23.0769231	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
4	1	32.3076923	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
5	1	41.5384615	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
6	1	50.7692308	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
7	1	60	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
8	1	69.2307692	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
9	1	78.4615385	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
10	1	87.6923077	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
11	1	96.9230769	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
12	1	106.153846	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
13	1	115.384615	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
14	1	124.615385	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
15	1	133.846154	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
16	1	143.076923	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
17	1	152.307692	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
18	1	161.538462	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
19	1	170.769231	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
20	1	180	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
21	1	189.230769	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
22	1	198.461538	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
23	1	207.692308	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
24	1	216.923077	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
25	1	226.153846	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
26	1	235.384615	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
27	1	244.615385	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
28	1	253.846154	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
29	1	263.076923	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
30	1	272.307692	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
31	1	281.538462	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
32	1	290.769231	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
33	1	300	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
34	1	309.230769	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
35	1	318.461538	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
36	1	327.692308	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
37	1	336.923077	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
38	1	346.153846	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70
39	1	355.384615	4	12	0.75	0.5	0.5	50	Fillet			0.5	0.5	70

Plot Graphic



Pier and Pad Foundation

BU # :	826222
Site Name:	Newtown/RT-25
App. Number:	662914 Rev. 0

TIA-222 Revision:	H
Tower Type:	Monopole

Top & Bot. Pad Rein. Different?:	☐
Block Foundation?:	☐
Rectangular Pad?:	☐

Superstructure Analysis Reactions		
Compression, P_{comp}:	52.95	kips
Base Shear, Vu_comp:	30.71	kips
Moment, M_u:	3174.98	ft-kips
Tower Height, **H**:	150	ft
BP Dist. Above Fdn, bp_{dist}:	2.5	in

Pier Properties		
Pier Shape:	Circular	
Pier Diameter, **dpier**:	7	ft
Ext. Above Grade, **E**:	0.5	ft
Pier Rebar Size, **Sc**:	8	
Pier Rebar Quantity, **mc**:	36	
Pier Tie/Spiral Size, **St**:	4	
Pier Tie/Spiral Quantity, **mt**:	9	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}:	3	in

Pad Properties		
Depth, **D**:	6	ft
Pad Width, W_1:	21	ft
Pad Thickness, **T**:	2	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	8	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	27	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	4	ksi
Dry Concrete Density, δ**c**:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	125	pcf
Ultimate Net Bearing, Qnet:	30.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:	35	degrees
SPT Blow Count, N_{blows}:	29	
Base Friction, μ:	0.4	
Neglected Depth, **N**:	3.40	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, **gw**:	N/A	ft

<--Toggle between Gross and Net

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	187.01	30.71	**15.6%**	**Pass**
Bearing Pressure (ksf)	23.06	4.28	**18.5%**	**Pass**
*Overturning (kip*ft)*	4196.65	3380.99	**80.6%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	4738.46	3313.18	**66.6%**	**Pass**
Pier Compression (kip)	24494.62	84.12	**0.3%**	**Pass**
*Pad Flexure (kip*ft)*	1800.02	1739.02	**92.0%**	**Pass**
Pad Shear - 1-way (kips)	466.18	282.02	**57.6%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.190	0.000	**0.0%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	2208.21	1987.91	**85.7%**	**Pass**

**Rating per TIA-222-H Section 15.5*

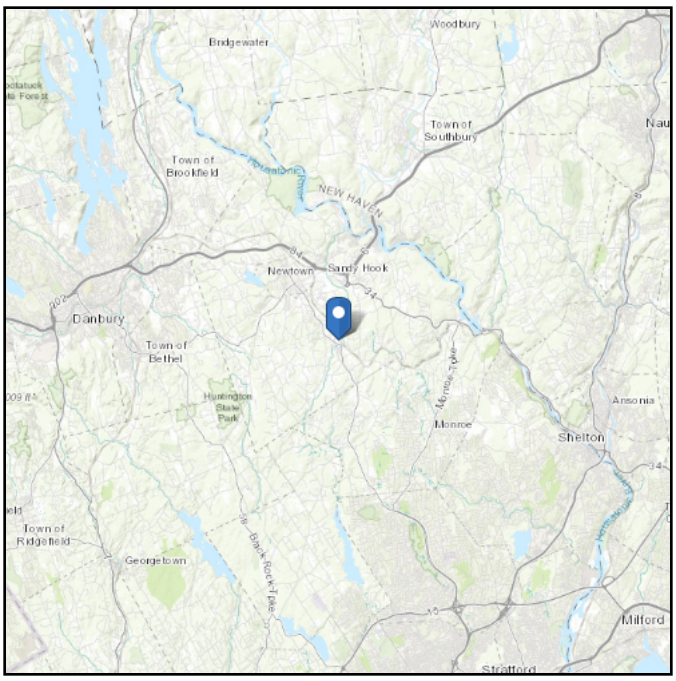
Structural Rating*:	**92.0%**
Soil Rating*:	**80.6%**

Version 5.0.2

ASCE Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-16	**Latitude:**	41.378144
Risk Category:	II	**Longitude:**	-73.27415
Soil Class:	D - Default (see Section 11.4.3)	**Elevation:**	398.503013408264 ft (NAVD 88)



Wind

Results:

Wind Speed	116 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

Data Source:	ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed:	Mon Apr 29 2024

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Seismic

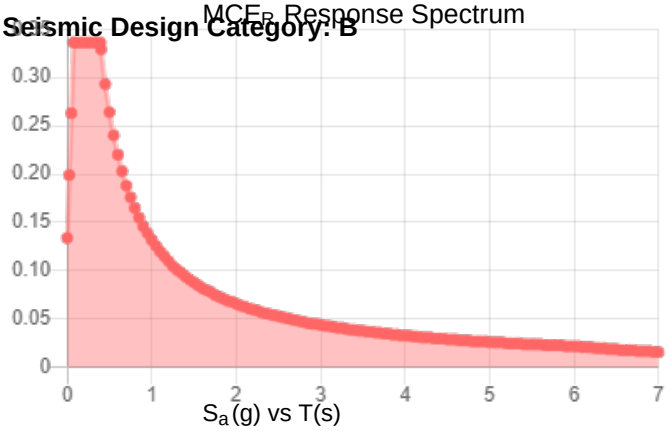
Site Soil Class: D - Default (see Section 11.4.3)

Results:

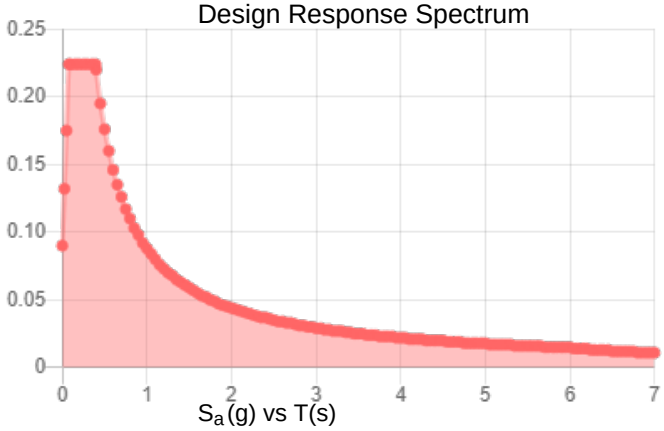
S_S :	0.21	S_{D1} :	0.088
S_1 :	0.055	T_L :	6
F_a :	1.6	PGA :	0.119
F_v :	2.4	PGA_M :	0.186
S_{MS} :	0.336	F_{PGA} :	1.562
S_{M1} :	0.132	I_e :	1
S_{DS} :	0.224	C_v :	0.72

Seismic Design Category: B

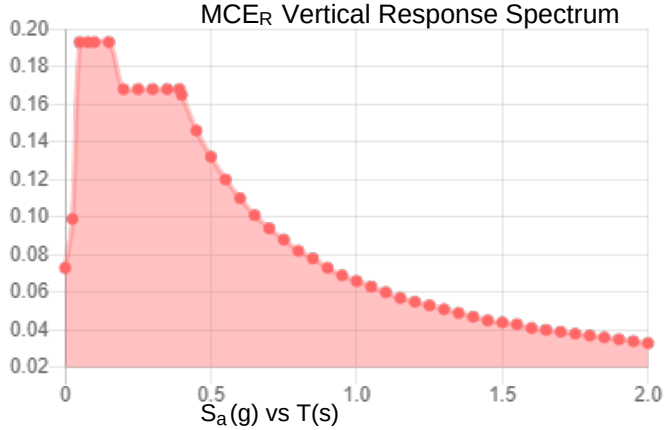
MCE_R Response Spectrum



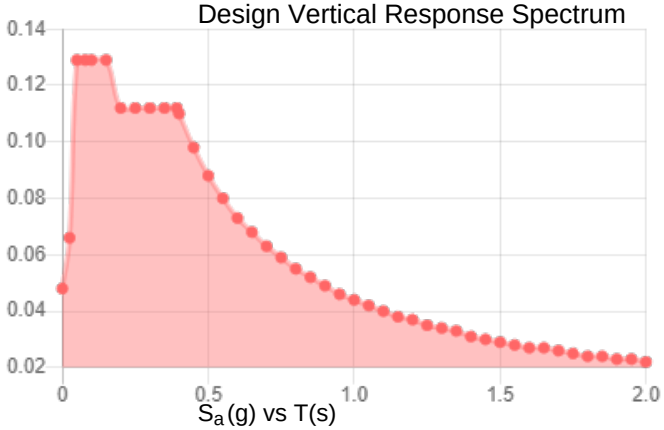
Design Response Spectrum



MCE_R Vertical Response Spectrum



Design Vertical Response Spectrum



Data Accessed: **Mon Apr 29 2024**

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Mon Apr 29 2024

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

EXHIBIT F

Mount Analysis Report

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

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10218077
Colliers Engineering & Design Project #: 22777025 (Rev. 1)

March 8, 2024

Site Information	*Site ID:*	*5000382932-VZW / NEWTOWN SOUTH CT*
	Site Name:	*NEWTOWN SOUTH CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*201 South Main St* *Newtown, Connecticut 06470* *Fairfield County*
	Latitude:	*41.378167°*
	Longitude:	*-73.274094°*
Structure Information	*Tower Type:*	*150-Ft Monopole*
	Mount Type:	*12.50-Ft Platform*

FUZE ID # 16092597

Analysis Results

Platform: **64.3% Pass w/ Modifications***

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

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

Report Prepared By: Nathan LaPorte

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS Site ID: 674992, dated November 9, 2023*
Desktop Mount Mapping Form	*Colliers Engineering & Design, Project #: 22777025A, dated March 21, 2022*
Previous Mount Analysis Report	*Colliers Engineering & Design, Project #: 22777025 (Rev. 1), dated December 26, 2023*
Mount Modification Drawings	*Colliers Engineering & Design, Project #: 22777025 (Rev. 1), dated March 8, 2024*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building code (CBC), Effective October 1, 2022	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	120 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.986
Seismic Parameters:	S_S:	0.209 g
	S_1:	0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V21)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
126.00	127.00	3	Samsung	MT6413-77A	Added
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4461d-13A	
		1	Raycap	RVZDC-6627-PF-48	
		6	RFS	APL866513	Retained
		6	Andrew	SBNHH-1D65B	

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

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

Standard Conditions:

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

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

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

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

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

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

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

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

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

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Support Rail Corner	26.9%	Pass
Support Rail	18.6%	Pass
Mount Pipe	29.4%	Pass
Face Horizontal	11.4%	Pass
Corner Plate	15.0%	Pass
Cross Arm Plate	33.7%	Pass
Grating Support	18.0%	Pass
Platform Crossmember	16.4%	Pass
Standoff Horizontal	28.2%	Pass
Mount Connection	64.3%	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**64.3%**

Mount Connection Envelope Reactions:

Connection Description	Elev. AGL (Ft)	Node Label	Envelope Wind Reactions				Envelope Wind + Ice Reactions			
			Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)	Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)
Sector A Standoff	126.0	N1	1468	1920	2.962	1.790	2227	635	4.235	0.465
Sector B Standoff	126.0	N30	1507	2058	3.100	1.858	2370	672	4.395	0.481
Sector C Standoff	126.0	N58	1460	1908	2.939	1.762	2204	632	4.161	0.456

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

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

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	24.5	24.5	41.6	41.6
0.5	32.1	32.1	56.5	56.5
1	39.1	39.1	70.6	70.6

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

Requirements:

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

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

Attachments:

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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com
For additional questions and support, please reach out to pmisupport@colliersengineering.com

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MDG #: 5000382932 SMART Project #: 10218077 Fuze Project ID: 16092597

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

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

Base Requirements:

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

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation of the modifications.
  - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to modification.
  - Photos showing the climbing facility and safety climb if present.

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

Material Certification:

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

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

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

OR

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

Antenna & Equipment Placement and Geometry Confirmation:

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

OR

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

Comments:

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

☐ Yes ☐ No

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

Issue:

Contractor shall record all dimensions and member sizes requested in the Mount Geometry Verification Requirements section of the Mount Modification Drawings. Contractor shall provide the requested information to Colliers Engineering & Design for structural verification while on site. Contact EOR if these documents are not available to the general contractor. Contractor shall install OVP onto existing OVP pipe on standoff horizontal.

Response:

Special Instruction Confirmation:

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

Comments:

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

☐ Yes ☐ No

Contractor certifies no new damage created during the current installation:

☐ Yes ☐ No

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

☐ Safety Climb in Good Condition ☐ Safety Climb Damaged

Comments:

Certifying Individual:

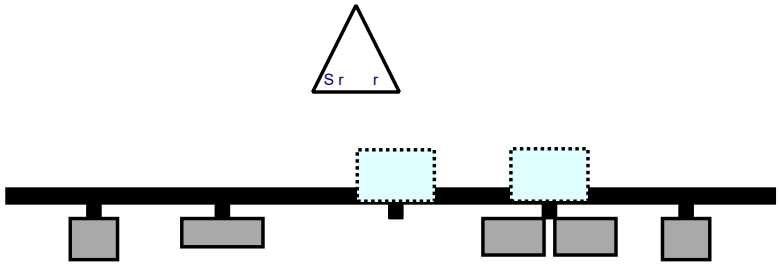
Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

S r **A** 3 2 2

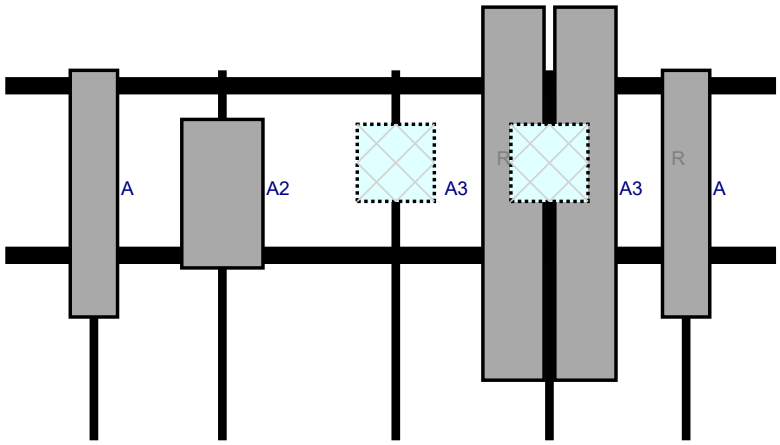
Sr r T M 1 21

M E 12 . P 1

Plan View



Front View - L Sr r



3 2 1

R	M d	d	D r L.	P P	P P	A r T.	.A O	A S	d
A	APL 13	.2	132.	1		r 2		R	d
A3	SB 1D B	2.	11.	1 .	2	r 2		R	d
A3	SB 1D B	2.	11.	1 .	2	r 2		R	d
R	R 1d 13A	1	1	1 .	2	B d 1		Add	d
R	R 3 d 2 A	1	1		3	B d 1		Add	d
A2	MT 13 A	2 .	1 .	2.2		r 2		Add	d
A	APL 13	.2	1 .2			r 2		R	d
O P	R D 2 P	2 .	1 .		M r			Add	d

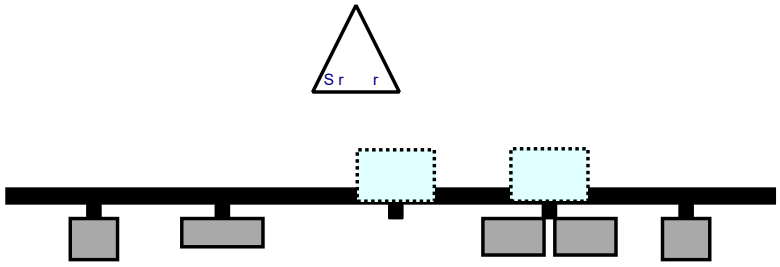
S r **B** 3 2 2

Sr r T M 1 21

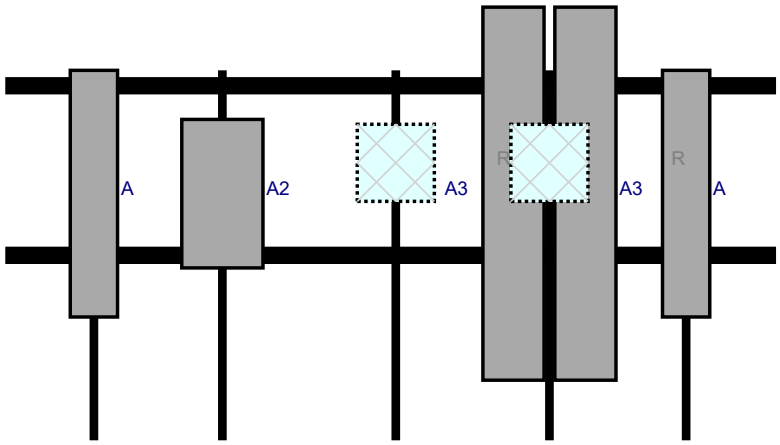
M E 12 . P 2

Colliers Engineering & Design

Plan View



Front View - L Sr r



3 2 1

R	M d	d	D r L.	P P	A P	. A r T.	A O	S	d
A	APL 13	.2	132.	1	r	2		R	d
A3	SB 1D B	2.	11.	1 . 2	r	2		R	d
A3	SB 1D B	2.	11.	1 . 2	r	2		R	d
R	R 1d 13A	1	1	1 . 2	B	d 1		Add	d
R	R 3 d 2 A	1	1	3	B	d 1		Add	d
A2	MT 13 A	2 .	1 .	2.2	r	2		Add	d
A	APL 13	.2	1 .2		r	2		R	d

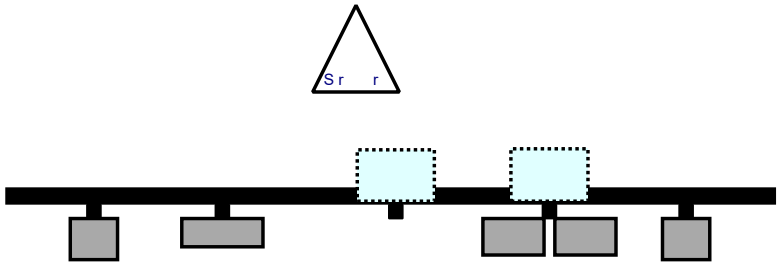
S r **C** 3 2 2

S r r T M 1 21

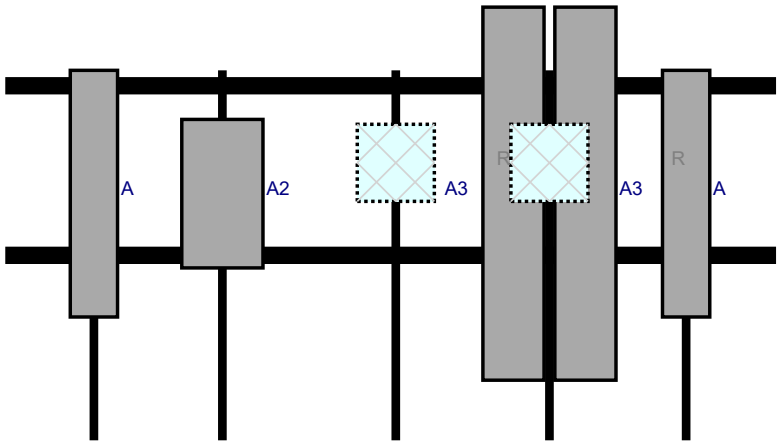
M E 12 . P 3

Colliers Engineering & Design

Plan View



Front View - L S r r



3 2 1

R	M d	d	D r L.	P P	A P	. A r T.	A O	S	d
A	APL 13	.2	132.	1	r	2		R	d
A3	SB 1D B	2.	11.	1 . 2	r	2		R	d
A3	SB 1D B	2.	11.	1 . 2	r	2		R	d
R	R 1d 13A	1	1	1 . 2	B	d 1		Add	d
R	R 3 d 2 A	1	1	3	B	d 1		Add	d
A2	MT 13 A	2 .	1 .	2.2	r	2		Add	d
A	APL 13	.2	1 .2		r	2		R	d

MOUNT MODIFICATION DRAWINGS
EXISTING 12.50' PLATFORM

TOWER OWNER: CROWN CASTLE
TOWER OWNER SITE NUMBER: 826222

CARRIER SITE NAME: NEWTOWN SOUTH CT
CARRIER MDG NUMBER: 5000382932
FUZE ID: 16092597

201 SOUTH MAIN ST
NEWTOWN, CT 06470
FAIRFIELD COUNTY

LATITUDE: 41.378167° N
LONGITUDE: 73.274094° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 120 MPH
EXPOSURE CATEGORY C
TOPOGRAPHIC METHOD II
TOPOGRAPHIC CONSIDERED N/A
MEAN BASE ELEVATION (AMSL) = 387'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_S = .210
LONG TERM MCER GROUND MOTION, S_1 = .055

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10218077
VZW MDG #: 5000382932
ANALYSIS DATE: 3/8/2024

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

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SCALE :	JOB NUMBER :
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1	03/08/24	ISSUED FOR CONSTRUCTION	NL	PET
0	05/18/22	ISSUED FOR CONSTRUCTION	DC	DH

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Colliers Engineering & Design
STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
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SHEET TITLE : TITLE SHEET

SHEET NUMBER : ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-PLK1	SUPPORT RAIL KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	504	504
3		VZWSMART-MSK1	CROSSOVER PLATE		14	42

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
					TOTAL:	546

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.

2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM

METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM

SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

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SHEET TITLE: BILL OF MATERIALS

SHEET NUMBER: SBOM-1

PROJECT NOTES

1. SEE MODIFICATION NOTES
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
11. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

GENERAL NOTES

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

STRUCTURAL STEEL

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

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO
      PETER.ALBANO@COLLIERSENGINEERING.COM
   b. PROVIDE MASER CONSULTING PROJECT # AND MASER CONSULTING PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. CONTRACTOR SHALL PROTECT CUT ENDS OF ALL FIELD-CUT STEEL WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC COTE).
9. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
10. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
11. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
12. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
13. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

WELDING NOTES

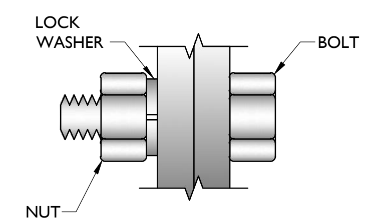
1. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE, DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.
2. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD PARTY CERTIFIED WELD INSPECTOR (CWI) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWI REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.
3. THE CERTIFIED WELD INSPECTOR SHALL INDICATE, IN A WRITTEN CWI REPORT, THAT ALL WELDING OPERATIONS PRE, DURING, AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELD INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED DURING THE PMI.
4. IN CASES WHERE A WELD IS SPECIFIED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT-UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN THE DRAWINGS.
5. OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.
6. CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.
7. CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT CONFORMS WITH ALL OSHA, ANSI/ASSP A10.48, ANSI Z49.1, AND LOCAL JURISDICTIONAL REQUIREMENTS.

BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

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

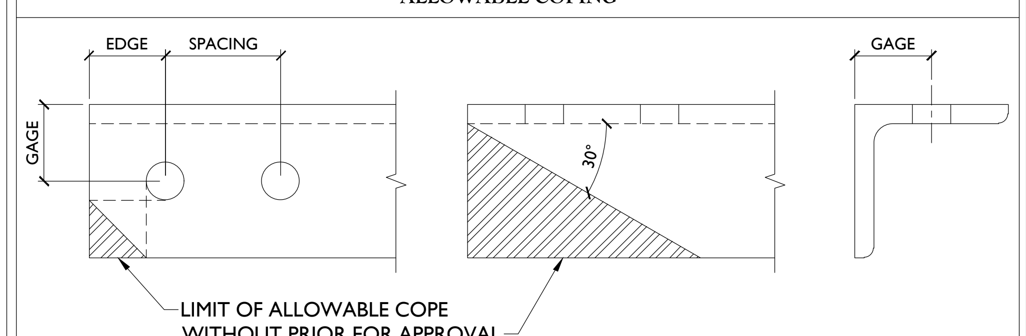


TYP. BOLT ASSEMBLY

NOTES:

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

ALLOWABLE COPING



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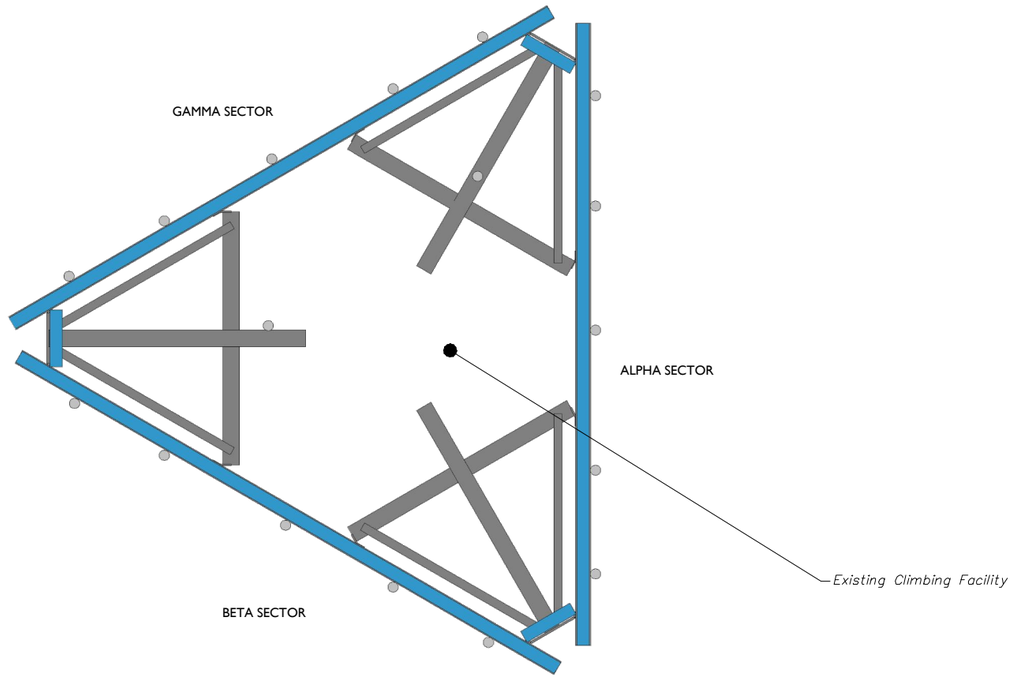
SHEET TITLE : MODIFICATION NOTES

SHEET NUMBER : SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 CLIMBING FACILITY LOCATION

SCALE : N.T.S.

STRUCTURAL NOTES:

1. CONTRACTOR TO INSPECT CLIMBING FACILITIES AT SITE AND ENSURE THAT THE SAFETY CLIMB IS IN GOOD CONDITION AND THAT THE WIRE ROPE DOES NOT OR WILL NOT INTERFERE WITH THE EXISTING OR PROPOSED MOUNT CONNECTIONS. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDED AROUND MOUNT CONNECTIONS AS NEEDED.

2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

CLIMBING FACILITY PHOTO

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Colliers Engineering & Design

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

SHEET TITLE :

CLIMBING FACILITY DETAIL

SHEET NUMBER :

SCF-1

LEGEND:

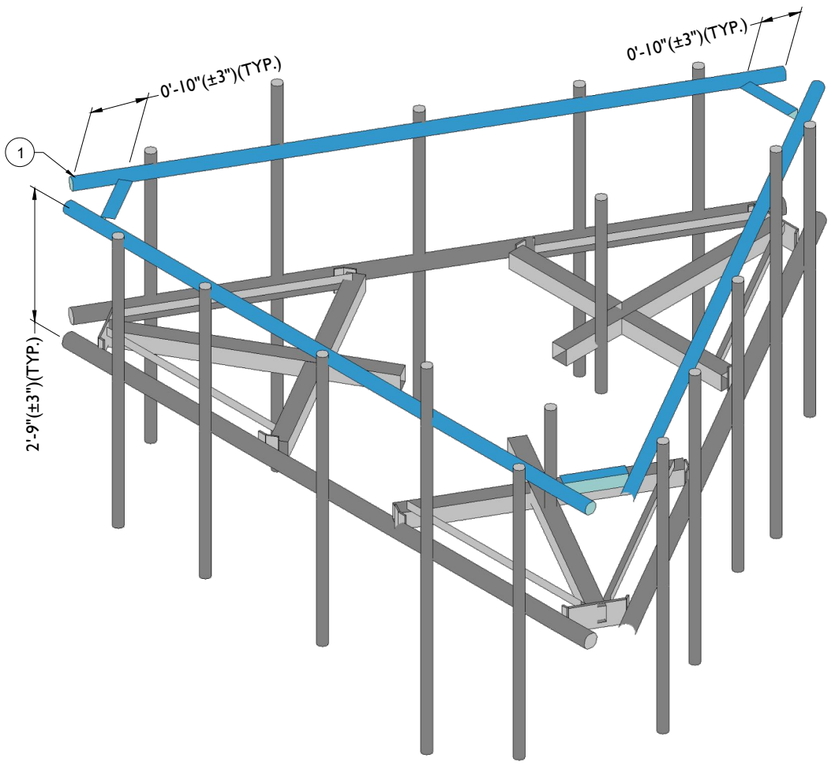
- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	126'-0"	1	PROPOSED SUPPORT RAIL KIT (PART #: VZWSMART-PLK1)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.CONNECT NEW HORIZONTAL TO ALL EXISTING VERTICAL MOUNT PIPES WITH INCLUDED KIT CROSSOVER PLATES AND WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).

NOTES.

MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW

SCALE : N.T.S.

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE : AS SHOWN

JOB NUMBER : 22777025A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	03/08/24	ISSUED FOR CONSTRUCTION	NL	PET
0	05/18/22	ISSUED FOR CONSTRUCTION	DC	DH

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

SITE NAME:

NEWTOWN SOUTH CT
5000382932

201 SOUTH MAIN ST
NEWTOWN, CT 06470
FAIRFIELD COUNTY

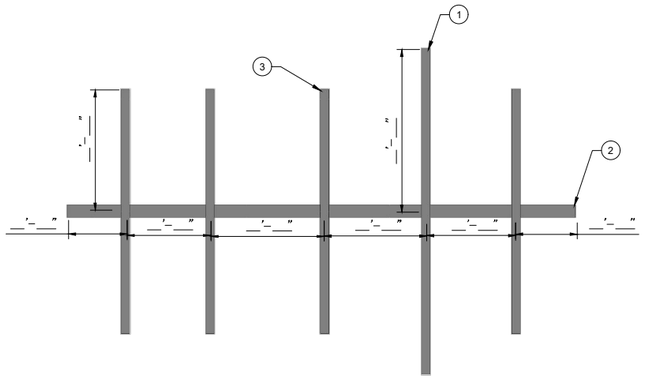
Colliers Engineering & Design
STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE : MODIFICATION DETAILS

SHEET NUMBER : SS-1

EXISTING MEMBERS			
NO.	DESCRIPTION	SHAPE	NOTES
1.	MOUNT PIPE		TYP. OF 3, 1 PER SECTOR
2.	FACE HORIZONTAL		TYP. OF 3, 1 PER SECTOR
3.	MOUNT PIPE		TYP. OF 12, 4 PER SECTOR

LIST ALL SHAPES:
ANGLE (LEG1xLEG2xTH.): EX. L2x2x1/4
CHANNEL (DEPTHxFLANGE WIDTH): EX. CH6"x1-7/8"
PIPE (ODxTH.): EX. PIPE 2.4"x0.12"
PLATE (TH.xDEPTH): EX. PLATE 1/2"x2"

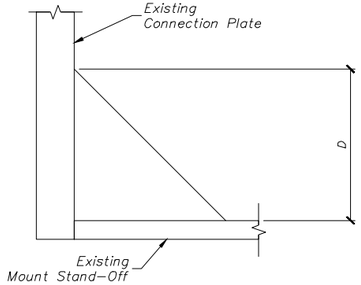


2 EXISTING MOUNT GEOMETRY VERIFICATION FRONT ELEVATION VIEW

SCALE : N.T.S.

NOTE:

CONTRACTOR SHALL RECORD ALL DIMENSIONS AND MEMBER SIZES SHOWN IN THIS SKETCH. DOCUMENT VIA PHOTOS AND SKETCHES AND PROVIDE TO THE EOR FOR EVALUATION.

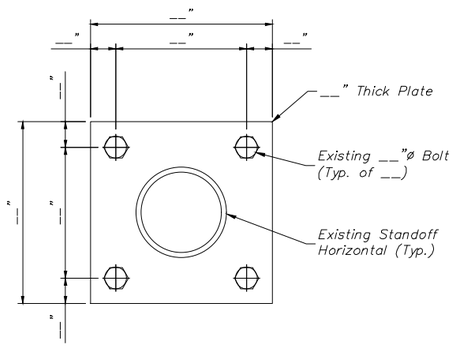


WELD MEASUREMENT NOTE:

CONTRACTOR SHALL MEASURE WELD SIZE 'D' AS SHOWN IN THIS DETAIL.

4 WELD MEASUREMENT DETAIL

SCALE : N.T.S.



NOTE:

REFER TO WELD MEASUREMENT DETAIL FOR DIRECTIONS ON OBTAINING WELD MEASUREMENTS.

3 MOUNT CONNECTION DETAIL

SCALE : N.T.S.

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SCALE :	JOB NUMBER :
AS SHOWN	22777025A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	03/08/24	ISSUED FOR CONSTRUCTION	NL	PET
0	05/18/22	ISSUED FOR CONSTRUCTION	DC	DH

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NEWTOWN, CT 06470
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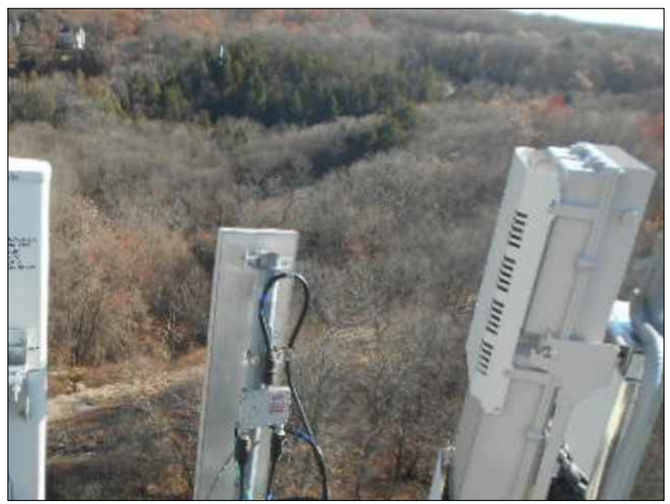
SHEET TITLE :
GEOMETRY VERIFICATION SKETCHES

SHEET NUMBER :
SS-2

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3



MOUNT PHOTO 4

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE : AS SHOWN

JOB NUMBER : 22777025A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	03/08/24	ISSUED FOR CONSTRUCTION	NL	PET
0	05/18/22	ISSUED FOR CONSTRUCTION	DC	DH

COLLIERS ENGINEERING & DESIGN CT, P.C.
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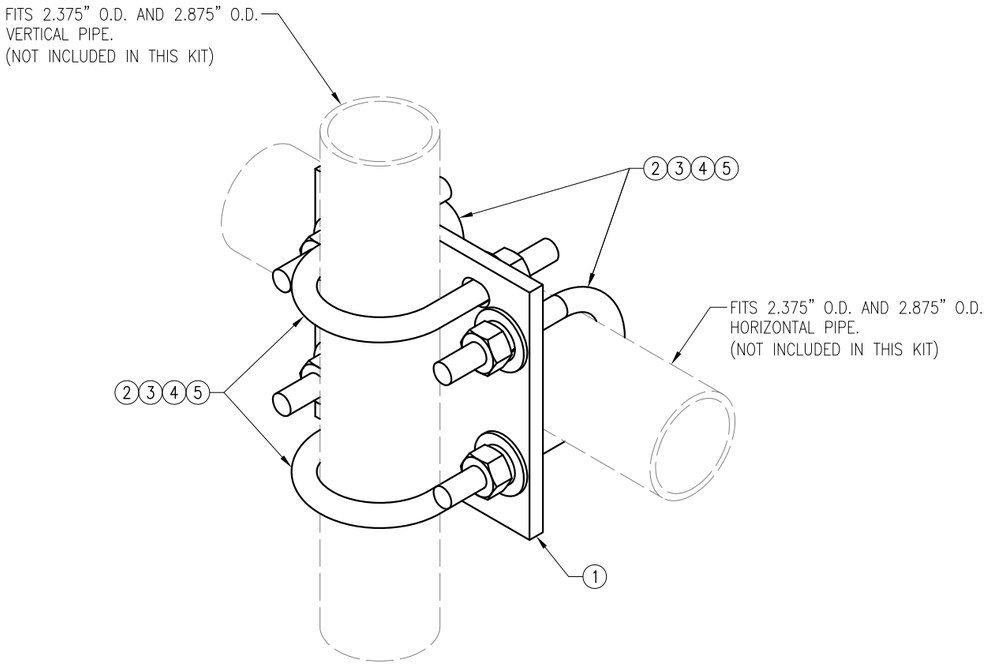
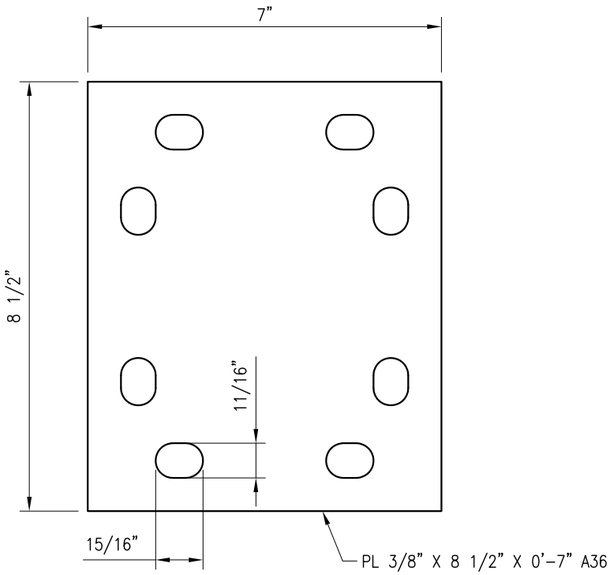
SHEET TITLE : MOUNT PHOTOS

SHEET NUMBER : SS-3





PL375-857

VZWSMART-MSK1 (CROSSOVER PLATE)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-857	PL 3/8" X 8 1/2" X 0'-7" A36	MSK1-F1	6
2	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	8	LW-625	5/8" HDG LOCK WASHER	---	0
5	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	14

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

VzW SMART Tool© Vendor

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DRAWN BY: H.R | CHECKED BY: HMA

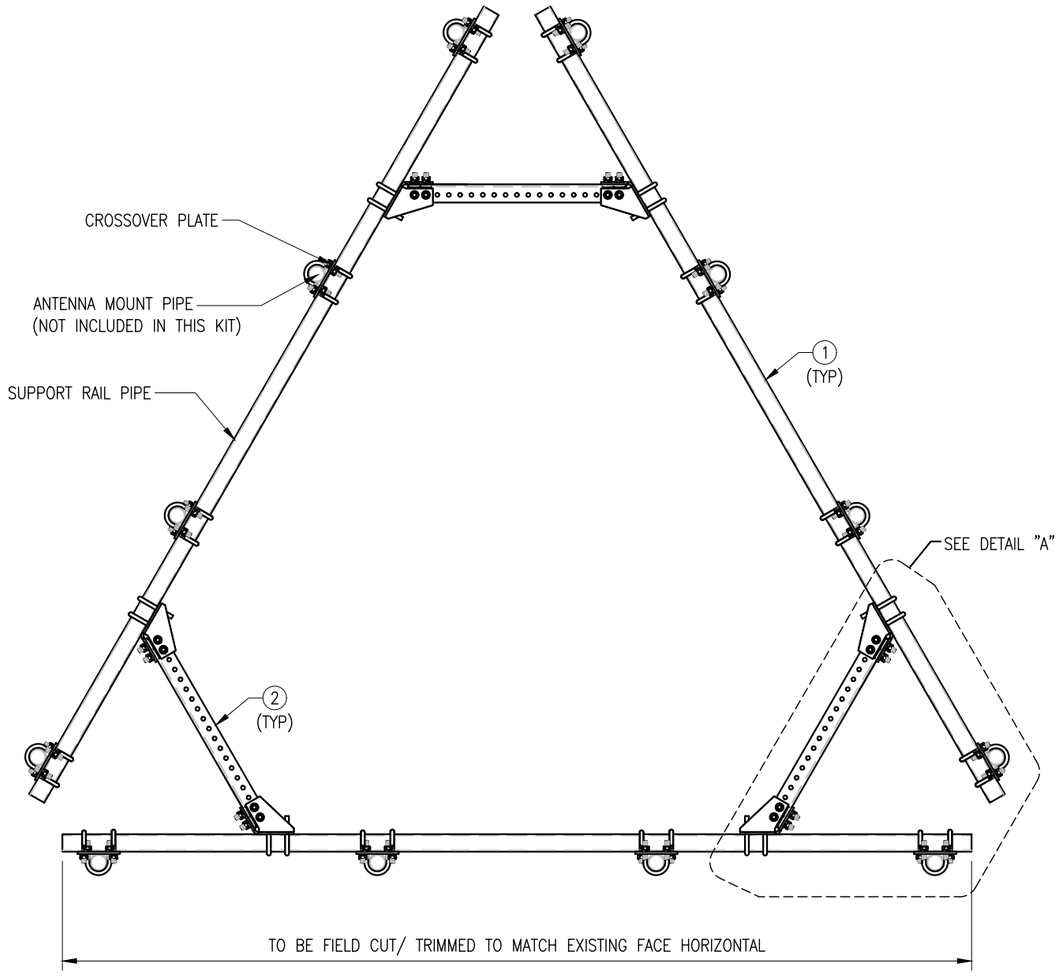
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:

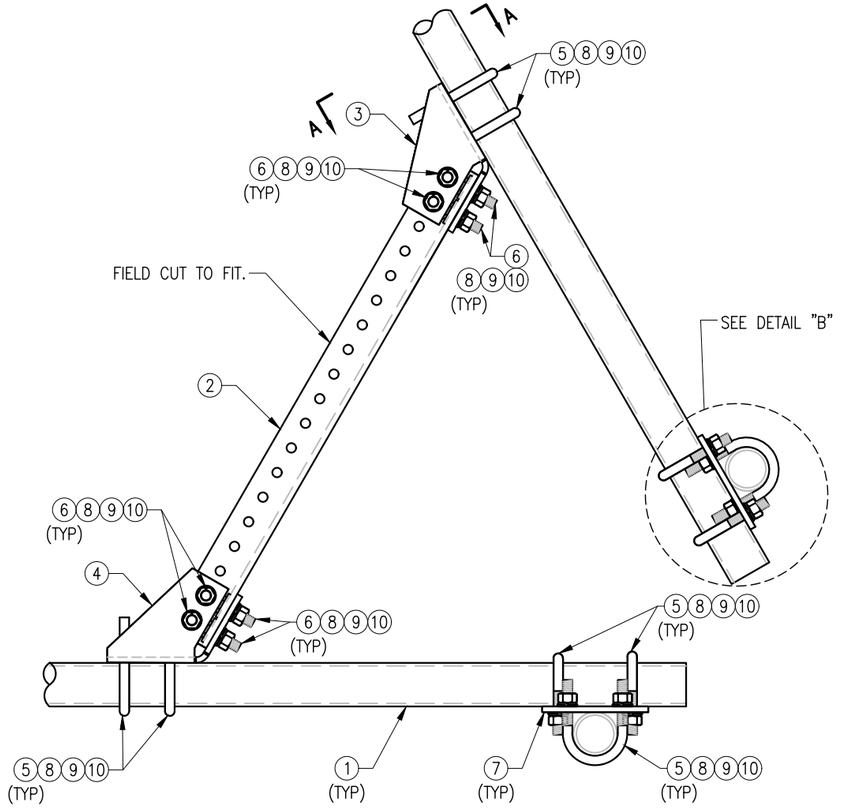
VZWSMART-MSK1
CROSSOVER PLATE

SHEET NUMBER: VZWSMART-MSK1

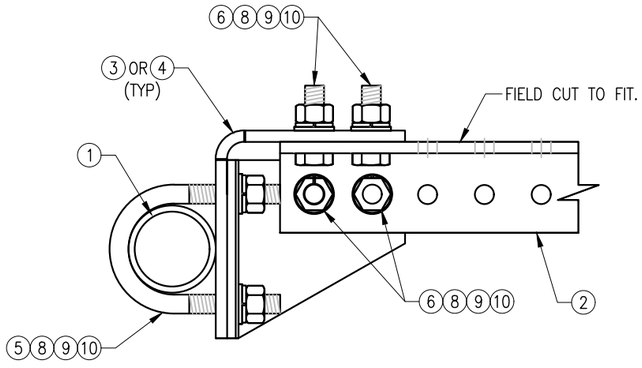
REV #: 0



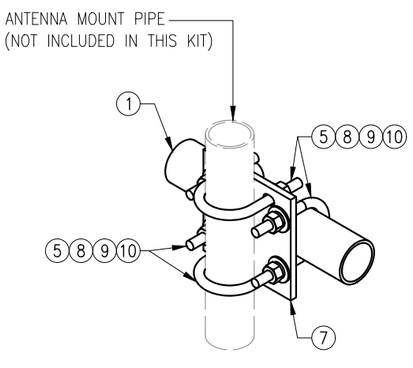
PLAN VIEW



DETAIL "A"



