Crown Castle
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

August 3, 2020

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

RE: **Notice of Exempt Modification for AT&T - 876376**
123 Campville Hill Road, Harwinton, CT 06791
Latitude: 41° 44′ 12.40″ / Longitude: -73° 5′ 49.40″

Dear Ms. Bachman:

AT&T currently maintains nine (9) antennas at the 127-foot mount on the existing 177-foot Monopole Tower, located at 123 Campville Hill Road, Harwinton, Connecticut. The property is owned by the Harwinton Rod and Gun Club and the Tower is owned by Crown Castle. AT&T now intends to remove and replace three (3) existing antennas with three (3) new antennas. The new antennas will be installed at the 127-ft level of the tower.

The facility was approved by the Town of Harwinton Zoning Commission by way of a Special Use Permit on June 26, 2000. The approval was given with conditions which this exempt modification follows.

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 Michael Criss, First Selectman for the Town of Harwinton, Polly Redmond, Land Use Coordinator, Harwinton Rod & Gun Club as the property owner and 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, AT&T 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: Anne Marie Zsamba.

Sincerely,

Anne Marie Zsamba
Site Acquisition Specialist
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
(201) 236-9224
AnneMarie.Zsamba@crowncastle.com

Attachments
cc:

The Honorable Michael R. Criss, First Selectman (*via email only to mcriss@harwinton.us*)
Town of Harwinton
100 Bentley Drive
Harwinton, CT 06791

Polly Redmond, Land Use Coordinator (*via email only to predmond@harwinton.us*)
Town of Harwinton
100 Bentley Drive
Harwinton, CT 06791

Harwinton Rod & Gun Club (*via email only to snafu98@comcast.net*)
PO Box 181
Harwinton, CT 06791

Crown Castle, Tower Owner

From: Zsamba, Anne Marie
To: "snafu98@comcast.net"
Subject: Notice of Exempt Modification - AT&T - 123 Campville Hill Rd, Harwinton - 876376
Date: Monday, August 3, 2020 12:30:00 PM
Attachments: EM-AT&T-123 CAMPVILLE HILL RD, HARWINTON-876376-10041787-notice.pdf

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Dear Harwinton Rod & Gun Club:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, today Monday, August 3, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From: Zsamba, Anne Marie
To: predmond@harwinton.us
Subject: Notice of Exempt Modification - AT&T - 123 Campville Hill Rd, Harwinton - 876376
Date: Monday, August 3, 2020 12:30:00 PM
Attachments: EM-AT&T-123 CAMPVILLE HILL RD, HARWINTON-876376-10041787-notice.pdf

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Dear Ms. Redmond:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, today Monday, August 3, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From: Zsamba, Anne Marie
To: mcriss@harwinton.us
Subject: Notice of Exempt Modification - AT&T - 123 Campville Hill Rd, Harwinton - 876376
Date: Monday, August 3, 2020 12:30:00 PM
Attachments: EM-AT&T-123 CAMPVILLE HILL RD, HARWINTON-876376-10041787-notice.pdf

---

Dear First Selectman Criss:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, today Monday, August 3, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

Exhibit A

Original Facility Approval

DECISION

The Zoning Commission, having reviewed the application and documentation, having heard the testimony at public hearing sessions held March 20, April 24, and May 1, and having viewed the premises and its surroundings in light of the proposed application, hereby finds as follows:

1. The applicant has proven that a tower is necessary to serve the Route 8 corridor south of Route 118 (Exit 42) to Campville Road (Exit 41). The applicant has also proven that its 180' tower at 123 Campville Road would serve this area, albeit to a greater degree of coverage and signal level than the Commission believes is required by the Telecommunications Act of 1996. Therefore, the applicant has satisfied the public interest, convenience or necessity requirement of §8.10.2.

2. On balance, the applicant has proven that the proposed location is necessary, and to a lesser degree, that alternate locations where similar special permit uses are located (or proposed to be located) are not available as required by §8.10.3.

3. The applicant has not demonstrated that the visual inconvenience of the proposed tower at this location is clearly less than the public necessity which requires the tower at this location, as required under §8.10.4; however, the visual impact of the tower will be lessened by landscaping, mature true planting, and mature tree line preservation imposed as a condition of approval under §8.10.3 and §8.1.1(a).

4. The tower and its support facilities would constitute a principal use or structure to be located on the same lot with an exiting principal building or use, in violation of §6.1; however, the applicant and the property owner have proposed a subdivision feasibility plan and agreed to subdivide (if necessary), as a condition of approval, so as to satisfy §6.1 in conjunction with the rear lot requirements of §5 and §8.6.

5. Subject to reasonable conditions of approval and site plan modifications imposed by the Commission, the application will more closely comply with the general requirements of §8.1.1(a).

THEREFORE, based on the foregoing regulations, findings of fact and reasons for decision, Application No. 3830 for a special permit to construct a 180' telecommunications tower at 123 Campville Hill Road, as shown on 4 sheets constituting the site plan and erosion control plan, dated 12/10/99, revised 12/21/99, as modified by the preliminary subdivision plan dated 4/24/00 is hereby APPROVED, subject to the following conditions and modifications:

1. Tower Manager: That a Tower Management firm be designated by name, address, contact person and telephone number as the person and firm responsible for the construction and operation of the tower, and be kept current and on file with the Commission at all times.

2. Tower Removal Bond: That the applicant file, prior to construction, a tower removal bond, in sufficient amount, and with sufficient surety, to guarantee the cost of removal of the tower, fence, and accessory structures, when the tower is no longer in service (other than for routine maintenance and testing), or its lease (and renewal options) expire, whichever occurs first. The bond shall protect both the Town of Harwinton and the landowner, and their heirs, successors and assigns, as per C.G.S. §8-3(g) and Zoning Regulation §7.4, and shall be subject to review and approval every five (5) years hereafter as to sufficiency and amount.

3. Landscaping and Fencing: That the tower site be fenced with a secure chain link fence with green webbing, and such fence be maintained in a safe condition at all times. The applicant shall plant a mature (16' tall) evergreen buffer around the tower compound, which shall be maintained and replanted as necessary, during the life of the tower. As much of the mature tree line around the tower as is possible shall be preserved as determined by the Commission or its agent at a pre-construction on-site meeting.

4. Security Alarm: That the tower be protected by a security alarm which shall be regularly tested and operational at all times.

5. EMF Certification: That each carrier shall certify that the EMF output of any antenna, combined with that of any previously installed antenna(s), is within FCC standards for public health and safety, and that the Tower Manager provide annual certification during the service life of the tower.

6. Tower Construction: That the monopole tower satisfy all structural requirements of the State Building Code, as certified by a Connecticut licensed

structural engineer; that the applicant comply with the threshold structural notification requirements of C.G.S. §29-276b and the Connecticut Supplement to the State Building Code; and that the monopole be of a matte gray finish with no lights or striping.

7. Fall Zone: That the property lines be maintained at all times while the tower is standing at a distance from the base of the tower not less than its total height.

8. Municipal, VFD and EMS Use: As offered by the applicant at the public hearing, that the Town of Harwinton, the Westside Volunteer Fire Department, the Harwinton Volunteer Fire Department and the Harwinton Ambulance Association be allowed to place their antenna(s) on the tower at no cost, provided that there is no proven signal interference and subject to such reasonable terms and conditions as the applicant or Tower Manager may impose.

9. Future structures and modifications: That any future structural additions or modifications, including accessory structures, be submitted to the Zoning Commission in accordance with the Zoning Regulations of the Commission then in effect, i.e., Regulations §A.8.10.1 - A.8.10.12, as amended, and any other land use regulations and ordinances as may then be in effect.

10. Recording and filing: That this special permit and the mylar site plans, be recorded in the Harwinton Land Records within fifteen (15) days, and shall run with the land described in the Harwinton Land Records in Volume 152 at Pages 53-54, Assessors Map A4-05-0002.

11. Subdivision approval: A five (5) acre rear lot shall be created solely for the tower and its accessory structure with its own 50' wide access way, on which no other principal uses or structures shall be permitted, in conformity with Regulations §§5, 6.1 and 8.6, and pursuant to subdivision approval, if required, (i.e., if "free split" privilege has been exhausted since September 30, 1961), as shown on the preliminary subdivision plan dated 4/24/00.

12. General requirements: The utility service to the property, including the tower, shall be buried underground, and the carriers' utility lockers or cabinets shall be enclosed within a wood, colonial style carriage shed type building to comply with Regulations §8.1.1(a).

Dated at Harwinton, Connecticut this 26 day of June, 2000.

HARWINTON ZONING COMMISSION

By: _____
John Byrnes
Its Chairman

A:\MDR.harwinton.2\HPC. notice of decison - 123 Campville Hill Road.wpd

Exhibit B

Property Card

qPublic.net™ Town of Harwinton, CT

Summary

ParcelId	1225
Account Number	2581
Location Address	123 CAMPVILLE HILL
Map-Block-Lot	A4 /05 /0002
Use Class/Description	1-1 RES LAND
Assessing Neighborhood	0001A
Census Tract	298400000000
Acreage	49
Utilities	

Owner

HARWINTON ROD & GUN CLUB
PO BOX 181
HARWINTON, CT 06791

Current Appraised Value

		2019	2018	2017
+	Building Value	$196,600	$196,600	$205,400
+	XF Value	$0	$0	$0
+	OB Value	$0	$0	$0
+	Land Value	$594,300	$594,300	$391,460
+	Special Land Value			
+	Total Appraised Value	$790,900	$790,900	$596,860
+	Net Appraised Value	$790,900	$790,900	$596,860
+	Current Assessment	$324,650	$324,650	$220,070

Assessment History

		2018	2017	2016	2015
+	Building Value	$137,620	$143,780	$143,780	$143,780
+	OB/Misc	$0	$0	$0	$0
+	Land	$187,030	$76,290	$76,290	$76,290
+	Total Assessment	$324,650	$220,070	$220,070	$220,070

Land

Use	Class	Zoning	Area	Value
1-1 RES LAND	R	CR2	2 AC	$75,900
6-2 FOREST LD	R		47 AC	$338,400
3-1 IND LAND	I		1 BL	$180,000

Building Data

Building #	1
Style	Camp
Actual Year Built	1977
Effective Year Built	1980
Living Area	5892
Stories	1
Grade	Average
Exterior Wall	Wood on Sheath
Interior Wall	Wall Brd/Wood
Fireplaces	
Roof Cover	Asph/F Gls/Cmp
Roof Structure	Gable/Hip
Floor Type	Average
Heat Type	Forced Air-Duc
Fuel Type	Oil
AC	None
Bdrms/Ful Bth/Hlf Bth/Ttl Rm	0/1/0/2

Building Sub Areas

Code	Description	Living Area	Gross Area	Effective Area
BAS	First Floor	5892	5892	5892
FST	Utility Storage	0	2400	1200
PTO	Patio	0	210	21
	Totals	5892	8502	7113

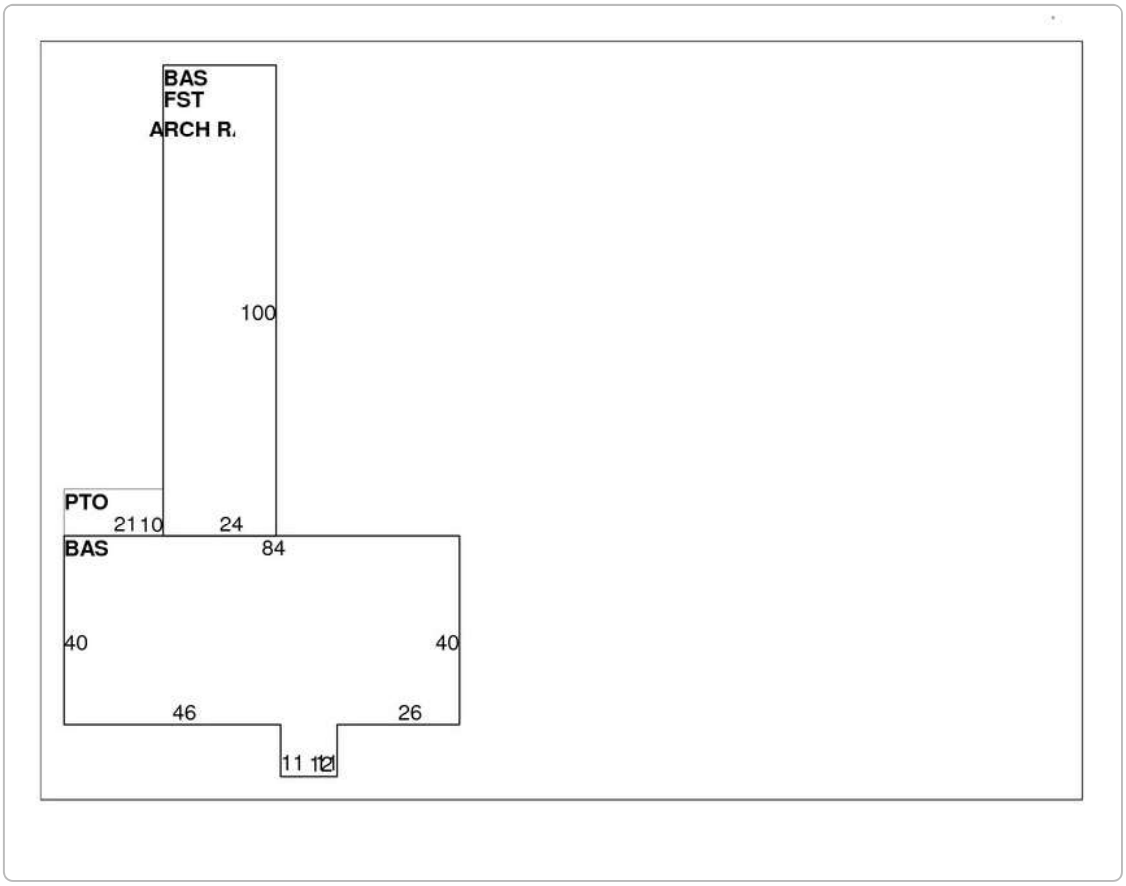
Sales History

Sales Date	Type of Document	Grantee	Vacant/Improved	Book/Page	Amount
12-30-1997	Q	HARWINTON ROD & GUN CLUB	Improved	0152/0053	$50,000
07-08-1957		SLATE ALICE	Improved	0049/0488	$0

Permit Information

Permit ID	Issue Date	Type	Description	Amount	Inspection Date	% Complete	Date Complete	Comments
19171B	12-06-2019		14X20 PAVILLION	$6,000		100		
1864E	11-05-2019		STAND BY GENERATOR	$8,500		100		
198E	01-31-2019	EL	Electric	$2,500		100		
17164B	11-09-2017		ADD 3 ANTENNAS	$20,000		100		
176CA	02-06-2017	CO	CO ISSUED	$0		100		T-MOBILE
16146B	08-02-2016		CONCRETE PATIO 30X30	$6,175		0		
1647E	03-08-2016	EL	Electric	$2,500		0		
9416	10-24-2014		MODIFICATIONS	$20,000		0		
8760	01-17-2013		FACILITY MODIFICATIO	$25,000		0		
8757	01-02-2013		ANTENNA SWAP	$10,000		0		
8704	11-21-2012		ANTENNAS	$12,000		0		
8339	01-13-2012			$92		0		REPLACING 6 ANTENNAS WITH NEWER MODELS
7560	09-28-2009	DE	Demolish	$1,500		0		
0000	09-10-2009	CO	CO ISSUED	$0		0		
7495	07-14-2009	EL	Electric	$3,000		0		
7486	07-01-2009	AD	Addition	$31,395		0		CEL TOWER
	03-17-2009	EL	Electric	$0		0		INSTALLING ANTENNAS & RADIO
7201	07-09-2008			$28,000		0		NEW VINYL SIDING
6437	06-21-2008	EL	Electric	$8,000		0		

Sketch



Photos

No data available for the following modules: Commercial Building, Out Buildings\Extra Features.

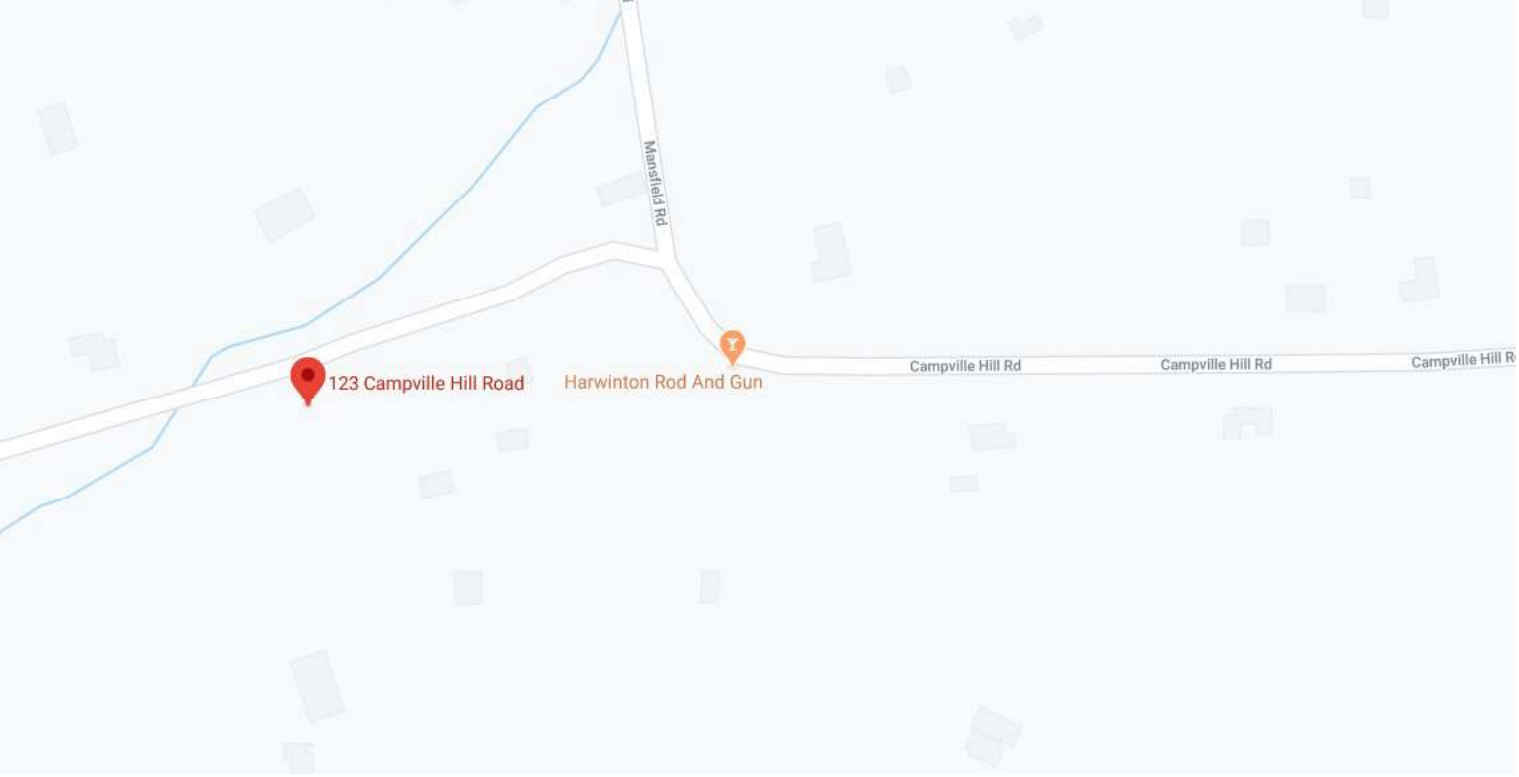

Mansfield Rd
123 Campville Hill Road
Harwinton Rod And Gun
Campville Hill Rd
Campville Hill Rd
Campville Hill R