SECTION "A–A"



DETAIL "B"

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VZW SMART–PLK1 (SUPPORT RAIL KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	PST2875–12.5	2.5" PST (2.875" O.D. X 0.203" THK.) X 12'–6" A53 GR–B	PLK1–F1	292
2	3	L33375–3	L 3" X 3" X 3/8" X 3'–0" A36	PLK1–F1	66
3	3	CBP–L	CORNER BENT PLATE BRACKET	PLK1–F2	28
4	3	CBP–R	CORNER BENT PLATE BRACKET	PLK1–F2	28
5	60	MS02–625–300–500	RU–BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC–1	82
6	24	---	BOLT 5/8" X 2" A325	---	9
7	12	PL375–857	PL 3/8" X 8 1/2" X 7'–0" A36	PLK1–F3	77
8	144	FW–625	5/8" HDG USS FLAT WASHER	---	12
9	144	LW–625	5/8" HDG LOCK WASHER	---	3
10	144	NUT–625	5/8" HDG HEX NUT	---	17
				GALVANIZED WT	504

VzW SMART Tool© Vendor

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DRAWN BY: H.R | CHECKED BY: HMA

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:

VZWSMART–PLK1
SUPPORT RAIL KIT

SHEET NUMBER: VZWSMART–PLK1

REV #: 0


11.22.2016 11:11


11.22.2016 11:07

Desktop Mount Mapping Form

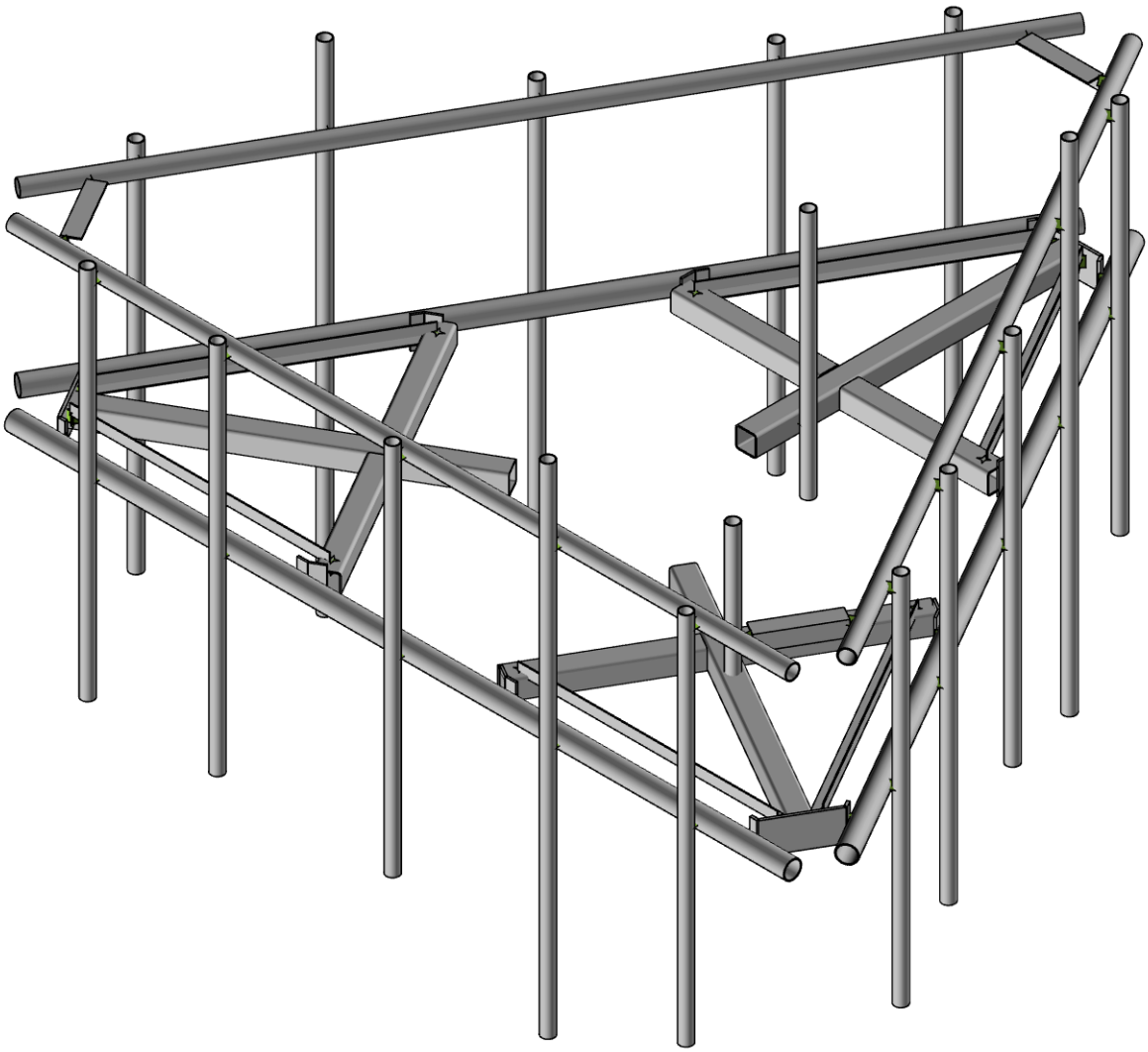
Site Name:	NEWTOWN SOUTH CT	**Tower Type:**	Monopole
Site ID:		**Tower Owner:**	
FUZE Project ID:		**Tower Height (Ft.):**	150'
Customer:	Verizon Wireless	**Mount Elevation (Ft.):**	
Colliers Project No.	22777025	**Date:**	3/31/2022

Document Type	Provided? (Yes/No)	Source Name	Project No.	Dated	Comments/Remarks
Previous Mount Mapping	No				
Previous Mapping Photos	No				
Previous Mount Analysis	No				
Previous Mount Modifications	No				
Previous Structural Analysis	No				
Construction Drawings	Yes	Newtown+South+CT+AWS-RET+CD's+10-01-14+V0		10/1/2014	Secondary source of information
Closeout Package	Yes	Newtown South_CT_COP			Provides photos
Photos	Yes	Newtown South_CT_PHOTOS			Photos show standard Site Pro 1 RMQP mount
Handover Package	No				
New Build 445 Documentation	No				
Other	No				
Previous PMI	No				

The desktop mount mapping is based on the engineering review of the available site documents in FUZE, as listed above, in place of a full mount mapping. It is assumed that the information provided in the documents listed above, provide an accurate representation of the existing mount. EOR reserves the right and will typically require additional clarification and verification as will be included in the PMI requirements. During the Post Modification Inspection (PMI) process, the GC on site will be required to confirm all questions, confirmations, and validations as posed by the EOR. The engineering review for this desktop mount mapping was performed in accordance to the ANSI/TIA-222-H requirements and Verizon's NSTD446 standard.

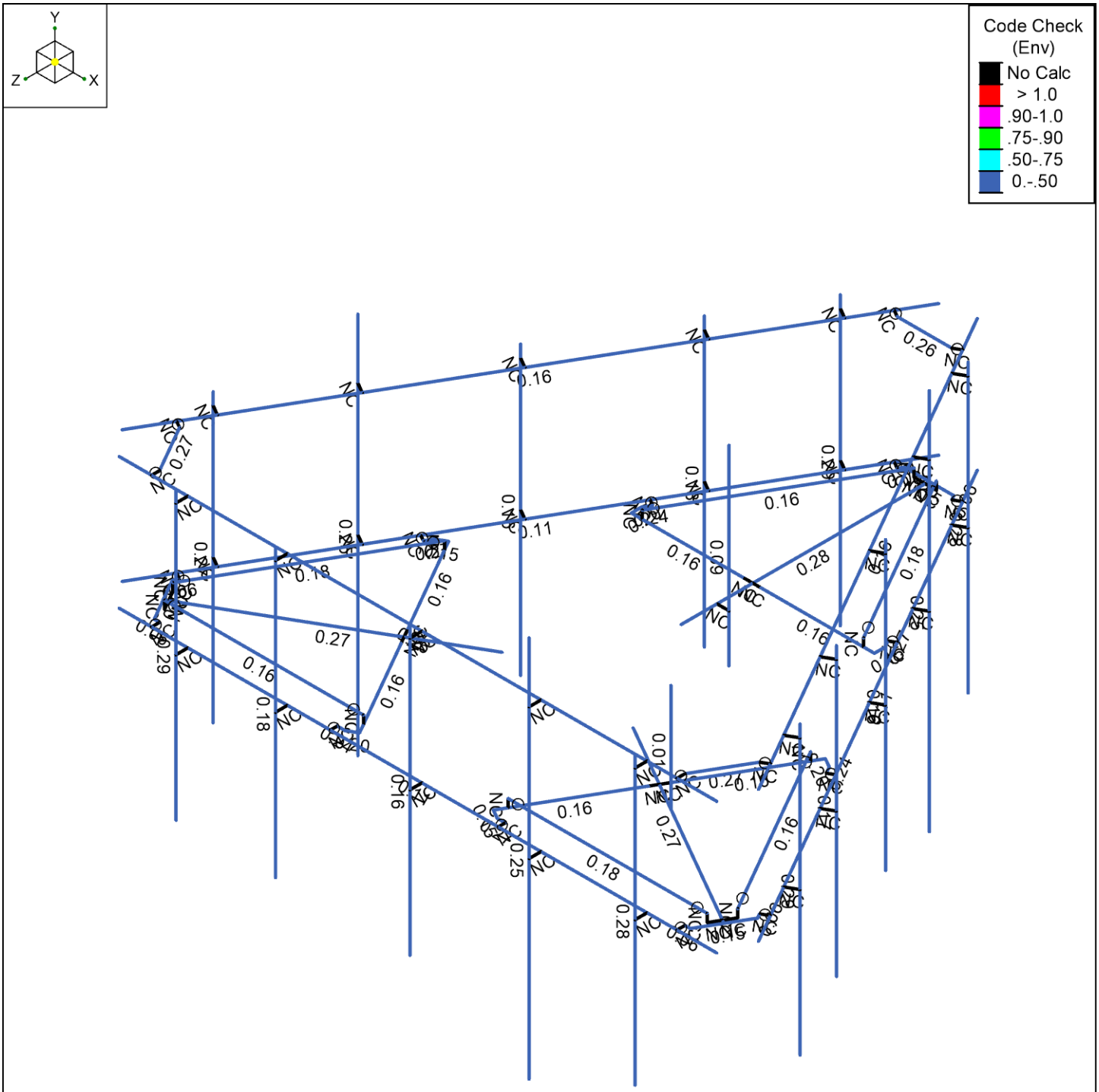
Photo taken from: Closeout Package

Photo taken from: Closeout Package



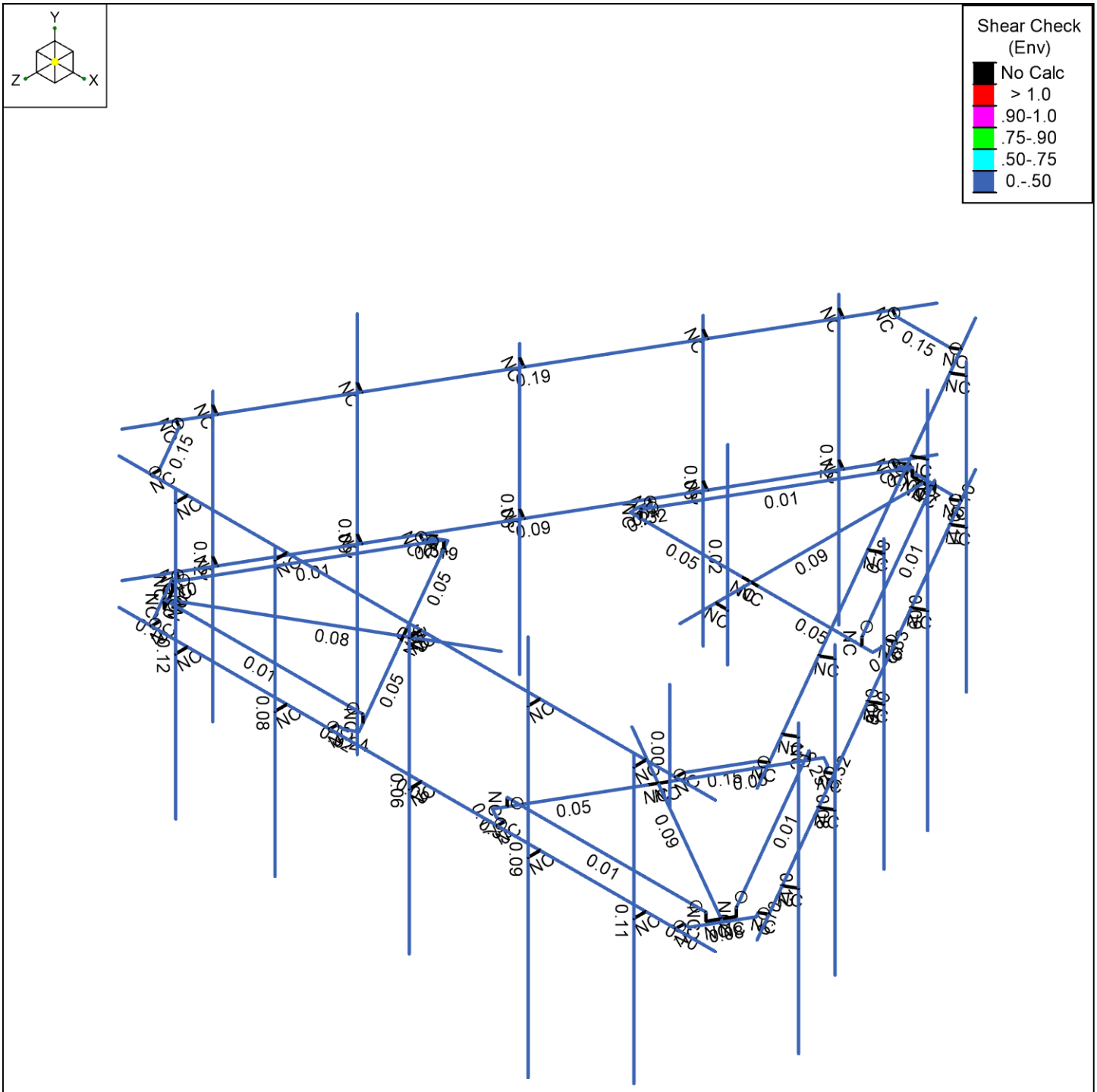
Envelope Only Solution

IRISA A NEMETSCHEK COMPANY	Colliers Engineering & De…	Mount Mod ReDesign	SK-1
	NL		Mar 07, 2024 at 09:47 AM
	22777025 (Rev. 1)		5000382932-VZW_MT_LO_…



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

RISA A NEMETSCHEK COMPANY	Colliers Engineering & De…	Mount Mod ReDesign	SK-2
	NL		Mar 07, 2024 at 09:47 AM
	22777025 (Rev. 1)		5000382932-VZW_MT_LO_…



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

RISA A NEMETSCHEK COMPANY	Colliers Engineering & De…	Mount Mod ReDesign	SK-3
	NL		Mar 07, 2024 at 09:47 AM
	22777025 (Rev. 1)		5000382932-VZW_MT_LO_…

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Point	Distributed	Area(Member)
1	Antenna D	None				111		
2	Antenna Di	None				111		
3	Antenna Wo (0 Deg)	None				111		
4	Antenna Wo (30 Deg)	None				111		
5	Antenna Wo (60 Deg)	None				111		
6	Antenna Wo (90 Deg)	None				111		
7	Antenna Wo (120 Deg)	None				111		
8	Antenna Wo (150 Deg)	None				111		
9	Antenna Wo (180 Deg)	None				111		
10	Antenna Wo (210 Deg)	None				111		
11	Antenna Wo (240 Deg)	None				111		
12	Antenna Wo (270 Deg)	None				111		
13	Antenna Wo (300 Deg)	None				111		
14	Antenna Wo (330 Deg)	None				111		
15	Antenna Wi (0 Deg)	None				111		
16	Antenna Wi (30 Deg)	None				111		
17	Antenna Wi (60 Deg)	None				111		
18	Antenna Wi (90 Deg)	None				111		
19	Antenna Wi (120 Deg)	None				111		
20	Antenna Wi (150 Deg)	None				111		
21	Antenna Wi (180 Deg)	None				111		
22	Antenna Wi (210 Deg)	None				111		
23	Antenna Wi (240 Deg)	None				111		
24	Antenna Wi (270 Deg)	None				111		
25	Antenna Wi (300 Deg)	None				111		
26	Antenna Wi (330 Deg)	None				111		
27	Antenna Wm (0 Deg)	None				111		
28	Antenna Wm (30 Deg)	None				111		
29	Antenna Wm (60 Deg)	None				111		
30	Antenna Wm (90 Deg)	None				111		
31	Antenna Wm (120 Deg)	None				111		
32	Antenna Wm (150 Deg)	None				111		
33	Antenna Wm (180 Deg)	None				111		
34	Antenna Wm (210 Deg)	None				111		
35	Antenna Wm (240 Deg)	None				111		
36	Antenna Wm (270 Deg)	None				111		
37	Antenna Wm (300 Deg)	None				111		
38	Antenna Wm (330 Deg)	None				111		
39	Structure D	None		-1				3
40	Structure Di	None					62	3
41	Structure Wo (0 Deg)	None					124	
42	Structure Wo (30 Deg)	None					124	
43	Structure Wo (60 Deg)	None					124	
44	Structure Wo (90 Deg)	None					124	
45	Structure Wo (120 Deg)	None					124	
46	Structure Wo (150 Deg)	None					124	
47	Structure Wo (180 Deg)	None					124	
48	Structure Wo (210 Deg)	None					124	
49	Structure Wo (240 Deg)	None					124	
50	Structure Wo (270 Deg)	None					124	
51	Structure Wo (300 Deg)	None					124	
52	Structure Wo (330 Deg)	None					124	
53	Structure Wi (0 Deg)	None					124	
54	Structure Wi (30 Deg)	None					124	
55	Structure Wi (60 Deg)	None					124	

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Point	Distributed	Area(Member)
56	Structure Wi (90 Deg)	None					124	
57	Structure Wi (120 Deg)	None					124	
58	Structure Wi (150 Deg)	None					124	
59	Structure Wi (180 Deg)	None					124	
60	Structure Wi (210 Deg)	None					124	
61	Structure Wi (240 Deg)	None					124	
62	Structure Wi (270 Deg)	None					124	
63	Structure Wi (300 Deg)	None					124	
64	Structure Wi (330 Deg)	None					124	
65	Structure Wm (0 Deg)	None					124	
66	Structure Wm (30 Deg)	None					124	
67	Structure Wm (60 Deg)	None					124	
68	Structure Wm (90 Deg)	None					124	
69	Structure Wm (120 Deg)	None					124	
70	Structure Wm (150 Deg)	None					124	
71	Structure Wm (180 Deg)	None					124	
72	Structure Wm (210 Deg)	None					124	
73	Structure Wm (240 Deg)	None					124	
74	Structure Wm (270 Deg)	None					124	
75	Structure Wm (300 Deg)	None					124	
76	Structure Wm (330 Deg)	None					124	
77	Lm1	None				1		
78	Lm2	None				1		
79	Lv1	None				1		
80	Lv2	None				1		
81	Antenna Ev	None				111		
82	Antenna Eh (0 Deg)	None				74		
83	Antenna Eh (90 Deg)	None				74		
84	Structure Ev	ELY		-0.045				3
85	Structure Eh (0 Deg)	ELZ			-0.111			3
86	Structure Eh (90 Deg)	ELX	0.111					3
87	BLC 39 Transient Area Loads	None					30	
88	BLC 40 Transient Area Loads	None					30	
89	BLC 84 Transient Area Loads	None					30	
90	BLC 85 Transient Area Loads	None					30	
91	BLC 86 Transient Area Loads	None					30	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.2D+1.0Wo (0 Deg)	Yes	Y	1	1.2	39	1.2	3	1	41	1								
2	1.2D+1.0Wo (30 Deg)	Yes	Y	1	1.2	39	1.2	4	1	42	1								
3	1.2D+1.0Wo (60 Deg)	Yes	Y	1	1.2	39	1.2	5	1	43	1								
4	1.2D+1.0Wo (90 Deg)	Yes	Y	1	1.2	39	1.2	6	1	44	1								
5	1.2D+1.0Wo (120 Deg)	Yes	Y	1	1.2	39	1.2	7	1	45	1								
6	1.2D+1.0Wo (150 Deg)	Yes	Y	1	1.2	39	1.2	8	1	46	1								
7	1.2D+1.0Wo (180 Deg)	Yes	Y	1	1.2	39	1.2	9	1	47	1								
8	1.2D+1.0Wo (210 Deg)	Yes	Y	1	1.2	39	1.2	10	1	48	1								
9	1.2D+1.0Wo (240 Deg)	Yes	Y	1	1.2	39	1.2	11	1	49	1								
10	1.2D+1.0Wo (270 Deg)	Yes	Y	1	1.2	39	1.2	12	1	50	1								
11	1.2D+1.0Wo (300 Deg)	Yes	Y	1	1.2	39	1.2	13	1	51	1								
12	1.2D+1.0Wo (330 Deg)	Yes	Y	1	1.2	39	1.2	14	1	52	1								
13	1.2D + 1.0Di + 1.0Wi (0 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	15	1	53	1				
14	1.2D + 1.0Di + 1.0Wi (30 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	16	1	54	1				
15	1.2D + 1.0Di + 1.0Wi (60 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	17	1	55	1				
16	1.2D + 1.0Di + 1.0Wi (90 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	18	1	56	1				

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
17	1.2D + 1.0Di + 1.0Wi (120 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	19	1	57	1				
18	1.2D + 1.0Di + 1.0Wi (150 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	20	1	58	1				
19	1.2D + 1.0Di + 1.0Wi (180 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	21	1	59	1				
20	1.2D + 1.0Di + 1.0Wi (210 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	22	1	60	1				
21	1.2D + 1.0Di + 1.0Wi (240 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	23	1	61	1				
22	1.2D + 1.0Di + 1.0Wi (270 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	24	1	62	1				
23	1.2D + 1.0Di + 1.0Wi (300 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	25	1	63	1				
24	1.2D + 1.0Di + 1.0Wi (330 Deg)	Yes	Y	1	1.2	39	1.2	2	1	40	1	26	1	64	1				
25	1.2D + 1.5Lm1 + 1.0Wm (0 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	27	1	65	1						
26	1.2D + 1.5Lm1 + 1.0Wm (30 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	28	1	66	1						
27	1.2D + 1.5Lm1 + 1.0Wm (60 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	29	1	67	1						
28	1.2D + 1.5Lm1 + 1.0Wm (90 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	30	1	68	1						
29	1.2D + 1.5Lm1 + 1.0Wm (120 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	31	1	69	1						
30	1.2D + 1.5Lm1 + 1.0Wm (150 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	32	1	70	1						
31	1.2D + 1.5Lm1 + 1.0Wm (180 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	33	1	71	1						
32	1.2D + 1.5Lm1 + 1.0Wm (210 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	34	1	72	1						
33	1.2D + 1.5Lm1 + 1.0Wm (240 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	35	1	73	1						
34	1.2D + 1.5Lm1 + 1.0Wm (270 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	36	1	74	1						
35	1.2D + 1.5Lm1 + 1.0Wm (300 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	37	1	75	1						
36	1.2D + 1.5Lm1 + 1.0Wm (330 Deg)	Yes	Y	1	1.2	39	1.2	77	1.5	38	1	76	1						
37	1.2D + 1.5Lm2 + 1.0Wm (0 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	27	1	65	1						
38	1.2D + 1.5Lm2 + 1.0Wm (30 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	28	1	66	1						
39	1.2D + 1.5Lm2 + 1.0Wm (60 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	29	1	67	1						
40	1.2D + 1.5Lm2 + 1.0Wm (90 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	30	1	68	1						
41	1.2D + 1.5Lm2 + 1.0Wm (120 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	31	1	69	1						
42	1.2D + 1.5Lm2 + 1.0Wm (150 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	32	1	70	1						
43	1.2D + 1.5Lm2 + 1.0Wm (180 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	33	1	71	1						
44	1.2D + 1.5Lm2 + 1.0Wm (210 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	34	1	72	1						
45	1.2D + 1.5Lm2 + 1.0Wm (240 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	35	1	73	1						
46	1.2D + 1.5Lm2 + 1.0Wm (270 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	36	1	74	1						
47	1.2D + 1.5Lm2 + 1.0Wm (300 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	37	1	75	1						
48	1.2D + 1.5Lm2 + 1.0Wm (330 Deg)	Yes	Y	1	1.2	39	1.2	78	1.5	38	1	76	1						
49	1.2D + 1.5Lv1	Yes	Y	1	1.2	39	1.2	79	1.5										
50	1.2D + 1.5Lv2	Yes	Y	1	1.2	39	1.2	80	1.5										
51	1.4D	Yes	Y	1	1.4	39	1.4												
52	1.2D + 1.0Ev + 1.0Eh (0 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	1	83		ELZ	1	ELX	
53	1.2D + 1.0Ev + 1.0Eh (30 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	0.866	83	0.5	ELZ	0.866	ELX	0.5
54	1.2D + 1.0Ev + 1.0Eh (60 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	0.5	83	0.866	ELZ	0.5	ELX	0.866
55	1.2D + 1.0Ev + 1.0Eh (90 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82		83	1	ELZ		ELX	1
56	1.2D + 1.0Ev + 1.0Eh (120 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-0.5	83	0.866	ELZ	-0.5	ELX	0.866
57	1.2D + 1.0Ev + 1.0Eh (150 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-0.866	83	0.5	ELZ	-0.866	ELX	0.5
58	1.2D + 1.0Ev + 1.0Eh (180 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-1	83		ELZ	-1	ELX	
59	1.2D + 1.0Ev + 1.0Eh (210 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-0.866	83	-0.5	ELZ	-0.866	ELX	-0.5
60	1.2D + 1.0Ev + 1.0Eh (240 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-0.5	83	-0.866	ELZ	-0.5	ELX	-0.866
61	1.2D + 1.0Ev + 1.0Eh (270 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82		83	-1	ELZ		ELX	-1
62	1.2D + 1.0Ev + 1.0Eh (300 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	0.5	83	-0.866	ELZ	0.5	ELX	-0.866
63	1.2D + 1.0Ev + 1.0Eh (330 Deg)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	0.866	83	-0.5	ELZ	0.866	ELX	-0.5
64	0.9D - 1.0Ev + 1.0Eh (0 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	1	83		ELZ	1	ELX	
65	0.9D - 1.0Ev + 1.0Eh (30 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	0.866	83	0.5	ELZ	0.866	ELX	0.5
66	0.9D - 1.0Ev + 1.0Eh (60 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	0.5	83	0.866	ELZ	0.5	ELX	0.866
67	0.9D - 1.0Ev + 1.0Eh (90 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82		83	1	ELZ		ELX	1
68	0.9D - 1.0Ev + 1.0Eh (120 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	-0.5	83	0.866	ELZ	-0.5	ELX	0.866
69	0.9D - 1.0Ev + 1.0Eh (150 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	-0.866	83	0.5	ELZ	-0.866	ELX	0.5
70	0.9D - 1.0Ev + 1.0Eh (180 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	-1	83		ELZ	-1	ELX	
71	0.9D - 1.0Ev + 1.0Eh (210 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	-0.866	83	-0.5	ELZ	-0.866	ELX	-0.5

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
72	0.9D - 1.0Ev + 1.0Eh (240 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	-0.5	83	-0.866	ELZ	-0.5	ELX	-0.866
73	0.9D - 1.0Ev + 1.0Eh (270 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82		83	-1	ELZ		ELX	-1
74	0.9D - 1.0Ev + 1.0Eh (300 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	0.5	83	-0.866	ELZ	0.5	ELX	-0.866
75	0.9D - 1.0Ev + 1.0Eh (330 Deg)	Yes	Y	1	0.9	39	0.9	81	-1	ELY	-1	82	0.866	83	-0.5	ELZ	0.866	ELX	-0.5

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Face Horizontal	PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
2	Standoff Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
3	Corner Plate	PL1/2X6	Beam	BAR	A36 Gr.36	Typical	3	0.063	9	0.237
4	Platform Crossmember	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
5	Grating Support	L2X2X3	Beam	Single Angle	A36 Gr.36	Typical	0.722	0.271	0.271	0.009
6	Mount Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
7	Cross Arm Plate	PL3/8X6	Column	RECT	A36 Gr.36	Typical	2.25	0.026	6.75	0.101
8	Support Rail	PIPE 2.5	Column	RECT	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
9	Support Rail Corner	L3X3X4	Column	RECT	A36 Gr.36	Typical	1.44	1.23	1.23	0.031

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
8	Q235	29000	11154	0.3	0.65	0.49	35	1.5	58	1.2

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N6		Standoff Horizontal	Beam	SquareTube	A500 Gr.B Rect	Typical
2	M2	N10	N12		Platform Crossmember	Beam	SquareTube	A500 Gr.B Rect	Typical
3	M3	N11	N2		Platform Crossmember	Beam	SquareTube	A500 Gr.B Rect	Typical
4	M4	N21	N22		Corner Plate	Beam	BAR	A36 Gr.36	Typical
5	M5	N4	N9	240	RIGID	None	None	RIGID	Typical
6	M6	N3	N8	240	RIGID	None	None	RIGID	Typical
7	M7	N26	N3		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
8	M8	N4	N28		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
9	M9	N28	N29	240	RIGID	None	None	RIGID	Typical
10	M10	N11	N5		RIGID	None	None	RIGID	Typical
11	M11	N5	N12		RIGID	None	None	RIGID	Typical
12	M12	N10	N14		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
13	M13	N14	N15		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
14	M14	N15	N19		RIGID	None	None	RIGID	Typical
15	M15	N22	N16		Corner Plate	Beam	BAR	A36 Gr.36	Typical
16	M16	N16	N23		RIGID	None	None	RIGID	Typical
17	M17	N2	N13		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
18	M18	N13	N17		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
19	M19	N17	N20		RIGID	None	None	RIGID	Typical
20	M20	N21	N18		Corner Plate	Beam	BAR	A36 Gr.36	Typical
21	M21	N18	N24		RIGID	None	None	RIGID	Typical
22	M22	N29	N25		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
23	M23	N25	N27		RIGID	None	None	RIGID	Typical
24	M24	N26	N27	240	RIGID	None	None	RIGID	Typical
25	M25	N30	N35		Standoff Horizontal	Beam	SquareTube	A500 Gr.B Rect	Typical
26	M26	N38	N40		Platform Crossmember	Beam	SquareTube	A500 Gr.B Rect	Typical
27	M27	N39	N31		Platform Crossmember	Beam	SquareTube	A500 Gr.B Rect	Typical
28	M28	N49	N50		Corner Plate	Beam	BAR	A36 Gr.36	Typical
29	M29	N33	N37	240	RIGID	None	None	RIGID	Typical
30	M30	N32	N36	240	RIGID	None	None	RIGID	Typical
31	M31	N54	N32		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
32	M32	N33	N56		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
33	M33	N56	N57	240	RIGID	None	None	RIGID	Typical
34	M34	N39	N34		RIGID	None	None	RIGID	Typical
35	M35	N34	N40		RIGID	None	None	RIGID	Typical
36	M36	N38	N42		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
37	M37	N42	N43		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
38	M38	N43	N47		RIGID	None	None	RIGID	Typical
39	M39	N50	N44		Corner Plate	Beam	BAR	A36 Gr.36	Typical
40	M40	N44	N51		RIGID	None	None	RIGID	Typical
41	M41	N31	N41		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
42	M42	N41	N45		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
43	M43	N45	N48		RIGID	None	None	RIGID	Typical
44	M44	N49	N46		Corner Plate	Beam	BAR	A36 Gr.36	Typical
45	M45	N46	N52		RIGID	None	None	RIGID	Typical
46	M46	N57	N53		RIGID	None	None	RIGID	Typical
47	M47	N53	N55		RIGID	None	None	RIGID	Typical
48	M48	N54	N55	240	RIGID	None	None	RIGID	Typical
49	M49	N58	N63		Standoff Horizontal	Beam	SquareTube	A500 Gr.B Rect	Typical
50	M50	N66	N68		Platform Crossmember	Beam	SquareTube	A500 Gr.B Rect	Typical
51	M51	N67	N59		Platform Crossmember	Beam	SquareTube	A500 Gr.B Rect	Typical
52	M52	N77	N78		Corner Plate	Beam	BAR	A36 Gr.36	Typical
53	M53	N61	N65	240	RIGID	None	None	RIGID	Typical
54	M54	N60	N64	240	RIGID	None	None	RIGID	Typical
55	M55	N82	N60		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
56	M56	N61	N84		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
57	M57	N84	N85	240	RIGID	None	None	RIGID	Typical
58	M58	N67	N62		RIGID	None	None	RIGID	Typical
59	M59	N62	N68		RIGID	None	None	RIGID	Typical
60	M60	N66	N70		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
61	M61	N70	N71		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
62	M62	N71	N75		RIGID	None	None	RIGID	Typical
63	M63	N78	N72		Corner Plate	Beam	BAR	A36 Gr.36	Typical
64	M64	N72	N79		RIGID	None	None	RIGID	Typical
65	M65	N59	N69		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
66	M66	N69	N73		Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
67	M67	N73	N76		RIGID	None	None	RIGID	Typical
68	M68	N77	N74		Corner Plate	Beam	BAR	A36 Gr.36	Typical
69	M69	N74	N80		RIGID	None	None	RIGID	Typical
70	M70	N85	N81		RIGID	None	None	RIGID	Typical
71	M71	N81	N83		RIGID	None	None	RIGID	Typical
72	M72	N82	N83	240	RIGID	None	None	RIGID	Typical
73	M73	N86	N87		Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
74	M74	N88	N89		Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
75	M75	N90	N91		Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
76	M76	N92	N93		RIGID	None	None	RIGID	Typical
77	MP1A	N94	N95		Mount Pipe	Column	Pipe	A53 Gr.B	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
78	M78	N96	N97		RIGID	None	None	RIGID	Typical
79	MP3A	N98	N99		Mount Pipe	Column	Pipe	A53 Gr.B	Typical
80	M80	N100	N101		RIGID	None	None	RIGID	Typical
81	MP4A	N102	N103		Mount Pipe	Column	Pipe	A53 Gr.B	Typical
82	M82	N104	N105		RIGID	None	None	RIGID	Typical
83	MP5A	N106	N107		Mount Pipe	Column	Pipe	A53 Gr.B	Typical
84	M84	N108	N109		RIGID	None	None	RIGID	Typical
85	MP1C	N110	N111	240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
86	M86	N112	N113		RIGID	None	None	RIGID	Typical
87	MP3C	N114	N115	240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
88	M88	N116	N117		RIGID	None	None	RIGID	Typical
89	MP4C	N118	N119	240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
90	M90	N120	N121		RIGID	None	None	RIGID	Typical
91	MP5C	N122	N123	240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
92	M92	N124	N125		RIGID	None	None	RIGID	Typical
93	MP1B	N126	N127	120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
94	M94	N128	N129		RIGID	None	None	RIGID	Typical
95	MP3B	N130	N131	120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
96	M96	N132	N133		RIGID	None	None	RIGID	Typical
97	MP4B	N134	N135	120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
98	M98	N136	N137		RIGID	None	None	RIGID	Typical
99	MP5B	N138	N139	120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
100	M100	N141	N140		Mount Pipe	Column	Pipe	A53 Gr.B	Typical
101	M101	N142	N143		RIGID	None	None	RIGID	Typical
102	OVP	N144	N145		Mount Pipe	Column	Pipe	A53 Gr.B	Typical
103	M103	N146	N147		RIGID	None	None	RIGID	Typical
104	MP2A	N148	N149		Mount Pipe	Column	Pipe	A53 Gr.B	Typical
105	M105	N151	N152		RIGID	None	None	RIGID	Typical
106	MP2C	N153	N154	240	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
107	M107	N156	N157		RIGID	None	None	RIGID	Typical
108	MP2B	N158	N159	120	Mount Pipe	Column	Pipe	A53 Gr.B	Typical
109	M109	N158A	N159A		Support Rail	Column	RECT	A53 Gr.B	Typical
110	M110	N160	N161		Support Rail	Column	RECT	A53 Gr.B	Typical
111	M111	N162	N163		Support Rail	Column	RECT	A53 Gr.B	Typical
112	M112	N164	N165		RIGID	None	None	RIGID	Typical
113	M113	N166	N167		RIGID	None	None	RIGID	Typical
114	M114	N168	N169		RIGID	None	None	RIGID	Typical
115	M115	N170	N171		RIGID	None	None	RIGID	Typical
116	M116	N172	N173		RIGID	None	None	RIGID	Typical
117	M117	N174	N175		RIGID	None	None	RIGID	Typical
118	M118	N176	N177		RIGID	None	None	RIGID	Typical
119	M119	N178	N179		RIGID	None	None	RIGID	Typical
120	M120	N180	N181		RIGID	None	None	RIGID	Typical
121	M121	N182	N183		RIGID	None	None	RIGID	Typical
122	M122	N184	N185		RIGID	None	None	RIGID	Typical
123	M123	N186	N187		RIGID	None	None	RIGID	Typical
124	M124	N188	N189		RIGID	None	None	RIGID	Typical
125	M125	N190	N191		RIGID	None	None	RIGID	Typical
126	M126	N192	N193		RIGID	None	None	RIGID	Typical
127	M127	N194	N196		RIGID	None	None	RIGID	Typical
128	M128	N195	N197		RIGID	None	None	RIGID	Typical
129	M129	N198	N200		RIGID	None	None	RIGID	Typical
130	M130	N199	N201		RIGID	None	None	RIGID	Typical
131	M131	N202	N204		RIGID	None	None	RIGID	Typical
132	M132	N203	N205		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
133	M133	N203	N202	90	Support Rail Corner	Column	RECT	A36 Gr.36	Typical
134	M134	N195	N194	90	Support Rail Corner	Column	RECT	A36 Gr.36	Typical
135	M135	N199	N198	90	Support Rail Corner	Column	RECT	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	Physical	Deflection Ratio Options	Seismic DR
1	M1			Yes	N/A	None
2	M2			Yes	Default	None
3	M3			Yes	Default	None
4	M4			Yes	Default	None
5	M5			Yes	** NA **	None
6	M6			Yes	** NA **	None
7	M7	OOOOOX	OOOOOX	Yes	Default	None
8	M8	OOOOOX	OOOOOX	Yes	Default	None
9	M9			Yes	** NA **	None
10	M10			Yes	** NA **	None
11	M11			Yes	** NA **	None
12	M12			Yes	** NA **	None
13	M13			Yes	** NA **	None
14	M14		BenPIN	Yes	** NA **	None
15	M15			Yes	N/A	None
16	M16		BenPIN	Yes	** NA **	None
17	M17			Yes	** NA **	None
18	M18			Yes	** NA **	None
19	M19		BenPIN	Yes	** NA **	None
20	M20			Yes	N/A	None
21	M21		BenPIN	Yes	** NA **	None
22	M22			Yes	** NA **	None
23	M23			Yes	** NA **	None
24	M24			Yes	** NA **	None
25	M25			Yes	N/A	None
26	M26			Yes	Default	None
27	M27			Yes	Default	None
28	M28			Yes	Default	None
29	M29			Yes	** NA **	None
30	M30			Yes	** NA **	None
31	M31	OOOOOX	OOOOOX	Yes	Default	None
32	M32	OOOOOX	OOOOOX	Yes	Default	None
33	M33			Yes	** NA **	None
34	M34			Yes	** NA **	None
35	M35			Yes	** NA **	None
36	M36			Yes	** NA **	None
37	M37			Yes	** NA **	None
38	M38		BenPIN	Yes	** NA **	None
39	M39			Yes	N/A	None
40	M40		BenPIN	Yes	** NA **	None
41	M41			Yes	** NA **	None
42	M42			Yes	** NA **	None
43	M43		BenPIN	Yes	** NA **	None
44	M44			Yes	N/A	None
45	M45		BenPIN	Yes	** NA **	None
46	M46			Yes	** NA **	None
47	M47			Yes	** NA **	None
48	M48			Yes	** NA **	None
49	M49			Yes	N/A	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Seismic DR
50	M50			Yes	Default	None
51	M51			Yes	Default	None
52	M52			Yes	Default	None
53	M53			Yes	** NA **	None
54	M54			Yes	** NA **	None
55	M55	OOOOOX	OOOOOX	Yes	Default	None
56	M56	OOOOOX	OOOOOX	Yes	Default	None
57	M57			Yes	** NA **	None
58	M58			Yes	** NA **	None
59	M59			Yes	** NA **	None
60	M60			Yes	** NA **	None
61	M61			Yes	** NA **	None
62	M62		BenPIN	Yes	** NA **	None
63	M63			Yes	N/A	None
64	M64		BenPIN	Yes	** NA **	None
65	M65			Yes	** NA **	None
66	M66			Yes	** NA **	None
67	M67		BenPIN	Yes	** NA **	None
68	M68			Yes	N/A	None
69	M69		BenPIN	Yes	** NA **	None
70	M70			Yes	** NA **	None
71	M71			Yes	** NA **	None
72	M72			Yes	** NA **	None
73	M73			Yes	N/A	None
74	M74			Yes	N/A	None
75	M75			Yes	N/A	None
76	M76			Yes	** NA **	None
77	MP1A			Yes	** NA **	None
78	M78			Yes	** NA **	None
79	MP3A			Yes	** NA **	None
80	M80			Yes	** NA **	None
81	MP4A			Yes	** NA **	None
82	M82			Yes	** NA **	None
83	MP5A			Yes	** NA **	None
84	M84			Yes	** NA **	None
85	MP1C			Yes	** NA **	None
86	M86			Yes	** NA **	None
87	MP3C			Yes	** NA **	None
88	M88			Yes	** NA **	None
89	MP4C			Yes	** NA **	None
90	M90			Yes	** NA **	None
91	MP5C			Yes	** NA **	None
92	M92			Yes	** NA **	None
93	MP1B			Yes	** NA **	None
94	M94			Yes	** NA **	None
95	MP3B			Yes	** NA **	None
96	M96			Yes	** NA **	None
97	MP4B			Yes	** NA **	None
98	M98			Yes	** NA **	None
99	MP5B			Yes	** NA **	None
100	M100			Yes	** NA **	None
101	M101			Yes	** NA **	None
102	OVP			Yes	** NA **	None
103	M103			Yes	** NA **	None
104	MP2A			Yes	** NA **	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Seismic DR
105	M105			Yes	** NA **	None
106	MP2C			Yes	** NA **	None
107	M107			Yes	** NA **	None
108	MP2B			Yes	** NA **	None
109	M109			Yes	** NA **	None
110	M110			Yes	** NA **	None
111	M111			Yes	** NA **	None
112	M112			Yes	** NA **	None
113	M113			Yes	** NA **	None
114	M114			Yes	** NA **	None
115	M115			Yes	** NA **	None
116	M116			Yes	** NA **	None
117	M117			Yes	** NA **	None
118	M118			Yes	** NA **	None
119	M119			Yes	** NA **	None
120	M120			Yes	** NA **	None
121	M121			Yes	** NA **	None
122	M122			Yes	** NA **	None
123	M123			Yes	** NA **	None
124	M124			Yes	** NA **	None
125	M125			Yes	** NA **	None
126	M126			Yes	** NA **	None
127	M127		OOOOXO	Yes	** NA **	None
128	M128		OOOOXO	Yes	** NA **	None
129	M129		OOOOXO	Yes	** NA **	None
130	M130		OOOOXO	Yes	** NA **	None
131	M131		OOOOXO	Yes	** NA **	None
132	M132		OOOOXO	Yes	** NA **	None
133	M133			Yes	** NA **	None
134	M134			Yes	** NA **	None
135	M135			Yes	** NA **	None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	Y	-28.65	1
2	MP4A	My	-0.014	1
3	MP4A	Mz	0	1
4	MP4A	Y	-28.65	3
5	MP4A	My	-0.014	3
6	MP4A	Mz	0	3
7	MP4B	Y	-28.65	1
8	MP4B	My	0.007	1
9	MP4B	Mz	-0.012	1
10	MP4B	Y	-28.65	3
11	MP4B	My	0.007	3
12	MP4B	Mz	-0.012	3
13	MP4C	Y	-28.65	1
14	MP4C	My	0.007	1
15	MP4C	Mz	0.012	1
16	MP4C	Y	-28.65	3
17	MP4C	My	0.007	3
18	MP4C	Mz	0.012	3
19	MP2A	Y	-20	0.5
20	MP2A	My	-0.01	0.5
21	MP2A	Mz	-0.012	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
22	MP2A	Y	-20	5.5
23	MP2A	My	-0.01	5.5
24	MP2A	Mz	-0.012	5.5
25	MP2B	Y	-20	0.5
26	MP2B	My	0.015	0.5
27	MP2B	Mz	-0.003	0.5
28	MP2B	Y	-20	5.5
29	MP2B	My	0.015	5.5
30	MP2B	Mz	-0.003	5.5
31	MP2C	Y	-20	0.5
32	MP2C	My	-0.005	0.5
33	MP2C	Mz	0.014	0.5
34	MP2C	Y	-20	5.5
35	MP2C	My	-0.005	5.5
36	MP2C	Mz	0.014	5.5
37	MP2A	Y	-20	0.5
38	MP2A	My	-0.01	0.5
39	MP2A	Mz	0.012	0.5
40	MP2A	Y	-20	5.5
41	MP2A	My	-0.01	5.5
42	MP2A	Mz	0.012	5.5
43	MP2B	Y	-20	0.5
44	MP2B	My	-0.005	0.5
45	MP2B	Mz	-0.014	0.5
46	MP2B	Y	-20	5.5
47	MP2B	My	-0.005	5.5
48	MP2B	Mz	-0.014	5.5
49	MP2C	Y	-20	0.5
50	MP2C	My	0.015	0.5
51	MP2C	Mz	0.003	0.5
52	MP2C	Y	-20	5.5
53	MP2C	My	0.015	5.5
54	MP2C	Mz	0.003	5.5
55	MP1A	Y	-7.85	0.5
56	MP1A	My	-0.004	0.5
57	MP1A	Mz	0	0.5
58	MP1A	Y	-7.85	3.5
59	MP1A	My	-0.004	3.5
60	MP1A	Mz	0	3.5
61	MP1B	Y	-7.85	0.5
62	MP1B	My	0.002	0.5
63	MP1B	Mz	-0.003	0.5
64	MP1B	Y	-7.85	3.5
65	MP1B	My	0.002	3.5
66	MP1B	Mz	-0.003	3.5
67	MP1C	Y	-7.85	0.5
68	MP1C	My	0.002	0.5
69	MP1C	Mz	0.003	0.5
70	MP1C	Y	-7.85	3.5
71	MP1C	My	0.002	3.5
72	MP1C	Mz	0.003	3.5
73	MP5A	Y	-7.85	0.5
74	MP5A	My	-0.004	0.5
75	MP5A	Mz	0	0.5
76	MP5A	Y	-7.85	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
77	MP5A	My	-0.004	3.5
78	MP5A	Mz	0	3.5
79	MP5B	Y	-7.85	0.5
80	MP5B	My	0.002	0.5
81	MP5B	Mz	-0.003	0.5
82	MP5B	Y	-7.85	3.5
83	MP5B	My	0.002	3.5
84	MP5B	Mz	-0.003	3.5
85	MP5C	Y	-7.85	0.5
86	MP5C	My	0.002	0.5
87	MP5C	Mz	0.003	0.5
88	MP5C	Y	-7.85	3.5
89	MP5C	My	0.002	3.5
90	MP5C	Mz	0.003	3.5
91	MP2A	Y	-79.1	1.5
92	MP2A	My	0.04	1.5
93	MP2A	Mz	0	1.5
94	MP2B	Y	-79.1	1.5
95	MP2B	My	-0.02	1.5
96	MP2B	Mz	0.034	1.5
97	MP2C	Y	-79.1	1.5
98	MP2C	My	-0.02	1.5
99	MP2C	Mz	-0.034	1.5
100	MP3A	Y	-74.7	0.5
101	MP3A	My	0.037	0.5
102	MP3A	Mz	0	0.5
103	MP3B	Y	-74.7	0.5
104	MP3B	My	-0.019	0.5
105	MP3B	Mz	0.032	0.5
106	MP3C	Y	-74.7	0.5
107	MP3C	My	-0.019	0.5
108	MP3C	Mz	-0.032	0.5
109	OVP	Y	-32	2
110	OVP	My	0	2
111	OVP	Mz	0	2