Exhibit C

Construction Drawings

AT&T

AT&T SITE NUMBER:	CT1132	**BUSINESS UNIT #:**	876376
AT&T SITE NAME:	HARWINTON-CAMPVILL HILL RD	**SITE ADDRESS:**	123 CAMPVILLE HILL RD. HARWINTON, CT 06791
AT&T FA CODE:	10041787	**COUNTY:**	LITCHFIELD
AT&T PACE NUMBER:	MRCTB047271 / MRCTB047188 / MRCTB047236	**SITE TYPE:**	MONOPOLE
AT&T PROJECT:	LTE 2C / 5GNR / 4T4R+PACE	**TOWER HEIGHT:**	177'-0"

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	SCOVILLE HILL / HARWINTON ROD
SITE ADDRESS:	123 CAMPVILLE HILL RD. HARWINTON, CT 06791
COUNTY:	LITCHFIELD
MAP/PARCEL #:	A4-05-0002
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41° 44' 12.40"
LONGITUDE:	-73° 05' 49.40"
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	730 FT.
CURRENT ZONING:	CR - COUNTY RESIDENTIAL
JURISDICTION:	TOWN OF HARWINTON
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	HARWINTON ROD & GUN CLUB, INC. P.O. BOX 181 HARWINTON, CT 06791-0181
TOWER OWNER:	GLOBAL SIGNAL ACQUISITIONS II LLC 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	AT&T TOWER ASSET GROUP 575 MOROSGO DRIVE ATLANTA, GA 30324-3300
ELECTRIC PROVIDER:	CONNECTICUT LIGHT & POWER CO (800) 286-2000
TELCO PROVIDER:	CHARTER COMMUNICATIONS (888) 428-2427

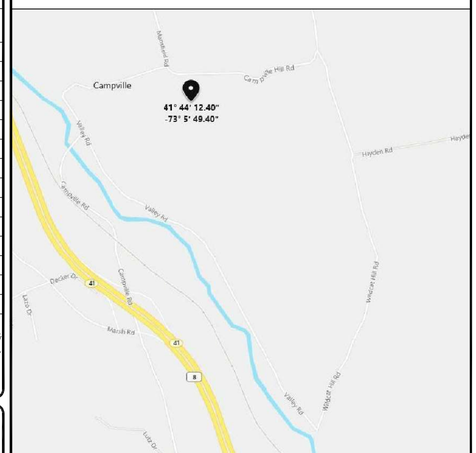
DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	SITE PLAN
C-1.2	EXISTING & FINAL EQUIPMENT PLANS
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	FINAL EQUIPMENT SCHEDULE
C-4	EQUIPMENT SPECS
G-1	GROUNDING SCHEMATIC
G-2	GROUNDING DETAILS
ATTACHED	PLUMBING DIAGRAMS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11X17. 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!

LOCATION MAP



NO SCALE

SITE PHOTO

PROJECT TEAM

A&E FIRM:	CROWN CASTLE USA INC. 2000 CORPORATE DRIVE CANONSBURG, PA 15317 CROWNAE.APPROVAL@CROWNCASTLE.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS:	3 CORPORATE PARK DRIVE, SUITE 101 CLIFTON PARK, NY 12065 VERONICA DELIA - PROJECT MANAGER (610) 635-3222 JASON D'AMICO - CONSTRUCTION MANAGER (860) 209-0104

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 (1) KMW COMM - AW-X-CD-14-65-00T-RET ANTENNA
- REMOVE (1) KMW COMM - AW-X-CD-16-65-00T-RET ANTENNA
- REMOVE (1) KATHREIN - 800-10764 ANTENNA
- REMOVE (3) POWERWAVE TECH - 7770 ANTENNAS
- REMOVE (3) ERICSSON - RRUS-11 B12 RRUs
- INSTALL (3) CCI - OPA65R-BU4DA ANTENNAS
- INSTALL (3) CCI - DMP65R-BU4DA ANTENNAS
- INSTALL (3) ERICSSON - 4449 B5/B12 RRUs
- INSTALL (3) ERICSSON - 4478 B14 RRUs
- INSTALL (3) ERICSSON - 8843 B2/B66A RRUs
- INSTALL (3) VALMONT - RRUDSM BACK TO BACK RRU MOUNTS
- INSTALL (1) RAYCAP - DC6-48-60-18-8C-EV SQUID
- INSTALL (2) #6AWG DC CABLES
- INSTALL (1) FIBER CABLE

GROUND SCOPE OF WORK:
- REMOVE (6) DIPLEXERS
- REMOVE (1) POWER PLANT
- INSTALL (2) 6630 + IDLE
- INSTALL (12) UP CONVERTERS
- INSTALL (1) BREAKER PANEL FLEX CAB
- INSTALL (1) NETSURE 7100 POWER PLANT
- INSTALL (3) BATTERY STRINGS

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	2018 CT STATE BUILDING CODE/2015 IBC W/ CT AMENDMENTS
MECHANICAL	2018 CT STATE BUILDING CODE/2015 IMC W/ CT AMENDMENTS
ELECTRICAL	2018 CT STATE BUILDING CODE/2017 NEC W/ CT AMENDMENTS

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS: B+T GROUP
DATED: JULY 16, 2020

MOUNT ANALYSIS: TOWER ENGINEERING PROFESSIONALS
DATED: JULY 10, 2020

RFDS REVISION: PRELIMINARY
DATED: 06/30/20

ORDER ID: 517077
REVISION: 0

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

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

AT&T SITE NUMBER: **CT1132**

BU #: **876376**
SCOVILLE HILL / HARWINTON ROD

123 CAMPVILLE HILL RD.
HARWINTON, CT 06791

EXISTING 177'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
B	05/21/20	AMM	PRELIMINARY	RO
C	06/04/20	AMM	PRELIMINARY	RO
0	07/02/20	AMM/AK	CONSTRUCTION	JL
1	07/27/20	AK	CONSTRUCTION	JL

DocuSigned by: [signature]
1B4805B2...
STATE OF CONNECTICUT
JUSTIN ... TTE
No. 31965
LICENSED PROFESSIONAL ENGINEER
7/28/2020 | 11:49:01 AM EDT

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	1

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" 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: AT&T
   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–POTENTAL 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. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
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 "AT&T".
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

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

AT&T SITE NUMBER: **CT1132**

BU #: **876376**
SCOVILLE HILL / HARWINTON ROD

123 CAMPVILLE HILL RD.
HARWINTON, CT 06791

EXISTING 177'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
B	05/21/20	AMM	PRELIMINARY	RO
C	06/04/20	AMM	PRELIMINARY	RO
0	07/02/20	AMM/AK	CONSTRUCTION	JL
1	07/27/20	AK	CONSTRUCTION	JL

DocuSigned by: Justin Lunette
1B4005B2547C41D...
STATE OF CONNECTICUT — JUSTIN PETER LUNETTE — No. 31965 — LICENSED PROFESSIONAL ENGINEER
7/28/2020 | 11:49:01 AM EDT

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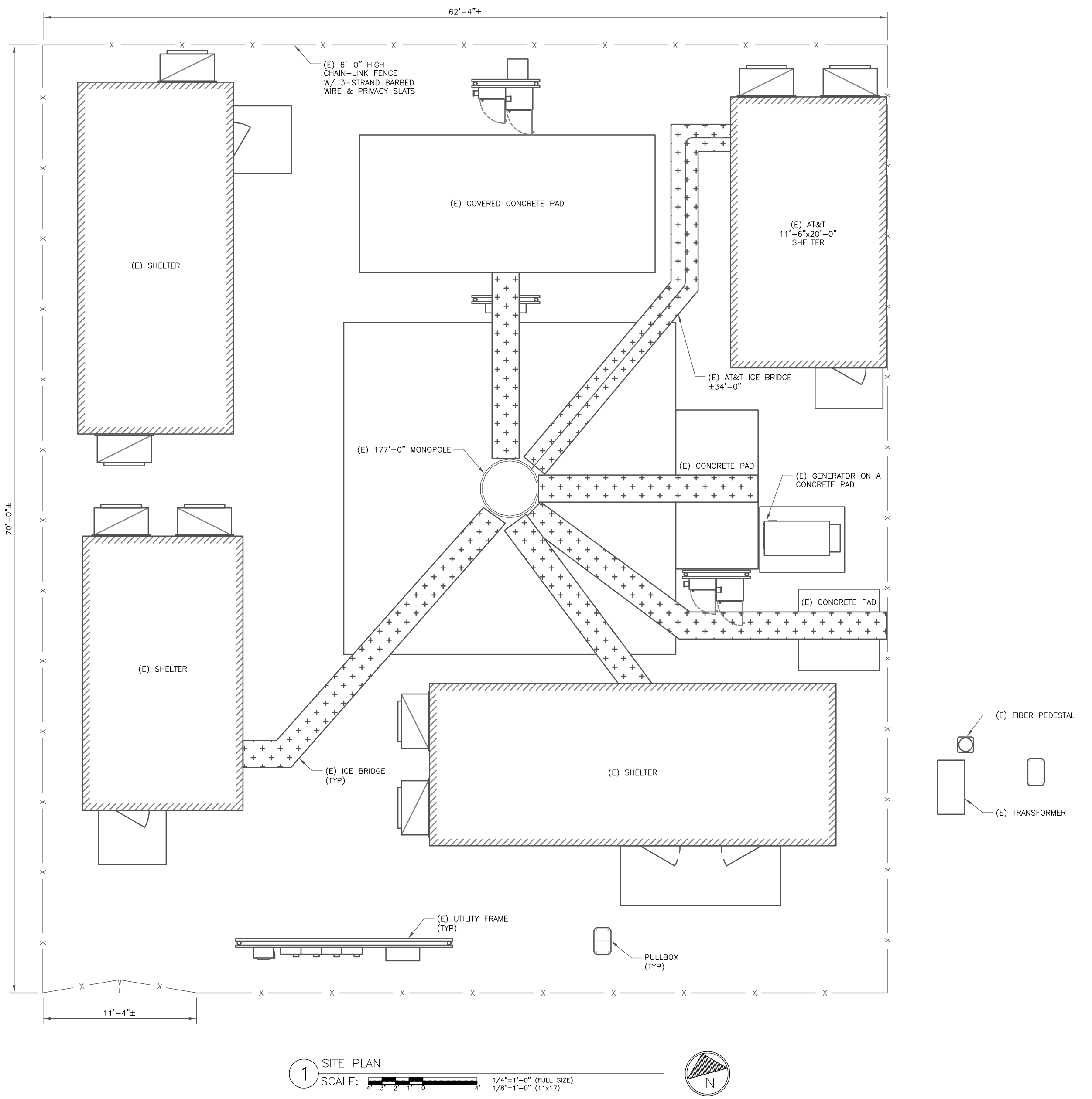
SHEET NUMBER: T-2
REVISION: 1



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

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DocuSigned by:
Justin Paquette
1B4905B2...

STATE OF CONNECTICUT
JUSTIN PAQUETTE
No. 31965
LICENSED PROFESSIONAL ENGINEER

7/28/2020 | 11:49:01 AM EDT

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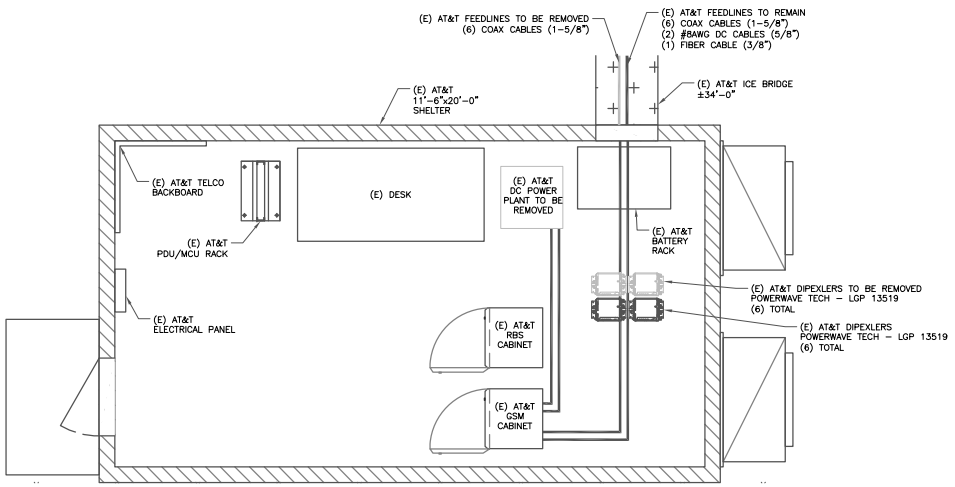
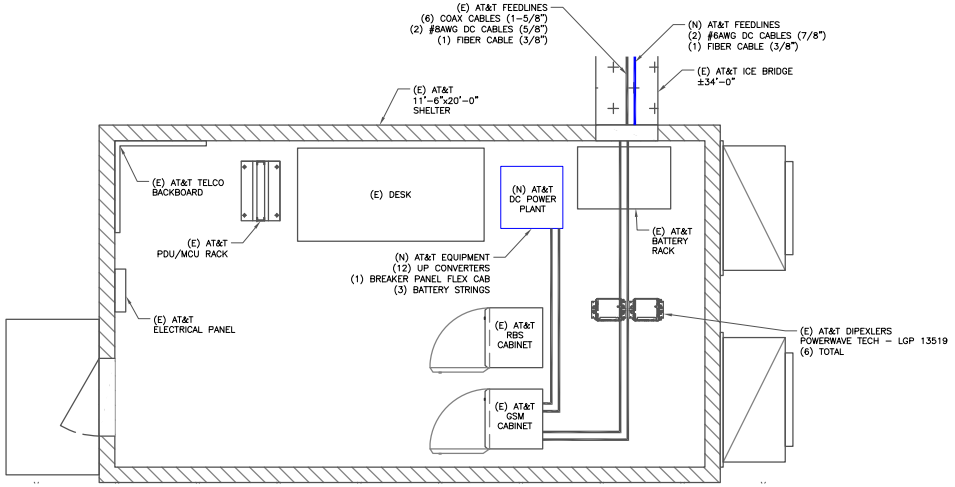
SHEET NUMBER: C-1.1
REVISION: 1



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

N



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

N

GROUND SCOPE OF WORK:

- REMOVE (6) DIPLEXERS
- REMOVE (1) POWER PLANT
- INSTALL (2) 6630 + IDLE
- INSTALL (12) UP CONVERTERS
- INSTALL (1) BREAKER PANEL FLEX CAB
- INSTALL (1) NETSURE 7100 POWER PLANT
- INSTALL (3) BATTERY STRINGS

INSTALLER NOTE:

NEW POWER PLANT TO REPLACE EXISTING. MAKE & MODEL TO BE DETERMINED. CROWN CASTLE HAS BEEN INFORMED BY THE CARRIER THAT THE NEW POWER PLANT WILL UTILIZE THE EXISTING BREAKERS, WIRE, AND CONDUITS THAT WERE FEEDING THE POWER PLANT BEING REPLACED. IT IS OUR UNDERSTANDING THAT NO ADDITIONAL RECTIFIERS ARE TO BE ADDED AND NO ADDITIONAL WIRING IS NECESSARY. CONTRACTOR IS TO NOTIFY THE ENGINEER OF RECORD IF ANY ELECTRICAL MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEM ARE NECESSARY.

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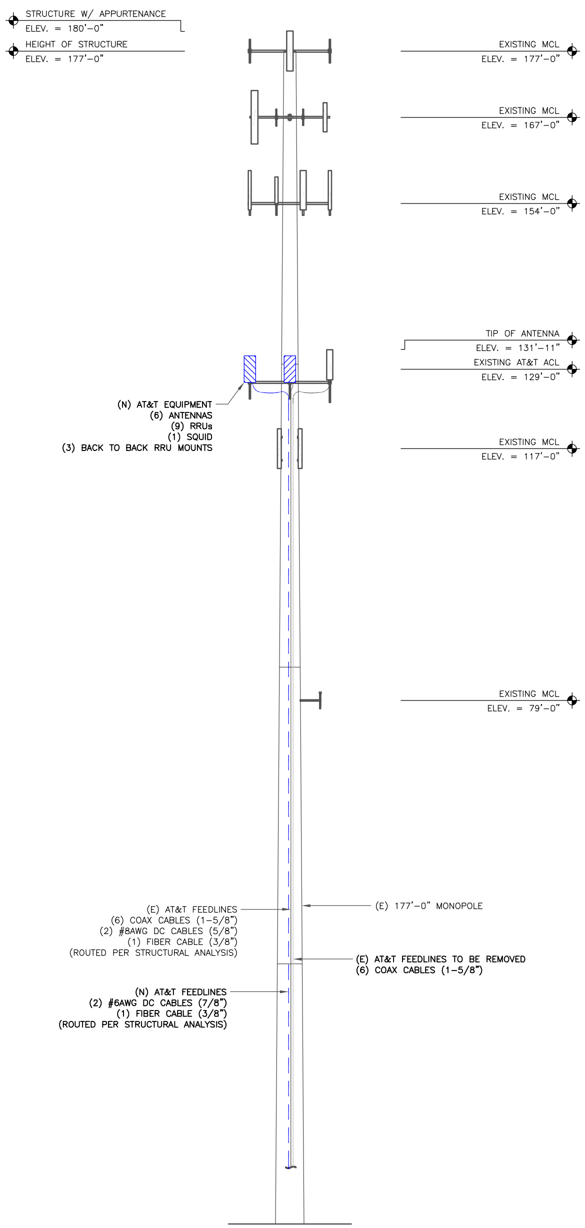
STATE OF CONNECTICUT
JUSTIN T. PINETTE
No. 31965
LICENSED PROFESSIONAL ENGINEER

DocuSigned by:
Justin Pinette
164B05B2...