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	Y	-29.471	1
2	MP4A	My	-0.015	1
3	MP4A	Mz	0	1
4	MP4A	Y	-29.471	3
5	MP4A	My	-0.015	3
6	MP4A	Mz	0	3
7	MP4B	Y	-29.471	1
8	MP4B	My	0.007	1
9	MP4B	Mz	-0.013	1
10	MP4B	Y	-29.471	3
11	MP4B	My	0.007	3
12	MP4B	Mz	-0.013	3
13	MP4C	Y	-29.471	1
14	MP4C	My	0.007	1
15	MP4C	Mz	0.013	1
16	MP4C	Y	-29.471	3
17	MP4C	My	0.007	3

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
18	MP4C	Mz	0.013	3
19	MP2A	Y	-60.44	0.5
20	MP2A	My	-0.03	0.5
21	MP2A	Mz	-0.035	0.5
22	MP2A	Y	-60.44	5.5
23	MP2A	My	-0.03	5.5
24	MP2A	Mz	-0.035	5.5
25	MP2B	Y	-60.44	0.5
26	MP2B	My	0.046	0.5
27	MP2B	Mz	-0.009	0.5
28	MP2B	Y	-60.44	5.5
29	MP2B	My	0.046	5.5
30	MP2B	Mz	-0.009	5.5
31	MP2C	Y	-60.44	0.5
32	MP2C	My	-0.015	0.5
33	MP2C	Mz	0.044	0.5
34	MP2C	Y	-60.44	5.5
35	MP2C	My	-0.015	5.5
36	MP2C	Mz	0.044	5.5
37	MP2A	Y	-60.44	0.5
38	MP2A	My	-0.03	0.5
39	MP2A	Mz	0.035	0.5
40	MP2A	Y	-60.44	5.5
41	MP2A	My	-0.03	5.5
42	MP2A	Mz	0.035	5.5
43	MP2B	Y	-60.44	0.5
44	MP2B	My	-0.015	0.5
45	MP2B	Mz	-0.044	0.5
46	MP2B	Y	-60.44	5.5
47	MP2B	My	-0.015	5.5
48	MP2B	Mz	-0.044	5.5
49	MP2C	Y	-60.44	0.5
50	MP2C	My	0.046	0.5
51	MP2C	Mz	0.009	0.5
52	MP2C	Y	-60.44	5.5
53	MP2C	My	0.046	5.5
54	MP2C	Mz	0.009	5.5
55	MP1A	Y	-37.759	0.5
56	MP1A	My	-0.019	0.5
57	MP1A	Mz	0	0.5
58	MP1A	Y	-37.759	3.5
59	MP1A	My	-0.019	3.5
60	MP1A	Mz	0	3.5
61	MP1B	Y	-37.759	0.5
62	MP1B	My	0.009	0.5
63	MP1B	Mz	-0.016	0.5
64	MP1B	Y	-37.759	3.5
65	MP1B	My	0.009	3.5
66	MP1B	Mz	-0.016	3.5
67	MP1C	Y	-37.759	0.5
68	MP1C	My	0.009	0.5
69	MP1C	Mz	0.016	0.5
70	MP1C	Y	-37.759	3.5
71	MP1C	My	0.009	3.5
72	MP1C	Mz	0.016	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
73	MP5A	Y	-37.759	0.5
74	MP5A	My	-0.019	0.5
75	MP5A	Mz	0	0.5
76	MP5A	Y	-37.759	3.5
77	MP5A	My	-0.019	3.5
78	MP5A	Mz	0	3.5
79	MP5B	Y	-37.759	0.5
80	MP5B	My	0.009	0.5
81	MP5B	Mz	-0.016	0.5
82	MP5B	Y	-37.759	3.5
83	MP5B	My	0.009	3.5
84	MP5B	Mz	-0.016	3.5
85	MP5C	Y	-37.759	0.5
86	MP5C	My	0.009	0.5
87	MP5C	Mz	0.016	0.5
88	MP5C	Y	-37.759	3.5
89	MP5C	My	0.009	3.5
90	MP5C	Mz	0.016	3.5
91	MP2A	Y	-44.904	1.5
92	MP2A	My	0.022	1.5
93	MP2A	Mz	0	1.5
94	MP2B	Y	-44.904	1.5
95	MP2B	My	-0.011	1.5
96	MP2B	Mz	0.019	1.5
97	MP2C	Y	-44.904	1.5
98	MP2C	My	-0.011	1.5
99	MP2C	Mz	-0.019	1.5
100	MP3A	Y	-44.433	0.5
101	MP3A	My	0.022	0.5
102	MP3A	Mz	0	0.5
103	MP3B	Y	-44.433	0.5
104	MP3B	My	-0.011	0.5
105	MP3B	Mz	0.019	0.5
106	MP3C	Y	-44.433	0.5
107	MP3C	My	-0.011	0.5
108	MP3C	Mz	-0.019	0.5
109	OVP	Y	-87.026	2
110	OVP	My	0	2
111	OVP	Mz	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	0	1
2	MP4A	Z	-78.258	1
3	MP4A	Mx	0	1
4	MP4A	X	0	3
5	MP4A	Z	-78.258	3
6	MP4A	Mx	0	3
7	MP4B	X	0	1
8	MP4B	Z	-42.17	1
9	MP4B	Mx	0.018	1
10	MP4B	X	0	3
11	MP4B	Z	-42.17	3
12	MP4B	Mx	0.018	3
13	MP4C	X	0	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
14	MP4C	Z	-42.17	1
15	MP4C	Mx	-0.018	1
16	MP4C	X	0	3
17	MP4C	Z	-42.17	3
18	MP4C	Mx	-0.018	3
19	MP2A	X	0	0.5
20	MP2A	Z	-113.773	0.5
21	MP2A	Mx	0.066	0.5
22	MP2A	X	0	5.5
23	MP2A	Z	-113.773	5.5
24	MP2A	Mx	0.066	5.5
25	MP2B	X	0	0.5
26	MP2B	Z	-65.146	0.5
27	MP2B	Mx	0.009	0.5
28	MP2B	X	0	5.5
29	MP2B	Z	-65.146	5.5
30	MP2B	Mx	0.009	5.5
31	MP2C	X	0	0.5
32	MP2C	Z	-65.146	0.5
33	MP2C	Mx	-0.047	0.5
34	MP2C	X	0	5.5
35	MP2C	Z	-65.146	5.5
36	MP2C	Mx	-0.047	5.5
37	MP2A	X	0	0.5
38	MP2A	Z	-113.773	0.5
39	MP2A	Mx	-0.066	0.5
40	MP2A	X	0	5.5
41	MP2A	Z	-113.773	5.5
42	MP2A	Mx	-0.066	5.5
43	MP2B	X	0	0.5
44	MP2B	Z	-65.146	0.5
45	MP2B	Mx	0.047	0.5
46	MP2B	X	0	5.5
47	MP2B	Z	-65.146	5.5
48	MP2B	Mx	0.047	5.5
49	MP2C	X	0	0.5
50	MP2C	Z	-65.146	0.5
51	MP2C	Mx	-0.009	0.5
52	MP2C	X	0	5.5
53	MP2C	Z	-65.146	5.5
54	MP2C	Mx	-0.009	5.5
55	MP1A	X	0	0.5
56	MP1A	Z	-83.626	0.5
57	MP1A	Mx	0	0.5
58	MP1A	X	0	3.5
59	MP1A	Z	-83.626	3.5
60	MP1A	Mx	0	3.5
61	MP1B	X	0	0.5
62	MP1B	Z	-76.887	0.5
63	MP1B	Mx	0.033	0.5
64	MP1B	X	0	3.5
65	MP1B	Z	-76.887	3.5
66	MP1B	Mx	0.033	3.5
67	MP1C	X	0	0.5
68	MP1C	Z	-76.887	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
69	MP1C	Mx	-0.033	0.5
70	MP1C	X	0	3.5
71	MP1C	Z	-76.887	3.5
72	MP1C	Mx	-0.033	3.5
73	MP5A	X	0	0.5
74	MP5A	Z	-83.626	0.5
75	MP5A	Mx	0	0.5
76	MP5A	X	0	3.5
77	MP5A	Z	-83.626	3.5
78	MP5A	Mx	0	3.5
79	MP5B	X	0	0.5
80	MP5B	Z	-76.887	0.5
81	MP5B	Mx	0.033	0.5
82	MP5B	X	0	3.5
83	MP5B	Z	-76.887	3.5
84	MP5B	Mx	0.033	3.5
85	MP5C	X	0	0.5
86	MP5C	Z	-76.887	0.5
87	MP5C	Mx	-0.033	0.5
88	MP5C	X	0	3.5
89	MP5C	Z	-76.887	3.5
90	MP5C	Mx	-0.033	3.5
91	MP2A	X	0	1.5
92	MP2A	Z	-77.225	1.5
93	MP2A	Mx	0	1.5
94	MP2B	X	0	1.5
95	MP2B	Z	-58.797	1.5
96	MP2B	Mx	-0.025	1.5
97	MP2C	X	0	1.5
98	MP2C	Z	-58.797	1.5
99	MP2C	Mx	0.025	1.5
100	MP3A	X	0	0.5
101	MP3A	Z	-64.01	0.5
102	MP3A	Mx	0	0.5
103	MP3B	X	0	0.5
104	MP3B	Z	-48.214	0.5
105	MP3B	Mx	-0.021	0.5
106	MP3C	X	0	0.5
107	MP3C	Z	-48.214	0.5
108	MP3C	Mx	0.021	0.5
109	OVP	X	0	2
110	OVP	Z	-117.944	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	33.114	1
2	MP4A	Z	-57.356	1
3	MP4A	Mx	-0.017	1
4	MP4A	X	33.114	3
5	MP4A	Z	-57.356	3
6	MP4A	Mx	-0.017	3
7	MP4B	X	15.07	1
8	MP4B	Z	-26.103	1
9	MP4B	Mx	0.015	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
10	MP4B	X	15.07	3
11	MP4B	Z	-26.103	3
12	MP4B	Mx	0.015	3
13	MP4C	X	33.114	1
14	MP4C	Z	-57.356	1
15	MP4C	Mx	-0.017	1
16	MP4C	X	33.114	3
17	MP4C	Z	-57.356	3
18	MP4C	Mx	-0.017	3
19	MP2A	X	48.782	0.5
20	MP2A	Z	-84.493	0.5
21	MP2A	Mx	0.025	0.5
22	MP2A	X	48.782	5.5
23	MP2A	Z	-84.493	5.5
24	MP2A	Mx	0.025	5.5
25	MP2B	X	24.468	0.5
26	MP2B	Z	-42.381	0.5
27	MP2B	Mx	0.024	0.5
28	MP2B	X	24.468	5.5
29	MP2B	Z	-42.381	5.5
30	MP2B	Mx	0.024	5.5
31	MP2C	X	48.782	0.5
32	MP2C	Z	-84.493	0.5
33	MP2C	Mx	-0.074	0.5
34	MP2C	X	48.782	5.5
35	MP2C	Z	-84.493	5.5
36	MP2C	Mx	-0.074	5.5
37	MP2A	X	48.782	0.5
38	MP2A	Z	-84.493	0.5
39	MP2A	Mx	-0.074	0.5
40	MP2A	X	48.782	5.5
41	MP2A	Z	-84.493	5.5
42	MP2A	Mx	-0.074	5.5
43	MP2B	X	24.468	0.5
44	MP2B	Z	-42.381	0.5
45	MP2B	Mx	0.024	0.5
46	MP2B	X	24.468	5.5
47	MP2B	Z	-42.381	5.5
48	MP2B	Mx	0.024	5.5
49	MP2C	X	48.782	0.5
50	MP2C	Z	-84.493	0.5
51	MP2C	Mx	0.025	0.5
52	MP2C	X	48.782	5.5
53	MP2C	Z	-84.493	5.5
54	MP2C	Mx	0.025	5.5
55	MP1A	X	40.69	0.5
56	MP1A	Z	-70.477	0.5
57	MP1A	Mx	-0.02	0.5
58	MP1A	X	40.69	3.5
59	MP1A	Z	-70.477	3.5
60	MP1A	Mx	-0.02	3.5
61	MP1B	X	37.32	0.5
62	MP1B	Z	-64.64	0.5
63	MP1B	Mx	0.037	0.5
64	MP1B	X	37.32	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
65	MP1B	Z	-64.64	3.5
66	MP1B	Mx	0.037	3.5
67	MP1C	X	40.69	0.5
68	MP1C	Z	-70.477	0.5
69	MP1C	Mx	-0.02	0.5
70	MP1C	X	40.69	3.5
71	MP1C	Z	-70.477	3.5
72	MP1C	Mx	-0.02	3.5
73	MP5A	X	40.69	0.5
74	MP5A	Z	-70.477	0.5
75	MP5A	Mx	-0.02	0.5
76	MP5A	X	40.69	3.5
77	MP5A	Z	-70.477	3.5
78	MP5A	Mx	-0.02	3.5
79	MP5B	X	37.32	0.5
80	MP5B	Z	-64.64	0.5
81	MP5B	Mx	0.037	0.5
82	MP5B	X	37.32	3.5
83	MP5B	Z	-64.64	3.5
84	MP5B	Mx	0.037	3.5
85	MP5C	X	40.69	0.5
86	MP5C	Z	-70.477	0.5
87	MP5C	Mx	-0.02	0.5
88	MP5C	X	40.69	3.5
89	MP5C	Z	-70.477	3.5
90	MP5C	Mx	-0.02	3.5
91	MP2A	X	35.541	1.5
92	MP2A	Z	-61.559	1.5
93	MP2A	Mx	0.018	1.5
94	MP2B	X	26.327	1.5
95	MP2B	Z	-45.599	1.5
96	MP2B	Mx	-0.026	1.5
97	MP2C	X	35.541	1.5
98	MP2C	Z	-61.559	1.5
99	MP2C	Mx	0.018	1.5
100	MP3A	X	29.372	0.5
101	MP3A	Z	-50.875	0.5
102	MP3A	Mx	0.015	0.5
103	MP3B	X	21.474	0.5
104	MP3B	Z	-37.195	0.5
105	MP3B	Mx	-0.021	0.5
106	MP3C	X	29.372	0.5
107	MP3C	Z	-50.875	0.5
108	MP3C	Mx	0.015	0.5
109	OVP	X	64.982	2
110	OVP	Z	-112.553	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	36.52	1
2	MP4A	Z	-21.085	1
3	MP4A	Mx	-0.018	1
4	MP4A	X	36.52	3
5	MP4A	Z	-21.085	3