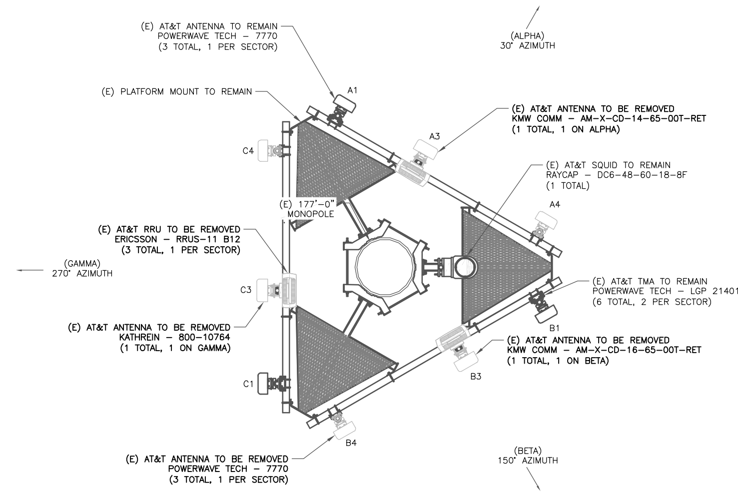
7/28/2020 | 11:49:01 AM EDT

Crown Castle USA Inc. Certificate of Registration #PEC.0001101

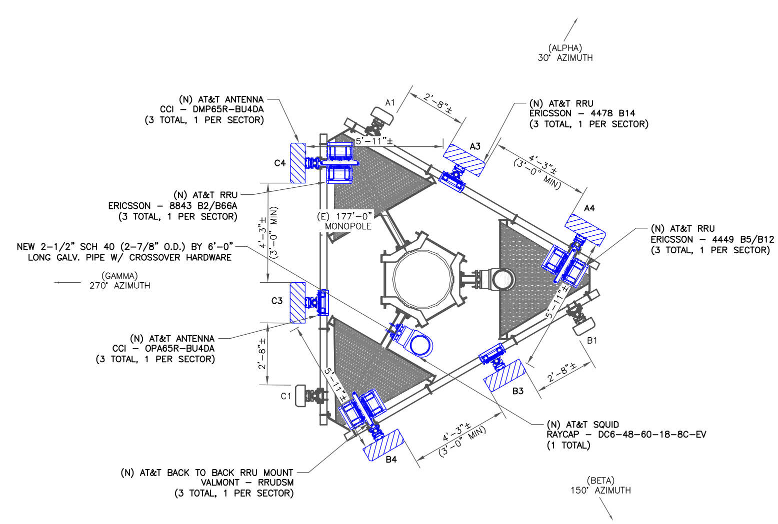
SHEET NUMBER:	REVISION:
C-1.2	1



1 FINAL ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN
SCALE: 3/8"=1'-0" (FULL SIZE) 3/16"=1'-0" (11x17)



3 FINAL ANTENNA PLAN
SCALE: 3/8"=1'-0" (FULL SIZE) 3/16"=1'-0" (11x17)

"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.

INSTALLER NOTES:

1. REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
2. REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
3. CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.
4. 3'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE ANTENNAS ON SAME SECTOR.
5. 6'-0" MINIMUM DISTANCE REQUIRED BETWEEN 700BC & 700DE ANTENNAS ON SAME SECTOR.
6. 4'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE 700 ANTENNAS ON OPPOSING SECTORS.
7. ALL ANTENNA MEASUREMENT DISTANCES MUST BE EDGE TO EDGE (RELOCATE ANTENNAS AS NEEDED).
8. 8" MINIMUM DISTANCE REQUIRED BETWEEN ANTENNA & RADIO. SEE GENERIC EXAMPLE DETAIL ON SHEET C-4.
9. AT&T TO SPECIFY APPROVED SPACING BETWEEN LTE AND UMTS ANTENNAS.

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BU #: **876376**
SCOVILLE HILL / HARWINTON ROD

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DocuSigned by: Justin Ducetti
1B4905B25...
STATE OF CONNECTICUT
JUSTIN P. DUCETTE
No. 31965
LICENSED PROFESSIONAL ENGINEER
7/28/2020 | 11:49:01 AM EDT

Crown Castle USA Inc. Certificate of Registration #PEC.0001101

SHEET NUMBER: C-2
REVISION: 1

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
ALPHA																		
A1	UMTS	(E) POWERWAVE TECH 7770	30°	129'-0"	–	–	–	2	(E)	GROUND	2	(E)	–	–	2	(E) COAX	1-5/8"	179'-0"
A2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
A3	LTE	(N) CCI OPA65R-BU4DA	30°	129'-0"	1	(N) 4478 B14	TOWER	–	–	–	–	–	1	(E) DC6-48-60-18-8F	2	(E) #8AWG DC	5/8"	179'-0"
															1	(E) FIBER	3/8"	179'-0"
A4	LTE/5G	(N) CCI DMP65R-BU4DA	30°	129'-0"	1	(N) 4449 B5/B12	TOWER	–	–	–	–	–	–	–	–	–	–	–
					1	(N) 8843 B2/B66A	TOWER											
BETA																		
B1	UMTS	(E) POWERWAVE TECH 7770	150°	129'-0"	–	–	–	2	(E)	GROUND	2	(E)	–	–	2	(E) COAX	1-5/8"	179'-0"
B2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
B3	LTE	(N) CCI OPA65R-BU4DA	150°	129'-0"	1	(N) 4478 B14	TOWER	–	–	–	–	–	1	(N) DC6-48-60-18-8C-EV	2	(N) #6AWG DC	7/8"	179'-0"
															1	(N) FIBER	3/8"	179'-0"
B4	LTE/5G	(N) CCI DMP65R-BU4DA	150°	129'-0"	1	(N) 4449 B5/B12	TOWER	–	–	–	–	–	–	–	–	–	–	–
					1	(N) 8843 B2/B66A	TOWER											
GAMMA																		
C1	UMTS	(E) POWERWAVE TECH 7770	270°	129'-0"	–	–	–	2	(E)	GROUND	2	(E)	–	–	2	(E) COAX	1-5/8"	179'-0"
C2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
C3	LTE	(N) CCI OPA65R-BU4DA	270°	129'-0"	1	(N) 4478 B14	TOWER	–	–	–	–	–	–	–	–	–	–	–
C4	LTE/5G	(N) CCI DMP65R-BU4DA	270°	129'-0"	1	(N) 4449 B5/B12	TOWER	–	–	–	–	–	–	–	–	–	–	–
					1	(N) 8843 B2/B66A	TOWER											

NOTE:
(E) – EXISTING
(N) – NEW

1 FINAL EQUIPMENT SCHEDULE
SCALE: NOT TO SCALE

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STATE OF CONNECTICUT
JUSTIN DUCETTE
No. 31965
LICENSED PROFESSIONAL ENGINEER
7/28/2020 | 11:49:01 AM EDT

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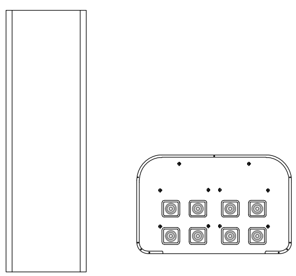
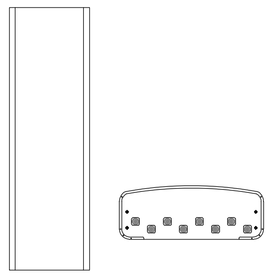
SHEET NUMBER: C-3
REVISION: 1



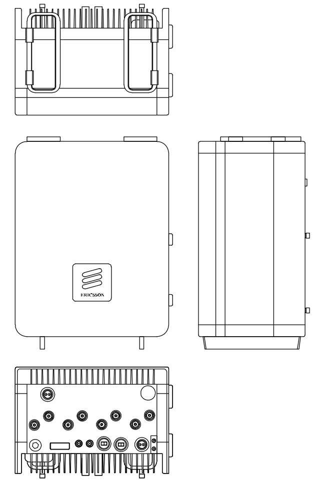
CCI ANTENNAS – OPA65R–BU4DA
WEIGHT (WITHOUT MOUNTING HARDWARE): 62.3 LBS
SIZE (HxWxD): 48x21x7.8 IN.
MOUNTING HARDWARE P/N: MBK–01
RATED WIND VELOCITY: 150.0 MPH

1 CCI ANTENNAS – OPA65R–BU4DA
SCALE: NOT TO SCALE



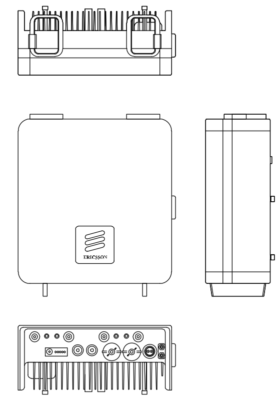
CCI ANTENNAS – DMP65R–BU4DA
WEIGHT (WITHOUT MOUNTING HARDWARE): 76.5 LBS
SIZE (HxWxD): 48x20.7x7.7 IN.

2 CCI ANTENNAS – DMP65R–BU4DA
SCALE: NOT TO SCALE



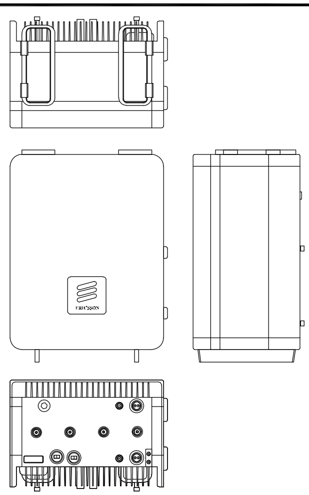
ERICSSON – 8843 B2/B66A
WEIGHT: 75.0 LBS
SIZE (HxWxD): 18.0x13.2x11.3 IN.

3 ERICSSON – 8843 B2/B66A
SCALE: NOT TO SCALE



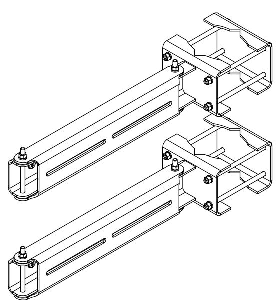
ERICSSON – 4478 B14
WEIGHT: 60.0 LBS
SIZE (HxWxD): 15.0x13.0x8.0 IN.

4 ERICSSON – 4478 B14
SCALE: NOT TO SCALE



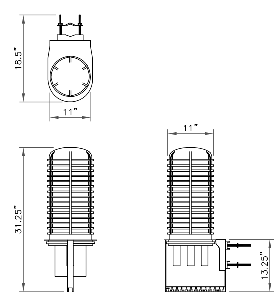
ERICSSON – 4449 B5/B12
WEIGHT: 70.0 LBS
SIZE (HxWxD): 18.0x13.2x9.4 IN.