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
6	MP4A	Mx	-0.018	3
7	MP4B	X	36.52	1
8	MP4B	Z	-21.085	1
9	MP4B	Mx	0.018	1
10	MP4B	X	36.52	3
11	MP4B	Z	-21.085	3
12	MP4B	Mx	0.018	3
13	MP4C	X	67.773	1
14	MP4C	Z	-39.129	1
15	MP4C	Mx	0	1
16	MP4C	X	67.773	3
17	MP4C	Z	-39.129	3
18	MP4C	Mx	0	3
19	MP2A	X	56.418	0.5
20	MP2A	Z	-32.573	0.5
21	MP2A	Mx	-0.009	0.5
22	MP2A	X	56.418	5.5
23	MP2A	Z	-32.573	5.5
24	MP2A	Mx	-0.009	5.5
25	MP2B	X	56.418	0.5
26	MP2B	Z	-32.573	0.5
27	MP2B	Mx	0.047	0.5
28	MP2B	X	56.418	5.5
29	MP2B	Z	-32.573	5.5
30	MP2B	Mx	0.047	5.5
31	MP2C	X	98.53	0.5
32	MP2C	Z	-56.887	0.5
33	MP2C	Mx	-0.066	0.5
34	MP2C	X	98.53	5.5
35	MP2C	Z	-56.887	5.5
36	MP2C	Mx	-0.066	5.5
37	MP2A	X	56.418	0.5
38	MP2A	Z	-32.573	0.5
39	MP2A	Mx	-0.047	0.5
40	MP2A	X	56.418	5.5
41	MP2A	Z	-32.573	5.5
42	MP2A	Mx	-0.047	5.5
43	MP2B	X	56.418	0.5
44	MP2B	Z	-32.573	0.5
45	MP2B	Mx	0.009	0.5
46	MP2B	X	56.418	5.5
47	MP2B	Z	-32.573	5.5
48	MP2B	Mx	0.009	5.5
49	MP2C	X	98.53	0.5
50	MP2C	Z	-56.887	0.5
51	MP2C	Mx	0.066	0.5
52	MP2C	X	98.53	5.5
53	MP2C	Z	-56.887	5.5
54	MP2C	Mx	0.066	5.5
55	MP1A	X	66.586	0.5
56	MP1A	Z	-38.443	0.5
57	MP1A	Mx	-0.033	0.5
58	MP1A	X	66.586	3.5
59	MP1A	Z	-38.443	3.5
60	MP1A	Mx	-0.033	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
61	MP1B	X	66.586	0.5
62	MP1B	Z	-38.443	0.5
63	MP1B	Mx	0.033	0.5
64	MP1B	X	66.586	3.5
65	MP1B	Z	-38.443	3.5
66	MP1B	Mx	0.033	3.5
67	MP1C	X	72.423	0.5
68	MP1C	Z	-41.813	0.5
69	MP1C	Mx	0	0.5
70	MP1C	X	72.423	3.5
71	MP1C	Z	-41.813	3.5
72	MP1C	Mx	0	3.5
73	MP5A	X	66.586	0.5
74	MP5A	Z	-38.443	0.5
75	MP5A	Mx	-0.033	0.5
76	MP5A	X	66.586	3.5
77	MP5A	Z	-38.443	3.5
78	MP5A	Mx	-0.033	3.5
79	MP5B	X	66.586	0.5
80	MP5B	Z	-38.443	0.5
81	MP5B	Mx	0.033	0.5
82	MP5B	X	66.586	3.5
83	MP5B	Z	-38.443	3.5
84	MP5B	Mx	0.033	3.5
85	MP5C	X	72.423	0.5
86	MP5C	Z	-41.813	0.5
87	MP5C	Mx	0	0.5
88	MP5C	X	72.423	3.5
89	MP5C	Z	-41.813	3.5
90	MP5C	Mx	0	3.5
91	MP2A	X	50.919	1.5
92	MP2A	Z	-29.398	1.5
93	MP2A	Mx	0.025	1.5
94	MP2B	X	50.919	1.5
95	MP2B	Z	-29.398	1.5
96	MP2B	Mx	-0.025	1.5
97	MP2C	X	66.879	1.5
98	MP2C	Z	-38.613	1.5
99	MP2C	Mx	0	1.5
100	MP3A	X	41.755	0.5
101	MP3A	Z	-24.107	0.5
102	MP3A	Mx	0.021	0.5
103	MP3B	X	41.755	0.5
104	MP3B	Z	-24.107	0.5
105	MP3B	Mx	-0.021	0.5
106	MP3C	X	55.435	0.5
107	MP3C	Z	-32.005	0.5
108	MP3C	Mx	0	0.5
109	OVP	X	110.193	2
110	OVP	Z	-63.62	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	30.141	1
2	MP4A	Z	0	1
3	MP4A	Mx	-0.015	1
4	MP4A	X	30.141	3
5	MP4A	Z	0	3
6	MP4A	Mx	-0.015	3
7	MP4B	X	66.229	1
8	MP4B	Z	0	1
9	MP4B	Mx	0.017	1
10	MP4B	X	66.229	3
11	MP4B	Z	0	3
12	MP4B	Mx	0.017	3
13	MP4C	X	66.229	1
14	MP4C	Z	0	1
15	MP4C	Mx	0.017	1
16	MP4C	X	66.229	3
17	MP4C	Z	0	3
18	MP4C	Mx	0.017	3
19	MP2A	X	48.937	0.5
20	MP2A	Z	0	0.5
21	MP2A	Mx	-0.024	0.5
22	MP2A	X	48.937	5.5
23	MP2A	Z	0	5.5
24	MP2A	Mx	-0.024	5.5
25	MP2B	X	97.564	0.5
26	MP2B	Z	0	0.5
27	MP2B	Mx	0.074	0.5
28	MP2B	X	97.564	5.5
29	MP2B	Z	0	5.5
30	MP2B	Mx	0.074	5.5
31	MP2C	X	97.564	0.5
32	MP2C	Z	0	0.5
33	MP2C	Mx	-0.025	0.5
34	MP2C	X	97.564	5.5
35	MP2C	Z	0	5.5
36	MP2C	Mx	-0.025	5.5
37	MP2A	X	48.937	0.5
38	MP2A	Z	0	0.5
39	MP2A	Mx	-0.024	0.5
40	MP2A	X	48.937	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	-0.024	5.5
43	MP2B	X	97.564	0.5
44	MP2B	Z	0	0.5
45	MP2B	Mx	-0.025	0.5
46	MP2B	X	97.564	5.5
47	MP2B	Z	0	5.5
48	MP2B	Mx	-0.025	5.5
49	MP2C	X	97.564	0.5
50	MP2C	Z	0	0.5
51	MP2C	Mx	0.074	0.5
52	MP2C	X	97.564	5.5
53	MP2C	Z	0	5.5
54	MP2C	Mx	0.074	5.5
55	MP1A	X	74.64	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
56	MP1A	Z	0	0.5
57	MP1A	Mx	-0.037	0.5
58	MP1A	X	74.64	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	-0.037	3.5
61	MP1B	X	81.38	0.5
62	MP1B	Z	0	0.5
63	MP1B	Mx	0.02	0.5
64	MP1B	X	81.38	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	0.02	3.5
67	MP1C	X	81.38	0.5
68	MP1C	Z	0	0.5
69	MP1C	Mx	0.02	0.5
70	MP1C	X	81.38	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	0.02	3.5
73	MP5A	X	74.64	0.5
74	MP5A	Z	0	0.5
75	MP5A	Mx	-0.037	0.5
76	MP5A	X	74.64	3.5
77	MP5A	Z	0	3.5
78	MP5A	Mx	-0.037	3.5
79	MP5B	X	81.38	0.5
80	MP5B	Z	0	0.5
81	MP5B	Mx	0.02	0.5
82	MP5B	X	81.38	3.5
83	MP5B	Z	0	3.5
84	MP5B	Mx	0.02	3.5
85	MP5C	X	81.38	0.5
86	MP5C	Z	0	0.5
87	MP5C	Mx	0.02	0.5
88	MP5C	X	81.38	3.5
89	MP5C	Z	0	3.5
90	MP5C	Mx	0.02	3.5
91	MP2A	X	52.654	1.5
92	MP2A	Z	0	1.5
93	MP2A	Mx	0.026	1.5
94	MP2B	X	71.082	1.5
95	MP2B	Z	0	1.5
96	MP2B	Mx	-0.018	1.5
97	MP2C	X	71.082	1.5
98	MP2C	Z	0	1.5
99	MP2C	Mx	-0.018	1.5
100	MP3A	X	42.949	0.5
101	MP3A	Z	0	0.5
102	MP3A	Mx	0.021	0.5
103	MP3B	X	58.745	0.5
104	MP3B	Z	0	0.5
105	MP3B	Mx	-0.015	0.5
106	MP3C	X	58.745	0.5
107	MP3C	Z	0	0.5
108	MP3C	Mx	-0.015	0.5
109	OVP	X	112.493	2
110	OVP	Z	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	36.52	1
2	MP4A	Z	21.085	1
3	MP4A	Mx	-0.018	1
4	MP4A	X	36.52	3
5	MP4A	Z	21.085	3
6	MP4A	Mx	-0.018	3
7	MP4B	X	67.773	1
8	MP4B	Z	39.129	1
9	MP4B	Mx	0	1
10	MP4B	X	67.773	3
11	MP4B	Z	39.129	3
12	MP4B	Mx	0	3
13	MP4C	X	36.52	1
14	MP4C	Z	21.085	1
15	MP4C	Mx	0.018	1
16	MP4C	X	36.52	3
17	MP4C	Z	21.085	3
18	MP4C	Mx	0.018	3
19	MP2A	X	56.418	0.5
20	MP2A	Z	32.573	0.5
21	MP2A	Mx	-0.047	0.5
22	MP2A	X	56.418	5.5
23	MP2A	Z	32.573	5.5
24	MP2A	Mx	-0.047	5.5
25	MP2B	X	98.53	0.5
26	MP2B	Z	56.887	0.5
27	MP2B	Mx	0.066	0.5
28	MP2B	X	98.53	5.5
29	MP2B	Z	56.887	5.5
30	MP2B	Mx	0.066	5.5
31	MP2C	X	56.418	0.5
32	MP2C	Z	32.573	0.5
33	MP2C	Mx	0.009	0.5
34	MP2C	X	56.418	5.5
35	MP2C	Z	32.573	5.5
36	MP2C	Mx	0.009	5.5
37	MP2A	X	56.418	0.5
38	MP2A	Z	32.573	0.5
39	MP2A	Mx	-0.009	0.5
40	MP2A	X	56.418	5.5
41	MP2A	Z	32.573	5.5
42	MP2A	Mx	-0.009	5.5
43	MP2B	X	98.53	0.5
44	MP2B	Z	56.887	0.5
45	MP2B	Mx	-0.066	0.5
46	MP2B	X	98.53	5.5
47	MP2B	Z	56.887	5.5
48	MP2B	Mx	-0.066	5.5
49	MP2C	X	56.418	0.5
50	MP2C	Z	32.573	0.5
51	MP2C	Mx	0.047	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
52	MP2C	X	56.418	5.5
53	MP2C	Z	32.573	5.5
54	MP2C	Mx	0.047	5.5
55	MP1A	X	66.586	0.5
56	MP1A	Z	38.443	0.5
57	MP1A	Mx	-0.033	0.5
58	MP1A	X	66.586	3.5
59	MP1A	Z	38.443	3.5
60	MP1A	Mx	-0.033	3.5
61	MP1B	X	72.423	0.5
62	MP1B	Z	41.813	0.5
63	MP1B	Mx	0	0.5
64	MP1B	X	72.423	3.5
65	MP1B	Z	41.813	3.5
66	MP1B	Mx	0	3.5
67	MP1C	X	66.586	0.5
68	MP1C	Z	38.443	0.5
69	MP1C	Mx	0.033	0.5
70	MP1C	X	66.586	3.5
71	MP1C	Z	38.443	3.5
72	MP1C	Mx	0.033	3.5
73	MP5A	X	66.586	0.5
74	MP5A	Z	38.443	0.5
75	MP5A	Mx	-0.033	0.5
76	MP5A	X	66.586	3.5
77	MP5A	Z	38.443	3.5
78	MP5A	Mx	-0.033	3.5
79	MP5B	X	72.423	0.5
80	MP5B	Z	41.813	0.5
81	MP5B	Mx	0	0.5
82	MP5B	X	72.423	3.5
83	MP5B	Z	41.813	3.5
84	MP5B	Mx	0	3.5
85	MP5C	X	66.586	0.5
86	MP5C	Z	38.443	0.5
87	MP5C	Mx	0.033	0.5
88	MP5C	X	66.586	3.5
89	MP5C	Z	38.443	3.5
90	MP5C	Mx	0.033	3.5
91	MP2A	X	50.919	1.5
92	MP2A	Z	29.398	1.5
93	MP2A	Mx	0.025	1.5
94	MP2B	X	66.879	1.5
95	MP2B	Z	38.613	1.5
96	MP2B	Mx	0	1.5
97	MP2C	X	50.919	1.5
98	MP2C	Z	29.398	1.5
99	MP2C	Mx	-0.025	1.5
100	MP3A	X	41.755	0.5
101	MP3A	Z	24.107	0.5
102	MP3A	Mx	0.021	0.5
103	MP3B	X	55.435	0.5
104	MP3B	Z	32.005	0.5
105	MP3B	Mx	0	0.5
106	MP3C	X	41.755	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
107	MP3C	Z	24.107	0.5
108	MP3C	Mx	-0.021	0.5
109	OVP	X	87.011	2
110	OVP	Z	50.236	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	33.114	1
2	MP4A	Z	57.356	1
3	MP4A	Mx	-0.017	1
4	MP4A	X	33.114	3
5	MP4A	Z	57.356	3
6	MP4A	Mx	-0.017	3
7	MP4B	X	33.114	1
8	MP4B	Z	57.356	1
9	MP4B	Mx	-0.017	1
10	MP4B	X	33.114	3
11	MP4B	Z	57.356	3
12	MP4B	Mx	-0.017	3
13	MP4C	X	15.07	1
14	MP4C	Z	26.103	1
15	MP4C	Mx	0.015	1
16	MP4C	X	15.07	3
17	MP4C	Z	26.103	3
18	MP4C	Mx	0.015	3
19	MP2A	X	48.782	0.5
20	MP2A	Z	84.493	0.5
21	MP2A	Mx	-0.074	0.5
22	MP2A	X	48.782	5.5
23	MP2A	Z	84.493	5.5
24	MP2A	Mx	-0.074	5.5
25	MP2B	X	48.782	0.5
26	MP2B	Z	84.493	0.5
27	MP2B	Mx	0.025	0.5
28	MP2B	X	48.782	5.5
29	MP2B	Z	84.493	5.5
30	MP2B	Mx	0.025	5.5
31	MP2C	X	24.468	0.5
32	MP2C	Z	42.381	0.5
33	MP2C	Mx	0.024	0.5
34	MP2C	X	24.468	5.5
35	MP2C	Z	42.381	5.5
36	MP2C	Mx	0.024	5.5
37	MP2A	X	48.782	0.5
38	MP2A	Z	84.493	0.5
39	MP2A	Mx	0.025	0.5
40	MP2A	X	48.782	5.5
41	MP2A	Z	84.493	5.5
42	MP2A	Mx	0.025	5.5
43	MP2B	X	48.782	0.5
44	MP2B	Z	84.493	0.5
45	MP2B	Mx	-0.074	0.5
46	MP2B	X	48.782	5.5
47	MP2B	Z	84.493	5.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
48	MP2B	Mx	-0.074	5.5
49	MP2C	X	24.468	0.5
50	MP2C	Z	42.381	0.5
51	MP2C	Mx	0.024	0.5
52	MP2C	X	24.468	5.5
53	MP2C	Z	42.381	5.5
54	MP2C	Mx	0.024	5.5
55	MP1A	X	40.69	0.5
56	MP1A	Z	70.477	0.5
57	MP1A	Mx	-0.02	0.5
58	MP1A	X	40.69	3.5
59	MP1A	Z	70.477	3.5
60	MP1A	Mx	-0.02	3.5
61	MP1B	X	40.69	0.5
62	MP1B	Z	70.477	0.5
63	MP1B	Mx	-0.02	0.5
64	MP1B	X	40.69	3.5
65	MP1B	Z	70.477	3.5
66	MP1B	Mx	-0.02	3.5
67	MP1C	X	37.32	0.5
68	MP1C	Z	64.64	0.5
69	MP1C	Mx	0.037	0.5
70	MP1C	X	37.32	3.5
71	MP1C	Z	64.64	3.5
72	MP1C	Mx	0.037	3.5
73	MP5A	X	40.69	0.5
74	MP5A	Z	70.477	0.5
75	MP5A	Mx	-0.02	0.5
76	MP5A	X	40.69	3.5
77	MP5A	Z	70.477	3.5
78	MP5A	Mx	-0.02	3.5
79	MP5B	X	40.69	0.5
80	MP5B	Z	70.477	0.5
81	MP5B	Mx	-0.02	0.5
82	MP5B	X	40.69	3.5
83	MP5B	Z	70.477	3.5
84	MP5B	Mx	-0.02	3.5
85	MP5C	X	37.32	0.5
86	MP5C	Z	64.64	0.5
87	MP5C	Mx	0.037	0.5
88	MP5C	X	37.32	3.5
89	MP5C	Z	64.64	3.5
90	MP5C	Mx	0.037	3.5
91	MP2A	X	35.541	1.5
92	MP2A	Z	61.559	1.5
93	MP2A	Mx	0.018	1.5
94	MP2B	X	35.541	1.5
95	MP2B	Z	61.559	1.5
96	MP2B	Mx	0.018	1.5
97	MP2C	X	26.327	1.5
98	MP2C	Z	45.599	1.5
99	MP2C	Mx	-0.026	1.5
100	MP3A	X	29.372	0.5
101	MP3A	Z	50.875	0.5
102	MP3A	Mx	0.015	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
103	MP3B	X	29.372	0.5
104	MP3B	Z	50.875	0.5
105	MP3B	Mx	0.015	0.5
106	MP3C	X	21.474	0.5
107	MP3C	Z	37.195	0.5
108	MP3C	Mx	-0.021	0.5
109	OVP	X	51.599	2
110	OVP	Z	89.371	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	0	1
2	MP4A	Z	78.258	1
3	MP4A	Mx	0	1
4	MP4A	X	0	3
5	MP4A	Z	78.258	3
6	MP4A	Mx	0	3
7	MP4B	X	0	1
8	MP4B	Z	42.17	1
9	MP4B	Mx	-0.018	1
10	MP4B	X	0	3
11	MP4B	Z	42.17	3
12	MP4B	Mx	-0.018	3
13	MP4C	X	0	1
14	MP4C	Z	42.17	1
15	MP4C	Mx	0.018	1
16	MP4C	X	0	3
17	MP4C	Z	42.17	3
18	MP4C	Mx	0.018	3
19	MP2A	X	0	0.5
20	MP2A	Z	113.773	0.5
21	MP2A	Mx	-0.066	0.5
22	MP2A	X	0	5.5
23	MP2A	Z	113.773	5.5
24	MP2A	Mx	-0.066	5.5
25	MP2B	X	0	0.5
26	MP2B	Z	65.146	0.5
27	MP2B	Mx	-0.009	0.5
28	MP2B	X	0	5.5
29	MP2B	Z	65.146	5.5
30	MP2B	Mx	-0.009	5.5
31	MP2C	X	0	0.5
32	MP2C	Z	65.146	0.5
33	MP2C	Mx	0.047	0.5
34	MP2C	X	0	5.5
35	MP2C	Z	65.146	5.5
36	MP2C	Mx	0.047	5.5
37	MP2A	X	0	0.5
38	MP2A	Z	113.773	0.5
39	MP2A	Mx	0.066	0.5
40	MP2A	X	0	5.5
41	MP2A	Z	113.773	5.5
42	MP2A	Mx	0.066	5.5
43	MP2B	X	0	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
44	MP2B	Z	65.146	0.5
45	MP2B	Mx	-0.047	0.5
46	MP2B	X	0	5.5
47	MP2B	Z	65.146	5.5
48	MP2B	Mx	-0.047	5.5
49	MP2C	X	0	0.5
50	MP2C	Z	65.146	0.5
51	MP2C	Mx	0.009	0.5
52	MP2C	X	0	5.5
53	MP2C	Z	65.146	5.5
54	MP2C	Mx	0.009	5.5
55	MP1A	X	0	0.5
56	MP1A	Z	83.626	0.5
57	MP1A	Mx	0	0.5
58	MP1A	X	0	3.5
59	MP1A	Z	83.626	3.5
60	MP1A	Mx	0	3.5
61	MP1B	X	0	0.5
62	MP1B	Z	76.887	0.5
63	MP1B	Mx	-0.033	0.5
64	MP1B	X	0	3.5
65	MP1B	Z	76.887	3.5
66	MP1B	Mx	-0.033	3.5
67	MP1C	X	0	0.5
68	MP1C	Z	76.887	0.5
69	MP1C	Mx	0.033	0.5
70	MP1C	X	0	3.5
71	MP1C	Z	76.887	3.5
72	MP1C	Mx	0.033	3.5
73	MP5A	X	0	0.5
74	MP5A	Z	83.626	0.5
75	MP5A	Mx	0	0.5
76	MP5A	X	0	3.5
77	MP5A	Z	83.626	3.5
78	MP5A	Mx	0	3.5
79	MP5B	X	0	0.5
80	MP5B	Z	76.887	0.5
81	MP5B	Mx	-0.033	0.5
82	MP5B	X	0	3.5
83	MP5B	Z	76.887	3.5
84	MP5B	Mx	-0.033	3.5
85	MP5C	X	0	0.5
86	MP5C	Z	76.887	0.5
87	MP5C	Mx	0.033	0.5
88	MP5C	X	0	3.5
89	MP5C	Z	76.887	3.5
90	MP5C	Mx	0.033	3.5
91	MP2A	X	0	1.5
92	MP2A	Z	77.225	1.5
93	MP2A	Mx	0	1.5
94	MP2B	X	0	1.5
95	MP2B	Z	58.797	1.5
96	MP2B	Mx	0.025	1.5
97	MP2C	X	0	1.5
98	MP2C	Z	58.797	1.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
99	MP2C	Mx	-0.025	1.5
100	MP3A	X	0	0.5
101	MP3A	Z	64.01	0.5
102	MP3A	Mx	0	0.5
103	MP3B	X	0	0.5
104	MP3B	Z	48.214	0.5
105	MP3B	Mx	0.021	0.5
106	MP3C	X	0	0.5
107	MP3C	Z	48.214	0.5
108	MP3C	Mx	-0.021	0.5
109	OVP	X	0	2
110	OVP	Z	117.944	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-33.114	1
2	MP4A	Z	57.356	1
3	MP4A	Mx	0.017	1
4	MP4A	X	-33.114	3
5	MP4A	Z	57.356	3
6	MP4A	Mx	0.017	3
7	MP4B	X	-15.07	1
8	MP4B	Z	26.103	1
9	MP4B	Mx	-0.015	1
10	MP4B	X	-15.07	3
11	MP4B	Z	26.103	3
12	MP4B	Mx	-0.015	3
13	MP4C	X	-33.114	1
14	MP4C	Z	57.356	1
15	MP4C	Mx	0.017	1
16	MP4C	X	-33.114	3
17	MP4C	Z	57.356	3
18	MP4C	Mx	0.017	3
19	MP2A	X	-48.782	0.5
20	MP2A	Z	84.493	0.5
21	MP2A	Mx	-0.025	0.5
22	MP2A	X	-48.782	5.5
23	MP2A	Z	84.493	5.5
24	MP2A	Mx	-0.025	5.5
25	MP2B	X	-24.468	0.5
26	MP2B	Z	42.381	0.5
27	MP2B	Mx	-0.024	0.5
28	MP2B	X	-24.468	5.5
29	MP2B	Z	42.381	5.5
30	MP2B	Mx	-0.024	5.5
31	MP2C	X	-48.782	0.5
32	MP2C	Z	84.493	0.5
33	MP2C	Mx	0.074	0.5
34	MP2C	X	-48.782	5.5
35	MP2C	Z	84.493	5.5
36	MP2C	Mx	0.074	5.5
37	MP2A	X	-48.782	0.5
38	MP2A	Z	84.493	0.5
39	MP2A	Mx	0.074	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
40	MP2A	X	-48.782	5.5
41	MP2A	Z	84.493	5.5
42	MP2A	Mx	0.074	5.5
43	MP2B	X	-24.468	0.5
44	MP2B	Z	42.381	0.5
45	MP2B	Mx	-0.024	0.5
46	MP2B	X	-24.468	5.5
47	MP2B	Z	42.381	5.5
48	MP2B	Mx	-0.024	5.5
49	MP2C	X	-48.782	0.5
50	MP2C	Z	84.493	0.5
51	MP2C	Mx	-0.025	0.5
52	MP2C	X	-48.782	5.5
53	MP2C	Z	84.493	5.5
54	MP2C	Mx	-0.025	5.5
55	MP1A	X	-40.69	0.5
56	MP1A	Z	70.477	0.5
57	MP1A	Mx	0.02	0.5
58	MP1A	X	-40.69	3.5
59	MP1A	Z	70.477	3.5
60	MP1A	Mx	0.02	3.5
61	MP1B	X	-37.32	0.5
62	MP1B	Z	64.64	0.5
63	MP1B	Mx	-0.037	0.5
64	MP1B	X	-37.32	3.5
65	MP1B	Z	64.64	3.5
66	MP1B	Mx	-0.037	3.5
67	MP1C	X	-40.69	0.5
68	MP1C	Z	70.477	0.5
69	MP1C	Mx	0.02	0.5
70	MP1C	X	-40.69	3.5
71	MP1C	Z	70.477	3.5
72	MP1C	Mx	0.02	3.5
73	MP5A	X	-40.69	0.5
74	MP5A	Z	70.477	0.5
75	MP5A	Mx	0.02	0.5
76	MP5A	X	-40.69	3.5
77	MP5A	Z	70.477	3.5
78	MP5A	Mx	0.02	3.5
79	MP5B	X	-37.32	0.5
80	MP5B	Z	64.64	0.5
81	MP5B	Mx	-0.037	0.5
82	MP5B	X	-37.32	3.5
83	MP5B	Z	64.64	3.5
84	MP5B	Mx	-0.037	3.5
85	MP5C	X	-40.69	0.5
86	MP5C	Z	70.477	0.5
87	MP5C	Mx	0.02	0.5
88	MP5C	X	-40.69	3.5
89	MP5C	Z	70.477	3.5
90	MP5C	Mx	0.02	3.5
91	MP2A	X	-35.541	1.5
92	MP2A	Z	61.559	1.5
93	MP2A	Mx	-0.018	1.5
94	MP2B	X	-26.327	1.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
95	MP2B	Z	45.599	1.5
96	MP2B	Mx	0.026	1.5
97	MP2C	X	-35.541	1.5
98	MP2C	Z	61.559	1.5
99	MP2C	Mx	-0.018	1.5
100	MP3A	X	-29.372	0.5
101	MP3A	Z	50.875	0.5
102	MP3A	Mx	-0.015	0.5
103	MP3B	X	-21.474	0.5
104	MP3B	Z	37.195	0.5
105	MP3B	Mx	0.021	0.5
106	MP3C	X	-29.372	0.5
107	MP3C	Z	50.875	0.5
108	MP3C	Mx	-0.015	0.5
109	OVP	X	-64.982	2
110	OVP	Z	112.553	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-36.52	1
2	MP4A	Z	21.085	1
3	MP4A	Mx	0.018	1
4	MP4A	X	-36.52	3
5	MP4A	Z	21.085	3
6	MP4A	Mx	0.018	3
7	MP4B	X	-36.52	1
8	MP4B	Z	21.085	1
9	MP4B	Mx	-0.018	1
10	MP4B	X	-36.52	3
11	MP4B	Z	21.085	3
12	MP4B	Mx	-0.018	3
13	MP4C	X	-67.773	1
14	MP4C	Z	39.129	1
15	MP4C	Mx	0	1
16	MP4C	X	-67.773	3
17	MP4C	Z	39.129	3
18	MP4C	Mx	0	3
19	MP2A	X	-56.418	0.5
20	MP2A	Z	32.573	0.5
21	MP2A	Mx	0.009	0.5
22	MP2A	X	-56.418	5.5
23	MP2A	Z	32.573	5.5
24	MP2A	Mx	0.009	5.5
25	MP2B	X	-56.418	0.5
26	MP2B	Z	32.573	0.5
27	MP2B	Mx	-0.047	0.5
28	MP2B	X	-56.418	5.5
29	MP2B	Z	32.573	5.5
30	MP2B	Mx	-0.047	5.5
31	MP2C	X	-98.53	0.5
32	MP2C	Z	56.887	0.5
33	MP2C	Mx	0.066	0.5
34	MP2C	X	-98.53	5.5
35	MP2C	Z	56.887	5.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
36	MP2C	Mx	0.066	5.5
37	MP2A	X	-56.418	0.5
38	MP2A	Z	32.573	0.5
39	MP2A	Mx	0.047	0.5
40	MP2A	X	-56.418	5.5
41	MP2A	Z	32.573	5.5
42	MP2A	Mx	0.047	5.5
43	MP2B	X	-56.418	0.5
44	MP2B	Z	32.573	0.5
45	MP2B	Mx	-0.009	0.5
46	MP2B	X	-56.418	5.5
47	MP2B	Z	32.573	5.5
48	MP2B	Mx	-0.009	5.5
49	MP2C	X	-98.53	0.5
50	MP2C	Z	56.887	0.5
51	MP2C	Mx	-0.066	0.5
52	MP2C	X	-98.53	5.5
53	MP2C	Z	56.887	5.5
54	MP2C	Mx	-0.066	5.5
55	MP1A	X	-66.586	0.5
56	MP1A	Z	38.443	0.5
57	MP1A	Mx	0.033	0.5
58	MP1A	X	-66.586	3.5
59	MP1A	Z	38.443	3.5
60	MP1A	Mx	0.033	3.5
61	MP1B	X	-66.586	0.5
62	MP1B	Z	38.443	0.5
63	MP1B	Mx	-0.033	0.5
64	MP1B	X	-66.586	3.5
65	MP1B	Z	38.443	3.5
66	MP1B	Mx	-0.033	3.5
67	MP1C	X	-72.423	0.5
68	MP1C	Z	41.813	0.5
69	MP1C	Mx	0	0.5
70	MP1C	X	-72.423	3.5
71	MP1C	Z	41.813	3.5
72	MP1C	Mx	0	3.5
73	MP5A	X	-66.586	0.5
74	MP5A	Z	38.443	0.5
75	MP5A	Mx	0.033	0.5
76	MP5A	X	-66.586	3.5
77	MP5A	Z	38.443	3.5
78	MP5A	Mx	0.033	3.5
79	MP5B	X	-66.586	0.5
80	MP5B	Z	38.443	0.5
81	MP5B	Mx	-0.033	0.5
82	MP5B	X	-66.586	3.5
83	MP5B	Z	38.443	3.5
84	MP5B	Mx	-0.033	3.5
85	MP5C	X	-72.423	0.5
86	MP5C	Z	41.813	0.5
87	MP5C	Mx	0	0.5
88	MP5C	X	-72.423	3.5
89	MP5C	Z	41.813	3.5
90	MP5C	Mx	0	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
91	MP2A	X	-50.919	1.5
92	MP2A	Z	29.398	1.5
93	MP2A	Mx	-0.025	1.5
94	MP2B	X	-50.919	1.5
95	MP2B	Z	29.398	1.5
96	MP2B	Mx	0.025	1.5
97	MP2C	X	-66.879	1.5
98	MP2C	Z	38.613	1.5
99	MP2C	Mx	0	1.5
100	MP3A	X	-41.755	0.5
101	MP3A	Z	24.107	0.5
102	MP3A	Mx	-0.021	0.5
103	MP3B	X	-41.755	0.5
104	MP3B	Z	24.107	0.5
105	MP3B	Mx	0.021	0.5
106	MP3C	X	-55.435	0.5
107	MP3C	Z	32.005	0.5
108	MP3C	Mx	0	0.5
109	OVP	X	-110.193	2
110	OVP	Z	63.62	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-30.141	1
2	MP4A	Z	0	1
3	MP4A	Mx	0.015	1
4	MP4A	X	-30.141	3
5	MP4A	Z	0	3
6	MP4A	Mx	0.015	3
7	MP4B	X	-66.229	1
8	MP4B	Z	0	1
9	MP4B	Mx	-0.017	1
10	MP4B	X	-66.229	3
11	MP4B	Z	0	3
12	MP4B	Mx	-0.017	3
13	MP4C	X	-66.229	1
14	MP4C	Z	0	1
15	MP4C	Mx	-0.017	1
16	MP4C	X	-66.229	3
17	MP4C	Z	0	3
18	MP4C	Mx	-0.017	3
19	MP2A	X	-48.937	0.5
20	MP2A	Z	0	0.5
21	MP2A	Mx	0.024	0.5
22	MP2A	X	-48.937	5.5
23	MP2A	Z	0	5.5
24	MP2A	Mx	0.024	5.5
25	MP2B	X	-97.564	0.5
26	MP2B	Z	0	0.5
27	MP2B	Mx	-0.074	0.5
28	MP2B	X	-97.564	5.5
29	MP2B	Z	0	5.5
30	MP2B	Mx	-0.074	5.5
31	MP2C	X	-97.564	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
32	MP2C	Z	0	0.5
33	MP2C	Mx	0.025	0.5
34	MP2C	X	-97.564	5.5
35	MP2C	Z	0	5.5
36	MP2C	Mx	0.025	5.5
37	MP2A	X	-48.937	0.5
38	MP2A	Z	0	0.5
39	MP2A	Mx	0.024	0.5
40	MP2A	X	-48.937	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	0.024	5.5
43	MP2B	X	-97.564	0.5
44	MP2B	Z	0	0.5
45	MP2B	Mx	0.025	0.5
46	MP2B	X	-97.564	5.5
47	MP2B	Z	0	5.5
48	MP2B	Mx	0.025	5.5
49	MP2C	X	-97.564	0.5
50	MP2C	Z	0	0.5
51	MP2C	Mx	-0.074	0.5
52	MP2C	X	-97.564	5.5
53	MP2C	Z	0	5.5
54	MP2C	Mx	-0.074	5.5
55	MP1A	X	-74.64	0.5
56	MP1A	Z	0	0.5
57	MP1A	Mx	0.037	0.5
58	MP1A	X	-74.64	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	0.037	3.5
61	MP1B	X	-81.38	0.5
62	MP1B	Z	0	0.5
63	MP1B	Mx	-0.02	0.5
64	MP1B	X	-81.38	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	-0.02	3.5
67	MP1C	X	-81.38	0.5
68	MP1C	Z	0	0.5
69	MP1C	Mx	-0.02	0.5
70	MP1C	X	-81.38	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	-0.02	3.5
73	MP5A	X	-74.64	0.5
74	MP5A	Z	0	0.5
75	MP5A	Mx	0.037	0.5
76	MP5A	X	-74.64	3.5
77	MP5A	Z	0	3.5
78	MP5A	Mx	0.037	3.5
79	MP5B	X	-81.38	0.5
80	MP5B	Z	0	0.5
81	MP5B	Mx	-0.02	0.5
82	MP5B	X	-81.38	3.5
83	MP5B	Z	0	3.5
84	MP5B	Mx	-0.02	3.5
85	MP5C	X	-81.38	0.5
86	MP5C	Z	0	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
87	MP5C	Mx	-0.02	0.5
88	MP5C	X	-81.38	3.5
89	MP5C	Z	0	3.5
90	MP5C	Mx	-0.02	3.5
91	MP2A	X	-52.654	1.5
92	MP2A	Z	0	1.5
93	MP2A	Mx	-0.026	1.5
94	MP2B	X	-71.082	1.5
95	MP2B	Z	0	1.5
96	MP2B	Mx	0.018	1.5
97	MP2C	X	-71.082	1.5
98	MP2C	Z	0	1.5
99	MP2C	Mx	0.018	1.5
100	MP3A	X	-42.949	0.5
101	MP3A	Z	0	0.5
102	MP3A	Mx	-0.021	0.5
103	MP3B	X	-58.745	0.5
104	MP3B	Z	0	0.5
105	MP3B	Mx	0.015	0.5
106	MP3C	X	-58.745	0.5
107	MP3C	Z	0	0.5
108	MP3C	Mx	0.015	0.5
109	OVP	X	-112.493	2
110	OVP	Z	0	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-36.52	1
2	MP4A	Z	-21.085	1
3	MP4A	Mx	0.018	1
4	MP4A	X	-36.52	3
5	MP4A	Z	-21.085	3
6	MP4A	Mx	0.018	3
7	MP4B	X	-67.773	1
8	MP4B	Z	-39.129	1
9	MP4B	Mx	0	1
10	MP4B	X	-67.773	3
11	MP4B	Z	-39.129	3
12	MP4B	Mx	0	3
13	MP4C	X	-36.52	1
14	MP4C	Z	-21.085	1
15	MP4C	Mx	-0.018	1
16	MP4C	X	-36.52	3
17	MP4C	Z	-21.085	3
18	MP4C	Mx	-0.018	3
19	MP2A	X	-56.418	0.5
20	MP2A	Z	-32.573	0.5
21	MP2A	Mx	0.047	0.5
22	MP2A	X	-56.418	5.5
23	MP2A	Z	-32.573	5.5
24	MP2A	Mx	0.047	5.5
25	MP2B	X	-98.53	0.5
26	MP2B	Z	-56.887	0.5
27	MP2B	Mx	-0.066	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
28	MP2B	X	-98.53	5.5
29	MP2B	Z	-56.887	5.5
30	MP2B	Mx	-0.066	5.5
31	MP2C	X	-56.418	0.5
32	MP2C	Z	-32.573	0.5
33	MP2C	Mx	-0.009	0.5
34	MP2C	X	-56.418	5.5
35	MP2C	Z	-32.573	5.5
36	MP2C	Mx	-0.009	5.5
37	MP2A	X	-56.418	0.5
38	MP2A	Z	-32.573	0.5
39	MP2A	Mx	0.009	0.5
40	MP2A	X	-56.418	5.5
41	MP2A	Z	-32.573	5.5
42	MP2A	Mx	0.009	5.5
43	MP2B	X	-98.53	0.5
44	MP2B	Z	-56.887	0.5
45	MP2B	Mx	0.066	0.5
46	MP2B	X	-98.53	5.5
47	MP2B	Z	-56.887	5.5
48	MP2B	Mx	0.066	5.5
49	MP2C	X	-56.418	0.5
50	MP2C	Z	-32.573	0.5
51	MP2C	Mx	-0.047	0.5
52	MP2C	X	-56.418	5.5
53	MP2C	Z	-32.573	5.5
54	MP2C	Mx	-0.047	5.5
55	MP1A	X	-66.586	0.5
56	MP1A	Z	-38.443	0.5
57	MP1A	Mx	0.033	0.5
58	MP1A	X	-66.586	3.5
59	MP1A	Z	-38.443	3.5
60	MP1A	Mx	0.033	3.5
61	MP1B	X	-72.423	0.5
62	MP1B	Z	-41.813	0.5
63	MP1B	Mx	0	0.5
64	MP1B	X	-72.423	3.5
65	MP1B	Z	-41.813	3.5
66	MP1B	Mx	0	3.5
67	MP1C	X	-66.586	0.5
68	MP1C	Z	-38.443	0.5
69	MP1C	Mx	-0.033	0.5
70	MP1C	X	-66.586	3.5
71	MP1C	Z	-38.443	3.5
72	MP1C	Mx	-0.033	3.5
73	MP5A	X	-66.586	0.5
74	MP5A	Z	-38.443	0.5
75	MP5A	Mx	0.033	0.5
76	MP5A	X	-66.586	3.5
77	MP5A	Z	-38.443	3.5
78	MP5A	Mx	0.033	3.5
79	MP5B	X	-72.423	0.5
80	MP5B	Z	-41.813	0.5
81	MP5B	Mx	0	0.5
82	MP5B	X	-72.423	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
83	MP5B	Z	-41.813	3.5
84	MP5B	Mx	0	3.5
85	MP5C	X	-66.586	0.5
86	MP5C	Z	-38.443	0.5
87	MP5C	Mx	-0.033	0.5
88	MP5C	X	-66.586	3.5
89	MP5C	Z	-38.443	3.5
90	MP5C	Mx	-0.033	3.5
91	MP2A	X	-50.919	1.5
92	MP2A	Z	-29.398	1.5
93	MP2A	Mx	-0.025	1.5
94	MP2B	X	-66.879	1.5
95	MP2B	Z	-38.613	1.5
96	MP2B	Mx	0	1.5
97	MP2C	X	-50.919	1.5
98	MP2C	Z	-29.398	1.5
99	MP2C	Mx	0.025	1.5
100	MP3A	X	-41.755	0.5
101	MP3A	Z	-24.107	0.5
102	MP3A	Mx	-0.021	0.5
103	MP3B	X	-55.435	0.5
104	MP3B	Z	-32.005	0.5
105	MP3B	Mx	0	0.5
106	MP3C	X	-41.755	0.5
107	MP3C	Z	-24.107	0.5
108	MP3C	Mx	0.021	0.5
109	OVP	X	-87.011	2
110	OVP	Z	-50.236	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-33.114	1
2	MP4A	Z	-57.356	1
3	MP4A	Mx	0.017	1
4	MP4A	X	-33.114	3
5	MP4A	Z	-57.356	3
6	MP4A	Mx	0.017	3
7	MP4B	X	-33.114	1
8	MP4B	Z	-57.356	1
9	MP4B	Mx	0.017	1
10	MP4B	X	-33.114	3
11	MP4B	Z	-57.356	3
12	MP4B	Mx	0.017	3
13	MP4C	X	-15.07	1
14	MP4C	Z	-26.103	1
15	MP4C	Mx	-0.015	1
16	MP4C	X	-15.07	3
17	MP4C	Z	-26.103	3
18	MP4C	Mx	-0.015	3
19	MP2A	X	-48.782	0.5
20	MP2A	Z	-84.493	0.5
21	MP2A	Mx	0.074	0.5
22	MP2A	X	-48.782	5.5
23	MP2A	Z	-84.493	5.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
24	MP2A	Mx	0.074	5.5
25	MP2B	X	-48.782	0.5
26	MP2B	Z	-84.493	0.5
27	MP2B	Mx	-0.025	0.5
28	MP2B	X	-48.782	5.5
29	MP2B	Z	-84.493	5.5
30	MP2B	Mx	-0.025	5.5
31	MP2C	X	-24.468	0.5
32	MP2C	Z	-42.381	0.5
33	MP2C	Mx	-0.024	0.5
34	MP2C	X	-24.468	5.5
35	MP2C	Z	-42.381	5.5
36	MP2C	Mx	-0.024	5.5
37	MP2A	X	-48.782	0.5
38	MP2A	Z	-84.493	0.5
39	MP2A	Mx	-0.025	0.5
40	MP2A	X	-48.782	5.5
41	MP2A	Z	-84.493	5.5
42	MP2A	Mx	-0.025	5.5
43	MP2B	X	-48.782	0.5
44	MP2B	Z	-84.493	0.5
45	MP2B	Mx	0.074	0.5
46	MP2B	X	-48.782	5.5
47	MP2B	Z	-84.493	5.5
48	MP2B	Mx	0.074	5.5
49	MP2C	X	-24.468	0.5
50	MP2C	Z	-42.381	0.5
51	MP2C	Mx	-0.024	0.5
52	MP2C	X	-24.468	5.5
53	MP2C	Z	-42.381	5.5
54	MP2C	Mx	-0.024	5.5
55	MP1A	X	-40.69	0.5
56	MP1A	Z	-70.477	0.5
57	MP1A	Mx	0.02	0.5
58	MP1A	X	-40.69	3.5
59	MP1A	Z	-70.477	3.5
60	MP1A	Mx	0.02	3.5
61	MP1B	X	-40.69	0.5
62	MP1B	Z	-70.477	0.5
63	MP1B	Mx	0.02	0.5
64	MP1B	X	-40.69	3.5
65	MP1B	Z	-70.477	3.5
66	MP1B	Mx	0.02	3.5
67	MP1C	X	-37.32	0.5
68	MP1C	Z	-64.64	0.5
69	MP1C	Mx	-0.037	0.5
70	MP1C	X	-37.32	3.5
71	MP1C	Z	-64.64	3.5
72	MP1C	Mx	-0.037	3.5
73	MP5A	X	-40.69	0.5
74	MP5A	Z	-70.477	0.5
75	MP5A	Mx	0.02	0.5
76	MP5A	X	-40.69	3.5
77	MP5A	Z	-70.477	3.5
78	MP5A	Mx	0.02	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
79	MP5B	X	-40.69	0.5
80	MP5B	Z	-70.477	0.5
81	MP5B	Mx	0.02	0.5
82	MP5B	X	-40.69	3.5
83	MP5B	Z	-70.477	3.5
84	MP5B	Mx	0.02	3.5
85	MP5C	X	-37.32	0.5
86	MP5C	Z	-64.64	0.5
87	MP5C	Mx	-0.037	0.5
88	MP5C	X	-37.32	3.5
89	MP5C	Z	-64.64	3.5
90	MP5C	Mx	-0.037	3.5
91	MP2A	X	-35.541	1.5
92	MP2A	Z	-61.559	1.5
93	MP2A	Mx	-0.018	1.5
94	MP2B	X	-35.541	1.5
95	MP2B	Z	-61.559	1.5
96	MP2B	Mx	-0.018	1.5
97	MP2C	X	-26.327	1.5
98	MP2C	Z	-45.599	1.5
99	MP2C	Mx	0.026	1.5
100	MP3A	X	-29.372	0.5
101	MP3A	Z	-50.875	0.5
102	MP3A	Mx	-0.015	0.5
103	MP3B	X	-29.372	0.5
104	MP3B	Z	-50.875	0.5
105	MP3B	Mx	-0.015	0.5
106	MP3C	X	-21.474	0.5
107	MP3C	Z	-37.195	0.5
108	MP3C	Mx	0.021	0.5
109	OVP	X	-51.599	2
110	OVP	Z	-89.371	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	0	1
2	MP4A	Z	-15.513	1
3	MP4A	Mx	0	1
4	MP4A	X	0	3
5	MP4A	Z	-15.513	3
6	MP4A	Mx	0	3
7	MP4B	X	0	1
8	MP4B	Z	-8.787	1
9	MP4B	Mx	0.004	1
10	MP4B	X	0	3
11	MP4B	Z	-8.787	3
12	MP4B	Mx	0.004	3
13	MP4C	X	0	1
14	MP4C	Z	-8.787	1
15	MP4C	Mx	-0.004	1
16	MP4C	X	0	3
17	MP4C	Z	-8.787	3
18	MP4C	Mx	-0.004	3
19	MP2A	X	0	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
20	MP2A	Z	-32.228	0.5
21	MP2A	Mx	0.019	0.5
22	MP2A	X	0	5.5
23	MP2A	Z	-32.228	5.5
24	MP2A	Mx	0.019	5.5
25	MP2B	X	0	0.5
26	MP2B	Z	-24.721	0.5
27	MP2B	Mx	0.003	0.5
28	MP2B	X	0	5.5
29	MP2B	Z	-24.721	5.5
30	MP2B	Mx	0.003	5.5
31	MP2C	X	0	0.5
32	MP2C	Z	-24.721	0.5
33	MP2C	Mx	-0.018	0.5
34	MP2C	X	0	5.5
35	MP2C	Z	-24.721	5.5
36	MP2C	Mx	-0.018	5.5
37	MP2A	X	0	0.5
38	MP2A	Z	-32.228	0.5
39	MP2A	Mx	-0.019	0.5
40	MP2A	X	0	5.5
41	MP2A	Z	-32.228	5.5
42	MP2A	Mx	-0.019	5.5
43	MP2B	X	0	0.5
44	MP2B	Z	-24.721	0.5
45	MP2B	Mx	0.018	0.5
46	MP2B	X	0	5.5
47	MP2B	Z	-24.721	5.5
48	MP2B	Mx	0.018	5.5
49	MP2C	X	0	0.5
50	MP2C	Z	-24.721	0.5
51	MP2C	Mx	-0.003	0.5
52	MP2C	X	0	5.5
53	MP2C	Z	-24.721	5.5
54	MP2C	Mx	-0.003	5.5
55	MP1A	X	0	0.5
56	MP1A	Z	-16.621	0.5
57	MP1A	Mx	0	0.5
58	MP1A	X	0	3.5
59	MP1A	Z	-16.621	3.5
60	MP1A	Mx	0	3.5
61	MP1B	X	0	0.5
62	MP1B	Z	-15.394	0.5
63	MP1B	Mx	0.007	0.5
64	MP1B	X	0	3.5
65	MP1B	Z	-15.394	3.5
66	MP1B	Mx	0.007	3.5
67	MP1C	X	0	0.5
68	MP1C	Z	-15.394	0.5
69	MP1C	Mx	-0.007	0.5
70	MP1C	X	0	3.5
71	MP1C	Z	-15.394	3.5
72	MP1C	Mx	-0.007	3.5
73	MP5A	X	0	0.5
74	MP5A	Z	-16.621	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
75	MP5A	Mx	0	0.5
76	MP5A	X	0	3.5
77	MP5A	Z	-16.621	3.5
78	MP5A	Mx	0	3.5
79	MP5B	X	0	0.5
80	MP5B	Z	-15.394	0.5
81	MP5B	Mx	0.007	0.5
82	MP5B	X	0	3.5
83	MP5B	Z	-15.394	3.5
84	MP5B	Mx	0.007	3.5
85	MP5C	X	0	0.5
86	MP5C	Z	-15.394	0.5
87	MP5C	Mx	-0.007	0.5
88	MP5C	X	0	3.5
89	MP5C	Z	-15.394	3.5
90	MP5C	Mx	-0.007	3.5
91	MP2A	X	0	1.5
92	MP2A	Z	-16.016	1.5
93	MP2A	Mx	0	1.5
94	MP2B	X	0	1.5
95	MP2B	Z	-12.503	1.5
96	MP2B	Mx	-0.005	1.5
97	MP2C	X	0	1.5
98	MP2C	Z	-12.503	1.5
99	MP2C	Mx	0.005	1.5
100	MP3A	X	0	0.5
101	MP3A	Z	-16.016	0.5
102	MP3A	Mx	0	0.5
103	MP3B	X	0	0.5
104	MP3B	Z	-12.357	0.5
105	MP3B	Mx	-0.005	0.5
106	MP3C	X	0	0.5
107	MP3C	Z	-12.357	0.5
108	MP3C	Mx	0.005	0.5
109	OVP	X	0	2
110	OVP	Z	-29.962	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	6.636	1
2	MP4A	Z	-11.493	1
3	MP4A	Mx	-0.003	1
4	MP4A	X	6.636	3
5	MP4A	Z	-11.493	3
6	MP4A	Mx	-0.003	3
7	MP4B	X	3.272	1
8	MP4B	Z	-5.668	1
9	MP4B	Mx	0.003	1
10	MP4B	X	3.272	3
11	MP4B	Z	-5.668	3
12	MP4B	Mx	0.003	3
13	MP4C	X	6.636	1
14	MP4C	Z	-11.493	1
15	MP4C	Mx	-0.003	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
16	MP4C	X	6.636	3
17	MP4C	Z	-11.493	3
18	MP4C	Mx	-0.003	3
19	MP2A	X	14.863	0.5
20	MP2A	Z	-25.743	0.5
21	MP2A	Mx	0.008	0.5
22	MP2A	X	14.863	5.5
23	MP2A	Z	-25.743	5.5
24	MP2A	Mx	0.008	5.5
25	MP2B	X	11.109	0.5
26	MP2B	Z	-19.242	0.5
27	MP2B	Mx	0.011	0.5
28	MP2B	X	11.109	5.5
29	MP2B	Z	-19.242	5.5
30	MP2B	Mx	0.011	5.5
31	MP2C	X	14.863	0.5
32	MP2C	Z	-25.743	0.5
33	MP2C	Mx	-0.022	0.5
34	MP2C	X	14.863	5.5
35	MP2C	Z	-25.743	5.5
36	MP2C	Mx	-0.022	5.5
37	MP2A	X	14.863	0.5
38	MP2A	Z	-25.743	0.5
39	MP2A	Mx	-0.022	0.5
40	MP2A	X	14.863	5.5
41	MP2A	Z	-25.743	5.5
42	MP2A	Mx	-0.022	5.5
43	MP2B	X	11.109	0.5
44	MP2B	Z	-19.242	0.5
45	MP2B	Mx	0.011	0.5
46	MP2B	X	11.109	5.5
47	MP2B	Z	-19.242	5.5
48	MP2B	Mx	0.011	5.5
49	MP2C	X	14.863	0.5
50	MP2C	Z	-25.743	0.5
51	MP2C	Mx	0.008	0.5
52	MP2C	X	14.863	5.5
53	MP2C	Z	-25.743	5.5
54	MP2C	Mx	0.008	5.5
55	MP1A	X	8.106	0.5
56	MP1A	Z	-14.04	0.5
57	MP1A	Mx	-0.004	0.5
58	MP1A	X	8.106	3.5
59	MP1A	Z	-14.04	3.5
60	MP1A	Mx	-0.004	3.5
61	MP1B	X	7.492	0.5
62	MP1B	Z	-12.977	0.5
63	MP1B	Mx	0.007	0.5
64	MP1B	X	7.492	3.5
65	MP1B	Z	-12.977	3.5
66	MP1B	Mx	0.007	3.5
67	MP1C	X	8.106	0.5
68	MP1C	Z	-14.04	0.5
69	MP1C	Mx	-0.004	0.5
70	MP1C	X	8.106	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
71	MP1C	Z	-14.04	3.5
72	MP1C	Mx	-0.004	3.5
73	MP5A	X	8.106	0.5
74	MP5A	Z	-14.04	0.5
75	MP5A	Mx	-0.004	0.5
76	MP5A	X	8.106	3.5
77	MP5A	Z	-14.04	3.5
78	MP5A	Mx	-0.004	3.5
79	MP5B	X	7.492	0.5
80	MP5B	Z	-12.977	0.5
81	MP5B	Mx	0.007	0.5
82	MP5B	X	7.492	3.5
83	MP5B	Z	-12.977	3.5
84	MP5B	Mx	0.007	3.5
85	MP5C	X	8.106	0.5
86	MP5C	Z	-14.04	0.5
87	MP5C	Mx	-0.004	0.5
88	MP5C	X	8.106	3.5
89	MP5C	Z	-14.04	3.5
90	MP5C	Mx	-0.004	3.5
91	MP2A	X	7.423	1.5
92	MP2A	Z	-12.856	1.5
93	MP2A	Mx	0.004	1.5
94	MP2B	X	5.666	1.5
95	MP2B	Z	-9.814	1.5
96	MP2B	Mx	-0.006	1.5
97	MP2C	X	7.423	1.5
98	MP2C	Z	-12.856	1.5
99	MP2C	Mx	0.004	1.5
100	MP3A	X	7.398	0.5
101	MP3A	Z	-12.814	0.5
102	MP3A	Mx	0.004	0.5
103	MP3B	X	5.568	0.5
104	MP3B	Z	-9.645	0.5
105	MP3B	Mx	-0.006	0.5
106	MP3C	X	7.398	0.5
107	MP3C	Z	-12.814	0.5
108	MP3C	Mx	0.004	0.5
109	OVP	X	16.357	2
110	OVP	Z	-28.331	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	7.61	1
2	MP4A	Z	-4.393	1
3	MP4A	Mx	-0.004	1
4	MP4A	X	7.61	3
5	MP4A	Z	-4.393	3
6	MP4A	Mx	-0.004	3
7	MP4B	X	7.61	1
8	MP4B	Z	-4.393	1
9	MP4B	Mx	0.004	1
10	MP4B	X	7.61	3
11	MP4B	Z	-4.393	3