5 ERICSSON – 4449 B5/B12
SCALE: NOT TO SCALE



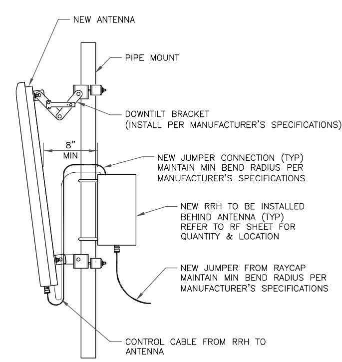
VALMONT – RRUDSM
DUAL SWIVEL MOUNT KITS FOR RRUs
(2 SWIVEL MOUNTS PER KIT)

6 VALMONT – RRUDSM
SCALE: NOT TO SCALE



RAYCAP – DC6–48–60–18–8C–EV
WEIGHT (WITHOUT MOUNTING HARDWARE): 20.0 LBS
SIZE (HxWxD): 31.25x11.0x11.0 IN.

7 RAYCAP – DC6–48–60–18–8C–EV
SCALE: NOT TO SCALE



8 ANTENNA MOUNTING ELEVATION
SCALE: NOT TO SCALE

AT&T

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DocuSigned by:
1B4805B25...
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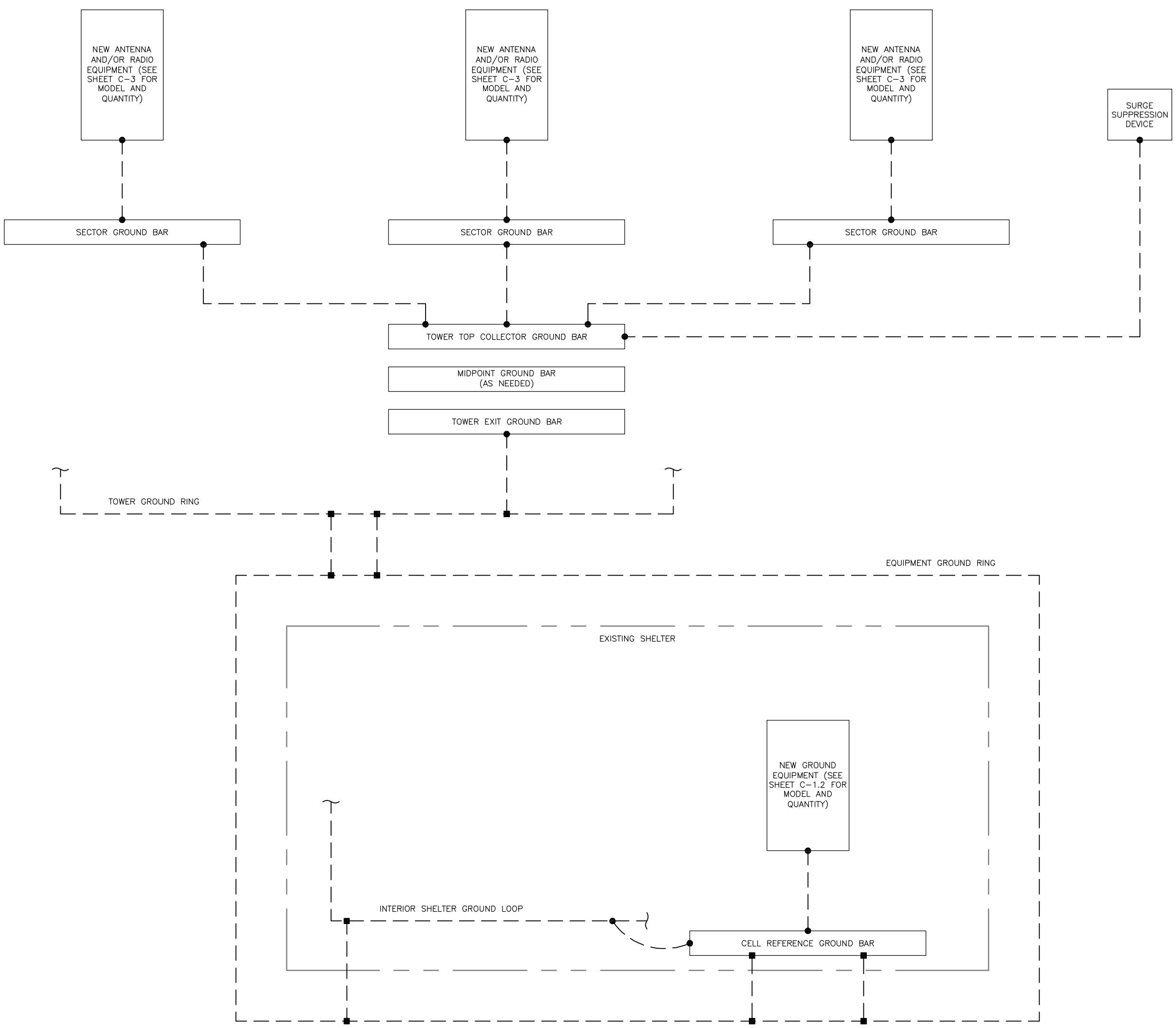
SHEET NUMBER:	REVISION:
C-4	1



1 GROUNDING SCHEMATIC
SCALE: NOT TO SCALE

GROUNDING PLAN LEGEND:

- --- GROUND WIRE
- ■ EXOTHERMIC WELD
- ● MECHANICAL CONNECTION
- COPPER GROUND ROD
- GROUND ROD W/ TEST WELL

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUITS (ATT-TP-76416 7.6.7).

HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CELL SITE REFERENCE GROUND BAR MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS.

EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE (ATT-TP-76416 7.6.7.2).

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

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DocuSigned by: Justin Ricciuti
1B4805B2...
STATE OF CONNECTICUT
JUSTIN P. RICCIUTI... (seal)
No. 31965
LICENSED PROFESSIONAL ENGINEER
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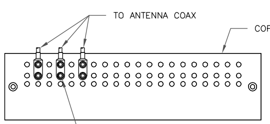
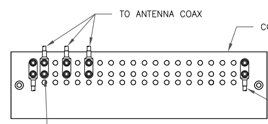
SHEET NUMBER: G-1
REVISION: 1



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

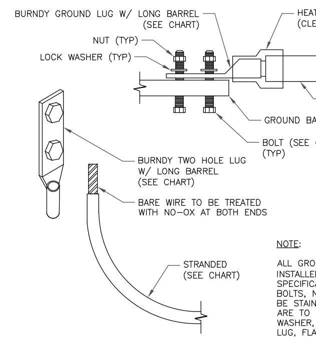


NOTES:

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

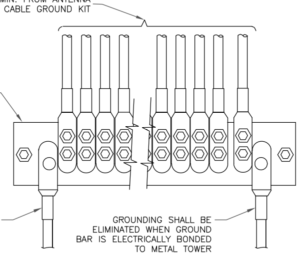
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



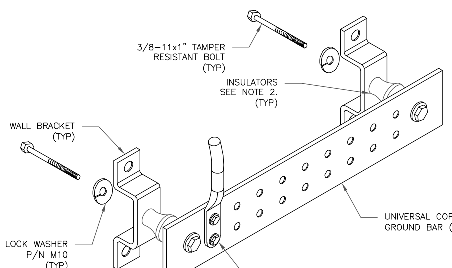
NOTE:

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

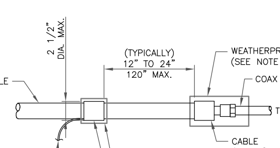


NOTES:

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.

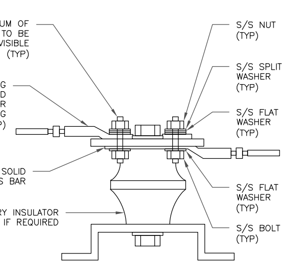
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



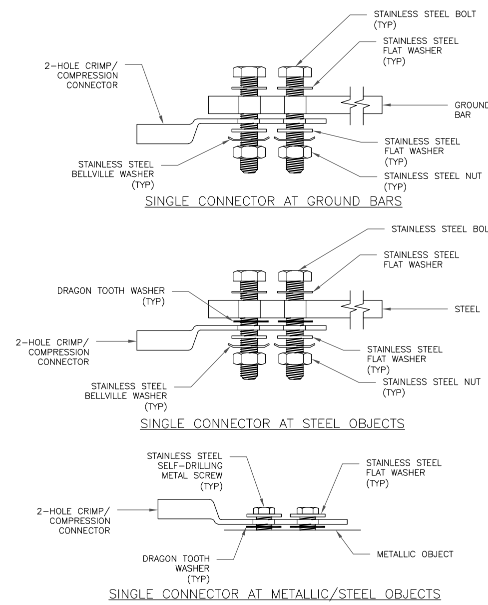
NOTES:

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



8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

AT&T SITE NUMBER: **CT1132**

BU #: **876376**
SCOVILLE HILL / HARWINTON ROD

123 CAMPVILLE HILL RD.
HARWINTON, CT 06791

EXISTING 177'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
B	05/21/20	AMM	PRELIMINARY	RO
C	06/04/20	AMM	PRELIMINARY	RO
0	07/02/20	AMM/AK	CONSTRUCTION	JL
1	07/27/20	AK	CONSTRUCTION	JL

DocuSigned by:
1B4805B25...
STATE OF CONNECTICUT
JUSTIN ...NETTE
No. 31965
LICENSED PROFESSIONAL ENGINEER
7/28/2020 | 11:49:01 AM EDT

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: G-2
REVISION: 1

Diagram - Sector	A	Diagram File Name - CT1132_LTE_3C_A_B_C_Rev2.vsd					
Atoll Site Name -	CT1132	Location Name -	Harwinton-Campvill Hill Rd	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND