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
12	MP4B	Mx	0.004	3
13	MP4C	X	13.435	1
14	MP4C	Z	-7.757	1
15	MP4C	Mx	0	1
16	MP4C	X	13.435	3
17	MP4C	Z	-7.757	3
18	MP4C	Mx	0	3
19	MP2A	X	21.409	0.5
20	MP2A	Z	-12.36	0.5
21	MP2A	Mx	-0.003	0.5
22	MP2A	X	21.409	5.5
23	MP2A	Z	-12.36	5.5
24	MP2A	Mx	-0.003	5.5
25	MP2B	X	21.409	0.5
26	MP2B	Z	-12.36	0.5
27	MP2B	Mx	0.018	0.5
28	MP2B	X	21.409	5.5
29	MP2B	Z	-12.36	5.5
30	MP2B	Mx	0.018	5.5
31	MP2C	X	27.911	0.5
32	MP2C	Z	-16.114	0.5
33	MP2C	Mx	-0.019	0.5
34	MP2C	X	27.911	5.5
35	MP2C	Z	-16.114	5.5
36	MP2C	Mx	-0.019	5.5
37	MP2A	X	21.409	0.5
38	MP2A	Z	-12.36	0.5
39	MP2A	Mx	-0.018	0.5
40	MP2A	X	21.409	5.5
41	MP2A	Z	-12.36	5.5
42	MP2A	Mx	-0.018	5.5
43	MP2B	X	21.409	0.5
44	MP2B	Z	-12.36	0.5
45	MP2B	Mx	0.003	0.5
46	MP2B	X	21.409	5.5
47	MP2B	Z	-12.36	5.5
48	MP2B	Mx	0.003	5.5
49	MP2C	X	27.911	0.5
50	MP2C	Z	-16.114	0.5
51	MP2C	Mx	0.019	0.5
52	MP2C	X	27.911	5.5
53	MP2C	Z	-16.114	5.5
54	MP2C	Mx	0.019	5.5
55	MP1A	X	13.332	0.5
56	MP1A	Z	-7.697	0.5
57	MP1A	Mx	-0.007	0.5
58	MP1A	X	13.332	3.5
59	MP1A	Z	-7.697	3.5
60	MP1A	Mx	-0.007	3.5
61	MP1B	X	13.332	0.5
62	MP1B	Z	-7.697	0.5
63	MP1B	Mx	0.007	0.5
64	MP1B	X	13.332	3.5
65	MP1B	Z	-7.697	3.5
66	MP1B	Mx	0.007	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
67	MP1C	X	14.395	0.5
68	MP1C	Z	-8.311	0.5
69	MP1C	Mx	0	0.5
70	MP1C	X	14.395	3.5
71	MP1C	Z	-8.311	3.5
72	MP1C	Mx	0	3.5
73	MP5A	X	13.332	0.5
74	MP5A	Z	-7.697	0.5
75	MP5A	Mx	-0.007	0.5
76	MP5A	X	13.332	3.5
77	MP5A	Z	-7.697	3.5
78	MP5A	Mx	-0.007	3.5
79	MP5B	X	13.332	0.5
80	MP5B	Z	-7.697	0.5
81	MP5B	Mx	0.007	0.5
82	MP5B	X	13.332	3.5
83	MP5B	Z	-7.697	3.5
84	MP5B	Mx	0.007	3.5
85	MP5C	X	14.395	0.5
86	MP5C	Z	-8.311	0.5
87	MP5C	Mx	0	0.5
88	MP5C	X	14.395	3.5
89	MP5C	Z	-8.311	3.5
90	MP5C	Mx	0	3.5
91	MP2A	X	10.828	1.5
92	MP2A	Z	-6.251	1.5
93	MP2A	Mx	0.005	1.5
94	MP2B	X	10.828	1.5
95	MP2B	Z	-6.251	1.5
96	MP2B	Mx	-0.005	1.5
97	MP2C	X	13.87	1.5
98	MP2C	Z	-8.008	1.5
99	MP2C	Mx	0	1.5
100	MP3A	X	10.701	0.5
101	MP3A	Z	-6.178	0.5
102	MP3A	Mx	0.005	0.5
103	MP3B	X	10.701	0.5
104	MP3B	Z	-6.178	0.5
105	MP3B	Mx	-0.005	0.5
106	MP3C	X	13.87	0.5
107	MP3C	Z	-8.008	0.5
108	MP3C	Mx	0	0.5
109	OVP	X	27.79	2
110	OVP	Z	-16.045	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	6.545	1
2	MP4A	Z	0	1
3	MP4A	Mx	-0.003	1
4	MP4A	X	6.545	3
5	MP4A	Z	0	3
6	MP4A	Mx	-0.003	3
7	MP4B	X	13.271	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
8	MP4B	Z	0	1
9	MP4B	Mx	0.003	1
10	MP4B	X	13.271	3
11	MP4B	Z	0	3
12	MP4B	Mx	0.003	3
13	MP4C	X	13.271	1
14	MP4C	Z	0	1
15	MP4C	Mx	0.003	1
16	MP4C	X	13.271	3
17	MP4C	Z	0	3
18	MP4C	Mx	0.003	3
19	MP2A	X	22.218	0.5
20	MP2A	Z	0	0.5
21	MP2A	Mx	-0.011	0.5
22	MP2A	X	22.218	5.5
23	MP2A	Z	0	5.5
24	MP2A	Mx	-0.011	5.5
25	MP2B	X	29.726	0.5
26	MP2B	Z	0	0.5
27	MP2B	Mx	0.022	0.5
28	MP2B	X	29.726	5.5
29	MP2B	Z	0	5.5
30	MP2B	Mx	0.022	5.5
31	MP2C	X	29.726	0.5
32	MP2C	Z	0	0.5
33	MP2C	Mx	-0.008	0.5
34	MP2C	X	29.726	5.5
35	MP2C	Z	0	5.5
36	MP2C	Mx	-0.008	5.5
37	MP2A	X	22.218	0.5
38	MP2A	Z	0	0.5
39	MP2A	Mx	-0.011	0.5
40	MP2A	X	22.218	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	-0.011	5.5
43	MP2B	X	29.726	0.5
44	MP2B	Z	0	0.5
45	MP2B	Mx	-0.008	0.5
46	MP2B	X	29.726	5.5
47	MP2B	Z	0	5.5
48	MP2B	Mx	-0.008	5.5
49	MP2C	X	29.726	0.5
50	MP2C	Z	0	0.5
51	MP2C	Mx	0.022	0.5
52	MP2C	X	29.726	5.5
53	MP2C	Z	0	5.5
54	MP2C	Mx	0.022	5.5
55	MP1A	X	14.985	0.5
56	MP1A	Z	0	0.5
57	MP1A	Mx	-0.007	0.5
58	MP1A	X	14.985	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	-0.007	3.5
61	MP1B	X	16.212	0.5
62	MP1B	Z	0	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
63	MP1B	Mx	0.004	0.5
64	MP1B	X	16.212	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	0.004	3.5
67	MP1C	X	16.212	0.5
68	MP1C	Z	0	0.5
69	MP1C	Mx	0.004	0.5
70	MP1C	X	16.212	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	0.004	3.5
73	MP5A	X	14.985	0.5
74	MP5A	Z	0	0.5
75	MP5A	Mx	-0.007	0.5
76	MP5A	X	14.985	3.5
77	MP5A	Z	0	3.5
78	MP5A	Mx	-0.007	3.5
79	MP5B	X	16.212	0.5
80	MP5B	Z	0	0.5
81	MP5B	Mx	0.004	0.5
82	MP5B	X	16.212	3.5
83	MP5B	Z	0	3.5
84	MP5B	Mx	0.004	3.5
85	MP5C	X	16.212	0.5
86	MP5C	Z	0	0.5
87	MP5C	Mx	0.004	0.5
88	MP5C	X	16.212	3.5
89	MP5C	Z	0	3.5
90	MP5C	Mx	0.004	3.5
91	MP2A	X	11.332	1.5
92	MP2A	Z	0	1.5
93	MP2A	Mx	0.006	1.5
94	MP2B	X	14.845	1.5
95	MP2B	Z	0	1.5
96	MP2B	Mx	-0.004	1.5
97	MP2C	X	14.845	1.5
98	MP2C	Z	0	1.5
99	MP2C	Mx	-0.004	1.5
100	MP3A	X	11.137	0.5
101	MP3A	Z	0	0.5
102	MP3A	Mx	0.006	0.5
103	MP3B	X	14.796	0.5
104	MP3B	Z	0	0.5
105	MP3B	Mx	-0.004	0.5
106	MP3C	X	14.796	0.5
107	MP3C	Z	0	0.5
108	MP3C	Mx	-0.004	0.5
109	OVP	X	28.714	2
110	OVP	Z	0	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	7.61	1
2	MP4A	Z	4.393	1
3	MP4A	Mx	-0.004	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
4	MP4A	X	7.61	3
5	MP4A	Z	4.393	3
6	MP4A	Mx	-0.004	3
7	MP4B	X	13.435	1
8	MP4B	Z	7.757	1
9	MP4B	Mx	0	1
10	MP4B	X	13.435	3
11	MP4B	Z	7.757	3
12	MP4B	Mx	0	3
13	MP4C	X	7.61	1
14	MP4C	Z	4.393	1
15	MP4C	Mx	0.004	1
16	MP4C	X	7.61	3
17	MP4C	Z	4.393	3
18	MP4C	Mx	0.004	3
19	MP2A	X	21.409	0.5
20	MP2A	Z	12.36	0.5
21	MP2A	Mx	-0.018	0.5
22	MP2A	X	21.409	5.5
23	MP2A	Z	12.36	5.5
24	MP2A	Mx	-0.018	5.5
25	MP2B	X	27.911	0.5
26	MP2B	Z	16.114	0.5
27	MP2B	Mx	0.019	0.5
28	MP2B	X	27.911	5.5
29	MP2B	Z	16.114	5.5
30	MP2B	Mx	0.019	5.5
31	MP2C	X	21.409	0.5
32	MP2C	Z	12.36	0.5
33	MP2C	Mx	0.003	0.5
34	MP2C	X	21.409	5.5
35	MP2C	Z	12.36	5.5
36	MP2C	Mx	0.003	5.5
37	MP2A	X	21.409	0.5
38	MP2A	Z	12.36	0.5
39	MP2A	Mx	-0.003	0.5
40	MP2A	X	21.409	5.5
41	MP2A	Z	12.36	5.5
42	MP2A	Mx	-0.003	5.5
43	MP2B	X	27.911	0.5
44	MP2B	Z	16.114	0.5
45	MP2B	Mx	-0.019	0.5
46	MP2B	X	27.911	5.5
47	MP2B	Z	16.114	5.5
48	MP2B	Mx	-0.019	5.5
49	MP2C	X	21.409	0.5
50	MP2C	Z	12.36	0.5
51	MP2C	Mx	0.018	0.5
52	MP2C	X	21.409	5.5
53	MP2C	Z	12.36	5.5
54	MP2C	Mx	0.018	5.5
55	MP1A	X	13.332	0.5
56	MP1A	Z	7.697	0.5
57	MP1A	Mx	-0.007	0.5
58	MP1A	X	13.332	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
59	MP1A	Z	7.697	3.5
60	MP1A	Mx	-0.007	3.5
61	MP1B	X	14.395	0.5
62	MP1B	Z	8.311	0.5
63	MP1B	Mx	0	0.5
64	MP1B	X	14.395	3.5
65	MP1B	Z	8.311	3.5
66	MP1B	Mx	0	3.5
67	MP1C	X	13.332	0.5
68	MP1C	Z	7.697	0.5
69	MP1C	Mx	0.007	0.5
70	MP1C	X	13.332	3.5
71	MP1C	Z	7.697	3.5
72	MP1C	Mx	0.007	3.5
73	MP5A	X	13.332	0.5
74	MP5A	Z	7.697	0.5
75	MP5A	Mx	-0.007	0.5
76	MP5A	X	13.332	3.5
77	MP5A	Z	7.697	3.5
78	MP5A	Mx	-0.007	3.5
79	MP5B	X	14.395	0.5
80	MP5B	Z	8.311	0.5
81	MP5B	Mx	0	0.5
82	MP5B	X	14.395	3.5
83	MP5B	Z	8.311	3.5
84	MP5B	Mx	0	3.5
85	MP5C	X	13.332	0.5
86	MP5C	Z	7.697	0.5
87	MP5C	Mx	0.007	0.5
88	MP5C	X	13.332	3.5
89	MP5C	Z	7.697	3.5
90	MP5C	Mx	0.007	3.5
91	MP2A	X	10.828	1.5
92	MP2A	Z	6.251	1.5
93	MP2A	Mx	0.005	1.5
94	MP2B	X	13.87	1.5
95	MP2B	Z	8.008	1.5
96	MP2B	Mx	0	1.5
97	MP2C	X	10.828	1.5
98	MP2C	Z	6.251	1.5
99	MP2C	Mx	-0.005	1.5
100	MP3A	X	10.701	0.5
101	MP3A	Z	6.178	0.5
102	MP3A	Mx	0.005	0.5
103	MP3B	X	13.87	0.5
104	MP3B	Z	8.008	0.5
105	MP3B	Mx	0	0.5
106	MP3C	X	10.701	0.5
107	MP3C	Z	6.178	0.5
108	MP3C	Mx	-0.005	0.5
109	OVP	X	22.484	2
110	OVP	Z	12.981	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	6.636	1
2	MP4A	Z	11.493	1
3	MP4A	Mx	-0.003	1
4	MP4A	X	6.636	3
5	MP4A	Z	11.493	3
6	MP4A	Mx	-0.003	3
7	MP4B	X	6.636	1
8	MP4B	Z	11.493	1
9	MP4B	Mx	-0.003	1
10	MP4B	X	6.636	3
11	MP4B	Z	11.493	3
12	MP4B	Mx	-0.003	3
13	MP4C	X	3.272	1
14	MP4C	Z	5.668	1
15	MP4C	Mx	0.003	1
16	MP4C	X	3.272	3
17	MP4C	Z	5.668	3
18	MP4C	Mx	0.003	3
19	MP2A	X	14.863	0.5
20	MP2A	Z	25.743	0.5
21	MP2A	Mx	-0.022	0.5
22	MP2A	X	14.863	5.5
23	MP2A	Z	25.743	5.5
24	MP2A	Mx	-0.022	5.5
25	MP2B	X	14.863	0.5
26	MP2B	Z	25.743	0.5
27	MP2B	Mx	0.008	0.5
28	MP2B	X	14.863	5.5
29	MP2B	Z	25.743	5.5
30	MP2B	Mx	0.008	5.5
31	MP2C	X	11.109	0.5
32	MP2C	Z	19.242	0.5
33	MP2C	Mx	0.011	0.5
34	MP2C	X	11.109	5.5
35	MP2C	Z	19.242	5.5
36	MP2C	Mx	0.011	5.5
37	MP2A	X	14.863	0.5
38	MP2A	Z	25.743	0.5
39	MP2A	Mx	0.008	0.5
40	MP2A	X	14.863	5.5
41	MP2A	Z	25.743	5.5
42	MP2A	Mx	0.008	5.5
43	MP2B	X	14.863	0.5
44	MP2B	Z	25.743	0.5
45	MP2B	Mx	-0.022	0.5
46	MP2B	X	14.863	5.5
47	MP2B	Z	25.743	5.5
48	MP2B	Mx	-0.022	5.5
49	MP2C	X	11.109	0.5
50	MP2C	Z	19.242	0.5
51	MP2C	Mx	0.011	0.5
52	MP2C	X	11.109	5.5
53	MP2C	Z	19.242	5.5
54	MP2C	Mx	0.011	5.5
55	MP1A	X	8.106	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
56	MP1A	Z	14.04	0.5
57	MP1A	Mx	-0.004	0.5
58	MP1A	X	8.106	3.5
59	MP1A	Z	14.04	3.5
60	MP1A	Mx	-0.004	3.5
61	MP1B	X	8.106	0.5
62	MP1B	Z	14.04	0.5
63	MP1B	Mx	-0.004	0.5
64	MP1B	X	8.106	3.5
65	MP1B	Z	14.04	3.5
66	MP1B	Mx	-0.004	3.5
67	MP1C	X	7.492	0.5
68	MP1C	Z	12.977	0.5
69	MP1C	Mx	0.007	0.5
70	MP1C	X	7.492	3.5
71	MP1C	Z	12.977	3.5
72	MP1C	Mx	0.007	3.5
73	MP5A	X	8.106	0.5
74	MP5A	Z	14.04	0.5
75	MP5A	Mx	-0.004	0.5
76	MP5A	X	8.106	3.5
77	MP5A	Z	14.04	3.5
78	MP5A	Mx	-0.004	3.5
79	MP5B	X	8.106	0.5
80	MP5B	Z	14.04	0.5
81	MP5B	Mx	-0.004	0.5
82	MP5B	X	8.106	3.5
83	MP5B	Z	14.04	3.5
84	MP5B	Mx	-0.004	3.5
85	MP5C	X	7.492	0.5
86	MP5C	Z	12.977	0.5
87	MP5C	Mx	0.007	0.5
88	MP5C	X	7.492	3.5
89	MP5C	Z	12.977	3.5
90	MP5C	Mx	0.007	3.5
91	MP2A	X	7.423	1.5
92	MP2A	Z	12.856	1.5
93	MP2A	Mx	0.004	1.5
94	MP2B	X	7.423	1.5
95	MP2B	Z	12.856	1.5
96	MP2B	Mx	0.004	1.5
97	MP2C	X	5.666	1.5
98	MP2C	Z	9.814	1.5
99	MP2C	Mx	-0.006	1.5
100	MP3A	X	7.398	0.5
101	MP3A	Z	12.814	0.5
102	MP3A	Mx	0.004	0.5
103	MP3B	X	7.398	0.5
104	MP3B	Z	12.814	0.5
105	MP3B	Mx	0.004	0.5
106	MP3C	X	5.568	0.5
107	MP3C	Z	9.645	0.5
108	MP3C	Mx	-0.006	0.5
109	OVP	X	13.293	2
110	OVP	Z	23.024	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	0	1
2	MP4A	Z	15.513	1
3	MP4A	Mx	0	1
4	MP4A	X	0	3
5	MP4A	Z	15.513	3
6	MP4A	Mx	0	3
7	MP4B	X	0	1
8	MP4B	Z	8.787	1
9	MP4B	Mx	-0.004	1
10	MP4B	X	0	3
11	MP4B	Z	8.787	3
12	MP4B	Mx	-0.004	3
13	MP4C	X	0	1
14	MP4C	Z	8.787	1
15	MP4C	Mx	0.004	1
16	MP4C	X	0	3
17	MP4C	Z	8.787	3
18	MP4C	Mx	0.004	3
19	MP2A	X	0	0.5
20	MP2A	Z	32.228	0.5
21	MP2A	Mx	-0.019	0.5
22	MP2A	X	0	5.5
23	MP2A	Z	32.228	5.5
24	MP2A	Mx	-0.019	5.5
25	MP2B	X	0	0.5
26	MP2B	Z	24.721	0.5
27	MP2B	Mx	-0.003	0.5
28	MP2B	X	0	5.5
29	MP2B	Z	24.721	5.5
30	MP2B	Mx	-0.003	5.5
31	MP2C	X	0	0.5
32	MP2C	Z	24.721	0.5
33	MP2C	Mx	0.018	0.5
34	MP2C	X	0	5.5
35	MP2C	Z	24.721	5.5
36	MP2C	Mx	0.018	5.5
37	MP2A	X	0	0.5
38	MP2A	Z	32.228	0.5
39	MP2A	Mx	0.019	0.5
40	MP2A	X	0	5.5
41	MP2A	Z	32.228	5.5
42	MP2A	Mx	0.019	5.5
43	MP2B	X	0	0.5
44	MP2B	Z	24.721	0.5
45	MP2B	Mx	-0.018	0.5
46	MP2B	X	0	5.5
47	MP2B	Z	24.721	5.5
48	MP2B	Mx	-0.018	5.5
49	MP2C	X	0	0.5
50	MP2C	Z	24.721	0.5
51	MP2C	Mx	0.003	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
52	MP2C	X	0	5.5
53	MP2C	Z	24.721	5.5
54	MP2C	Mx	0.003	5.5
55	MP1A	X	0	0.5
56	MP1A	Z	16.621	0.5
57	MP1A	Mx	0	0.5
58	MP1A	X	0	3.5
59	MP1A	Z	16.621	3.5
60	MP1A	Mx	0	3.5
61	MP1B	X	0	0.5
62	MP1B	Z	15.394	0.5
63	MP1B	Mx	-0.007	0.5
64	MP1B	X	0	3.5
65	MP1B	Z	15.394	3.5
66	MP1B	Mx	-0.007	3.5
67	MP1C	X	0	0.5
68	MP1C	Z	15.394	0.5
69	MP1C	Mx	0.007	0.5
70	MP1C	X	0	3.5
71	MP1C	Z	15.394	3.5
72	MP1C	Mx	0.007	3.5
73	MP5A	X	0	0.5
74	MP5A	Z	16.621	0.5
75	MP5A	Mx	0	0.5
76	MP5A	X	0	3.5
77	MP5A	Z	16.621	3.5
78	MP5A	Mx	0	3.5
79	MP5B	X	0	0.5
80	MP5B	Z	15.394	0.5
81	MP5B	Mx	-0.007	0.5
82	MP5B	X	0	3.5
83	MP5B	Z	15.394	3.5
84	MP5B	Mx	-0.007	3.5
85	MP5C	X	0	0.5
86	MP5C	Z	15.394	0.5
87	MP5C	Mx	0.007	0.5
88	MP5C	X	0	3.5
89	MP5C	Z	15.394	3.5
90	MP5C	Mx	0.007	3.5
91	MP2A	X	0	1.5
92	MP2A	Z	16.016	1.5
93	MP2A	Mx	0	1.5
94	MP2B	X	0	1.5
95	MP2B	Z	12.503	1.5
96	MP2B	Mx	0.005	1.5
97	MP2C	X	0	1.5
98	MP2C	Z	12.503	1.5
99	MP2C	Mx	-0.005	1.5
100	MP3A	X	0	0.5
101	MP3A	Z	16.016	0.5
102	MP3A	Mx	0	0.5
103	MP3B	X	0	0.5
104	MP3B	Z	12.357	0.5
105	MP3B	Mx	0.005	0.5
106	MP3C	X	0	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
107	MP3C	Z	12.357	0.5
108	MP3C	Mx	-0.005	0.5
109	OVP	X	0	2
110	OVP	Z	29.962	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-6.636	1
2	MP4A	Z	11.493	1
3	MP4A	Mx	0.003	1
4	MP4A	X	-6.636	3
5	MP4A	Z	11.493	3
6	MP4A	Mx	0.003	3
7	MP4B	X	-3.272	1
8	MP4B	Z	5.668	1
9	MP4B	Mx	-0.003	1
10	MP4B	X	-3.272	3
11	MP4B	Z	5.668	3
12	MP4B	Mx	-0.003	3
13	MP4C	X	-6.636	1
14	MP4C	Z	11.493	1
15	MP4C	Mx	0.003	1
16	MP4C	X	-6.636	3
17	MP4C	Z	11.493	3
18	MP4C	Mx	0.003	3
19	MP2A	X	-14.863	0.5
20	MP2A	Z	25.743	0.5
21	MP2A	Mx	-0.008	0.5
22	MP2A	X	-14.863	5.5
23	MP2A	Z	25.743	5.5
24	MP2A	Mx	-0.008	5.5
25	MP2B	X	-11.109	0.5
26	MP2B	Z	19.242	0.5
27	MP2B	Mx	-0.011	0.5
28	MP2B	X	-11.109	5.5
29	MP2B	Z	19.242	5.5
30	MP2B	Mx	-0.011	5.5
31	MP2C	X	-14.863	0.5
32	MP2C	Z	25.743	0.5
33	MP2C	Mx	0.022	0.5
34	MP2C	X	-14.863	5.5
35	MP2C	Z	25.743	5.5
36	MP2C	Mx	0.022	5.5
37	MP2A	X	-14.863	0.5
38	MP2A	Z	25.743	0.5
39	MP2A	Mx	0.022	0.5
40	MP2A	X	-14.863	5.5
41	MP2A	Z	25.743	5.5
42	MP2A	Mx	0.022	5.5
43	MP2B	X	-11.109	0.5
44	MP2B	Z	19.242	0.5
45	MP2B	Mx	-0.011	0.5
46	MP2B	X	-11.109	5.5
47	MP2B	Z	19.242	5.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
48	MP2B	Mx	-0.011	5.5
49	MP2C	X	-14.863	0.5
50	MP2C	Z	25.743	0.5
51	MP2C	Mx	-0.008	0.5
52	MP2C	X	-14.863	5.5
53	MP2C	Z	25.743	5.5
54	MP2C	Mx	-0.008	5.5
55	MP1A	X	-8.106	0.5
56	MP1A	Z	14.04	0.5
57	MP1A	Mx	0.004	0.5
58	MP1A	X	-8.106	3.5
59	MP1A	Z	14.04	3.5
60	MP1A	Mx	0.004	3.5
61	MP1B	X	-7.492	0.5
62	MP1B	Z	12.977	0.5
63	MP1B	Mx	-0.007	0.5
64	MP1B	X	-7.492	3.5
65	MP1B	Z	12.977	3.5
66	MP1B	Mx	-0.007	3.5
67	MP1C	X	-8.106	0.5
68	MP1C	Z	14.04	0.5
69	MP1C	Mx	0.004	0.5
70	MP1C	X	-8.106	3.5
71	MP1C	Z	14.04	3.5
72	MP1C	Mx	0.004	3.5
73	MP5A	X	-8.106	0.5
74	MP5A	Z	14.04	0.5
75	MP5A	Mx	0.004	0.5
76	MP5A	X	-8.106	3.5
77	MP5A	Z	14.04	3.5
78	MP5A	Mx	0.004	3.5
79	MP5B	X	-7.492	0.5
80	MP5B	Z	12.977	0.5
81	MP5B	Mx	-0.007	0.5
82	MP5B	X	-7.492	3.5
83	MP5B	Z	12.977	3.5
84	MP5B	Mx	-0.007	3.5
85	MP5C	X	-8.106	0.5
86	MP5C	Z	14.04	0.5
87	MP5C	Mx	0.004	0.5
88	MP5C	X	-8.106	3.5
89	MP5C	Z	14.04	3.5
90	MP5C	Mx	0.004	3.5
91	MP2A	X	-7.423	1.5
92	MP2A	Z	12.856	1.5
93	MP2A	Mx	-0.004	1.5
94	MP2B	X	-5.666	1.5
95	MP2B	Z	9.814	1.5
96	MP2B	Mx	0.006	1.5
97	MP2C	X	-7.423	1.5
98	MP2C	Z	12.856	1.5
99	MP2C	Mx	-0.004	1.5
100	MP3A	X	-7.398	0.5
101	MP3A	Z	12.814	0.5
102	MP3A	Mx	-0.004	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
103	MP3B	X	-5.568	0.5
104	MP3B	Z	9.645	0.5
105	MP3B	Mx	0.006	0.5
106	MP3C	X	-7.398	0.5
107	MP3C	Z	12.814	0.5
108	MP3C	Mx	-0.004	0.5
109	OVP	X	-16.357	2
110	OVP	Z	28.331	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-7.61	1
2	MP4A	Z	4.393	1
3	MP4A	Mx	0.004	1
4	MP4A	X	-7.61	3
5	MP4A	Z	4.393	3
6	MP4A	Mx	0.004	3
7	MP4B	X	-7.61	1
8	MP4B	Z	4.393	1
9	MP4B	Mx	-0.004	1
10	MP4B	X	-7.61	3
11	MP4B	Z	4.393	3
12	MP4B	Mx	-0.004	3
13	MP4C	X	-13.435	1
14	MP4C	Z	7.757	1
15	MP4C	Mx	0	1
16	MP4C	X	-13.435	3
17	MP4C	Z	7.757	3
18	MP4C	Mx	0	3
19	MP2A	X	-21.409	0.5
20	MP2A	Z	12.36	0.5
21	MP2A	Mx	0.003	0.5
22	MP2A	X	-21.409	5.5
23	MP2A	Z	12.36	5.5
24	MP2A	Mx	0.003	5.5
25	MP2B	X	-21.409	0.5
26	MP2B	Z	12.36	0.5
27	MP2B	Mx	-0.018	0.5
28	MP2B	X	-21.409	5.5
29	MP2B	Z	12.36	5.5
30	MP2B	Mx	-0.018	5.5
31	MP2C	X	-27.911	0.5
32	MP2C	Z	16.114	0.5
33	MP2C	Mx	0.019	0.5
34	MP2C	X	-27.911	5.5
35	MP2C	Z	16.114	5.5
36	MP2C	Mx	0.019	5.5
37	MP2A	X	-21.409	0.5
38	MP2A	Z	12.36	0.5
39	MP2A	Mx	0.018	0.5
40	MP2A	X	-21.409	5.5
41	MP2A	Z	12.36	5.5
42	MP2A	Mx	0.018	5.5
43	MP2B	X	-21.409	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
44	MP2B	Z	12.36	0.5
45	MP2B	Mx	-0.003	0.5
46	MP2B	X	-21.409	5.5
47	MP2B	Z	12.36	5.5
48	MP2B	Mx	-0.003	5.5
49	MP2C	X	-27.911	0.5
50	MP2C	Z	16.114	0.5
51	MP2C	Mx	-0.019	0.5
52	MP2C	X	-27.911	5.5
53	MP2C	Z	16.114	5.5
54	MP2C	Mx	-0.019	5.5
55	MP1A	X	-13.332	0.5
56	MP1A	Z	7.697	0.5
57	MP1A	Mx	0.007	0.5
58	MP1A	X	-13.332	3.5
59	MP1A	Z	7.697	3.5
60	MP1A	Mx	0.007	3.5
61	MP1B	X	-13.332	0.5
62	MP1B	Z	7.697	0.5
63	MP1B	Mx	-0.007	0.5
64	MP1B	X	-13.332	3.5
65	MP1B	Z	7.697	3.5
66	MP1B	Mx	-0.007	3.5
67	MP1C	X	-14.395	0.5
68	MP1C	Z	8.311	0.5
69	MP1C	Mx	0	0.5
70	MP1C	X	-14.395	3.5
71	MP1C	Z	8.311	3.5
72	MP1C	Mx	0	3.5
73	MP5A	X	-13.332	0.5
74	MP5A	Z	7.697	0.5
75	MP5A	Mx	0.007	0.5
76	MP5A	X	-13.332	3.5
77	MP5A	Z	7.697	3.5
78	MP5A	Mx	0.007	3.5
79	MP5B	X	-13.332	0.5
80	MP5B	Z	7.697	0.5
81	MP5B	Mx	-0.007	0.5
82	MP5B	X	-13.332	3.5
83	MP5B	Z	7.697	3.5
84	MP5B	Mx	-0.007	3.5
85	MP5C	X	-14.395	0.5
86	MP5C	Z	8.311	0.5
87	MP5C	Mx	0	0.5
88	MP5C	X	-14.395	3.5
89	MP5C	Z	8.311	3.5
90	MP5C	Mx	0	3.5
91	MP2A	X	-10.828	1.5
92	MP2A	Z	6.251	1.5
93	MP2A	Mx	-0.005	1.5
94	MP2B	X	-10.828	1.5
95	MP2B	Z	6.251	1.5
96	MP2B	Mx	0.005	1.5
97	MP2C	X	-13.87	1.5
98	MP2C	Z	8.008	1.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
99	MP2C	Mx	0	1.5
100	MP3A	X	-10.701	0.5
101	MP3A	Z	6.178	0.5
102	MP3A	Mx	-0.005	0.5
103	MP3B	X	-10.701	0.5
104	MP3B	Z	6.178	0.5
105	MP3B	Mx	0.005	0.5
106	MP3C	X	-13.87	0.5
107	MP3C	Z	8.008	0.5
108	MP3C	Mx	0	0.5
109	OVP	X	-27.79	2
110	OVP	Z	16.045	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-6.545	1
2	MP4A	Z	0	1
3	MP4A	Mx	0.003	1
4	MP4A	X	-6.545	3
5	MP4A	Z	0	3
6	MP4A	Mx	0.003	3
7	MP4B	X	-13.271	1
8	MP4B	Z	0	1
9	MP4B	Mx	-0.003	1
10	MP4B	X	-13.271	3
11	MP4B	Z	0	3
12	MP4B	Mx	-0.003	3
13	MP4C	X	-13.271	1
14	MP4C	Z	0	1
15	MP4C	Mx	-0.003	1
16	MP4C	X	-13.271	3
17	MP4C	Z	0	3
18	MP4C	Mx	-0.003	3
19	MP2A	X	-22.218	0.5
20	MP2A	Z	0	0.5
21	MP2A	Mx	0.011	0.5
22	MP2A	X	-22.218	5.5
23	MP2A	Z	0	5.5
24	MP2A	Mx	0.011	5.5
25	MP2B	X	-29.726	0.5
26	MP2B	Z	0	0.5
27	MP2B	Mx	-0.022	0.5
28	MP2B	X	-29.726	5.5
29	MP2B	Z	0	5.5
30	MP2B	Mx	-0.022	5.5
31	MP2C	X	-29.726	0.5
32	MP2C	Z	0	0.5
33	MP2C	Mx	0.008	0.5
34	MP2C	X	-29.726	5.5
35	MP2C	Z	0	5.5
36	MP2C	Mx	0.008	5.5
37	MP2A	X	-22.218	0.5
38	MP2A	Z	0	0.5
39	MP2A	Mx	0.011	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
40	MP2A	X	-22.218	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	0.011	5.5
43	MP2B	X	-29.726	0.5
44	MP2B	Z	0	0.5
45	MP2B	Mx	0.008	0.5
46	MP2B	X	-29.726	5.5
47	MP2B	Z	0	5.5
48	MP2B	Mx	0.008	5.5
49	MP2C	X	-29.726	0.5
50	MP2C	Z	0	0.5
51	MP2C	Mx	-0.022	0.5
52	MP2C	X	-29.726	5.5
53	MP2C	Z	0	5.5
54	MP2C	Mx	-0.022	5.5
55	MP1A	X	-14.985	0.5
56	MP1A	Z	0	0.5
57	MP1A	Mx	0.007	0.5
58	MP1A	X	-14.985	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	0.007	3.5
61	MP1B	X	-16.212	0.5
62	MP1B	Z	0	0.5
63	MP1B	Mx	-0.004	0.5
64	MP1B	X	-16.212	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	-0.004	3.5
67	MP1C	X	-16.212	0.5
68	MP1C	Z	0	0.5
69	MP1C	Mx	-0.004	0.5
70	MP1C	X	-16.212	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	-0.004	3.5
73	MP5A	X	-14.985	0.5
74	MP5A	Z	0	0.5
75	MP5A	Mx	0.007	0.5
76	MP5A	X	-14.985	3.5
77	MP5A	Z	0	3.5
78	MP5A	Mx	0.007	3.5
79	MP5B	X	-16.212	0.5
80	MP5B	Z	0	0.5
81	MP5B	Mx	-0.004	0.5
82	MP5B	X	-16.212	3.5
83	MP5B	Z	0	3.5
84	MP5B	Mx	-0.004	3.5
85	MP5C	X	-16.212	0.5
86	MP5C	Z	0	0.5
87	MP5C	Mx	-0.004	0.5
88	MP5C	X	-16.212	3.5
89	MP5C	Z	0	3.5
90	MP5C	Mx	-0.004	3.5
91	MP2A	X	-11.332	1.5
92	MP2A	Z	0	1.5
93	MP2A	Mx	-0.006	1.5
94	MP2B	X	-14.845	1.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
95	MP2B	Z	0	1.5
96	MP2B	Mx	0.004	1.5
97	MP2C	X	-14.845	1.5
98	MP2C	Z	0	1.5
99	MP2C	Mx	0.004	1.5
100	MP3A	X	-11.137	0.5
101	MP3A	Z	0	0.5
102	MP3A	Mx	-0.006	0.5
103	MP3B	X	-14.796	0.5
104	MP3B	Z	0	0.5
105	MP3B	Mx	0.004	0.5
106	MP3C	X	-14.796	0.5
107	MP3C	Z	0	0.5
108	MP3C	Mx	0.004	0.5
109	OVP	X	-28.714	2
110	OVP	Z	0	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-7.61	1
2	MP4A	Z	-4.393	1
3	MP4A	Mx	0.004	1
4	MP4A	X	-7.61	3
5	MP4A	Z	-4.393	3
6	MP4A	Mx	0.004	3
7	MP4B	X	-13.435	1
8	MP4B	Z	-7.757	1
9	MP4B	Mx	0	1
10	MP4B	X	-13.435	3
11	MP4B	Z	-7.757	3
12	MP4B	Mx	0	3
13	MP4C	X	-7.61	1
14	MP4C	Z	-4.393	1
15	MP4C	Mx	-0.004	1
16	MP4C	X	-7.61	3
17	MP4C	Z	-4.393	3
18	MP4C	Mx	-0.004	3
19	MP2A	X	-21.409	0.5
20	MP2A	Z	-12.36	0.5
21	MP2A	Mx	0.018	0.5
22	MP2A	X	-21.409	5.5
23	MP2A	Z	-12.36	5.5
24	MP2A	Mx	0.018	5.5
25	MP2B	X	-27.911	0.5
26	MP2B	Z	-16.114	0.5
27	MP2B	Mx	-0.019	0.5
28	MP2B	X	-27.911	5.5
29	MP2B	Z	-16.114	5.5
30	MP2B	Mx	-0.019	5.5
31	MP2C	X	-21.409	0.5
32	MP2C	Z	-12.36	0.5
33	MP2C	Mx	-0.003	0.5
34	MP2C	X	-21.409	5.5
35	MP2C	Z	-12.36	5.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
36	MP2C	Mx	-0.003	5.5
37	MP2A	X	-21.409	0.5
38	MP2A	Z	-12.36	0.5
39	MP2A	Mx	0.003	0.5
40	MP2A	X	-21.409	5.5
41	MP2A	Z	-12.36	5.5
42	MP2A	Mx	0.003	5.5
43	MP2B	X	-27.911	0.5
44	MP2B	Z	-16.114	0.5
45	MP2B	Mx	0.019	0.5
46	MP2B	X	-27.911	5.5
47	MP2B	Z	-16.114	5.5
48	MP2B	Mx	0.019	5.5
49	MP2C	X	-21.409	0.5
50	MP2C	Z	-12.36	0.5
51	MP2C	Mx	-0.018	0.5
52	MP2C	X	-21.409	5.5
53	MP2C	Z	-12.36	5.5
54	MP2C	Mx	-0.018	5.5
55	MP1A	X	-13.332	0.5
56	MP1A	Z	-7.697	0.5
57	MP1A	Mx	0.007	0.5
58	MP1A	X	-13.332	3.5
59	MP1A	Z	-7.697	3.5
60	MP1A	Mx	0.007	3.5
61	MP1B	X	-14.395	0.5
62	MP1B	Z	-8.311	0.5
63	MP1B	Mx	0	0.5
64	MP1B	X	-14.395	3.5
65	MP1B	Z	-8.311	3.5
66	MP1B	Mx	0	3.5
67	MP1C	X	-13.332	0.5
68	MP1C	Z	-7.697	0.5
69	MP1C	Mx	-0.007	0.5
70	MP1C	X	-13.332	3.5
71	MP1C	Z	-7.697	3.5
72	MP1C	Mx	-0.007	3.5
73	MP5A	X	-13.332	0.5
74	MP5A	Z	-7.697	0.5
75	MP5A	Mx	0.007	0.5
76	MP5A	X	-13.332	3.5
77	MP5A	Z	-7.697	3.5
78	MP5A	Mx	0.007	3.5
79	MP5B	X	-14.395	0.5
80	MP5B	Z	-8.311	0.5
81	MP5B	Mx	0	0.5
82	MP5B	X	-14.395	3.5
83	MP5B	Z	-8.311	3.5
84	MP5B	Mx	0	3.5
85	MP5C	X	-13.332	0.5
86	MP5C	Z	-7.697	0.5
87	MP5C	Mx	-0.007	0.5
88	MP5C	X	-13.332	3.5
89	MP5C	Z	-7.697	3.5
90	MP5C	Mx	-0.007	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
91	MP2A	X	-10.828	1.5
92	MP2A	Z	-6.251	1.5
93	MP2A	Mx	-0.005	1.5
94	MP2B	X	-13.87	1.5
95	MP2B	Z	-8.008	1.5
96	MP2B	Mx	0	1.5
97	MP2C	X	-10.828	1.5
98	MP2C	Z	-6.251	1.5
99	MP2C	Mx	0.005	1.5
100	MP3A	X	-10.701	0.5
101	MP3A	Z	-6.178	0.5
102	MP3A	Mx	-0.005	0.5
103	MP3B	X	-13.87	0.5
104	MP3B	Z	-8.008	0.5
105	MP3B	Mx	0	0.5
106	MP3C	X	-10.701	0.5
107	MP3C	Z	-6.178	0.5
108	MP3C	Mx	0.005	0.5
109	OVP	X	-22.484	2
110	OVP	Z	-12.981	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-6.636	1
2	MP4A	Z	-11.493	1
3	MP4A	Mx	0.003	1
4	MP4A	X	-6.636	3
5	MP4A	Z	-11.493	3
6	MP4A	Mx	0.003	3
7	MP4B	X	-6.636	1
8	MP4B	Z	-11.493	1
9	MP4B	Mx	0.003	1
10	MP4B	X	-6.636	3
11	MP4B	Z	-11.493	3
12	MP4B	Mx	0.003	3
13	MP4C	X	-3.272	1
14	MP4C	Z	-5.668	1
15	MP4C	Mx	-0.003	1
16	MP4C	X	-3.272	3
17	MP4C	Z	-5.668	3
18	MP4C	Mx	-0.003	3
19	MP2A	X	-14.863	0.5
20	MP2A	Z	-25.743	0.5
21	MP2A	Mx	0.022	0.5
22	MP2A	X	-14.863	5.5
23	MP2A	Z	-25.743	5.5
24	MP2A	Mx	0.022	5.5
25	MP2B	X	-14.863	0.5
26	MP2B	Z	-25.743	0.5
27	MP2B	Mx	-0.008	0.5
28	MP2B	X	-14.863	5.5
29	MP2B	Z	-25.743	5.5
30	MP2B	Mx	-0.008	5.5
31	MP2C	X	-11.109	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
32	MP2C	Z	-19.242	0.5
33	MP2C	Mx	-0.011	0.5
34	MP2C	X	-11.109	5.5
35	MP2C	Z	-19.242	5.5
36	MP2C	Mx	-0.011	5.5
37	MP2A	X	-14.863	0.5
38	MP2A	Z	-25.743	0.5
39	MP2A	Mx	-0.008	0.5
40	MP2A	X	-14.863	5.5
41	MP2A	Z	-25.743	5.5
42	MP2A	Mx	-0.008	5.5
43	MP2B	X	-14.863	0.5
44	MP2B	Z	-25.743	0.5
45	MP2B	Mx	0.022	0.5
46	MP2B	X	-14.863	5.5
47	MP2B	Z	-25.743	5.5
48	MP2B	Mx	0.022	5.5
49	MP2C	X	-11.109	0.5
50	MP2C	Z	-19.242	0.5
51	MP2C	Mx	-0.011	0.5
52	MP2C	X	-11.109	5.5
53	MP2C	Z	-19.242	5.5
54	MP2C	Mx	-0.011	5.5
55	MP1A	X	-8.106	0.5
56	MP1A	Z	-14.04	0.5
57	MP1A	Mx	0.004	0.5
58	MP1A	X	-8.106	3.5
59	MP1A	Z	-14.04	3.5
60	MP1A	Mx	0.004	3.5
61	MP1B	X	-8.106	0.5
62	MP1B	Z	-14.04	0.5
63	MP1B	Mx	0.004	0.5
64	MP1B	X	-8.106	3.5
65	MP1B	Z	-14.04	3.5
66	MP1B	Mx	0.004	3.5
67	MP1C	X	-7.492	0.5
68	MP1C	Z	-12.977	0.5
69	MP1C	Mx	-0.007	0.5
70	MP1C	X	-7.492	3.5
71	MP1C	Z	-12.977	3.5
72	MP1C	Mx	-0.007	3.5
73	MP5A	X	-8.106	0.5
74	MP5A	Z	-14.04	0.5
75	MP5A	Mx	0.004	0.5
76	MP5A	X	-8.106	3.5
77	MP5A	Z	-14.04	3.5
78	MP5A	Mx	0.004	3.5
79	MP5B	X	-8.106	0.5
80	MP5B	Z	-14.04	0.5
81	MP5B	Mx	0.004	0.5
82	MP5B	X	-8.106	3.5
83	MP5B	Z	-14.04	3.5
84	MP5B	Mx	0.004	3.5
85	MP5C	X	-7.492	0.5
86	MP5C	Z	-12.977	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
87	MP5C	Mx	-0.007	0.5
88	MP5C	X	-7.492	3.5
89	MP5C	Z	-12.977	3.5
90	MP5C	Mx	-0.007	3.5
91	MP2A	X	-7.423	1.5
92	MP2A	Z	-12.856	1.5
93	MP2A	Mx	-0.004	1.5
94	MP2B	X	-7.423	1.5
95	MP2B	Z	-12.856	1.5
96	MP2B	Mx	-0.004	1.5
97	MP2C	X	-5.666	1.5
98	MP2C	Z	-9.814	1.5
99	MP2C	Mx	0.006	1.5
100	MP3A	X	-7.398	0.5
101	MP3A	Z	-12.814	0.5
102	MP3A	Mx	-0.004	0.5
103	MP3B	X	-7.398	0.5
104	MP3B	Z	-12.814	0.5
105	MP3B	Mx	-0.004	0.5
106	MP3C	X	-5.568	0.5
107	MP3C	Z	-9.645	0.5
108	MP3C	Mx	0.006	0.5
109	OVP	X	-13.293	2
110	OVP	Z	-23.024	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	0	1
2	MP4A	Z	-4.891	1
3	MP4A	Mx	0	1
4	MP4A	X	0	3
5	MP4A	Z	-4.891	3
6	MP4A	Mx	0	3
7	MP4B	X	0	1
8	MP4B	Z	-2.636	1
9	MP4B	Mx	0.001	1
10	MP4B	X	0	3
11	MP4B	Z	-2.636	3
12	MP4B	Mx	0.001	3
13	MP4C	X	0	1
14	MP4C	Z	-2.636	1
15	MP4C	Mx	-0.001	1
16	MP4C	X	0	3
17	MP4C	Z	-2.636	3
18	MP4C	Mx	-0.001	3
19	MP2A	X	0	0.5
20	MP2A	Z	-7.111	0.5
21	MP2A	Mx	0.004	0.5
22	MP2A	X	0	5.5
23	MP2A	Z	-7.111	5.5
24	MP2A	Mx	0.004	5.5
25	MP2B	X	0	0.5
26	MP2B	Z	-4.072	0.5
27	MP2B	Mx	0.000576	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
28	MP2B	X	0	5.5
29	MP2B	Z	-4.072	5.5
30	MP2B	Mx	0.000576	5.5
31	MP2C	X	0	0.5
32	MP2C	Z	-4.072	0.5
33	MP2C	Mx	-0.003	0.5
34	MP2C	X	0	5.5
35	MP2C	Z	-4.072	5.5
36	MP2C	Mx	-0.003	5.5
37	MP2A	X	0	0.5
38	MP2A	Z	-7.111	0.5
39	MP2A	Mx	-0.004	0.5
40	MP2A	X	0	5.5
41	MP2A	Z	-7.111	5.5
42	MP2A	Mx	-0.004	5.5
43	MP2B	X	0	0.5
44	MP2B	Z	-4.072	0.5
45	MP2B	Mx	0.003	0.5
46	MP2B	X	0	5.5
47	MP2B	Z	-4.072	5.5
48	MP2B	Mx	0.003	5.5
49	MP2C	X	0	0.5
50	MP2C	Z	-4.072	0.5
51	MP2C	Mx	-0.000576	0.5
52	MP2C	X	0	5.5
53	MP2C	Z	-4.072	5.5
54	MP2C	Mx	-0.000576	5.5
55	MP1A	X	0	0.5
56	MP1A	Z	-5.227	0.5
57	MP1A	Mx	0	0.5
58	MP1A	X	0	3.5
59	MP1A	Z	-5.227	3.5
60	MP1A	Mx	0	3.5
61	MP1B	X	0	0.5
62	MP1B	Z	-4.805	0.5
63	MP1B	Mx	0.002	0.5
64	MP1B	X	0	3.5
65	MP1B	Z	-4.805	3.5
66	MP1B	Mx	0.002	3.5
67	MP1C	X	0	0.5
68	MP1C	Z	-4.805	0.5
69	MP1C	Mx	-0.002	0.5
70	MP1C	X	0	3.5
71	MP1C	Z	-4.805	3.5
72	MP1C	Mx	-0.002	3.5
73	MP5A	X	0	0.5
74	MP5A	Z	-5.227	0.5
75	MP5A	Mx	0	0.5
76	MP5A	X	0	3.5
77	MP5A	Z	-5.227	3.5
78	MP5A	Mx	0	3.5
79	MP5B	X	0	0.5
80	MP5B	Z	-4.805	0.5
81	MP5B	Mx	0.002	0.5
82	MP5B	X	0	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
83	MP5B	Z	-4.805	3.5
84	MP5B	Mx	0.002	3.5
85	MP5C	X	0	0.5
86	MP5C	Z	-4.805	0.5
87	MP5C	Mx	-0.002	0.5
88	MP5C	X	0	3.5
89	MP5C	Z	-4.805	3.5
90	MP5C	Mx	-0.002	3.5
91	MP2A	X	0	1.5
92	MP2A	Z	-4.827	1.5
93	MP2A	Mx	0	1.5
94	MP2B	X	0	1.5
95	MP2B	Z	-3.675	1.5
96	MP2B	Mx	-0.002	1.5
97	MP2C	X	0	1.5
98	MP2C	Z	-3.675	1.5
99	MP2C	Mx	0.002	1.5
100	MP3A	X	0	0.5
101	MP3A	Z	-4.001	0.5
102	MP3A	Mx	0	0.5
103	MP3B	X	0	0.5
104	MP3B	Z	-3.013	0.5
105	MP3B	Mx	-0.001	0.5
106	MP3C	X	0	0.5
107	MP3C	Z	-3.013	0.5
108	MP3C	Mx	0.001	0.5
109	OVP	X	0	2
110	OVP	Z	-7.371	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	2.07	1
2	MP4A	Z	-3.585	1
3	MP4A	Mx	-0.001	1
4	MP4A	X	2.07	3
5	MP4A	Z	-3.585	3
6	MP4A	Mx	-0.001	3
7	MP4B	X	0.942	1
8	MP4B	Z	-1.631	1
9	MP4B	Mx	0.000942	1
10	MP4B	X	0.942	3
11	MP4B	Z	-1.631	3
12	MP4B	Mx	0.000942	3
13	MP4C	X	2.07	1
14	MP4C	Z	-3.585	1
15	MP4C	Mx	-0.001	1
16	MP4C	X	2.07	3
17	MP4C	Z	-3.585	3
18	MP4C	Mx	-0.001	3
19	MP2A	X	3.049	0.5
20	MP2A	Z	-5.281	0.5
21	MP2A	Mx	0.002	0.5
22	MP2A	X	3.049	5.5
23	MP2A	Z	-5.281	5.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
24	MP2A	Mx	0.002	5.5
25	MP2B	X	1.529	0.5
26	MP2B	Z	-2.649	0.5
27	MP2B	Mx	0.002	0.5
28	MP2B	X	1.529	5.5
29	MP2B	Z	-2.649	5.5
30	MP2B	Mx	0.002	5.5
31	MP2C	X	3.049	0.5
32	MP2C	Z	-5.281	0.5
33	MP2C	Mx	-0.005	0.5
34	MP2C	X	3.049	5.5
35	MP2C	Z	-5.281	5.5
36	MP2C	Mx	-0.005	5.5
37	MP2A	X	3.049	0.5
38	MP2A	Z	-5.281	0.5
39	MP2A	Mx	-0.005	0.5
40	MP2A	X	3.049	5.5
41	MP2A	Z	-5.281	5.5
42	MP2A	Mx	-0.005	5.5
43	MP2B	X	1.529	0.5
44	MP2B	Z	-2.649	0.5
45	MP2B	Mx	0.002	0.5
46	MP2B	X	1.529	5.5
47	MP2B	Z	-2.649	5.5
48	MP2B	Mx	0.002	5.5
49	MP2C	X	3.049	0.5
50	MP2C	Z	-5.281	0.5
51	MP2C	Mx	0.002	0.5
52	MP2C	X	3.049	5.5
53	MP2C	Z	-5.281	5.5
54	MP2C	Mx	0.002	5.5
55	MP1A	X	2.543	0.5
56	MP1A	Z	-4.405	0.5
57	MP1A	Mx	-0.001	0.5
58	MP1A	X	2.543	3.5
59	MP1A	Z	-4.405	3.5
60	MP1A	Mx	-0.001	3.5
61	MP1B	X	2.333	0.5
62	MP1B	Z	-4.04	0.5
63	MP1B	Mx	0.002	0.5
64	MP1B	X	2.333	3.5
65	MP1B	Z	-4.04	3.5
66	MP1B	Mx	0.002	3.5
67	MP1C	X	2.543	0.5
68	MP1C	Z	-4.405	0.5
69	MP1C	Mx	-0.001	0.5
70	MP1C	X	2.543	3.5
71	MP1C	Z	-4.405	3.5
72	MP1C	Mx	-0.001	3.5
73	MP5A	X	2.543	0.5
74	MP5A	Z	-4.405	0.5
75	MP5A	Mx	-0.001	0.5
76	MP5A	X	2.543	3.5
77	MP5A	Z	-4.405	3.5
78	MP5A	Mx	-0.001	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
79	MP5B	X	2.333	0.5
80	MP5B	Z	-4.04	0.5
81	MP5B	Mx	0.002	0.5
82	MP5B	X	2.333	3.5
83	MP5B	Z	-4.04	3.5
84	MP5B	Mx	0.002	3.5
85	MP5C	X	2.543	0.5
86	MP5C	Z	-4.405	0.5
87	MP5C	Mx	-0.001	0.5
88	MP5C	X	2.543	3.5
89	MP5C	Z	-4.405	3.5
90	MP5C	Mx	-0.001	3.5
91	MP2A	X	2.221	1.5
92	MP2A	Z	-3.847	1.5
93	MP2A	Mx	0.001	1.5
94	MP2B	X	1.645	1.5
95	MP2B	Z	-2.85	1.5
96	MP2B	Mx	-0.002	1.5
97	MP2C	X	2.221	1.5
98	MP2C	Z	-3.847	1.5
99	MP2C	Mx	0.001	1.5
100	MP3A	X	1.836	0.5
101	MP3A	Z	-3.18	0.5
102	MP3A	Mx	0.000918	0.5
103	MP3B	X	1.342	0.5
104	MP3B	Z	-2.325	0.5
105	MP3B	Mx	-0.001	0.5
106	MP3C	X	1.836	0.5
107	MP3C	Z	-3.18	0.5
108	MP3C	Mx	0.000918	0.5
109	OVP	X	4.061	2
110	OVP	Z	-7.035	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	2.283	1
2	MP4A	Z	-1.318	1
3	MP4A	Mx	-0.001	1
4	MP4A	X	2.283	3
5	MP4A	Z	-1.318	3
6	MP4A	Mx	-0.001	3
7	MP4B	X	2.283	1
8	MP4B	Z	-1.318	1
9	MP4B	Mx	0.001	1
10	MP4B	X	2.283	3
11	MP4B	Z	-1.318	3
12	MP4B	Mx	0.001	3
13	MP4C	X	4.236	1
14	MP4C	Z	-2.446	1
15	MP4C	Mx	0	1
16	MP4C	X	4.236	3
17	MP4C	Z	-2.446	3
18	MP4C	Mx	0	3
19	MP2A	X	3.526	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
20	MP2A	Z	-2.036	0.5
21	MP2A	Mx	-0.000575	0.5
22	MP2A	X	3.526	5.5
23	MP2A	Z	-2.036	5.5
24	MP2A	Mx	-0.000575	5.5
25	MP2B	X	3.526	0.5
26	MP2B	Z	-2.036	0.5
27	MP2B	Mx	0.003	0.5
28	MP2B	X	3.526	5.5
29	MP2B	Z	-2.036	5.5
30	MP2B	Mx	0.003	5.5
31	MP2C	X	6.158	0.5
32	MP2C	Z	-3.555	0.5
33	MP2C	Mx	-0.004	0.5
34	MP2C	X	6.158	5.5
35	MP2C	Z	-3.555	5.5
36	MP2C	Mx	-0.004	5.5
37	MP2A	X	3.526	0.5
38	MP2A	Z	-2.036	0.5
39	MP2A	Mx	-0.003	0.5
40	MP2A	X	3.526	5.5
41	MP2A	Z	-2.036	5.5
42	MP2A	Mx	-0.003	5.5
43	MP2B	X	3.526	0.5
44	MP2B	Z	-2.036	0.5
45	MP2B	Mx	0.000576	0.5
46	MP2B	X	3.526	5.5
47	MP2B	Z	-2.036	5.5
48	MP2B	Mx	0.000576	5.5
49	MP2C	X	6.158	0.5
50	MP2C	Z	-3.555	0.5
51	MP2C	Mx	0.004	0.5
52	MP2C	X	6.158	5.5
53	MP2C	Z	-3.555	5.5
54	MP2C	Mx	0.004	5.5
55	MP1A	X	4.162	0.5
56	MP1A	Z	-2.403	0.5
57	MP1A	Mx	-0.002	0.5
58	MP1A	X	4.162	3.5
59	MP1A	Z	-2.403	3.5
60	MP1A	Mx	-0.002	3.5
61	MP1B	X	4.162	0.5
62	MP1B	Z	-2.403	0.5
63	MP1B	Mx	0.002	0.5
64	MP1B	X	4.162	3.5
65	MP1B	Z	-2.403	3.5
66	MP1B	Mx	0.002	3.5
67	MP1C	X	4.526	0.5
68	MP1C	Z	-2.613	0.5
69	MP1C	Mx	0	0.5
70	MP1C	X	4.526	3.5
71	MP1C	Z	-2.613	3.5
72	MP1C	Mx	0	3.5
73	MP5A	X	4.162	0.5
74	MP5A	Z	-2.403	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
75	MP5A	Mx	-0.002	0.5
76	MP5A	X	4.162	3.5
77	MP5A	Z	-2.403	3.5
78	MP5A	Mx	-0.002	3.5
79	MP5B	X	4.162	0.5
80	MP5B	Z	-2.403	0.5
81	MP5B	Mx	0.002	0.5
82	MP5B	X	4.162	3.5
83	MP5B	Z	-2.403	3.5
84	MP5B	Mx	0.002	3.5
85	MP5C	X	4.526	0.5
86	MP5C	Z	-2.613	0.5
87	MP5C	Mx	0	0.5
88	MP5C	X	4.526	3.5
89	MP5C	Z	-2.613	3.5
90	MP5C	Mx	0	3.5
91	MP2A	X	3.182	1.5
92	MP2A	Z	-1.837	1.5
93	MP2A	Mx	0.002	1.5
94	MP2B	X	3.182	1.5
95	MP2B	Z	-1.837	1.5
96	MP2B	Mx	-0.002	1.5
97	MP2C	X	4.18	1.5
98	MP2C	Z	-2.413	1.5
99	MP2C	Mx	0	1.5
100	MP3A	X	2.61	0.5
101	MP3A	Z	-1.507	0.5
102	MP3A	Mx	0.001	0.5
103	MP3B	X	2.61	0.5
104	MP3B	Z	-1.507	0.5
105	MP3B	Mx	-0.001	0.5
106	MP3C	X	3.465	0.5
107	MP3C	Z	-2	0.5
108	MP3C	Mx	0	0.5
109	OVP	X	6.887	2
110	OVP	Z	-3.976	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	1.884	1
2	MP4A	Z	0	1
3	MP4A	Mx	-0.000942	1
4	MP4A	X	1.884	3
5	MP4A	Z	0	3
6	MP4A	Mx	-0.000942	3
7	MP4B	X	4.139	1
8	MP4B	Z	0	1
9	MP4B	Mx	0.001	1
10	MP4B	X	4.139	3
11	MP4B	Z	0	3
12	MP4B	Mx	0.001	3
13	MP4C	X	4.139	1
14	MP4C	Z	0	1
15	MP4C	Mx	0.001	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
16	MP4C	X	4.139	3
17	MP4C	Z	0	3
18	MP4C	Mx	0.001	3
19	MP2A	X	3.059	0.5
20	MP2A	Z	0	0.5
21	MP2A	Mx	-0.002	0.5
22	MP2A	X	3.059	5.5
23	MP2A	Z	0	5.5
24	MP2A	Mx	-0.002	5.5
25	MP2B	X	6.098	0.5
26	MP2B	Z	0	0.5
27	MP2B	Mx	0.005	0.5
28	MP2B	X	6.098	5.5
29	MP2B	Z	0	5.5
30	MP2B	Mx	0.005	5.5
31	MP2C	X	6.098	0.5
32	MP2C	Z	0	0.5
33	MP2C	Mx	-0.002	0.5
34	MP2C	X	6.098	5.5
35	MP2C	Z	0	5.5
36	MP2C	Mx	-0.002	5.5
37	MP2A	X	3.059	0.5
38	MP2A	Z	0	0.5
39	MP2A	Mx	-0.002	0.5
40	MP2A	X	3.059	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	-0.002	5.5
43	MP2B	X	6.098	0.5
44	MP2B	Z	0	0.5
45	MP2B	Mx	-0.002	0.5
46	MP2B	X	6.098	5.5
47	MP2B	Z	0	5.5
48	MP2B	Mx	-0.002	5.5
49	MP2C	X	6.098	0.5
50	MP2C	Z	0	0.5
51	MP2C	Mx	0.005	0.5
52	MP2C	X	6.098	5.5
53	MP2C	Z	0	5.5
54	MP2C	Mx	0.005	5.5
55	MP1A	X	4.665	0.5
56	MP1A	Z	0	0.5
57	MP1A	Mx	-0.002	0.5
58	MP1A	X	4.665	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	-0.002	3.5
61	MP1B	X	5.086	0.5
62	MP1B	Z	0	0.5
63	MP1B	Mx	0.001	0.5
64	MP1B	X	5.086	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	0.001	3.5
67	MP1C	X	5.086	0.5
68	MP1C	Z	0	0.5
69	MP1C	Mx	0.001	0.5
70	MP1C	X	5.086	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
71	MP1C	Z	0	3.5
72	MP1C	Mx	0.001	3.5
73	MP5A	X	4.665	0.5
74	MP5A	Z	0	0.5
75	MP5A	Mx	-0.002	0.5
76	MP5A	X	4.665	3.5
77	MP5A	Z	0	3.5
78	MP5A	Mx	-0.002	3.5
79	MP5B	X	5.086	0.5
80	MP5B	Z	0	0.5
81	MP5B	Mx	0.001	0.5
82	MP5B	X	5.086	3.5
83	MP5B	Z	0	3.5
84	MP5B	Mx	0.001	3.5
85	MP5C	X	5.086	0.5
86	MP5C	Z	0	0.5
87	MP5C	Mx	0.001	0.5
88	MP5C	X	5.086	3.5
89	MP5C	Z	0	3.5
90	MP5C	Mx	0.001	3.5
91	MP2A	X	3.291	1.5
92	MP2A	Z	0	1.5
93	MP2A	Mx	0.002	1.5
94	MP2B	X	4.443	1.5
95	MP2B	Z	0	1.5
96	MP2B	Mx	-0.001	1.5
97	MP2C	X	4.443	1.5
98	MP2C	Z	0	1.5
99	MP2C	Mx	-0.001	1.5
100	MP3A	X	2.684	0.5
101	MP3A	Z	0	0.5
102	MP3A	Mx	0.001	0.5
103	MP3B	X	3.672	0.5
104	MP3B	Z	0	0.5
105	MP3B	Mx	-0.000918	0.5
106	MP3C	X	3.672	0.5
107	MP3C	Z	0	0.5
108	MP3C	Mx	-0.000918	0.5
109	OVP	X	7.031	2
110	OVP	Z	0	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	2.283	1
2	MP4A	Z	1.318	1
3	MP4A	Mx	-0.001	1
4	MP4A	X	2.283	3
5	MP4A	Z	1.318	3
6	MP4A	Mx	-0.001	3
7	MP4B	X	4.236	1
8	MP4B	Z	2.446	1
9	MP4B	Mx	0	1
10	MP4B	X	4.236	3
11	MP4B	Z	2.446	3

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
12	MP4B	Mx	0	3
13	MP4C	X	2.283	1
14	MP4C	Z	1.318	1
15	MP4C	Mx	0.001	1
16	MP4C	X	2.283	3
17	MP4C	Z	1.318	3
18	MP4C	Mx	0.001	3
19	MP2A	X	3.526	0.5
20	MP2A	Z	2.036	0.5
21	MP2A	Mx	-0.003	0.5
22	MP2A	X	3.526	5.5
23	MP2A	Z	2.036	5.5
24	MP2A	Mx	-0.003	5.5
25	MP2B	X	6.158	0.5
26	MP2B	Z	3.555	0.5
27	MP2B	Mx	0.004	0.5
28	MP2B	X	6.158	5.5
29	MP2B	Z	3.555	5.5
30	MP2B	Mx	0.004	5.5
31	MP2C	X	3.526	0.5
32	MP2C	Z	2.036	0.5
33	MP2C	Mx	0.000576	0.5
34	MP2C	X	3.526	5.5
35	MP2C	Z	2.036	5.5
36	MP2C	Mx	0.000576	5.5
37	MP2A	X	3.526	0.5
38	MP2A	Z	2.036	0.5
39	MP2A	Mx	-0.000575	0.5
40	MP2A	X	3.526	5.5
41	MP2A	Z	2.036	5.5
42	MP2A	Mx	-0.000575	5.5
43	MP2B	X	6.158	0.5
44	MP2B	Z	3.555	0.5
45	MP2B	Mx	-0.004	0.5
46	MP2B	X	6.158	5.5
47	MP2B	Z	3.555	5.5
48	MP2B	Mx	-0.004	5.5
49	MP2C	X	3.526	0.5
50	MP2C	Z	2.036	0.5
51	MP2C	Mx	0.003	0.5
52	MP2C	X	3.526	5.5
53	MP2C	Z	2.036	5.5
54	MP2C	Mx	0.003	5.5
55	MP1A	X	4.162	0.5
56	MP1A	Z	2.403	0.5
57	MP1A	Mx	-0.002	0.5
58	MP1A	X	4.162	3.5
59	MP1A	Z	2.403	3.5
60	MP1A	Mx	-0.002	3.5
61	MP1B	X	4.526	0.5
62	MP1B	Z	2.613	0.5
63	MP1B	Mx	0	0.5
64	MP1B	X	4.526	3.5
65	MP1B	Z	2.613	3.5
66	MP1B	Mx	0	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
67	MP1C	X	4.162	0.5
68	MP1C	Z	2.403	0.5
69	MP1C	Mx	0.002	0.5
70	MP1C	X	4.162	3.5
71	MP1C	Z	2.403	3.5
72	MP1C	Mx	0.002	3.5
73	MP5A	X	4.162	0.5
74	MP5A	Z	2.403	0.5
75	MP5A	Mx	-0.002	0.5
76	MP5A	X	4.162	3.5
77	MP5A	Z	2.403	3.5
78	MP5A	Mx	-0.002	3.5
79	MP5B	X	4.526	0.5
80	MP5B	Z	2.613	0.5
81	MP5B	Mx	0	0.5
82	MP5B	X	4.526	3.5
83	MP5B	Z	2.613	3.5
84	MP5B	Mx	0	3.5
85	MP5C	X	4.162	0.5
86	MP5C	Z	2.403	0.5
87	MP5C	Mx	0.002	0.5
88	MP5C	X	4.162	3.5
89	MP5C	Z	2.403	3.5
90	MP5C	Mx	0.002	3.5
91	MP2A	X	3.182	1.5
92	MP2A	Z	1.837	1.5
93	MP2A	Mx	0.002	1.5
94	MP2B	X	4.18	1.5
95	MP2B	Z	2.413	1.5
96	MP2B	Mx	0	1.5
97	MP2C	X	3.182	1.5
98	MP2C	Z	1.837	1.5
99	MP2C	Mx	-0.002	1.5
100	MP3A	X	2.61	0.5
101	MP3A	Z	1.507	0.5
102	MP3A	Mx	0.001	0.5
103	MP3B	X	3.465	0.5
104	MP3B	Z	2	0.5
105	MP3B	Mx	0	0.5
106	MP3C	X	2.61	0.5
107	MP3C	Z	1.507	0.5
108	MP3C	Mx	-0.001	0.5
109	OVP	X	5.438	2
110	OVP	Z	3.14	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	2.07	1
2	MP4A	Z	3.585	1
3	MP4A	Mx	-0.001	1
4	MP4A	X	2.07	3
5	MP4A	Z	3.585	3
6	MP4A	Mx	-0.001	3
7	MP4B	X	2.07	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
8	MP4B	Z	3.585	1
9	MP4B	Mx	-0.001	1
10	MP4B	X	2.07	3
11	MP4B	Z	3.585	3
12	MP4B	Mx	-0.001	3
13	MP4C	X	0.942	1
14	MP4C	Z	1.631	1
15	MP4C	Mx	0.000942	1
16	MP4C	X	0.942	3
17	MP4C	Z	1.631	3
18	MP4C	Mx	0.000942	3
19	MP2A	X	3.049	0.5
20	MP2A	Z	5.281	0.5
21	MP2A	Mx	-0.005	0.5
22	MP2A	X	3.049	5.5
23	MP2A	Z	5.281	5.5
24	MP2A	Mx	-0.005	5.5
25	MP2B	X	3.049	0.5
26	MP2B	Z	5.281	0.5
27	MP2B	Mx	0.002	0.5
28	MP2B	X	3.049	5.5
29	MP2B	Z	5.281	5.5
30	MP2B	Mx	0.002	5.5
31	MP2C	X	1.529	0.5
32	MP2C	Z	2.649	0.5
33	MP2C	Mx	0.002	0.5
34	MP2C	X	1.529	5.5
35	MP2C	Z	2.649	5.5
36	MP2C	Mx	0.002	5.5
37	MP2A	X	3.049	0.5
38	MP2A	Z	5.281	0.5
39	MP2A	Mx	0.002	0.5
40	MP2A	X	3.049	5.5
41	MP2A	Z	5.281	5.5
42	MP2A	Mx	0.002	5.5
43	MP2B	X	3.049	0.5
44	MP2B	Z	5.281	0.5
45	MP2B	Mx	-0.005	0.5
46	MP2B	X	3.049	5.5
47	MP2B	Z	5.281	5.5
48	MP2B	Mx	-0.005	5.5
49	MP2C	X	1.529	0.5
50	MP2C	Z	2.649	0.5
51	MP2C	Mx	0.002	0.5
52	MP2C	X	1.529	5.5
53	MP2C	Z	2.649	5.5
54	MP2C	Mx	0.002	5.5
55	MP1A	X	2.543	0.5
56	MP1A	Z	4.405	0.5
57	MP1A	Mx	-0.001	0.5
58	MP1A	X	2.543	3.5
59	MP1A	Z	4.405	3.5
60	MP1A	Mx	-0.001	3.5
61	MP1B	X	2.543	0.5
62	MP1B	Z	4.405	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
63	MP1B	Mx	-0.001	0.5
64	MP1B	X	2.543	3.5
65	MP1B	Z	4.405	3.5
66	MP1B	Mx	-0.001	3.5
67	MP1C	X	2.333	0.5
68	MP1C	Z	4.04	0.5
69	MP1C	Mx	0.002	0.5
70	MP1C	X	2.333	3.5
71	MP1C	Z	4.04	3.5
72	MP1C	Mx	0.002	3.5
73	MP5A	X	2.543	0.5
74	MP5A	Z	4.405	0.5
75	MP5A	Mx	-0.001	0.5
76	MP5A	X	2.543	3.5
77	MP5A	Z	4.405	3.5
78	MP5A	Mx	-0.001	3.5
79	MP5B	X	2.543	0.5
80	MP5B	Z	4.405	0.5
81	MP5B	Mx	-0.001	0.5
82	MP5B	X	2.543	3.5
83	MP5B	Z	4.405	3.5
84	MP5B	Mx	-0.001	3.5
85	MP5C	X	2.333	0.5
86	MP5C	Z	4.04	0.5
87	MP5C	Mx	0.002	0.5
88	MP5C	X	2.333	3.5
89	MP5C	Z	4.04	3.5
90	MP5C	Mx	0.002	3.5
91	MP2A	X	2.221	1.5
92	MP2A	Z	3.847	1.5
93	MP2A	Mx	0.001	1.5
94	MP2B	X	2.221	1.5
95	MP2B	Z	3.847	1.5
96	MP2B	Mx	0.001	1.5
97	MP2C	X	1.645	1.5
98	MP2C	Z	2.85	1.5
99	MP2C	Mx	-0.002	1.5
100	MP3A	X	1.836	0.5
101	MP3A	Z	3.18	0.5
102	MP3A	Mx	0.000918	0.5
103	MP3B	X	1.836	0.5
104	MP3B	Z	3.18	0.5
105	MP3B	Mx	0.000918	0.5
106	MP3C	X	1.342	0.5
107	MP3C	Z	2.325	0.5
108	MP3C	Mx	-0.001	0.5
109	OVP	X	3.225	2
110	OVP	Z	5.586	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	0	1
2	MP4A	Z	4.891	1
3	MP4A	Mx	0	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
4	MP4A	X	0	3
5	MP4A	Z	4.891	3
6	MP4A	Mx	0	3
7	MP4B	X	0	1
8	MP4B	Z	2.636	1
9	MP4B	Mx	-0.001	1
10	MP4B	X	0	3
11	MP4B	Z	2.636	3
12	MP4B	Mx	-0.001	3
13	MP4C	X	0	1
14	MP4C	Z	2.636	1
15	MP4C	Mx	0.001	1
16	MP4C	X	0	3
17	MP4C	Z	2.636	3
18	MP4C	Mx	0.001	3
19	MP2A	X	0	0.5
20	MP2A	Z	7.111	0.5
21	MP2A	Mx	-0.004	0.5
22	MP2A	X	0	5.5
23	MP2A	Z	7.111	5.5
24	MP2A	Mx	-0.004	5.5
25	MP2B	X	0	0.5
26	MP2B	Z	4.072	0.5
27	MP2B	Mx	-0.000576	0.5
28	MP2B	X	0	5.5
29	MP2B	Z	4.072	5.5
30	MP2B	Mx	-0.000576	5.5
31	MP2C	X	0	0.5
32	MP2C	Z	4.072	0.5
33	MP2C	Mx	0.003	0.5
34	MP2C	X	0	5.5
35	MP2C	Z	4.072	5.5
36	MP2C	Mx	0.003	5.5
37	MP2A	X	0	0.5
38	MP2A	Z	7.111	0.5
39	MP2A	Mx	0.004	0.5
40	MP2A	X	0	5.5
41	MP2A	Z	7.111	5.5
42	MP2A	Mx	0.004	5.5
43	MP2B	X	0	0.5
44	MP2B	Z	4.072	0.5
45	MP2B	Mx	-0.003	0.5
46	MP2B	X	0	5.5
47	MP2B	Z	4.072	5.5
48	MP2B	Mx	-0.003	5.5
49	MP2C	X	0	0.5
50	MP2C	Z	4.072	0.5
51	MP2C	Mx	0.000576	0.5
52	MP2C	X	0	5.5
53	MP2C	Z	4.072	5.5
54	MP2C	Mx	0.000576	5.5
55	MP1A	X	0	0.5
56	MP1A	Z	5.227	0.5
57	MP1A	Mx	0	0.5
58	MP1A	X	0	3.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
59	MP1A	Z	5.227	3.5
60	MP1A	Mx	0	3.5
61	MP1B	X	0	0.5
62	MP1B	Z	4.805	0.5
63	MP1B	Mx	-0.002	0.5
64	MP1B	X	0	3.5
65	MP1B	Z	4.805	3.5
66	MP1B	Mx	-0.002	3.5
67	MP1C	X	0	0.5
68	MP1C	Z	4.805	0.5
69	MP1C	Mx	0.002	0.5
70	MP1C	X	0	3.5
71	MP1C	Z	4.805	3.5
72	MP1C	Mx	0.002	3.5
73	MP5A	X	0	0.5
74	MP5A	Z	5.227	0.5
75	MP5A	Mx	0	0.5
76	MP5A	X	0	3.5
77	MP5A	Z	5.227	3.5
78	MP5A	Mx	0	3.5
79	MP5B	X	0	0.5
80	MP5B	Z	4.805	0.5
81	MP5B	Mx	-0.002	0.5
82	MP5B	X	0	3.5
83	MP5B	Z	4.805	3.5
84	MP5B	Mx	-0.002	3.5
85	MP5C	X	0	0.5
86	MP5C	Z	4.805	0.5
87	MP5C	Mx	0.002	0.5
88	MP5C	X	0	3.5
89	MP5C	Z	4.805	3.5
90	MP5C	Mx	0.002	3.5
91	MP2A	X	0	1.5
92	MP2A	Z	4.827	1.5
93	MP2A	Mx	0	1.5
94	MP2B	X	0	1.5
95	MP2B	Z	3.675	1.5
96	MP2B	Mx	0.002	1.5
97	MP2C	X	0	1.5
98	MP2C	Z	3.675	1.5
99	MP2C	Mx	-0.002	1.5
100	MP3A	X	0	0.5
101	MP3A	Z	4.001	0.5
102	MP3A	Mx	0	0.5
103	MP3B	X	0	0.5
104	MP3B	Z	3.013	0.5
105	MP3B	Mx	0.001	0.5
106	MP3C	X	0	0.5
107	MP3C	Z	3.013	0.5
108	MP3C	Mx	-0.001	0.5
109	OVP	X	0	2
110	OVP	Z	7.371	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-2.07	1
2	MP4A	Z	3.585	1
3	MP4A	Mx	0.001	1
4	MP4A	X	-2.07	3
5	MP4A	Z	3.585	3
6	MP4A	Mx	0.001	3
7	MP4B	X	-0.942	1
8	MP4B	Z	1.631	1
9	MP4B	Mx	-0.000942	1
10	MP4B	X	-0.942	3
11	MP4B	Z	1.631	3
12	MP4B	Mx	-0.000942	3
13	MP4C	X	-2.07	1
14	MP4C	Z	3.585	1
15	MP4C	Mx	0.001	1
16	MP4C	X	-2.07	3
17	MP4C	Z	3.585	3
18	MP4C	Mx	0.001	3
19	MP2A	X	-3.049	0.5
20	MP2A	Z	5.281	0.5
21	MP2A	Mx	-0.002	0.5
22	MP2A	X	-3.049	5.5
23	MP2A	Z	5.281	5.5
24	MP2A	Mx	-0.002	5.5
25	MP2B	X	-1.529	0.5
26	MP2B	Z	2.649	0.5
27	MP2B	Mx	-0.002	0.5
28	MP2B	X	-1.529	5.5
29	MP2B	Z	2.649	5.5
30	MP2B	Mx	-0.002	5.5
31	MP2C	X	-3.049	0.5
32	MP2C	Z	5.281	0.5
33	MP2C	Mx	0.005	0.5
34	MP2C	X	-3.049	5.5
35	MP2C	Z	5.281	5.5
36	MP2C	Mx	0.005	5.5
37	MP2A	X	-3.049	0.5
38	MP2A	Z	5.281	0.5
39	MP2A	Mx	0.005	0.5
40	MP2A	X	-3.049	5.5
41	MP2A	Z	5.281	5.5
42	MP2A	Mx	0.005	5.5
43	MP2B	X	-1.529	0.5
44	MP2B	Z	2.649	0.5
45	MP2B	Mx	-0.002	0.5
46	MP2B	X	-1.529	5.5
47	MP2B	Z	2.649	5.5
48	MP2B	Mx	-0.002	5.5
49	MP2C	X	-3.049	0.5
50	MP2C	Z	5.281	0.5
51	MP2C	Mx	-0.002	0.5
52	MP2C	X	-3.049	5.5
53	MP2C	Z	5.281	5.5
54	MP2C	Mx	-0.002	5.5
55	MP1A	X	-2.543	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
56	MP1A	Z	4.405	0.5
57	MP1A	Mx	0.001	0.5
58	MP1A	X	-2.543	3.5
59	MP1A	Z	4.405	3.5
60	MP1A	Mx	0.001	3.5
61	MP1B	X	-2.333	0.5
62	MP1B	Z	4.04	0.5
63	MP1B	Mx	-0.002	0.5
64	MP1B	X	-2.333	3.5
65	MP1B	Z	4.04	3.5
66	MP1B	Mx	-0.002	3.5
67	MP1C	X	-2.543	0.5
68	MP1C	Z	4.405	0.5
69	MP1C	Mx	0.001	0.5
70	MP1C	X	-2.543	3.5
71	MP1C	Z	4.405	3.5
72	MP1C	Mx	0.001	3.5
73	MP5A	X	-2.543	0.5
74	MP5A	Z	4.405	0.5
75	MP5A	Mx	0.001	0.5
76	MP5A	X	-2.543	3.5
77	MP5A	Z	4.405	3.5
78	MP5A	Mx	0.001	3.5
79	MP5B	X	-2.333	0.5
80	MP5B	Z	4.04	0.5
81	MP5B	Mx	-0.002	0.5
82	MP5B	X	-2.333	3.5
83	MP5B	Z	4.04	3.5
84	MP5B	Mx	-0.002	3.5
85	MP5C	X	-2.543	0.5
86	MP5C	Z	4.405	0.5
87	MP5C	Mx	0.001	0.5
88	MP5C	X	-2.543	3.5
89	MP5C	Z	4.405	3.5
90	MP5C	Mx	0.001	3.5
91	MP2A	X	-2.221	1.5
92	MP2A	Z	3.847	1.5
93	MP2A	Mx	-0.001	1.5
94	MP2B	X	-1.645	1.5
95	MP2B	Z	2.85	1.5
96	MP2B	Mx	0.002	1.5
97	MP2C	X	-2.221	1.5
98	MP2C	Z	3.847	1.5
99	MP2C	Mx	-0.001	1.5
100	MP3A	X	-1.836	0.5
101	MP3A	Z	3.18	0.5
102	MP3A	Mx	-0.000918	0.5
103	MP3B	X	-1.342	0.5
104	MP3B	Z	2.325	0.5
105	MP3B	Mx	0.001	0.5
106	MP3C	X	-1.836	0.5
107	MP3C	Z	3.18	0.5
108	MP3C	Mx	-0.000918	0.5
109	OVP	X	-4.061	2
110	OVP	Z	7.035	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-2.283	1
2	MP4A	Z	1.318	1
3	MP4A	Mx	0.001	1
4	MP4A	X	-2.283	3
5	MP4A	Z	1.318	3
6	MP4A	Mx	0.001	3
7	MP4B	X	-2.283	1
8	MP4B	Z	1.318	1
9	MP4B	Mx	-0.001	1
10	MP4B	X	-2.283	3
11	MP4B	Z	1.318	3
12	MP4B	Mx	-0.001	3
13	MP4C	X	-4.236	1
14	MP4C	Z	2.446	1
15	MP4C	Mx	0	1
16	MP4C	X	-4.236	3
17	MP4C	Z	2.446	3
18	MP4C	Mx	0	3
19	MP2A	X	-3.526	0.5
20	MP2A	Z	2.036	0.5
21	MP2A	Mx	0.000575	0.5
22	MP2A	X	-3.526	5.5
23	MP2A	Z	2.036	5.5
24	MP2A	Mx	0.000575	5.5
25	MP2B	X	-3.526	0.5
26	MP2B	Z	2.036	0.5
27	MP2B	Mx	-0.003	0.5
28	MP2B	X	-3.526	5.5
29	MP2B	Z	2.036	5.5
30	MP2B	Mx	-0.003	5.5
31	MP2C	X	-6.158	0.5
32	MP2C	Z	3.555	0.5
33	MP2C	Mx	0.004	0.5
34	MP2C	X	-6.158	5.5
35	MP2C	Z	3.555	5.5
36	MP2C	Mx	0.004	5.5
37	MP2A	X	-3.526	0.5
38	MP2A	Z	2.036	0.5
39	MP2A	Mx	0.003	0.5
40	MP2A	X	-3.526	5.5
41	MP2A	Z	2.036	5.5
42	MP2A	Mx	0.003	5.5
43	MP2B	X	-3.526	0.5
44	MP2B	Z	2.036	0.5
45	MP2B	Mx	-0.000576	0.5
46	MP2B	X	-3.526	5.5
47	MP2B	Z	2.036	5.5
48	MP2B	Mx	-0.000576	5.5
49	MP2C	X	-6.158	0.5
50	MP2C	Z	3.555	0.5
51	MP2C	Mx	-0.004	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
52	MP2C	X	-6.158	5.5
53	MP2C	Z	3.555	5.5
54	MP2C	Mx	-0.004	5.5
55	MP1A	X	-4.162	0.5
56	MP1A	Z	2.403	0.5
57	MP1A	Mx	0.002	0.5
58	MP1A	X	-4.162	3.5
59	MP1A	Z	2.403	3.5
60	MP1A	Mx	0.002	3.5
61	MP1B	X	-4.162	0.5
62	MP1B	Z	2.403	0.5
63	MP1B	Mx	-0.002	0.5
64	MP1B	X	-4.162	3.5
65	MP1B	Z	2.403	3.5
66	MP1B	Mx	-0.002	3.5
67	MP1C	X	-4.526	0.5
68	MP1C	Z	2.613	0.5
69	MP1C	Mx	0	0.5
70	MP1C	X	-4.526	3.5
71	MP1C	Z	2.613	3.5
72	MP1C	Mx	0	3.5
73	MP5A	X	-4.162	0.5
74	MP5A	Z	2.403	0.5
75	MP5A	Mx	0.002	0.5
76	MP5A	X	-4.162	3.5
77	MP5A	Z	2.403	3.5
78	MP5A	Mx	0.002	3.5
79	MP5B	X	-4.162	0.5
80	MP5B	Z	2.403	0.5
81	MP5B	Mx	-0.002	0.5
82	MP5B	X	-4.162	3.5
83	MP5B	Z	2.403	3.5
84	MP5B	Mx	-0.002	3.5
85	MP5C	X	-4.526	0.5
86	MP5C	Z	2.613	0.5
87	MP5C	Mx	0	0.5
88	MP5C	X	-4.526	3.5
89	MP5C	Z	2.613	3.5
90	MP5C	Mx	0	3.5
91	MP2A	X	-3.182	1.5
92	MP2A	Z	1.837	1.5
93	MP2A	Mx	-0.002	1.5
94	MP2B	X	-3.182	1.5
95	MP2B	Z	1.837	1.5
96	MP2B	Mx	0.002	1.5
97	MP2C	X	-4.18	1.5
98	MP2C	Z	2.413	1.5
99	MP2C	Mx	0	1.5
100	MP3A	X	-2.61	0.5
101	MP3A	Z	1.507	0.5
102	MP3A	Mx	-0.001	0.5
103	MP3B	X	-2.61	0.5
104	MP3B	Z	1.507	0.5
105	MP3B	Mx	0.001	0.5
106	MP3C	X	-3.465	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
107	MP3C	Z	2	0.5
108	MP3C	Mx	0	0.5
109	OVP	X	-6.887	2
110	OVP	Z	3.976	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-1.884	1
2	MP4A	Z	0	1
3	MP4A	Mx	0.000942	1
4	MP4A	X	-1.884	3
5	MP4A	Z	0	3
6	MP4A	Mx	0.000942	3
7	MP4B	X	-4.139	1
8	MP4B	Z	0	1
9	MP4B	Mx	-0.001	1
10	MP4B	X	-4.139	3
11	MP4B	Z	0	3
12	MP4B	Mx	-0.001	3
13	MP4C	X	-4.139	1
14	MP4C	Z	0	1
15	MP4C	Mx	-0.001	1
16	MP4C	X	-4.139	3
17	MP4C	Z	0	3
18	MP4C	Mx	-0.001	3
19	MP2A	X	-3.059	0.5
20	MP2A	Z	0	0.5
21	MP2A	Mx	0.002	0.5
22	MP2A	X	-3.059	5.5
23	MP2A	Z	0	5.5
24	MP2A	Mx	0.002	5.5
25	MP2B	X	-6.098	0.5
26	MP2B	Z	0	0.5
27	MP2B	Mx	-0.005	0.5
28	MP2B	X	-6.098	5.5
29	MP2B	Z	0	5.5
30	MP2B	Mx	-0.005	5.5
31	MP2C	X	-6.098	0.5
32	MP2C	Z	0	0.5
33	MP2C	Mx	0.002	0.5
34	MP2C	X	-6.098	5.5
35	MP2C	Z	0	5.5
36	MP2C	Mx	0.002	5.5
37	MP2A	X	-3.059	0.5
38	MP2A	Z	0	0.5
39	MP2A	Mx	0.002	0.5
40	MP2A	X	-3.059	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	0.002	5.5
43	MP2B	X	-6.098	0.5
44	MP2B	Z	0	0.5
45	MP2B	Mx	0.002	0.5
46	MP2B	X	-6.098	5.5
47	MP2B	Z	0	5.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
48	MP2B	Mx	0.002	5.5
49	MP2C	X	-6.098	0.5
50	MP2C	Z	0	0.5
51	MP2C	Mx	-0.005	0.5
52	MP2C	X	-6.098	5.5
53	MP2C	Z	0	5.5
54	MP2C	Mx	-0.005	5.5
55	MP1A	X	-4.665	0.5
56	MP1A	Z	0	0.5
57	MP1A	Mx	0.002	0.5
58	MP1A	X	-4.665	3.5
59	MP1A	Z	0	3.5
60	MP1A	Mx	0.002	3.5
61	MP1B	X	-5.086	0.5
62	MP1B	Z	0	0.5
63	MP1B	Mx	-0.001	0.5
64	MP1B	X	-5.086	3.5
65	MP1B	Z	0	3.5
66	MP1B	Mx	-0.001	3.5
67	MP1C	X	-5.086	0.5
68	MP1C	Z	0	0.5
69	MP1C	Mx	-0.001	0.5
70	MP1C	X	-5.086	3.5
71	MP1C	Z	0	3.5
72	MP1C	Mx	-0.001	3.5
73	MP5A	X	-4.665	0.5
74	MP5A	Z	0	0.5
75	MP5A	Mx	0.002	0.5
76	MP5A	X	-4.665	3.5
77	MP5A	Z	0	3.5
78	MP5A	Mx	0.002	3.5
79	MP5B	X	-5.086	0.5
80	MP5B	Z	0	0.5
81	MP5B	Mx	-0.001	0.5
82	MP5B	X	-5.086	3.5
83	MP5B	Z	0	3.5
84	MP5B	Mx	-0.001	3.5
85	MP5C	X	-5.086	0.5
86	MP5C	Z	0	0.5
87	MP5C	Mx	-0.001	0.5
88	MP5C	X	-5.086	3.5
89	MP5C	Z	0	3.5
90	MP5C	Mx	-0.001	3.5
91	MP2A	X	-3.291	1.5
92	MP2A	Z	0	1.5
93	MP2A	Mx	-0.002	1.5
94	MP2B	X	-4.443	1.5
95	MP2B	Z	0	1.5
96	MP2B	Mx	0.001	1.5
97	MP2C	X	-4.443	1.5
98	MP2C	Z	0	1.5
99	MP2C	Mx	0.001	1.5
100	MP3A	X	-2.684	0.5
101	MP3A	Z	0	0.5
102	MP3A	Mx	-0.001	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
103	MP3B	X	-3.672	0.5
104	MP3B	Z	0	0.5
105	MP3B	Mx	0.000918	0.5
106	MP3C	X	-3.672	0.5
107	MP3C	Z	0	0.5
108	MP3C	Mx	0.000918	0.5
109	OVP	X	-7.031	2
110	OVP	Z	0	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-2.283	1
2	MP4A	Z	-1.318	1
3	MP4A	Mx	0.001	1
4	MP4A	X	-2.283	3
5	MP4A	Z	-1.318	3
6	MP4A	Mx	0.001	3
7	MP4B	X	-4.236	1
8	MP4B	Z	-2.446	1
9	MP4B	Mx	0	1
10	MP4B	X	-4.236	3
11	MP4B	Z	-2.446	3
12	MP4B	Mx	0	3
13	MP4C	X	-2.283	1
14	MP4C	Z	-1.318	1
15	MP4C	Mx	-0.001	1
16	MP4C	X	-2.283	3
17	MP4C	Z	-1.318	3
18	MP4C	Mx	-0.001	3
19	MP2A	X	-3.526	0.5
20	MP2A	Z	-2.036	0.5
21	MP2A	Mx	0.003	0.5
22	MP2A	X	-3.526	5.5
23	MP2A	Z	-2.036	5.5
24	MP2A	Mx	0.003	5.5
25	MP2B	X	-6.158	0.5
26	MP2B	Z	-3.555	0.5
27	MP2B	Mx	-0.004	0.5
28	MP2B	X	-6.158	5.5
29	MP2B	Z	-3.555	5.5
30	MP2B	Mx	-0.004	5.5
31	MP2C	X	-3.526	0.5
32	MP2C	Z	-2.036	0.5
33	MP2C	Mx	-0.000576	0.5
34	MP2C	X	-3.526	5.5
35	MP2C	Z	-2.036	5.5
36	MP2C	Mx	-0.000576	5.5
37	MP2A	X	-3.526	0.5
38	MP2A	Z	-2.036	0.5
39	MP2A	Mx	0.000575	0.5
40	MP2A	X	-3.526	5.5
41	MP2A	Z	-2.036	5.5
42	MP2A	Mx	0.000575	5.5
43	MP2B	X	-6.158	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
44	MP2B	Z	-3.555	0.5
45	MP2B	Mx	0.004	0.5
46	MP2B	X	-6.158	5.5
47	MP2B	Z	-3.555	5.5
48	MP2B	Mx	0.004	5.5
49	MP2C	X	-3.526	0.5
50	MP2C	Z	-2.036	0.5
51	MP2C	Mx	-0.003	0.5
52	MP2C	X	-3.526	5.5
53	MP2C	Z	-2.036	5.5
54	MP2C	Mx	-0.003	5.5
55	MP1A	X	-4.162	0.5
56	MP1A	Z	-2.403	0.5
57	MP1A	Mx	0.002	0.5
58	MP1A	X	-4.162	3.5
59	MP1A	Z	-2.403	3.5
60	MP1A	Mx	0.002	3.5
61	MP1B	X	-4.526	0.5
62	MP1B	Z	-2.613	0.5
63	MP1B	Mx	0	0.5
64	MP1B	X	-4.526	3.5
65	MP1B	Z	-2.613	3.5
66	MP1B	Mx	0	3.5
67	MP1C	X	-4.162	0.5
68	MP1C	Z	-2.403	0.5
69	MP1C	Mx	-0.002	0.5
70	MP1C	X	-4.162	3.5
71	MP1C	Z	-2.403	3.5
72	MP1C	Mx	-0.002	3.5
73	MP5A	X	-4.162	0.5
74	MP5A	Z	-2.403	0.5
75	MP5A	Mx	0.002	0.5
76	MP5A	X	-4.162	3.5
77	MP5A	Z	-2.403	3.5
78	MP5A	Mx	0.002	3.5
79	MP5B	X	-4.526	0.5
80	MP5B	Z	-2.613	0.5
81	MP5B	Mx	0	0.5
82	MP5B	X	-4.526	3.5
83	MP5B	Z	-2.613	3.5
84	MP5B	Mx	0	3.5
85	MP5C	X	-4.162	0.5
86	MP5C	Z	-2.403	0.5
87	MP5C	Mx	-0.002	0.5
88	MP5C	X	-4.162	3.5
89	MP5C	Z	-2.403	3.5
90	MP5C	Mx	-0.002	3.5
91	MP2A	X	-3.182	1.5
92	MP2A	Z	-1.837	1.5
93	MP2A	Mx	-0.002	1.5
94	MP2B	X	-4.18	1.5
95	MP2B	Z	-2.413	1.5
96	MP2B	Mx	0	1.5
97	MP2C	X	-3.182	1.5
98	MP2C	Z	-1.837	1.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
99	MP2C	Mx	0.002	1.5
100	MP3A	X	-2.61	0.5
101	MP3A	Z	-1.507	0.5
102	MP3A	Mx	-0.001	0.5
103	MP3B	X	-3.465	0.5
104	MP3B	Z	-2	0.5
105	MP3B	Mx	0	0.5
106	MP3C	X	-2.61	0.5
107	MP3C	Z	-1.507	0.5
108	MP3C	Mx	0.001	0.5
109	OVP	X	-5.438	2
110	OVP	Z	-3.14	2
111	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	-2.07	1
2	MP4A	Z	-3.585	1
3	MP4A	Mx	0.001	1
4	MP4A	X	-2.07	3
5	MP4A	Z	-3.585	3
6	MP4A	Mx	0.001	3
7	MP4B	X	-2.07	1
8	MP4B	Z	-3.585	1
9	MP4B	Mx	0.001	1
10	MP4B	X	-2.07	3
11	MP4B	Z	-3.585	3
12	MP4B	Mx	0.001	3
13	MP4C	X	-0.942	1
14	MP4C	Z	-1.631	1
15	MP4C	Mx	-0.000942	1
16	MP4C	X	-0.942	3
17	MP4C	Z	-1.631	3
18	MP4C	Mx	-0.000942	3
19	MP2A	X	-3.049	0.5
20	MP2A	Z	-5.281	0.5
21	MP2A	Mx	0.005	0.5
22	MP2A	X	-3.049	5.5
23	MP2A	Z	-5.281	5.5
24	MP2A	Mx	0.005	5.5
25	MP2B	X	-3.049	0.5
26	MP2B	Z	-5.281	0.5
27	MP2B	Mx	-0.002	0.5
28	MP2B	X	-3.049	5.5
29	MP2B	Z	-5.281	5.5
30	MP2B	Mx	-0.002	5.5
31	MP2C	X	-1.529	0.5
32	MP2C	Z	-2.649	0.5
33	MP2C	Mx	-0.002	0.5
34	MP2C	X	-1.529	5.5
35	MP2C	Z	-2.649	5.5
36	MP2C	Mx	-0.002	5.5
37	MP2A	X	-3.049	0.5
38	MP2A	Z	-5.281	0.5
39	MP2A	Mx	-0.002	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
40	MP2A	X	-3.049	5.5
41	MP2A	Z	-5.281	5.5
42	MP2A	Mx	-0.002	5.5
43	MP2B	X	-3.049	0.5
44	MP2B	Z	-5.281	0.5
45	MP2B	Mx	0.005	0.5
46	MP2B	X	-3.049	5.5
47	MP2B	Z	-5.281	5.5
48	MP2B	Mx	0.005	5.5
49	MP2C	X	-1.529	0.5
50	MP2C	Z	-2.649	0.5
51	MP2C	Mx	-0.002	0.5
52	MP2C	X	-1.529	5.5
53	MP2C	Z	-2.649	5.5
54	MP2C	Mx	-0.002	5.5
55	MP1A	X	-2.543	0.5
56	MP1A	Z	-4.405	0.5
57	MP1A	Mx	0.001	0.5
58	MP1A	X	-2.543	3.5
59	MP1A	Z	-4.405	3.5
60	MP1A	Mx	0.001	3.5
61	MP1B	X	-2.543	0.5
62	MP1B	Z	-4.405	0.5
63	MP1B	Mx	0.001	0.5
64	MP1B	X	-2.543	3.5
65	MP1B	Z	-4.405	3.5
66	MP1B	Mx	0.001	3.5
67	MP1C	X	-2.333	0.5
68	MP1C	Z	-4.04	0.5
69	MP1C	Mx	-0.002	0.5
70	MP1C	X	-2.333	3.5
71	MP1C	Z	-4.04	3.5
72	MP1C	Mx	-0.002	3.5
73	MP5A	X	-2.543	0.5
74	MP5A	Z	-4.405	0.5
75	MP5A	Mx	0.001	0.5
76	MP5A	X	-2.543	3.5
77	MP5A	Z	-4.405	3.5
78	MP5A	Mx	0.001	3.5
79	MP5B	X	-2.543	0.5
80	MP5B	Z	-4.405	0.5
81	MP5B	Mx	0.001	0.5
82	MP5B	X	-2.543	3.5
83	MP5B	Z	-4.405	3.5
84	MP5B	Mx	0.001	3.5
85	MP5C	X	-2.333	0.5
86	MP5C	Z	-4.04	0.5
87	MP5C	Mx	-0.002	0.5
88	MP5C	X	-2.333	3.5
89	MP5C	Z	-4.04	3.5
90	MP5C	Mx	-0.002	3.5
91	MP2A	X	-2.221	1.5
92	MP2A	Z	-3.847	1.5
93	MP2A	Mx	-0.001	1.5
94	MP2B	X	-2.221	1.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
95	MP2B	Z	-3.847	1.5
96	MP2B	Mx	-0.001	1.5
97	MP2C	X	-1.645	1.5
98	MP2C	Z	-2.85	1.5
99	MP2C	Mx	0.002	1.5
100	MP3A	X	-1.836	0.5
101	MP3A	Z	-3.18	0.5
102	MP3A	Mx	-0.000918	0.5
103	MP3B	X	-1.836	0.5
104	MP3B	Z	-3.18	0.5
105	MP3B	Mx	-0.000918	0.5
106	MP3C	X	-1.342	0.5
107	MP3C	Z	-2.325	0.5
108	MP3C	Mx	0.001	0.5
109	OVP	X	-3.225	2
110	OVP	Z	-5.586	2
111	OVP	Mx	0	2

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	M103	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	M80	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	M73	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	M73	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	Y	-1.277	1
2	MP4A	My	-0.000639	1
3	MP4A	Mz	0	1
4	MP4A	Y	-1.277	3
5	MP4A	My	-0.000639	3
6	MP4A	Mz	0	3
7	MP4B	Y	-1.277	1
8	MP4B	My	0.000319	1
9	MP4B	Mz	-0.000553	1
10	MP4B	Y	-1.277	3
11	MP4B	My	0.000319	3
12	MP4B	Mz	-0.000553	3
13	MP4C	Y	-1.277	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
14	MP4C	My	0.000319	1
15	MP4C	Mz	0.000553	1
16	MP4C	Y	-1.277	3
17	MP4C	My	0.000319	3
18	MP4C	Mz	0.000553	3
19	MP2A	Y	-0.892	0.5
20	MP2A	My	-0.000446	0.5
21	MP2A	Mz	-0.00052	0.5
22	MP2A	Y	-0.892	5.5
23	MP2A	My	-0.000446	5.5
24	MP2A	Mz	-0.00052	5.5
25	MP2B	Y	-0.892	0.5
26	MP2B	My	0.000673	0.5
27	MP2B	Mz	-0.000126	0.5
28	MP2B	Y	-0.892	5.5
29	MP2B	My	0.000673	5.5
30	MP2B	Mz	-0.000126	5.5
31	MP2C	Y	-0.892	0.5
32	MP2C	My	-0.000228	0.5
33	MP2C	Mz	0.000646	0.5
34	MP2C	Y	-0.892	5.5
35	MP2C	My	-0.000228	5.5
36	MP2C	Mz	0.000646	5.5
37	MP2A	Y	-0.892	0.5
38	MP2A	My	-0.000446	0.5
39	MP2A	Mz	0.00052	0.5
40	MP2A	Y	-0.892	5.5
41	MP2A	My	-0.000446	5.5
42	MP2A	Mz	0.00052	5.5
43	MP2B	Y	-0.892	0.5
44	MP2B	My	-0.000228	0.5
45	MP2B	Mz	-0.000646	0.5
46	MP2B	Y	-0.892	5.5
47	MP2B	My	-0.000228	5.5
48	MP2B	Mz	-0.000646	5.5
49	MP2C	Y	-0.892	0.5
50	MP2C	My	0.000673	0.5
51	MP2C	Mz	0.000126	0.5
52	MP2C	Y	-0.892	5.5
53	MP2C	My	0.000673	5.5
54	MP2C	Mz	0.000126	5.5
55	MP1A	Y	-0.35	0.5
56	MP1A	My	-0.000175	0.5
57	MP1A	Mz	0	0.5
58	MP1A	Y	-0.35	3.5
59	MP1A	My	-0.000175	3.5
60	MP1A	Mz	0	3.5
61	MP1B	Y	-0.35	0.5
62	MP1B	My	8.8e-5	0.5
63	MP1B	Mz	-0.000152	0.5
64	MP1B	Y	-0.35	3.5
65	MP1B	My	8.8e-5	3.5
66	MP1B	Mz	-0.000152	3.5
67	MP1C	Y	-0.35	0.5
68	MP1C	My	8.8e-5	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
69	MP1C	Mz	0.000152	0.5
70	MP1C	Y	-0.35	3.5
71	MP1C	My	8.8e-5	3.5
72	MP1C	Mz	0.000152	3.5
73	MP5A	Y	-0.35	0.5
74	MP5A	My	-0.000175	0.5
75	MP5A	Mz	0	0.5
76	MP5A	Y	-0.35	3.5
77	MP5A	My	-0.000175	3.5
78	MP5A	Mz	0	3.5
79	MP5B	Y	-0.35	0.5
80	MP5B	My	8.8e-5	0.5
81	MP5B	Mz	-0.000152	0.5
82	MP5B	Y	-0.35	3.5
83	MP5B	My	8.8e-5	3.5
84	MP5B	Mz	-0.000152	3.5
85	MP5C	Y	-0.35	0.5
86	MP5C	My	8.8e-5	0.5
87	MP5C	Mz	0.000152	0.5
88	MP5C	Y	-0.35	3.5
89	MP5C	My	8.8e-5	3.5
90	MP5C	Mz	0.000152	3.5
91	MP2A	Y	-3.527	1.5
92	MP2A	My	0.002	1.5
93	MP2A	Mz	0	1.5
94	MP2B	Y	-3.527	1.5
95	MP2B	My	-0.000882	1.5
96	MP2B	Mz	0.002	1.5
97	MP2C	Y	-3.527	1.5
98	MP2C	My	-0.000882	1.5
99	MP2C	Mz	-0.002	1.5
100	MP3A	Y	-3.331	0.5
101	MP3A	My	0.002	0.5
102	MP3A	Mz	0	0.5
103	MP3B	Y	-3.331	0.5
104	MP3B	My	-0.000833	0.5
105	MP3B	Mz	0.001	0.5
106	MP3C	Y	-3.331	0.5
107	MP3C	My	-0.000833	0.5
108	MP3C	Mz	-0.001	0.5
109	OVP	Y	-1.427	2
110	OVP	My	0	2
111	OVP	Mz	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	Z	-3.194	1
2	MP4A	Mx	0	1
3	MP4A	Z	-3.194	3
4	MP4A	Mx	0	3
5	MP4B	Z	-3.194	1
6	MP4B	Mx	0.001	1
7	MP4B	Z	-3.194	3
8	MP4B	Mx	0.001	3
9	MP4C	Z	-3.194	1