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

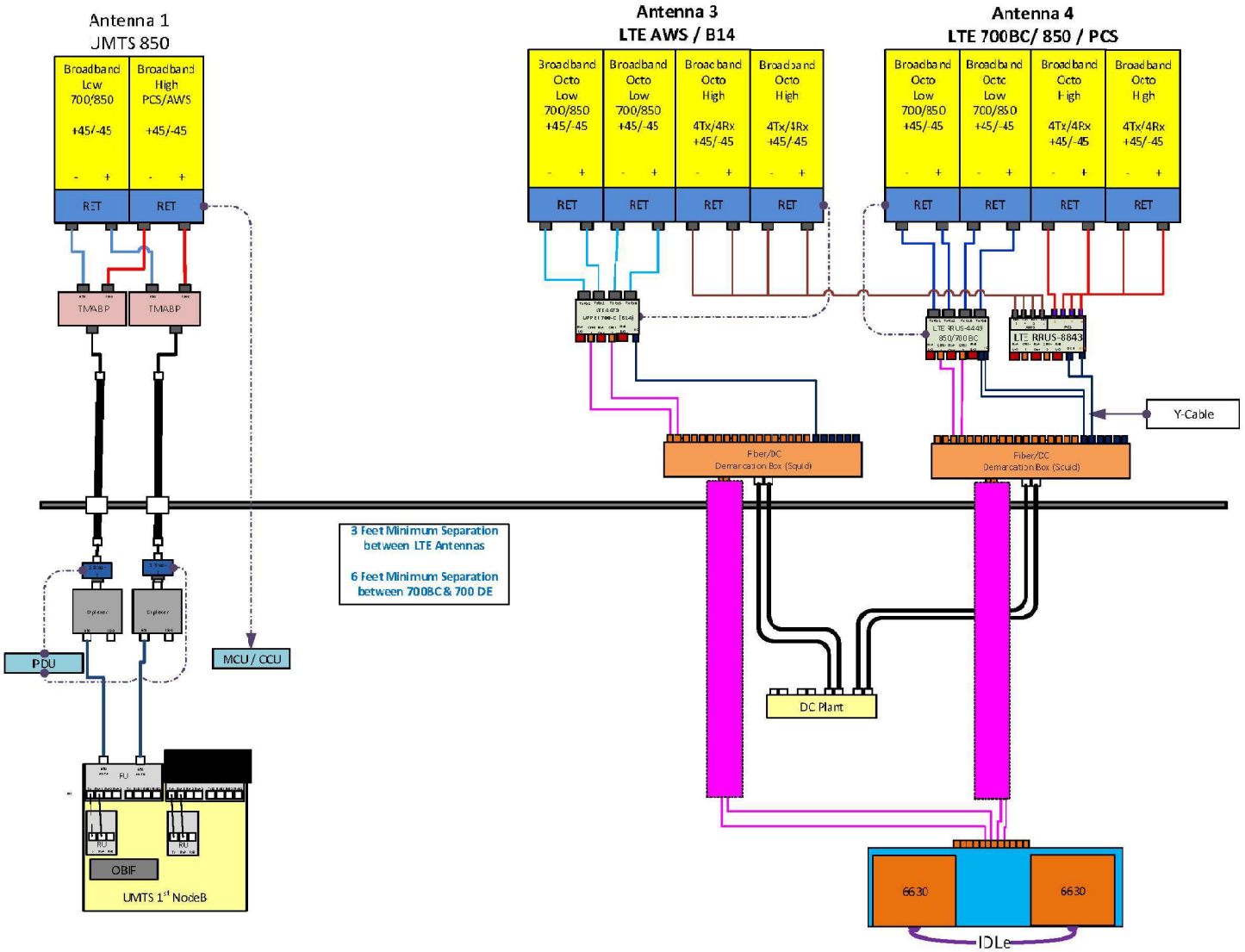


Diagram - Sector	B	Diagram File Name - CT1132_LTE_3C_A_B_C_Rev2.vsd					
Atoll Site Name -	CT1132	Location Name -	Harwinton-Campvill Hill Rd	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND

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

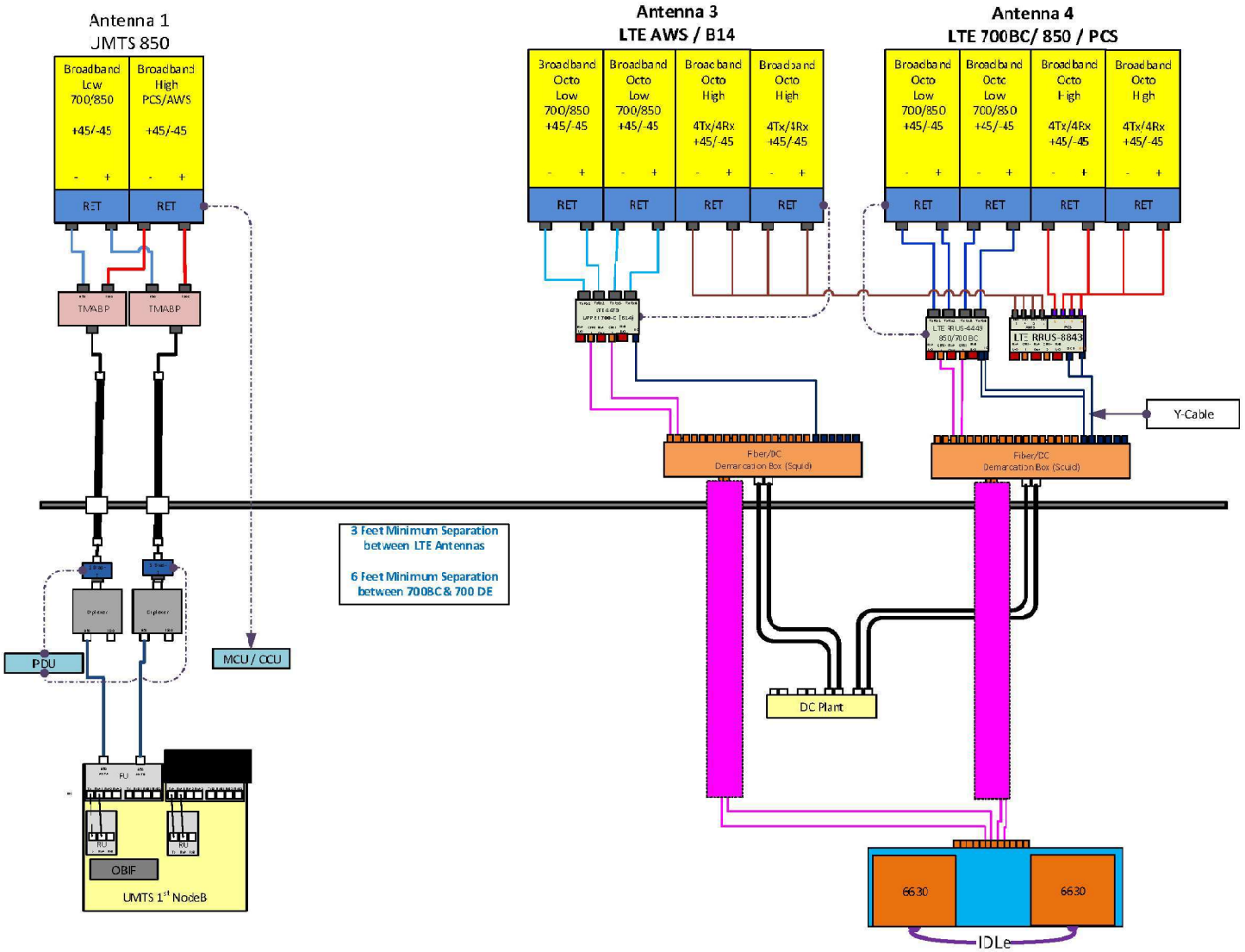
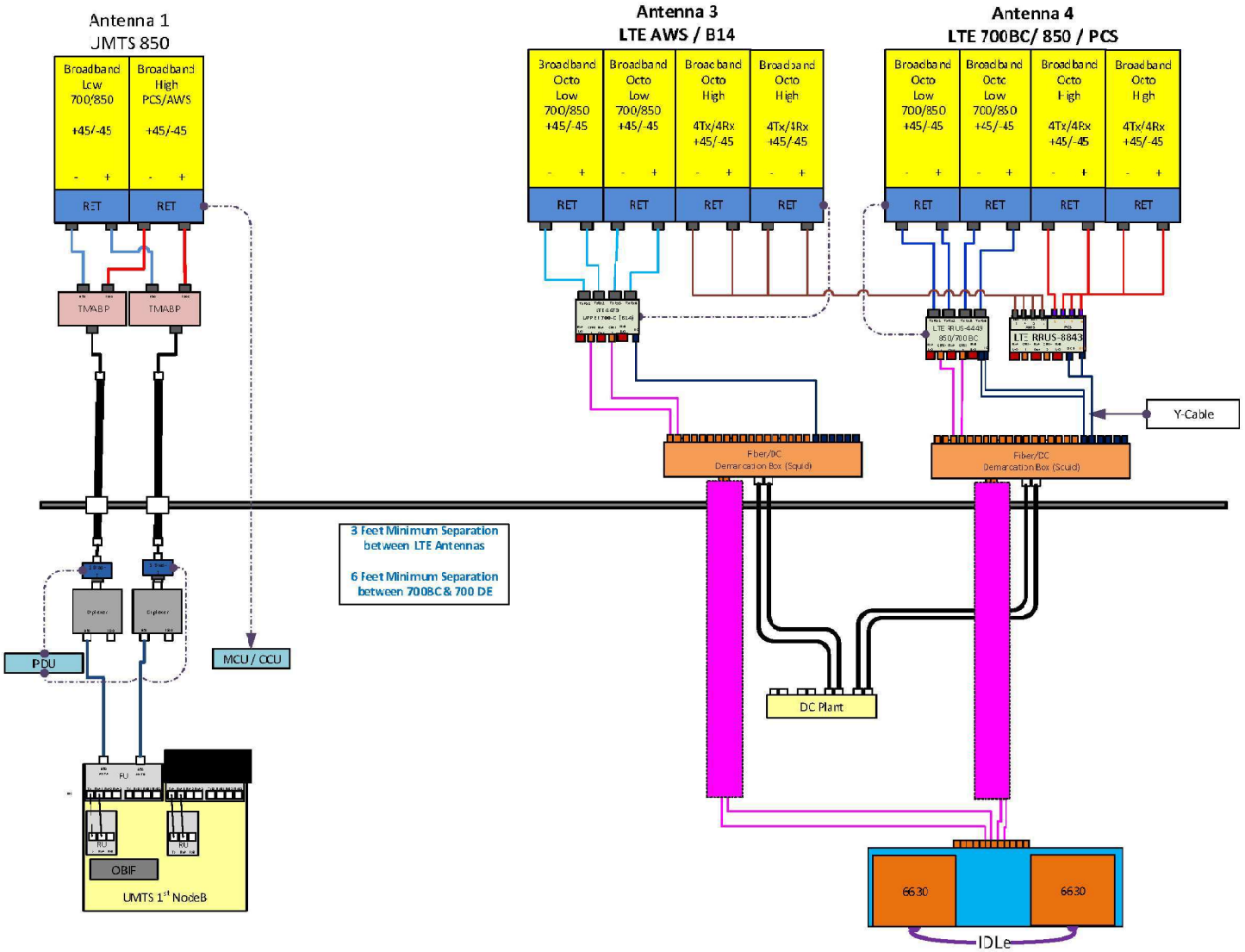