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
10	MP4C	Mx	-0.001	1
11	MP4C	Z	-3.194	3
12	MP4C	Mx	-0.001	3
13	MP2A	Z	-2.229	0.5
14	MP2A	Mx	0.001	0.5
15	MP2A	Z	-2.229	5.5
16	MP2A	Mx	0.001	5.5
17	MP2B	Z	-2.229	0.5
18	MP2B	Mx	0.000315	0.5
19	MP2B	Z	-2.229	5.5
20	MP2B	Mx	0.000315	5.5
21	MP2C	Z	-2.229	0.5
22	MP2C	Mx	-0.002	0.5
23	MP2C	Z	-2.229	5.5
24	MP2C	Mx	-0.002	5.5
25	MP2A	Z	-2.229	0.5
26	MP2A	Mx	-0.001	0.5
27	MP2A	Z	-2.229	5.5
28	MP2A	Mx	-0.001	5.5
29	MP2B	Z	-2.229	0.5
30	MP2B	Mx	0.002	0.5
31	MP2B	Z	-2.229	5.5
32	MP2B	Mx	0.002	5.5
33	MP2C	Z	-2.229	0.5
34	MP2C	Mx	-0.000315	0.5
35	MP2C	Z	-2.229	5.5
36	MP2C	Mx	-0.000315	5.5
37	MP1A	Z	-0.875	0.5
38	MP1A	Mx	0	0.5
39	MP1A	Z	-0.875	3.5
40	MP1A	Mx	0	3.5
41	MP1B	Z	-0.875	0.5
42	MP1B	Mx	0.000379	0.5
43	MP1B	Z	-0.875	3.5
44	MP1B	Mx	0.000379	3.5
45	MP1C	Z	-0.875	0.5
46	MP1C	Mx	-0.000379	0.5
47	MP1C	Z	-0.875	3.5
48	MP1C	Mx	-0.000379	3.5
49	MP5A	Z	-0.875	0.5
50	MP5A	Mx	0	0.5
51	MP5A	Z	-0.875	3.5
52	MP5A	Mx	0	3.5
53	MP5B	Z	-0.875	0.5
54	MP5B	Mx	0.000379	0.5
55	MP5B	Z	-0.875	3.5
56	MP5B	Mx	0.000379	3.5
57	MP5C	Z	-0.875	0.5
58	MP5C	Mx	-0.000379	0.5
59	MP5C	Z	-0.875	3.5
60	MP5C	Mx	-0.000379	3.5
61	MP2A	Z	-8.817	1.5
62	MP2A	Mx	0	1.5
63	MP2B	Z	-8.817	1.5
64	MP2B	Mx	-0.004	1.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
65	MP2C	Z	-8.817	1.5
66	MP2C	Mx	0.004	1.5
67	MP3A	Z	-8.327	0.5
68	MP3A	Mx	0	0.5
69	MP3B	Z	-8.327	0.5
70	MP3B	Mx	-0.004	0.5
71	MP3C	Z	-8.327	0.5
72	MP3C	Mx	0.004	0.5
73	OVP	Z	-3.567	2
74	OVP	Mx	0	2

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
1	MP4A	X	3.194	1
2	MP4A	Mx	-0.002	1
3	MP4A	X	3.194	3
4	MP4A	Mx	-0.002	3
5	MP4B	X	3.194	1
6	MP4B	Mx	0.000798	1
7	MP4B	X	3.194	3
8	MP4B	Mx	0.000798	3
9	MP4C	X	3.194	1
10	MP4C	Mx	0.000798	1
11	MP4C	X	3.194	3
12	MP4C	Mx	0.000798	3
13	MP2A	X	2.229	0.5
14	MP2A	Mx	-0.001	0.5
15	MP2A	X	2.229	5.5
16	MP2A	Mx	-0.001	5.5
17	MP2B	X	2.229	0.5
18	MP2B	Mx	0.002	0.5
19	MP2B	X	2.229	5.5
20	MP2B	Mx	0.002	5.5
21	MP2C	X	2.229	0.5
22	MP2C	Mx	-0.000569	0.5
23	MP2C	X	2.229	5.5
24	MP2C	Mx	-0.000569	5.5
25	MP2A	X	2.229	0.5
26	MP2A	Mx	-0.001	0.5
27	MP2A	X	2.229	5.5
28	MP2A	Mx	-0.001	5.5
29	MP2B	X	2.229	0.5
30	MP2B	Mx	-0.000569	0.5
31	MP2B	X	2.229	5.5
32	MP2B	Mx	-0.000569	5.5
33	MP2C	X	2.229	0.5
34	MP2C	Mx	0.002	0.5
35	MP2C	X	2.229	5.5
36	MP2C	Mx	0.002	5.5
37	MP1A	X	0.875	0.5
38	MP1A	Mx	-0.000438	0.5
39	MP1A	X	0.875	3.5
40	MP1A	Mx	-0.000438	3.5
41	MP1B	X	0.875	0.5
42	MP1B	Mx	0.000219	0.5

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

	Member Label	Direction	Magnitude [lb, k-ft]	Location [(ft, %)]
43	MP1B	X	0.875	3.5
44	MP1B	Mx	0.000219	3.5
45	MP1C	X	0.875	0.5
46	MP1C	Mx	0.000219	0.5
47	MP1C	X	0.875	3.5
48	MP1C	Mx	0.000219	3.5
49	MP5A	X	0.875	0.5
50	MP5A	Mx	-0.000438	0.5
51	MP5A	X	0.875	3.5
52	MP5A	Mx	-0.000438	3.5
53	MP5B	X	0.875	0.5
54	MP5B	Mx	0.000219	0.5
55	MP5B	X	0.875	3.5
56	MP5B	Mx	0.000219	3.5
57	MP5C	X	0.875	0.5
58	MP5C	Mx	0.000219	0.5
59	MP5C	X	0.875	3.5
60	MP5C	Mx	0.000219	3.5
61	MP2A	X	8.817	1.5
62	MP2A	Mx	0.004	1.5
63	MP2B	X	8.817	1.5
64	MP2B	Mx	-0.002	1.5
65	MP2C	X	8.817	1.5
66	MP2C	Mx	-0.002	1.5
67	MP3A	X	8.327	0.5
68	MP3A	Mx	0.004	0.5
69	MP3B	X	8.327	0.5
70	MP3B	Mx	-0.002	0.5
71	MP3C	X	8.327	0.5
72	MP3C	Mx	-0.002	0.5
73	OVP	X	3.567	2
74	OVP	Mx	0	2

Member Area Loads (BLC 39 : Structure D)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N60	N61	N84	N82	Y	Two Way	-0.005
2	N4	N3	N26	N28	Y	Two Way	-0.005
3	N33	N32	N54	N56	Y	Two Way	-0.005

Member Area Loads (BLC 40 : Structure Di)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N60	N61	N84	N82	Y	Two Way	-0.01
2	N4	N3	N26	N28	Y	Two Way	-0.01
3	N33	N32	N54	N56	Y	Two Way	-0.01

Member Area Loads (BLC 84 : Structure Ev)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N60	N61	N84	N82	Y	Two Way	-0.000232
2	N4	N3	N26	N28	Y	Two Way	-0.000232
3	N33	N32	N54	N56	Y	Two Way	-0.000232

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

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N60	N61	N84	N82	Z	Two Way	-0.00058
2	N4	N3	N26	N28	Z	Two Way	-0.00058
3	N33	N32	N54	N56	Z	Two Way	-0.00058

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

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N60	N61	N84	N82	X	Two Way	0.00058
2	N4	N3	N26	N28	X	Two Way	0.00058
3	N33	N32	N54	N56	X	Two Way	0.00058

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N1	max	1629.119	11	2226.854	17	1489.035	1	-0.062	12	1.788	8	3.572	16
1		min	-1557.995	5	483.066	11	-1451.589	7	-2.333	18	-1.786	2	0.523	10
2	N30	max	1326.956	10	2369.604	13	1974.276	1	4.392	13	1.855	4	0.794	4
3		min	-1323.871	4	530.114	7	-2057.536	7	0.507	7	-1.856	10	-0.676	10
4	N58	max	1726.522	10	2204.442	21	1214.8	1	-0.117	2	1.759	12	-0.454	4
5		min	-1803.028	4	471.098	3	-1168.984	7	-2.171	44	-1.754	6	-3.669	22
6	Totals:	max	4672.595	10	6413.617	21	4678.111	1						
7		min	-4672.603	4	2112.237	66	-4678.109	7						

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
0	1	N1	645.829	729.179	1489.035	-0.082	-1.13	1.274
1	1	N30	-62.606	1506.919	1974.276	3.098	-0.015	0.124
2	1	N58	-583.312	727.019	1214.8	-0.13	0.886	-1.352
3	1	Totals:	-0.089	2963.117	4678.111			
4	1	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
5	2	N1	-482.611	975.857	1100.166	-0.342	-1.786	1.802
6	2	N30	-468.247	1445.549	1913.665	2.968	0.047	0.499
7	2	N58	-1394.265	541.708	1048.001	-0.117	-0.111	-0.828
8	2	Totals:	-2345.123	2963.113	4061.831			
9	2	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
10	3	N1	-1291.932	1221.611	140.268	-0.751	-0.898	2.262
11	3	N30	-1083.554	1270.402	1306.292	2.523	1.168	0.747
12	3	N58	-1683.933	471.098	897.216	-0.312	-0.015	-0.502
13	3	Totals:	-4059.419	2963.11	2343.776			
14	3	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
15	4	N1	-1545.704	1401.192	-651.741	-1.192	0.113	2.524
16	4	N30	-1323.871	1027.241	67.244	1.88	1.855	0.794
17	4	N58	-1803.028	534.677	584.573	-0.66	-0.029	-0.454
18	4	Totals:	-4672.603	2963.111	0.076			
19	4	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
20	5	N1	-1557.995	1467.834	-979.26	-1.568	0.024	2.513
21	5	N30	-876.829	781.047	-1178.936	1.22	0.977	0.654
22	5	N58	-1601.312	714.231	-172.044	-1.046	-1.098	-0.703
23	5	Totals:	-4036.136	2963.113	-2330.241			
24	5	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
25	6	N1	-1345.975	1404.314	-1239.995	-1.787	0.044	2.244
26	6	N30	-278.538	598.852	-1849.393	0.719	-0.043	0.372
27	6	N58	-707.071	959.949	-949.15	-1.369	-1.754	-1.189

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
28	6	Totals:	-2331.584	2963.115	-4038.538			
29	6	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
30	7	N1	-586.552	1226.477	-1451.589	-1.772	1.122	1.794
31	7	N30	66.757	530.114	-2057.536	0.507	0.013	-0.005
32	7	N58	519.875	1206.527	-1168.984	-1.561	-0.874	-1.768
33	7	Totals:	0.079	2963.119	-4678.109			
34	7	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
35	8	N1	540.525	980.251	-1070.97	-1.521	1.788	1.267
36	8	N30	480.165	593.411	-1993.915	0.646	-0.058	-0.386
37	8	N58	1324.423	1389.461	-996.945	-1.569	0.123	-2.279
38	8	Totals:	2345.113	2963.122	-4061.831			
39	8	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
40	9	N1	1357.589	732.087	-112.804	-1.112	0.907	0.796
41	9	N30	1093.136	771.35	-1378.963	1.105	-1.178	-0.635
42	9	N58	1608.685	1459.687	-852.01	-1.373	0.018	-2.599
43	9	Totals:	4059.411	2963.124	-2343.776			
44	9	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
45	10	N1	1619.117	550.109	682.105	-0.662	-0.105	0.523
46	10	N30	1326.956	1014.967	-134.585	1.754	-1.856	-0.676
47	10	N58	1726.522	1398.048	-547.595	-1.034	0.024	-2.652
48	10	Totals:	4672.595	2963.124	-0.075			
49	10	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
50	11	N1	1629.119	483.066	1017.221	-0.28	-0.024	0.531
51	11	N30	874.536	1258.776	1105.729	2.406	-0.971	-0.531
52	11	N58	1532.473	1221.281	207.293	-0.657	1.094	-2.414
53	11	Totals:	4036.128	2963.122	2330.243			
54	11	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
55	12	N1	1410.607	548.532	1283.191	-0.062	-0.053	0.81
56	12	N30	274.925	1438.588	1767.986	2.892	0.048	-0.25
57	12	N58	646.043	976	987.363	-0.331	1.759	-1.936
58	12	Totals:	2331.575	2963.12	4038.54			
59	12	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
60	13	N1	257.953	2032.025	453.874	-1.883	-0.298	3.246
61	13	N30	-28.633	2369.604	478.565	4.392	0.005	0.163
62	13	N58	-229.342	2011.985	375.818	-1.671	0.241	-3.328
63	13	Totals:	-0.022	6413.615	1308.257			
64	13	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
65	14	N1	-46.585	2096.687	343.582	-1.95	-0.458	3.383
66	14	N30	-143.763	2353.457	454.122	4.358	0.041	0.261
67	14	N58	-465.173	1963.47	337.672	-1.669	-0.013	-3.192
68	14	Totals:	-655.521	6413.614	1135.376			
69	14	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
70	15	N1	-276.039	2161.511	88.077	-2.058	-0.25	3.503
71	15	N30	-296.698	2307.257	277.688	4.241	0.311	0.324
72	15	N58	-562.105	1944.846	289.438	-1.72	-0.02	-3.106
73	15	Totals:	-1134.842	6413.613	655.204			
74	15	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
75	16	N1	-360.79	2209.077	-138.073	-2.176	0.009	3.572
76	16	N30	-356.085	2243.323	-60.205	4.073	0.478	0.335
77	16	N58	-590.124	1961.214	198.291	-1.808	-0.04	-3.092
78	16	Totals:	-1306.999	6413.613	0.013			
79	16	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
80	17	N1	-366.42	2226.854	-248.668	-2.276	0.02	3.571
81	17	N30	-243.332	2178.78	-403.4	3.9	0.272	0.297
82	17	N58	-519.757	2007.981	-0.046	-1.905	-0.296	-3.155

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
83	17	Totals:	-1129.51	6413.614	-652.113			
84	17	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
85	18	N1	-299.589	2210.194	-320.422	-2.333	0.045	3.502
86	18	N30	-78.788	2130.98	-603.12	3.77	0.012	0.22
87	18	N58	-274.04	2072.44	-206.512	-1.988	-0.456	-3.281
88	18	Totals:	-652.417	6413.615	-1130.054			
89	18	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
90	19	N1	-90.089	2163.366	-359.927	-2.328	0.304	3.385
91	19	N30	31.04	2112.777	-671.495	3.714	-0.007	0.121
92	19	N58	59.07	2137.473	-276.847	-2.038	-0.25	-3.433
93	19	Totals:	0.021	6413.615	-1308.269			
94	19	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
95	20	N1	214.362	2098.724	-250.189	-2.261	0.465	3.249
96	20	N30	146.69	2129.061	-646.847	3.748	-0.043	0.022
97	20	N58	294.468	2185.831	-238.353	-2.039	0.005	-3.569
98	20	Totals:	655.521	6413.616	-1135.389			
99	20	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
100	21	N1	444.33	2033.74	5.199	-2.154	0.257	3.128
101	21	N30	299.468	2175.434	-469.907	3.866	-0.313	-0.041
102	21	N58	391.042	2204.442	-190.508	-1.988	0.011	-3.654
103	21	Totals:	1134.841	6413.617	-655.216			
104	21	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
105	22	N1	529.602	1986.016	231.549	-2.035	-0.001	3.058
106	22	N30	358.416	2239.389	-131.66	4.035	-0.48	-0.052
107	22	N58	418.98	2188.212	-99.914	-1.901	0.031	-3.669
108	22	Totals:	1306.998	6413.617	-0.026			
109	22	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
110	23	N1	535.079	1968.224	342.647	-1.934	-0.014	3.059
111	23	N30	245.307	2303.774	211.145	4.206	-0.273	-0.013
112	23	N58	349.123	2141.619	98.308	-1.804	0.287	-3.606
113	23	Totals:	1129.509	6413.616	652.101			
114	23	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
115	24	N1	467.81	1985.021	414.751	-1.877	-0.039	3.128
116	24	N30	80.68	2351.416	410.312	4.336	-0.013	0.063
117	24	N58	103.927	2077.179	304.979	-1.72	0.447	-3.48
118	24	Totals:	652.417	6413.616	1130.042			
119	24	COG (ft):	X: 0.017	Y: 0.888	Z: -0.053			
120	25	N1	79.085	1702.993	110.106	-2.152	-0.071	2.662
121	25	N30	-2.897	887.402	84.913	1.499	0.001	0.092
122	25	N58	-76.194	1122.707	97.363	-1.152	0.049	-1.516
123	25	Totals:	-0.007	3713.102	292.381			
124	25	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
125	26	N1	8.586	1718.405	86.06	-2.168	-0.112	2.695
126	26	N30	-28.473	883.502	81.024	1.491	0.005	0.116
127	26	N58	-126.686	1111.195	86.781	-1.152	-0.013	-1.484
128	26	Totals:	-146.573	3713.101	253.865			
129	26	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
130	27	N1	-42.24	1733.853	26.127	-2.194	-0.057	2.724
131	27	N30	-66.848	872.478	42.825	1.463	0.075	0.131
132	27	N58	-144.629	1106.77	77.533	-1.164	-0.007	-1.464
133	27	Totals:	-253.717	3713.101	146.484			
134	27	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
135	28	N1	-58.346	1745.162	-23.46	-2.221	0.007	2.741
136	28	N30	-81.658	857.276	-34.778	1.422	0.118	0.134
137	28	N58	-152.037	1110.663	58.239	-1.185	-0.007	-1.46

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
138	28	Totals:	-292.041	3713.101	0.001			
139	28	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
140	29	N1	-59.066	1749.34	-44.166	-2.245	0.001	2.74
141	29	N30	-53.54	841.975	-112.492	1.381	0.063	0.125
142	29	N58	-139.656	1121.787	11.013	-1.209	-0.074	-1.476
143	29	Totals:	-252.262	3713.101	-145.646			
144	29	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
145	30	N1	-45.637	1745.308	-60.624	-2.259	0.003	2.723
146	30	N30	-16.095	830.682	-154.149	1.351	-0.001	0.108
147	30	N58	-83.996	1137.112	-37.643	-1.229	-0.116	-1.506
148	30	Totals:	-145.727	3713.101	-252.417			
149	30	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
150	31	N1	1.982	1734.109	-73.696	-2.258	0.07	2.695
151	31	N30	5.263	826.421	-167.093	1.338	0.003	0.084
152	31	N58	-7.241	1152.572	-51.6	-1.242	-0.061	-1.542
153	31	Totals:	0.004	3713.102	-292.388			
154	31	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
155	32	N1	72.475	1718.699	-49.682	-2.242	0.112	2.662
156	32	N30	30.869	830.329	-163.192	1.346	-0.002	0.06
157	32	N58	43.226	1164.074	-40.998	-1.242	0.002	-1.574
158	32	Totals:	146.57	3713.102	-253.872			
159	32	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
160	33	N1	123.331	1703.241	10.244	-2.216	0.056	2.633
161	33	N30	69.235	841.363	-124.963	1.374	-0.072	0.045
162	33	N58	61.148	1168.498	-31.772	-1.23	-0.005	-1.594
163	33	Totals:	253.714	3713.102	-146.491			
164	33	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
165	34	N1	139.468	1691.923	59.842	-2.188	-0.007	2.616
166	34	N30	84.02	856.567	-47.34	1.415	-0.114	0.042
167	34	N58	68.551	1164.612	-12.511	-1.209	-0.004	-1.598
168	34	Totals:	292.039	3713.102	-0.008			
169	34	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
170	35	N1	140.179	1687.743	80.578	-2.165	-0.002	2.617
171	35	N30	55.88	871.859	30.352	1.456	-0.059	0.051
172	35	N58	56.199	1153.499	34.709	-1.185	0.063	-1.582
173	35	Totals:	252.259	3713.102	145.639			
174	35	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
175	36	N1	126.724	1691.783	97.057	-2.151	-0.003	2.634
176	36	N30	18.43	883.143	71.976	1.486	0.005	0.069
177	36	N58	0.57	1138.176	83.376	-1.165	0.104	-1.552
178	36	Totals:	145.725	3713.102	252.409			
179	36	COG (ft):	X: 0.548	Y: 0.763	Z: 0.777			
180	37	N1	78.139	1131.976	110.761	-1.225	-0.064	1.486
181	37	N30	-1.361	888.002	85.107	1.5	-0.006	0.034
182	37	N58	-76.781	1693.132	96.517	-2.081	0.056	-2.696
183	37	Totals:	-0.003	3713.11	292.385			
184	37	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
185	38	N1	7.65	1147.369	86.701	-1.241	-0.106	1.519
186	38	N30	-26.948	884.131	81.241	1.492	-0.002	0.058
187	38	N58	-127.272	1681.609	85.927	-2.08	-0.006	-2.664
188	38	Totals:	-146.569	3713.11	253.869			
189	38	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
190	39	N1	-43.155	1162.787	26.761	-1.267	-0.05	1.548
191	39	N30	-65.351	873.123	43.06	1.463	0.068	0.073
192	39	N58	-145.207	1677.199	76.667	-2.093	0	-2.643

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
193	39	Totals:	-253.713	3713.11	146.488			
194	39	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
195	40	N1	-59.237	1174.067	-22.815	-1.295	0.013	1.565
196	40	N30	-80.204	857.926	-34.536	1.423	0.111	0.076
197	40	N58	-152.596	1681.116	57.355	-2.114	-0.001	-2.64
198	40	Totals:	-292.038	3713.11	0.005			
199	40	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
200	41	N1	-59.938	1178.224	-43.502	-1.318	0.008	1.564
201	41	N30	-52.126	842.62	-112.259	1.382	0.056	0.067
202	41	N58	-140.194	1692.266	10.119	-2.138	-0.068	-2.655
203	41	Totals:	-252.258	3713.11	-145.642			
204	41	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
205	42	N1	-46.5	1174.177	-59.947	-1.332	0.009	1.547
206	42	N30	-14.704	831.306	-153.936	1.351	-0.008	0.05
207	42	N58	-84.519	1707.626	-38.529	-2.158	-0.109	-2.685
208	42	Totals:	-145.723	3713.11	-252.412			
209	42	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
210	43	N1	1.118	1162.978	-73.008	-1.331	0.077	1.519
211	43	N30	6.649	827.012	-166.903	1.338	-0.004	0.026
212	43	N58	-7.759	1723.12	-52.473	-2.17	-0.054	-2.722
213	43	Totals:	0.008	3713.11	-292.384			
214	43	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
215	44	N1	71.601	1147.586	-48.98	-1.315	0.118	1.486
216	44	N30	32.267	830.891	-163.026	1.346	-0.008	0.002
217	44	N58	42.706	1734.633	-41.862	-2.171	0.008	-2.754
218	44	Totals:	146.574	3713.11	-253.868			
219	44	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
220	45	N1	122.437	1132.159	10.953	-1.289	0.063	1.457
221	45	N30	70.661	841.91	-124.816	1.375	-0.078	-0.013
222	45	N58	60.62	1739.042	-32.624	-2.159	0.002	-2.774
223	45	Totals:	253.718	3713.11	-146.487			
224	45	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
225	46	N1	138.549	1120.869	60.54	-1.262	-0.001	1.44
226	46	N30	85.488	857.108	-47.199	1.415	-0.121	-0.016
227	46	N58	68.004	1735.133	-13.345	-2.137	0.003	-2.777
228	46	Totals:	292.042	3713.11	-0.004			
229	46	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
230	47	N1	139.241	1116.712	81.257	-1.238	0.005	1.441
231	47	N30	57.389	872.405	30.502	1.456	-0.066	-0.007
232	47	N58	55.632	1723.993	33.884	-2.113	0.069	-2.762
233	47	Totals:	252.263	3713.11	145.643			
234	47	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
235	48	N1	125.778	1120.765	97.723	-1.224	0.003	1.458
236	48	N30	19.962	883.71	72.147	1.487	-0.002	0.011
237	48	N58	-0.012	1708.635	82.544	-2.093	0.111	-2.732
238	48	Totals:	145.728	3713.11	252.414			
239	48	COG (ft):	X: -0.524	Y: 0.763	Z: 0.777			
240	49	N1	55.525	1480.319	31.111	-1.742	0.001	2.762
241	49	N30	-3.104	949.408	-56.392	1.564	0.012	0.152
242	49	N58	-52.427	908.381	25.281	-0.822	-0.013	-1.28
243	49	Totals:	-0.006	3338.107	-0.001			
244	49	COG (ft):	X: 0.724	Y: 0.848	Z: 0.416			
245	50	N1	35.667	1212.692	17.572	-1.346	0	1.75
246	50	N30	1.908	933.674	-38.833	1.629	-0.002	0.058
247	50	N58	-37.576	1191.745	21.261	-1.246	0.001	-1.763

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
248	50	Totals:	-0.002	3338.111	-0.001			
249	50	COG (ft):	X: 0.022	Y: 0.848	Z: 0.416			
250	51	N1	39.94	1139.511	21.148	-1.084	-0.001	1.785
251	51	N30	2.272	1189.716	-46.718	2.114	-0.002	0.069
252	51	N58	-42.217	1127.744	25.57	-0.989	0.002	-1.818
253	51	Totals:	-0.005	3456.97	0.001			
254	51	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
255	52	N1	66.789	996.59	95.254	-0.912	-0.058	1.565
256	52	N30	-1.273	1090.315	87.623	1.967	0	0.064
257	52	N58	-65.525	986.313	92.381	-0.833	0.054	-1.597
258	52	Totals:	-0.01	3073.218	275.258			
259	52	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
260	53	N1	10.174	1012.992	69.302	-0.93	-0.065	1.603
261	53	N30	-31.116	1086.02	72.016	1.957	0.033	0.084
262	53	N58	-116.695	974.206	97.058	-0.83	0.03	-1.562
263	53	Totals:	-137.637	3073.218	238.376			
264	53	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
265	54	N1	-39.646	1029.396	29.823	-0.957	-0.054	1.637
266	54	N30	-52.086	1074.125	25.996	1.926	0.057	0.098
267	54	N58	-146.646	969.697	81.815	-0.84	-0.002	-1.542
268	54	Totals:	-238.378	3073.218	137.634			
269	54	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
270	55	N1	-69.337	1041.411	-12.61	-0.985	-0.03	1.657
271	55	N30	-58.568	1057.811	-38.12	1.882	0.064	0.101
272	55	N58	-147.355	973.995	50.735	-0.86	-0.033	-1.541
273	55	Totals:	-275.26	3073.218	0.005			
274	55	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
275	56	N1	-70.939	1045.819	-46.624	-1.008	0.003	1.659
276	56	N30	-48.813	1041.451	-103.153	1.838	0.054	0.095
277	56	N58	-118.621	985.948	12.153	-0.886	-0.055	-1.561
278	56	Totals:	-238.373	3073.218	-137.624			
279	56	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
280	57	N1	-44.029	1041.44	-63.114	-1.019	0.035	1.641
281	57	N30	-25.436	1029.431	-151.67	1.805	0.03	0.079
282	57	N58	-68.162	1002.347	-23.587	-0.909	-0.061	-1.595
283	57	Totals:	-137.628	3073.218	-238.37			
284	57	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
285	58	N1	4.19	1029.445	-57.666	-1.015	0.057	1.609
286	58	N30	5.303	1024.973	-170.673	1.791	-0.004	0.058
287	58	N58	-9.493	1018.801	-46.918	-0.925	-0.051	-1.635
288	58	Totals:	0.001	3073.219	-275.257			
289	58	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
290	59	N1	60.806	1013.045	-31.731	-0.997	0.064	1.571
291	59	N30	35.16	1029.274	-155.056	1.802	-0.037	0.039
292	59	N58	41.661	1030.9	-51.588	-0.928	-0.027	-1.67
293	59	Totals:	137.627	3073.219	-238.375			
294	59	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
295	60	N1	110.642	996.634	7.74	-0.97	0.053	1.537
296	60	N30	56.129	1041.178	-109.019	1.833	-0.06	0.025
297	60	N58	71.598	1035.407	-36.354	-0.918	0.005	-1.69
298	60	Totals:	238.369	3073.219	-137.633			
299	60	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
300	61	N1	140.347	984.611	50.182	-0.941	0.029	1.517
301	61	N30	62.595	1057.493	-44.895	1.877	-0.068	0.021
302	61	N58	72.308	1031.115	-5.292	-0.898	0.036	-1.691

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
303	61	Totals:	275.251	3073.219	-0.004			
304	61	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
305	62	N1	141.948	980.202	84.214	-0.919	-0.004	1.515
306	62	N30	52.826	1073.847	20.128	1.921	-0.058	0.028
307	62	N58	43.59	1019.17	33.283	-0.872	0.057	-1.671
308	62	Totals:	238.364	3073.219	137.625			
309	62	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
310	63	N1	115.023	984.587	100.711	-0.908	-0.036	1.533
311	63	N30	29.45	1085.859	68.628	1.954	-0.033	0.044
312	63	N58	-6.855	1002.773	69.032	-0.849	0.064	-1.637
313	63	Totals:	137.618	3073.218	238.372			
314	63	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
315	64	N1	55.666	679.837	89.374	-0.611	-0.058	1.069
316	64	N30	-1.917	759.568	100.612	1.38	0.001	0.045
317	64	N58	-53.758	672.832	85.272	-0.558	0.054	-1.092
318	64	Totals:	-0.008	2112.237	275.258			
319	64	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
320	65	N1	-0.942	696.227	63.426	-0.629	-0.065	1.107
321	65	N30	-31.766	755.275	85.008	1.369	0.034	0.065
322	65	N58	-104.928	660.735	89.942	-0.555	0.029	-1.057
323	65	Totals:	-137.635	2112.237	238.376			
324	65	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
325	66	N1	-50.754	712.618	23.946	-0.656	-0.054	1.14
326	66	N30	-52.739	743.388	38.996	1.338	0.057	0.078
327	66	N58	-134.883	656.23	74.692	-0.565	-0.002	-1.036
328	66	Totals:	-238.377	2112.237	137.633			
329	66	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
330	67	N1	-80.439	724.624	-18.49	-0.684	-0.029	1.161
331	67	N30	-59.22	727.088	-25.112	1.295	0.065	0.082
332	67	N58	-135.599	660.525	43.608	-0.585	-0.033	-1.036
333	67	Totals:	-275.258	2112.237	0.005			
334	67	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
335	68	N1	-82.036	729.027	-52.512	-0.707	0.003	1.162
336	68	N30	-49.461	710.741	-90.138	1.25	0.055	0.075
337	68	N58	-106.874	672.469	5.025	-0.611	-0.055	-1.056
338	68	Totals:	-238.372	2112.237	-137.624			
339	68	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
340	69	N1	-55.127	724.65	-69.009	-0.718	0.035	1.145
341	69	N30	-26.078	698.732	-138.65	1.217	0.03	0.06
342	69	N58	-56.422	688.856	-30.711	-0.635	-0.062	-1.09
343	69	Totals:	-137.626	2112.237	-238.371			
344	69	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
345	70	N1	-6.91	712.664	-63.568	-0.714	0.057	1.113
346	70	N30	4.669	694.278	-157.653	1.204	-0.003	0.039
347	70	N58	2.244	705.296	-54.036	-0.65	-0.052	-1.13
348	70	Totals:	0.002	2112.238	-275.258			
349	70	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
350	71	N1	49.699	696.276	-37.637	-0.696	0.064	1.075
351	71	N30	34.532	698.577	-142.04	1.214	-0.036	0.019
352	71	N58	53.398	717.385	-58.699	-0.653	-0.028	-1.165
353	71	Totals:	137.629	2112.238	-238.375			
354	71	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
355	72	N1	99.527	679.878	1.835	-0.669	0.053	1.041
356	72	N30	55.504	710.471	-96.01	1.245	-0.06	0.006
357	72	N58	83.34	721.888	-43.458	-0.643	0.004	-1.185

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
358	72	Totals:	238.37	2112.238	-137.633			
359	72	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
360	73	N1	129.225	667.865	44.281	-0.64	0.029	1.021
361	73	N30	61.97	726.773	-31.895	1.289	-0.067	0.002
362	73	N58	84.057	717.6	-12.391	-0.623	0.035	-1.186
363	73	Totals:	275.252	2112.238	-0.004			
364	73	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
365	74	N1	130.822	663.46	78.32	-0.617	-0.004	1.019
366	74	N30	52.197	743.114	33.121	1.333	-0.057	0.009
367	74	N58	55.347	705.664	26.184	-0.597	0.057	-1.166
368	74	Totals:	238.365	2112.238	137.625			
369	74	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			
370	75	N1	103.897	667.843	94.825	-0.607	-0.035	1.037
371	75	N30	28.814	755.115	81.616	1.367	-0.032	0.025
372	75	N58	4.909	689.279	61.93	-0.574	0.064	-1.132
373	75	Totals:	137.62	2112.237	238.371			
374	75	COG (ft):	X: 0.015	Y: 0.956	Z: -0.038			

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
0	M1	HSS4X4X4	0.273	0	19	0.09	0	y	31	124657.752	139518	16.181	16.181	3	H1-1b
1	M2	HSS4X4X4	0.161	2.375	18	0.052	2.375	y	17	136263.03	139518	16.181	16.181	1.656	H1-1b
2	M3	HSS4X4X4	0.159	0	16	0.046	0	y	17	136263.03	139518	16.181	16.181	1.639	H1-1b
3	M4	PL1/2X6	0.15	0.516	10	0.08	0	y	19	66212.275	97200	1.012	12.15	1.309	H1-1b
4	M7	L2X2X3	0.18	4.162	7	0.011	4.162	y	14	9823.122	23392.8	0.558	1.069	1.115	H2-1
5	M8	L2X2X3	0.156	0	3	0.013	4.162	y	20	9823.122	23392.8	0.558	1.068	1.113	H2-1
6	M12	PL3/8X6	0.147	0	8	0.173	0	y	14	70677.939	72900	0.57	9.113	1.188	H1-1b
7	M13	PL3/8X6	0.267	0.167	12	0.333	0	y	17	71601.728	72900	0.57	9.113	1.16	H1-1b
8	M15	PL1/2X6	0.056	0.112	4	0.1	0.112	y	1	96761.011	97200	1.012	12.15	1.169	H1-1b
9	M17	PL3/8X6	0.198	0	4	0.252	0	y	20	70677.939	72900	0.57	9.113	1.253	H1-1b
10	M18	PL3/8X6	0.24	0.167	10	0.324	0	y	17	71601.728	72900	0.57	9.113	1.154	H1-1b
11	M20	PL1/2X6	0.057	0.112	5	0.104	0.112	y	8	96761.011	97200	1.012	12.15	1.058	H1-1b
12	M25	HSS4X4X4	0.282	0	15	0.093	0	z	4	124657.752	139518	16.181	16.181	3	H1-1b
13	M26	HSS4X4X4	0.161	2.375	14	0.052	2.375	y	13	136263.03	139518	16.181	16.181	1.655	H1-1b
14	M27	HSS4X4X4	0.158	0	24	0.046	0	y	13	136263.03	139518	16.181	16.181	1.641	H1-1b
15	M28	PL1/2X6	0.149	0.516	6	0.074	0	y	15	66212.275	97200	1.012	12.15	1.304	H1-1b
16	M31	L2X2X3	0.18	4.162	3	0.012	0	y	21	9823.122	23392.8	0.558	1.068	1.112	H2-1
17	M32	L2X2X3	0.155	0	11	0.012	4.162	y	16	9823.122	23392.8	0.558	1.069	1.115	H2-1
18	M36	PL3/8X6	0.152	0	2	0.176	0	y	22	70677.939	72900	0.57	9.113	1.212	H1-1b
19	M37	PL3/8X6	0.267	0.167	8	0.331	0	y	13	71601.728	72900	0.57	9.113	1.164	H1-1b
20	M39	PL1/2X6	0.056	0.112	12	0.099	0.112	y	9	96761.011	97200	1.012	12.15	1.165	H1-1b
21	M41	PL3/8X6	0.197	0	12	0.243	0	y	16	70677.939	72900	0.57	9.113	1.255	H1-1b
22	M42	PL3/8X6	0.24	0.167	6	0.322	0	y	13	71601.728	72900	0.57	9.113	1.155	H1-1b
23	M44	PL1/2X6	0.057	0.112	1	0.106	0.112	y	4	96761.011	97200	1.012	12.15	1.064	H1-1b
24	M49	HSS4X4X4	0.267	0	23	0.083	0	y	42	124657.752	139518	16.181	16.181	3	H1-1b
25	M50	HSS4X4X4	0.164	2.375	22	0.052	2.375	y	21	136263.03	139518	16.181	16.181	1.652	H1-1b
26	M51	HSS4X4X4	0.157	0	20	0.05	0	y	45	136263.03	139518	16.181	16.181	1.641	H1-1b
27	M52	PL1/2X6	0.149	0.516	2	0.071	1.031	y	19	66212.275	97200	1.012	12.15	1.312	H1-1b
28	M55	L2X2X3	0.179	4.162	11	0.012	0	y	17	9823.122	23392.8	0.558	1.068	1.113	H2-1
29	M56	L2X2X3	0.155	0	7	0.012	4.162	y	24	9823.122	23392.8	0.558	1.069	1.115	H2-1
30	M60	PL3/8X6	0.152	0	10	0.19	0	y	18	70677.939	72900	0.57	9.113	1.212	H1-1b
31	M61	PL3/8X6	0.267	0.167	4	0.337	0	y	21	71601.728	72900	0.57	9.113	1.161	H1-1b
32	M63	PL1/2X6	0.056	0.112	8	0.1	0.112	y	5	96761.011	97200	1.012	12.15	1.169	H1-1b
33	M65	PL3/8X6	0.199	0	8	0.238	0	y	24	70677.939	72900	0.57	9.113	1.253	H1-1b
34	M66	PL3/8X6	0.24	0.167	2	0.322	0	y	21	71601.728	72900	0.57	9.113	1.153	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
35	M68	PL1/2X6	0.057	0.112	9	0.104	0.112	y	12	96761.011	97200	1.012	12.15	1.055	H1-1b
36	M73	PIPE_3.0	0.113	8.073	20	0.085	10.938		10	28250.554	65205	5.749	5.749	1	H1-1b
37	M74	PIPE_3.0	0.112	8.073	16	0.085	10.938		6	28250.554	65205	5.749	5.749	1	H1-1b
38	M75	PIPE_3.0	0.114	8.073	24	0.087	4.557		9	28250.554	65205	5.749	5.749	1	H1-1b
39	MP1A	PIPE_2.0	0.279	0.25	8	0.114	3		4	20866.733	32130	1.872	1.872	1	H1-1b
40	MP3A	PIPE_2.0	0.162	3	11	0.06	0.438		9	20866.733	32130	1.872	1.872	1	H1-1b
41	MP4A	PIPE_2.0	0.178	3	5	0.08	3		8	20866.733	32130	1.872	1.872	1	H1-1b
42	MP5A	PIPE_2.0	0.294	0.25	5	0.121	3		10	20866.733	32130	1.872	1.872	1	H1-1b
43	MP1C	PIPE_2.0	0.277	0.25	4	0.113	3		12	20866.733	32130	1.872	1.872	1	H1-1b
44	MP3C	PIPE_2.0	0.158	0.25	5	0.062	0.438		5	20866.733	32130	1.872	1.872	1	H1-1b
45	MP4C	PIPE_2.0	0.174	3	1	0.084	3		4	20866.733	32130	1.872	1.872	1	H1-1b
46	MP5C	PIPE_2.0	0.289	0.25	1	0.122	3		6	20866.733	32130	1.872	1.872	1	H1-1b
47	MP1B	PIPE_2.0	0.275	0.25	12	0.115	3		8	20866.733	32130	1.872	1.872	1	H1-1b
48	MP3B	PIPE_2.0	0.165	3	2	0.062	0.438		1	20866.733	32130	1.872	1.872	1	H1-1b
49	MP4B	PIPE_2.0	0.181	3	9	0.084	3		12	20866.733	32130	1.872	1.872	1	H1-1b
50	MP5B	PIPE_2.0	0.288	0.25	9	0.12	3		2	20866.733	32130	1.872	1.872	1	H1-1b
51	M100	PIPE_2.0	0.01	2.25	6	0.002	2.25		6	30237.765	32130	1.872	1.872	1	H1-1b
52	OVP	PIPE_2.0	0.092	3	2	0.016	3		2	26521.424	32130	1.872	1.872	1	H1-1b
53	MP2A	PIPE_2.0	0.249	4	1	0.092	1.25		6	14916.096	32130	1.872	1.872	1	H1-1b
54	MP2C	PIPE_2.0	0.247	4	3	0.092	1.25		2	14916.096	32130	1.872	1.872	1	H1-1b
55	MP2B	PIPE_2.0	0.249	4	11	0.094	1.25		10	14916.096	32130	1.872	1.872	1	H1-1b
56	M109	PIPE_2.5	0.162	11.068	6	0.186	0.911		1	14558.792	50715	3.596	3.596	1	H1-1b
57	M110	PIPE_2.5	0.161	11.068	2	0.184	0.911		9	14558.792	50715	3.596	3.596	1	H1-1b
58	M111	PIPE_2.5	0.16	11.068	10	0.186	0.911		5	14558.792	50715	3.596	3.596	1	H1-1b
59	M133	L3X3X4	0.268	1.143	5	0.15	0	z	6	45324.609	46656	1.688	3.756	1.5	H2-1
60	M134	L3X3X4	0.269	1.143	1	0.149	0	z	2	45324.609	46656	1.688	3.756	1.5	H2-1
61	M135	L3X3X4	0.265	1.143	9	0.149	1.143	z	4	45324.609	46656	1.688	3.756	1.5	H2-1

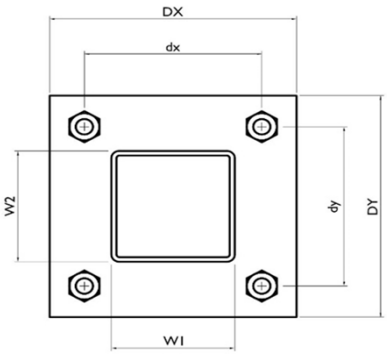
VzW SMART Tool© Vendor

Client:	Verizon Wireless	Date:	3/7/2024
Site Name:	NEWTOWN SOUTH CT		
MDG #:	5000382932		
Fuze ID #:	16092597	Page:	1

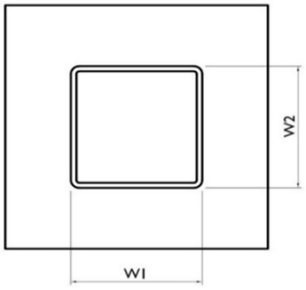
Version 2.00

I. Mount-to-Tower Connection Check

Custom Orientation Required	No
Tower Connection Bolt Checks	Yes
Bolt Orientation	Parallel
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	6
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	6
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength / bolt (kips):	4.6
Required Shear Strength / bolt (kips):	0.8
Tensile Capacity / bolt (kips):	20.7
Shear Capacity / bolt (kips):	12.4
Bolt Overall Utilization:	**22.3%**



Tower Connection Baseplate Checks	Yes
Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	8
Plate Height, D_y (in):	8
W1(in):	4
W2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.5
Length of Yield Line, L_y (in):	5.85
Bolt Eccentricity, e (in):	1.65
M_u (kip-in):	7.61
Phi*M_n (kip-in):	11.85
Plate Bending Utilization:	**64.3%**

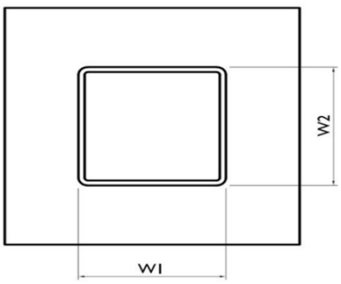


VzW SMART Tool© Vendor

Client:	Verizon Wireless	Date:	3/7/2024
Site Name:	NEWTOWN SOUTH CT		
MDG #:	5000382932		
Fuze ID #:	16092597	Page:	2

Version 2.00

Tower Connection Weld Checks	Yes
Weld Shape:	Rectangle
Weld Stiffener Configuration:	None
Weld Size (1/16 in):	4
W1 (in):	4
W2 (in):	4
Weld Total Length (in):	16.00
Z_x (in^3/in):	21.33
Z_y (in^3/in):	21.33
J_p (in^4/in):	85.33
c_x (in)	2.25
c_y (in)	2.25
Required combined strength (kip/in):	1.74
Weld Capacity (kip/in):	5.57
Weld Utilization:	**31.2%**



MOUNT MODIFICATION DRAWINGS
EXISTING 12.50' PLATFORM

TOWER OWNER: CROWN CASTLE
TOWER OWNER SITE NUMBER: 826222

CARRIER SITE NAME: NEWTOWN SOUTH CT
CARRIER MDG NUMBER: 5000382932
FUZE ID: 16092597

201 SOUTH MAIN ST
NEWTOWN, CT 06470
FAIRFIELD COUNTY

LATITUDE: 41.378167° N
LONGITUDE: 73.274094° W

DESIGN CRITERIA

WIND LOADS

BASIC WIND SPEED (3 SECOND GUST), V = 120 MPH
EXPOSURE CATEGORY C
TOPOGRAPHIC METHOD II
TOPOGRAPHIC CONSIDERED N/A
MEAN BASE ELEVATION (AMSL) = 387'

ICE LOADS

ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN

SEISMIC LOADS

SEISMIC DESIGN CATEGORY B
SHORT TERM MCER GROUND MOTION, S_S = .210
LONG TERM MCER GROUND MOTION, S_1 = .055

PROJECT INFORMATION

APPLICANT/LESSEE

COMPANY: VERIZON WIRELESS

CLIENT REPRESENTATIVE

COMPANY: VERIZON WIRELESS

PROJECT MANAGER

COMPANY: COLLIERS ENGINEERING & DESIGN
CONTACT: PETER ALBANO
PHONE: 856.797.0412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS

PMI LOCATION: HTTPS://PMI.VZWSMART.COM
SMART TOOL PROJECT #: 10218077
VZW MDG #: 5000382932
ANALYSIS DATE: 3/8/2024

PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

Colliers Engineering & Design

www.colliersengineering.com

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SCALE: AS SHOWN
JOB NUMBER: 22777025A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
.	.	.	.	.
.	.	.	.	.
1	03/08/24	ISSUED FOR CONSTRUCTION	NL	PET
0	05/18/22	ISSUED FOR CONSTRUCTION	DC	DH

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

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

SITE NAME:

NEWTOWN SOUTH CT
5000382932

201 SOUTH MAIN ST
NEWTOWN, CT 06470
FAIRFIELD COUNTY

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

SHEET TITLE: TITLE SHEET

SHEET NUMBER: ST-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-PLK1	SUPPORT RAIL KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	504	504
3		VZWSMART-MSK1	CROSSOVER PLATE		14	42

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
					TOTAL:	546

NOTES:

1. THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.

2. ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM

METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM

SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

SCALE: AS SHOWN

JOB NUMBER: 22777025A

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
1	03/08/24	ISSUED FOR CONSTRUCTION	NL	PET
0	05/18/22	ISSUED FOR CONSTRUCTION	DC	DH

STATE OF CONNECTICUT · PETER M. ALBANO · 35459 · LICENSED PROFESSIONAL ENGINEER

COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. PEC.0000131

SITE NAME:

NEWTOWN SOUTH CT
5000382932

201 SOUTH MAIN ST
NEWTOWN, CT 06470
FAIRFIELD COUNTY

Colliers Engineering & Design

STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
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SHEET TITLE: BILL OF MATERIALS

SHEET NUMBER: SBOM-1

PROJECT NOTES

1. SEE MODIFICATION NOTES
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
11. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

GENERAL NOTES

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

STRUCTURAL STEEL

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

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE

3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
   a. SUBMIT SHOP DRAWINGS TO
      PETER.ALBANO@COLLIERSENGINEERING.COM
   b. PROVIDE MASER CONSULTING PROJECT # AND MASER CONSULTING PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. CONTRACTOR SHALL PROTECT CUT ENDS OF ALL FIELD-CUT STEEL WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC COTE).
9. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
10. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
11. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
12. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
13. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
14. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

WELDING NOTES

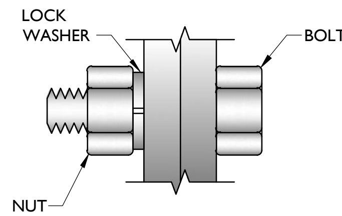
1. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE, DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.
2. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD PARTY CERTIFIED WELD INSPECTOR (CWI) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWI REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.
3. THE CERTIFIED WELD INSPECTOR SHALL INDICATE, IN A WRITTEN CWI REPORT, THAT ALL WELDING OPERATIONS PRE, DURING, AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELD INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED DURING THE PMI.
4. IN CASES WHERE A WELD IS SPECIFIED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT-UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN THE DRAWINGS.
5. OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.
6. CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.
7. CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT CONFORMS WITH ALL OSHA, ANSI/ASSP A10.48, ANSI Z49.1, AND LOCAL JURISDICTIONAL REQUIREMENTS.

BOLT SCHEDULE (IN.)

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	11/16	11/16 x 7/8	1 1/8	1 7/8
3/4	13/16	13/16 x 1	1 1/4	2 1/4
7/8	15/16	15/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

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

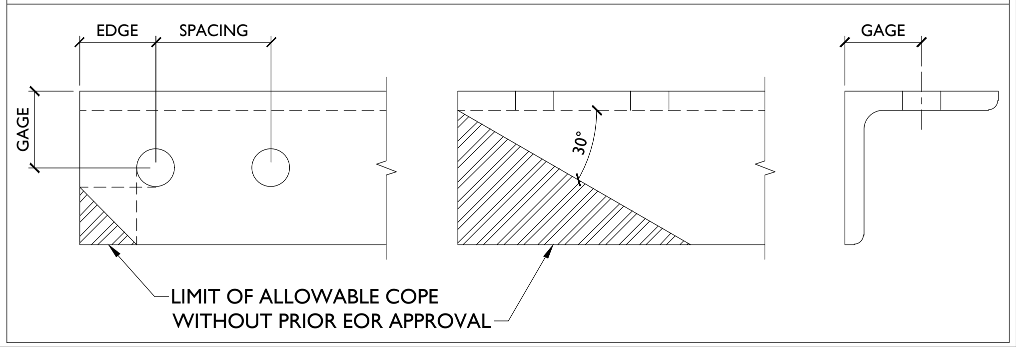


TYP. BOLT ASSEMBLY

NOTES:

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

ALLOWABLE COPING



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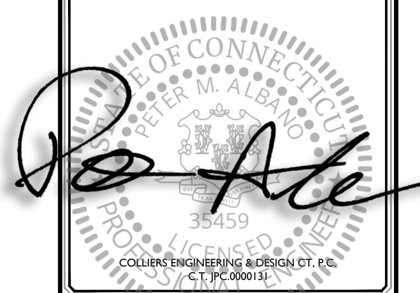
0	05/18/22	ISSUED FOR CONSTRUCTION	DC	DH



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

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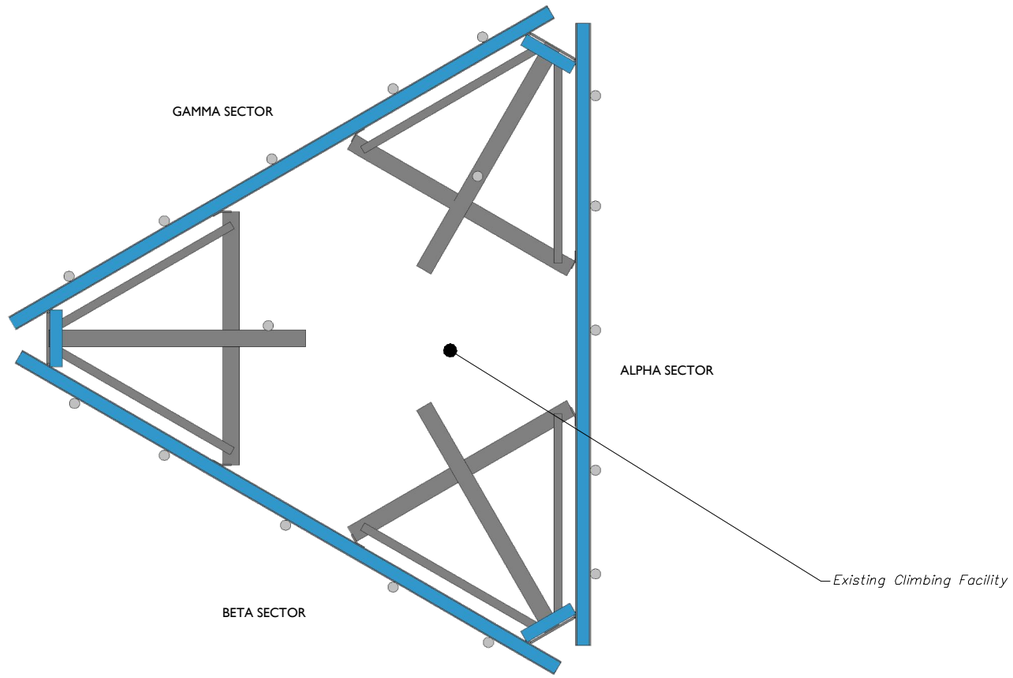
SHEET TITLE :
MODIFICATION NOTES

SHEET NUMBER :
SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



1 CLIMBING FACILITY LOCATION

SCALE : N.T.S.

STRUCTURAL NOTES:

1. CONTRACTOR TO INSPECT CLIMBING FACILITIES AT SITE AND ENSURE THAT THE SAFETY CLIMB IS IN GOOD CONDITION AND THAT THE WIRE ROPE DOES NOT OR WILL NOT INTERFERE WITH THE EXISTING OR PROPOSED MOUNT CONNECTIONS. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDED AROUND MOUNT CONNECTIONS AS NEEDED.

2. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

CLIMBING FACILITY PHOTO

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SHEET TITLE :

CLIMBING FACILITY DETAIL

SHEET NUMBER :

SCF-1

LEGEND:

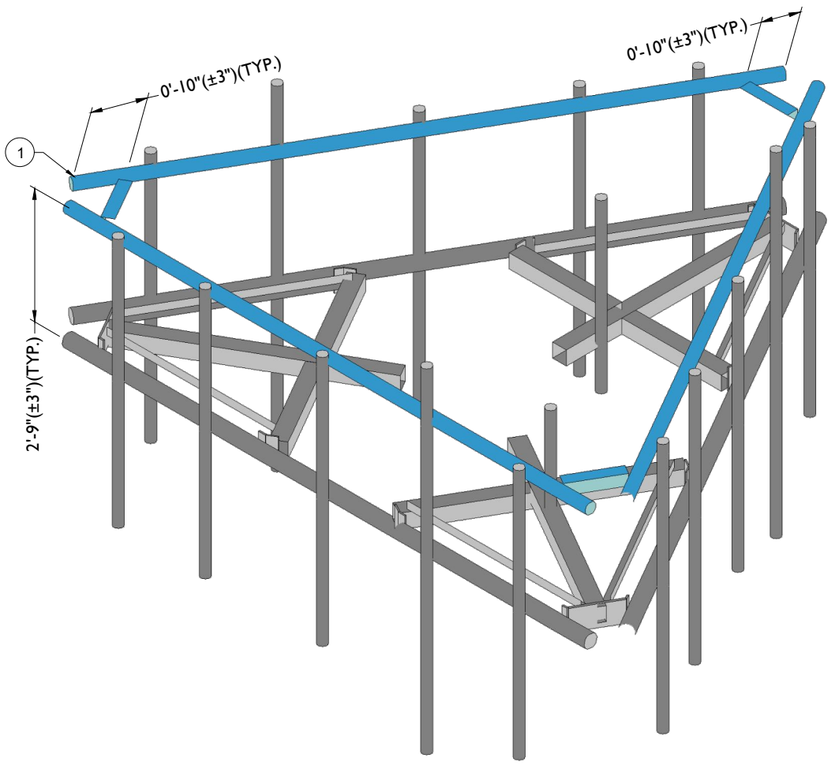
- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	126'-0"	1	PROPOSED SUPPORT RAIL KIT (PART #: VZWSMART-PLK1)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.RADIO AND/OR TME POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF HORIZONTAL AS SHOWN. EOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.CONNECT NEW HORIZONTAL TO ALL EXISTING VERTICAL MOUNT PIPES WITH INCLUDED KIT CROSSOVER PLATES AND WITH CROSSOVER PLATES (PART #: VZWSMART-MSK1).

NOTES.

MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



1 PROPOSED ISOMETRIC VIEW

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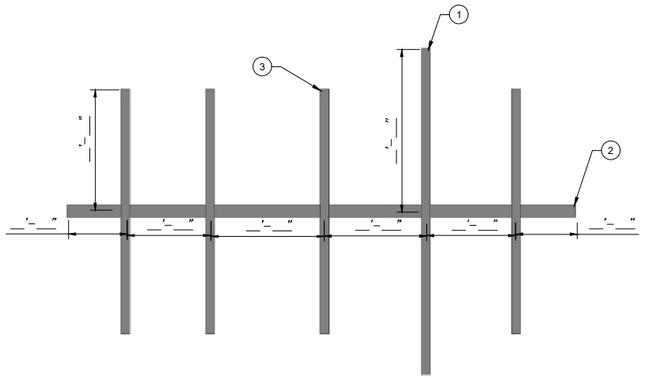
SHEET TITLE : MODIFICATION DETAILS

SHEET NUMBER : SS-1

EXISTING MEMBERS			
NO.	DESCRIPTION	SHAPE	NOTES
1.	MOUNT PIPE		TYP. OF 3, 1 PER SECTOR
2.	FACE HORIZONTAL		TYP. OF 3, 1 PER SECTOR
3.	MOUNT PIPE		TYP. OF 12, 4 PER SECTOR

LIST ALL SHAPES:
ANGLE (LEG1xLEG2xTH.): EX. L2x2x1/4
CHANNEL (DEPTHxFLANGE WIDTH): EX. CH6"x1-7/8"
PIPE (ODxTH.): EX. PIPE 2.4"x0.12"
PLATE (TH.xDEPTH): EX. PLATE 1/2"x2"

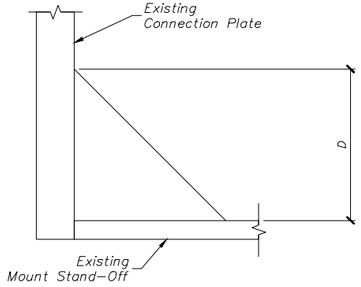


2 EXISTING MOUNT GEOMETRY VERIFICATION FRONT ELEVATION VIEW

SCALE : N.T.S.

NOTE:

CONTRACTOR SHALL RECORD ALL DIMENSIONS AND MEMBER SIZES SHOWN IN THIS SKETCH. DOCUMENT VIA PHOTOS AND SKETCHES AND PROVIDE TO THE EOR FOR EVALUATION.

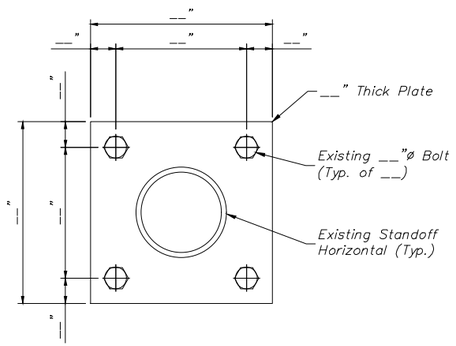


WELD MEASUREMENT NOTE:

CONTRACTOR SHALL MEASURE WELD SIZE 'D' AS SHOWN IN THIS DETAIL.

4 WELD MEASUREMENT DETAIL

SCALE : N.T.S.



NOTE:

REFER TO WELD MEASUREMENT DETAIL FOR DIRECTIONS ON OBTAINING WELD MEASUREMENTS.

3 MOUNT CONNECTION DETAIL

SCALE : N.T.S.

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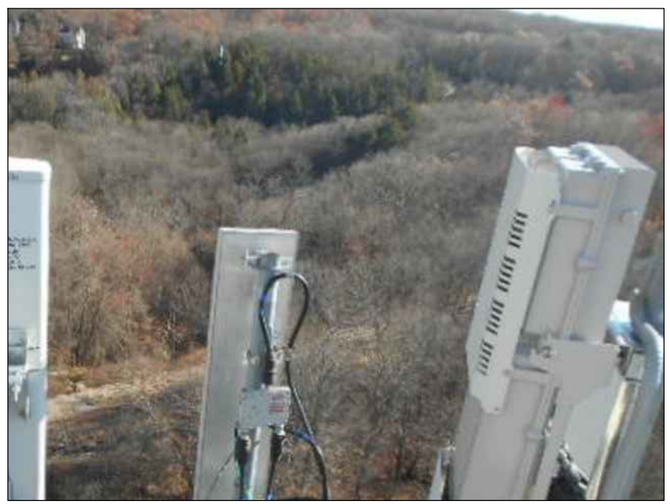
SHEET TITLE : GEOMETRY VERIFICATION SKETCHES

SHEET NUMBER : SS-2

MOUNT PHOTO 1

MOUNT PHOTO 2

MOUNT PHOTO 3



MOUNT PHOTO 4

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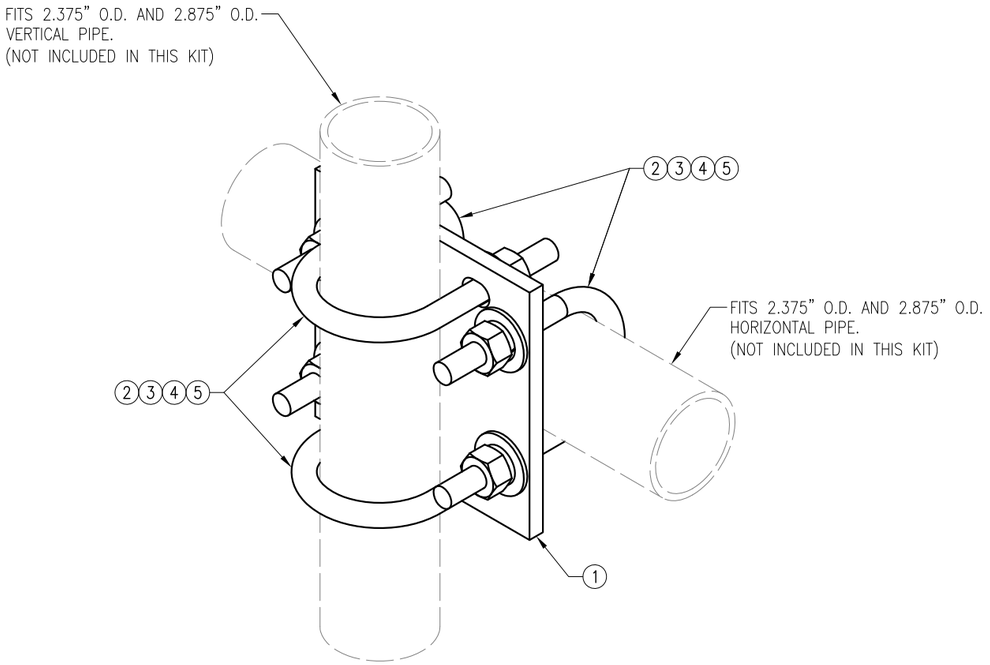
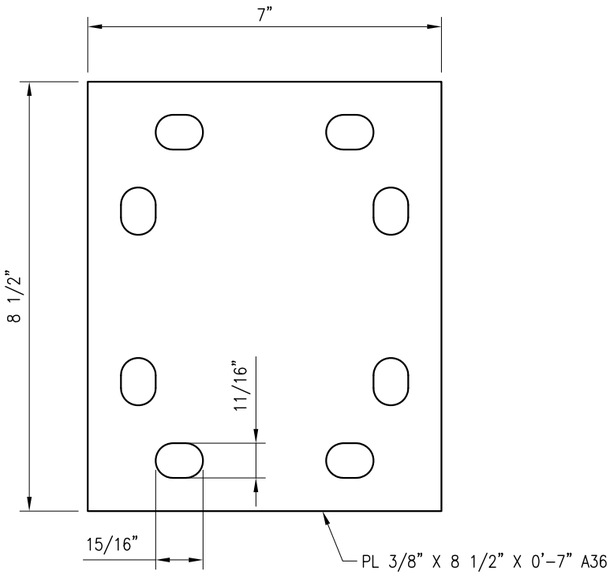
SHEET TITLE : MOUNT PHOTOS

SHEET NUMBER : SS-3





PL375-857

VZWSMART-MSK1 (CROSSOVER PLATE)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PL375-857	PL 3/8" X 8 1/2" X 0'-7" A36	MSK1-F1	6
2	4	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC-1	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	8	LW-625	5/8" HDG LOCK WASHER	---	0
5	8	NUT-625	5/8" HDG HEX NUT	---	1
				GALVANIZED WT	14

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

VzW SMART Tool© Vendor

verizon

DRAWN BY: H.R | CHECKED BY: HMA

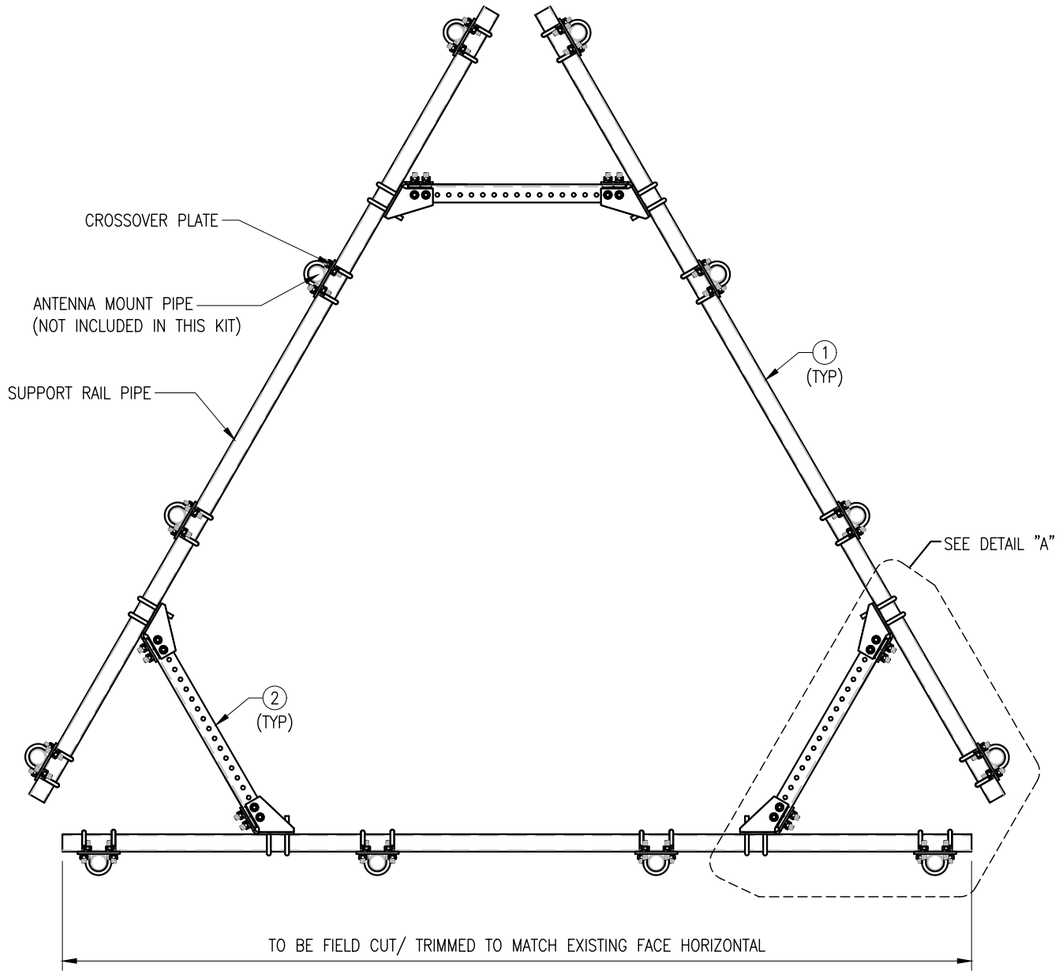
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:

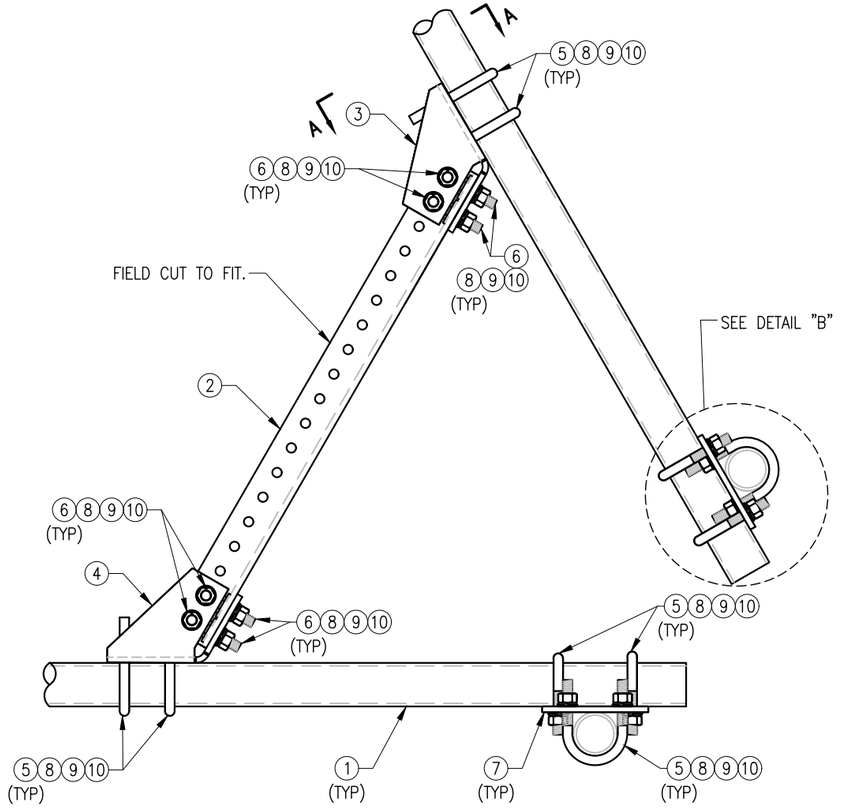
VZWSMART-MSK1
CROSSOVER PLATE

SHEET NUMBER: VZWSMART-MSK1

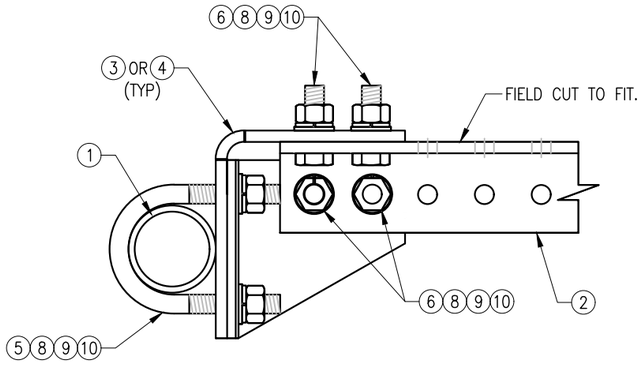
REV #: 0



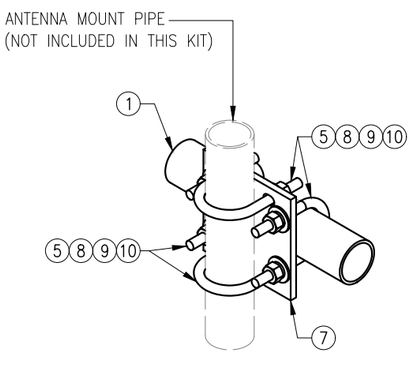
PLAN VIEW



DETAIL "A"



SECTION "A–A"



DETAIL "B"

NOTES:
1. HOT–DIPPED GALVANIZED PER ASTM A123.

VZW SMART–PLK1 (SUPPORT RAIL KIT)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	PST2875–12.5	2.5" PST (2.875" O.D. X 0.203" THK.) X 12'–6" A53 GR–B	PLK1–F1	292
2	3	L33375–3	L 3" X 3" X 3/8" X 3'–0" A36	PLK1–F1	66
3	3	CBP–L	CORNER BENT PLATE BRACKET	PLK1–F2	28
4	3	CBP–R	CORNER BENT PLATE BRACKET	PLK1–F2	28
5	60	MS02–625–300–500	RU–BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	RBC–1	82
6	24	---	BOLT 5/8" X 2" A325	---	9
7	12	PL375–857	PL 3/8" X 8 1/2" X 7'–0" A36	PLK1–F3	77
8	144	FW–625	5/8" HDG USS FLAT WASHER	---	12
9	144	LW–625	5/8" HDG LOCK WASHER	---	3
10	144	NUT–625	5/8" HDG HEX NUT	---	17
				GALVANIZED WT	504

VzW SMART Tool© Vendor

verizon

DRAWN BY: H.R | CHECKED BY: HMA

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	H.R	05/08/20

SHEET TITLE:

VZWSMART–PLK1
SUPPORT RAIL KIT

SHEET NUMBER: VZWSMART–PLK1

REV #: 0

EXHIBIT G

Power Density / RF Emissions Report

FOX HILL TELECOM

Radio Frequency Emissions Analysis Report

Prepared for:

Crown Site ID: 826222_Newtown/RT-25

Verizon Wireless Site Name: Newtown South CT

Verizon Wireless FUZE ID: 16092597

Site Address:

201 South Main Street

Newtown, CT 06470

May 28, 2024

Fox Hill Telecom Project Number: 240145

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	22.03 %

FOX HILL TELECOM

May 28, 2024

Crown Castle
1800 W. Park Drive
Westborough, MA 01581

Emissions Analysis for:

Crown Castle Site: **826222 – Newtown/RT-25**

Verizon Wireless Site: Newtown South CT

Fox Hill Telecom, Inc ("Fox Hill") was directed to analyze the proposed upgrades for Verizon Wireless to the Crown Castle facility located at **201 South Main Street, Newtown, CT**, for the purpose of determining whether the emissions from the Proposed Verizon Wireless Antenna Installation, in addition to all existing radio systems located on this property, are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

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

General population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 700 MHz band & the 850 MHz cellular band are approximately 497 $\mu W/cm^2$ and 586 $\mu W/cm^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 3700 MHz (C band) frequency bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report the percentage of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were performed for the proposed upgrades to the Crown Castle facility for Verizon Wireless located at **201 South Main Street, Newtown, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65 for far field modeling calculations.

In OET-65, plane wave power densities in the far field of an antenna are calculated by considering antenna gain and reflective waves that would contribute to exposure.

Since the radiation pattern of an antenna has developed in the **far field** region the power gain in specific directions needs to be considered in exposure predictions to yield an Effective Radiated Power (ERP) in each specific direction from the antenna. Also, since the vertical radiation pattern of the antenna is considered, the exposure calculations would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels. To determine a worst-case scenario at each point along the calculation radials, each point was calculated using the antenna gain value at each angle of incident and compared against the result using an isotropic radiator at the antenna height with the greater of the two used to yield the more pessimistic far field value for each point along the calculation radial.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential 1.6 times increase in power density in calculating far field power density values.

With these factors considered, the worst case **far field prediction model** utilized in this analysis is determined by the following equation:

Equation 9 per FCC OET65 for Far Field Modeling

$$S = \frac{33.4\ ERP}{R^2}$$

S = Power Density (in μw/cm^2)
ERP = Effective Radiated Power from antenna (watts)
R = Distance from the antenna (meters)

Predicted far field power density values for all carriers identified in this report were calculated 6 feet above the ground level and are displayed as a percentage of the applicable FCC standards. All emissions values for other carriers were calculated using the same Far Field model outlined above, using industry standard radio configurations and frequency band selection based upon available licenses in this geographic area for emissions contribution estimates.

For each Verizon Wireless sector, the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
LTE	700 MHz	4	40
LTE / 5G	850 MHz	4	40
LTE	1900 MHz (PCS)	4	40
LTE	2100 MHz (AWS)	4	40
CDMA	850 MHz	1	30
5G	3700 MHz (C Band)	2	160

Table 1: Channel Data Table

The following **Verizon Wireless** antennas listed in *Table 2 – Antenna Data* were used in the modeling for transmission in the 700 MHz, 850 MHz, 1900 MHz (PCS), 2100 MHz (AWS) and 3700 MHz (C Band) frequency bands. This is based on feedback from Verizon Wireless regarding anticipated antenna selection. Maximum gain values for all antennas are listed in *Table 3 – Verizon Wireless Inventory and Power Data* below.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Commscope SBNHH-1D65B	127
A	2	Commscope SBNHH-1D65B	127
A	3	RFS APL866513	127
A	4	Samsung MT6413-77A	127
A	5	RFS APL866513 (Dormant)	127
B	1	Commscope SBNHH-1D65B	127
B	2	Commscope SBNHH-1D65B	127
B	3	RFS APL866513	127
B	4	Samsung MT6413-77A	127
B	5	RFS APL866513 (Dormant)	127
C	1	Commscope SBNHH-1D65B	127
C	2	Commscope SBNHH-1D65B	127
C	3	RFS APL866513	127
C	4	Samsung MT6413-77A	127
C	5	RFS APL866513 (Dormant)	127

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.

RESULTS

Per the calculations completed for the proposed Verizon Wireless configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Commscope SBNHH-1D65B	700 MHz / 850 MHz	12.15 / 12.45	8	320	5,437.62	1.53
Antenna A2	Commscope SBNHH-1D65B	1900 MHz (PCS) / 2100 MHz (AWS)	15.05 / 15.15	8	320	10,355.68	0.78
Antenna A3	RFS APL866513	850 MHz	12.95	1	30	591.73	3.34
Antenna A4	Samsung MT6413-77A	3700 MHz (C Band)	23.15	2	320	66,092.16	0.13
Antenna A5	RFS APL866513 (Dormant)	NA	NA	0	0	0.00	0.00
						Sector A Composite MPE%	**5.78**
Antenna B1	Commscope SBNHH-1D65B	700 MHz / 850 MHz	12.15 / 12.45	8	320	5,437.62	1.53
Antenna B2	Commscope SBNHH-1D65B	1900 MHz (PCS) / 2100 MHz (AWS)	15.05 / 15.15	8	320	10,355.68	0.78
Antenna B3	RFS APL866513	850 MHz	12.95	1	30	591.73	3.34
Antenna B4	Samsung MT6413-77A	3700 MHz (C Band)	23.15	2	320	66,092.16	0.13
Antenna B5	RFS APL866513 (Dormant)	NA	NA	0	0	0.00	0.00
						Sector B Composite MPE%	**5.78**
Antenna C1	Commscope SBNHH-1D65B	700 MHz / 850 MHz	12.15 / 12.45	8	320	5,437.62	1.53
Antenna C2	Commscope SBNHH-1D65B	1900 MHz (PCS) / 2100 MHz (AWS)	15.05 / 15.15	8	320	10,355.68	0.78
Antenna C3	RFS APL866513	850 MHz	12.95	1	30	591.73	3.34
Antenna C4	Samsung MT6413-77A	3700 MHz (C Band)	23.15	2	320	66,092.16	0.13
Antenna C5	RFS APL866513 (Dormant)	NA	NA	0	0	0.00	0.00
						Sector C Composite MPE%	**5.78**

Table 3: Verizon Wireless Inventory and Power Data table

Table 4: All Carrier MPE Contributions shows all additional identified carriers on site and their emissions contribution estimates, along with the newly calculated maximum Verizon Wireless far field emissions contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas the highest recorded sector value be used for composite site emissions values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three Verizon Wireless sectors have the same configuration yielding the same results for all three sectors. *Table 5* below shows a summary for each Verizon Wireless Sector as well as the composite estimated emissions value for the site.

Site Composite MPE%	
Carrier	**MPE%**
Verizon Wireless – Max Per Sector Value	**5.78 %**
T-Mobile	2.27 %
Sprint	1.00 %
AT&T	5.18 %
Dish	7.80 %
Site Total MPE %:	**22.03 %**

Table 4: All Carrier MPE Contributions

Verizon Wireless Sector A Total:	5.78 %
Verizon Wireless Sector B Total:	5.78 %
Verizon Wireless Sector C Total:	5.78 %
Site Total:	22.03 %

Table 5: Site MPE Summary

Table 6 below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated Verizon sector(s). For this site, all three Verizon Wireless sectors have the same configuration yielding the same results for all three sectors.

Verizon Wireless _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
Verizon Wireless 700 MHz LTE	4	656.24	127	4.17	700 MHz	497	0.84%
Verizon Wireless 850 MHz LTE / 5G	4	703.17	127	4.04	850 MHz	586	0.69%
Verizon Wireless 1900 MHz (PCS) LTE	4	1,279.56	127	3.90	1900 MHz (PCS)	1000	0.39%
Verizon Wireless 2100 MHz (AWS) LTE	4	1,309.36	127	3.90	2100 MHz (AWS)	1000	0.39%
Verizon Wireless 850 MHz CDMA	1	591.73	127	19.57	850 MHz	586	3.34%
Verizon Wireless 3700 MHz (C Band) 5G	2	33,046.08	127	1.30	3700 MHz (C Band)	1000	0.13%
						Total:	**5.78 %**

Table 6: Verizon Wireless Maximum Sector MPE Power Values

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the Verizon Wireless facility as well as the site composite emissions estimates value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

Verizon Wireless Sector	Power Density Value (%)
Sector A:	5.78 %
Sector B:	5.78 %
Sector C:	5.78 %
Verizon Wireless Maximum Total (per sector):	5.78 %
Site Total:	22.03 %
Site Compliance Status:	**COMPLIANT**

The estimated composite emissions value for this site, assuming all carriers present, is **22.03 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon the far field calculations performed for all carriers identified in this report.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite estimated values calculated were well within the allowable 100% threshold standard per the federal government.

Scott Heffernan
Principal RF Engineer
Fox Hill Telecom, Inc
Worcester, MA 01609
(978)660-3998

EXHIBIT H

Recipient Mailing Records

From: TrackingUpdates@fedex.com
To: Bachi, Jennifer
Subject: FedEx Shipment 776713497316: Your package has been delivered / 826222 - 1st Selectman
Date: Thursday, June 6, 2024 10:01:33 AM

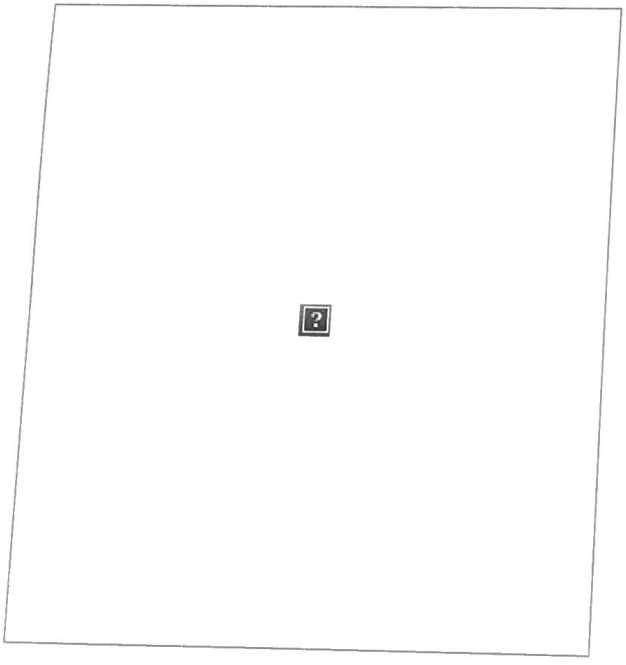
CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi. Your package was delivered Thu, 06/06/2024 at 9:53am.

OBTAIN PROOF OF DELIVERY

How was your delivery ?

TRACKING NUMBER	776713497316
FROM	KING OF PRUSSIA, PA, US
TO	NEWTOW, CT, US
SHIP DATE	Wed 6/05/2024 06:04 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Pak
ORIGIN	KING OF PRUSSIA, PA, US
DESTINATION	NEWTOW, CT, US
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Priority Overnight



Absolutely, positively committed to you

Every delivery deserves extra care. Even if it means one of our drivers takes on the role of ringbearer for a customer's wedding. We'll work to make your next delivery special too.

WATCH FEDEX IN ACTION

FOLLOW FEDEX

FedEx®

Hi. Your package was delivered Thu, 06/06/2024 at 9:51am.

OBTAIN PROOF OF DELIVERY

How was your delivery ?

TRACKING NUMBER	776713569319
FROM	KING OF PRUSSIA, PA, US
TO	NEWTOWN, CT, US
SHIP DATE	Wed 6/05/2024 06:04 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Pak
ORIGIN	KING OF PRUSSIA, PA, US
DESTINATION	NEWTOWN, CT, US
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Priority Overnight

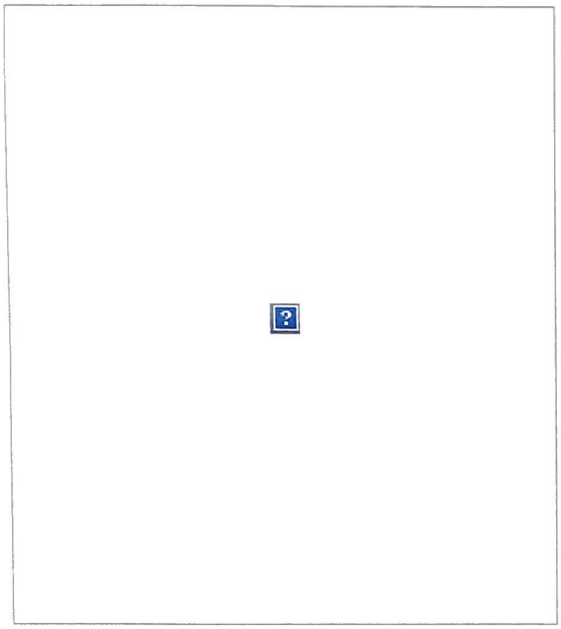
From: TrackingUpdates@fedex.com
To: Bachi, Jenifer
Subject: FedEx Shipment 776713614782: Your package has been delivered / 826222 - LL
Date: Thursday, June 6, 2024 10:16:08 AM

Hi. Your package was delivered Thu, 06/06/2024 at 10:09am.

OBTAIN PROOF OF DELIVERY

How was your delivery ?

TRACKING NUMBER	776713614782
FROM	KING OF PRUSSIA, PA, US
TO	FORT LAUDERDALE, FL, US
SHIP DATE	Wed 6/05/2024 06:04 PM
PACKAGING TYPE	FedEx Pak
ORIGIN	KING OF PRUSSIA, PA, US
DESTINATION	FORT LAUDERDALE, FL, US
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	1.00 LB
SERVICE TYPE	FedEx Priority Overnight



Absolutely, positively committed to you

Every delivery deserves extra care. Even if it means one of our drivers takes on the role of ringbearer for a customer's wedding. We'll work to make your next delivery special too.

WATCH FEDEX IN ACTION

FOLLOW FEDEX

ORIGIN ID:KPDA (610) 635-3221
JENNIFER BACHI
CROWN CASTLE
3200 HORIZON DRIVE
SUITE 150
KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 06JUN24
ACTWGT: 2.00 LB
CAD: 104924192/INET4730

BILL SENDER

TO MELANIE A. BACHMAN, EXEC DIRECTOR
CONNECTICUT SITING COUNCIL
10 FRANKLIN SQUARE

NEW BRITAIN CT 06051
(860) 827-2935 REF: 1766.668
INV:
PO: 826222_VERIZON DEPT:

583J36CA9/9AE3

FedEx Express

J242024032601uv

FRI - 07 JUN 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7767 1448 9120

06051
CT-US BDL

EB BDLA

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.