Diagram - Sector	C	Diagram File Name - C~1132_LTE_3C_A_B_C_Rev2.vsd					
Atoll Site Name -	CT1132	Location Name -	Harwinton-Campvill Hill Rd	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND
Comments: Important Note: For detailed radio to antenna wiring refer to the latest field notice - Antenna_Radio Connection Drawings Playbook v6.0_Ericsson							



Certificate Of Completion

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Status: Completed
Subject: Please DocuSign: 10041787_876376_SCOVILLE HILL _ HARWINTON ROD_AT&T Multicarrier FCD_REV 1_07.2...
Source Envelope:
Document Pages: 12
Signatures: 9
Certificate Pages: 3
Initials: 0
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Envelope Originator:
Whitney Sealover
2000 Corporate Drive
Canonsburg, PA 15317
Whitney.Sealover@crowncastle.com
IP Address: 64.213.130.12

Record Tracking

Status: Original
7/28/2020 11:28:35 AM
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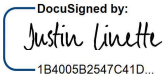
Signer Events	Signature	Timestamp
Justin Linette justin.linette@crowncastle.com Crown Castle International Corp. Security Level: Email, Account Authentication (None)	DocuSigned by:  1B4005B2547C41D... Signature Adoption: Pre-selected Style Using IP Address: 162.254.108.200	Sent: 7/28/2020 11:34:56 AM Viewed: 7/28/2020 11:48:01 AM Signed: 7/28/2020 11:49:01 AM

Electronic Record and Signature Disclosure:
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ID: 5006cfc0-7b26-47be-9523-588826283226

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	7/28/2020 11:34:56 AM
Certified Delivered	Security Checked	7/28/2020 11:48:01 AM
Signing Complete	Security Checked	7/28/2020 11:49:01 AM
Completed	Security Checked	7/28/2020 11:49:01 AM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

Electronic Record and Signature Disclosure created on: 9/19/2018 4:13:40 PM
Parties agreed to: Justin Linette

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Consequences of withdrawing consent to receive and/or execute documents electronically

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Documents for execution, and other documents and records may be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we may provide documents for execution, and other documents and records electronically to you through the DocuSign system during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any document for execution or other document or record, we prefer to provide all documents for execution, and other documents and records by the same method and to the same address that you have given us. If you do not agree with this process, please let us know as described below.

How to contact Crown Castle

You may contact us to let us know of any changes related to contacting you electronically, to request paper copies of documents for execution and other documents and records from us, and to withdraw your prior consent to receive documents for execution and other documents and records electronically as follows:

To contact us by phone call: 724-416-2000
To contact us by email, send messages to: esignature@CrownCastle.com
To contact us by paper mail, send correspondence to
Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317

To advise Crown Castle and DocuSign of your new e-mail address

To let us know of a change to the e-mail address where we should send documents for execution and other documents and records to you, you must send an email message to esignature@CrownCastle.com and state your previous e-mail address and your new e-mail address.

In addition, you must notify DocuSign, Inc. to arrange for your new email address to be reflected in your DocuSign account by following the process for changing e-mail in the DocuSign system.

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Browsers:	Internet Explorer® 11 (Windows only); Windows Edge Current Version; Mozilla Firefox Current Version; Safari™ (Mac OS only) 6.2 or above; Google Chrome Current Version; **Note** : Pre-release (e.g., beta) versions of operating systems and browsers are not supported.
Mobile Signing:	Apple iOS 7.0 or above; Android 4.0 or above
PDF Reader:	Acrobat® Reader or similar software may be required to view and print PDF files
Screen Resolution:	1024 x 768

Enabled Security Settings:	Allow per session cookies

These minimum requirements are subject to change. If these requirements change, you will be asked to re-accept the disclosure. Pre-release (e.g. beta) versions of operating systems and browsers are not supported.

Acknowledging your access and consent to receive documents electronically

Please confirm that you were able to access this disclosure electronically (which is similar to the manner in which we will deliver documents for execution and other documents and records) and that you were able to print this disclosure on paper or electronically save it for your future reference and access or that you were able to e-mail this disclosure to an address where you will be able to print it on paper or save it for your future reference and access. Further, if you consent to receiving documents for execution and other documents and records in electronic format on the terms described above, please let us know by clicking the “I agree” button below.

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Exhibit D

Structural Analysis Report

Date: **July 16, 2020**

Stephanie Lipscomb
Crown Castle
370 Mallory Station Rd
Franklin, TN 37067

B+T Group
1717 S, Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630

Subject:	**Structural Analysis Report**	
Carrier Designation:	***AT&T Mobility* Co-Locate**	
	Carrier Site Number:	10041787
	Carrier Site Name:	Harwinton-Campvill Hill Rd
Crown Castle Designation:	**Crown Castle BU Number:**	876376
	Crown Castle Site Name:	Scoville Hill / Harwinton Rod
	Crown Castle JDE Job Number:	616003
	Crown Castle Work Order Number:	1867685
	Crown Castle Order Number:	525776 Rev. 0
Engineering Firm Designation:	**B+T Group Project Number:**	83609.009.01
Site Data:	**123 Campville Hill Rd., Harwinton, Litchfield County, CT** **Latitude *41° 44' 12.4"*, Longitude *-73° 5' 49.4"*** **177 Foot - Monopole Tower**	

Dear Stephanie Lipscomb,

B+T Group 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:

LC7: Proposed Equipment Configuration **Sufficient Capacity - 83.4%**

This analysis utilizes an ultimate 3-second gust wind speed of 120 mph as required by the 2018 Connecticut State Building code (2015 IBC). Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Jennifer Tillson, E.I.

Respectfully submitted by: B+T Engineering, Inc.
COA: PEC.0001564; Expires: 02/10/2021

7/16/20

Scott S. Vance, P.E.

tnxTower Report - version 8.0.7.4

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 177 ft Monopole tower designed by Summit in August of 2000. The tower has been modified multiple times to accommodate additional loading.

Modifications designed by Hutter Trankina in August of 2004 are found to be ineffective and are considered for wind area only.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	120 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1.5 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)
127.0	130.0	1	Raycap	DC6-48-60-18-8F	6 2 2 2	1-5/8 7/8 5/8 3/8
	129.0	3	CCI Antennas	DMP65R-BU4D		
		3	CCI Antennas	OPA65R-BU4D		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 4478 B14_CCIV2		
		3	Ericsson	RRUS 8843 B2/B66A		
		3	Powerwave Tech.	7770.00		
		1	Raycap	DC6-48-60-18-8C-EV		
	127.0	1	--	Platform Mount [LP 303-1]		
	126.0	3	Powerwave Tech.	LGP13519		
		3	Powerwave Tech.	LGP21401		
	125.0	3	Powerwave Tech.	LGP13519		
		3	Powerwave Tech.	LGP21401		

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)
177.0	179.0	3	Alcatel Lucent	1900MHZ RRH (65MHZ)	4	1-1/4
		3	Alcatel Lucent	800 External Notch Filter		
		3	Alcatel Lucent	800MHZ RRH		
		9	RFS Celwave	ACU-A20-N		
	177.0	3	Alcatel Lucent	TD-RRH8X20-25		
		3	RFS Celwave	APXVSPP18-C-A20		
		3	RFS Celwave	APXVTM14-C-120		
		1	--	Platform Mount [LP 1201-1]		
167.0	169.0	3	Commscope	LNX-6515DS-A1M	12	1-5/8
		3	RFS Celwave	APXV18-206516S-C-A20		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
	168.0	3	Ericsson	KRY 112 75/1		
	167.0	1	--	T-Arm Mount [TA 602-3]		
154.0	156.0	1	Antel	BXA-171063-8BF-EDIN-2	12	1-5/8
		2	Antel	BXA-171085-8BF-EDIN-2		
		3	Antel	BXA-70063-6CF-2		
		2	Antel	LPA-80063/6CF		
		4	Antel	LPA-80080/6CF		
		6	RFS Celwave	FD9R6004/2C-3L		
	154.0	1	--	Platform Mount [LP 303-1]		
117.0	117.0	3	RFS Celwave	APXV18-206517S-C	6	1-5/8
79.0	80.0	1	Spectracom	8225	1	1/2
	79.0	1	--	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Online Order Information	AT&T Mobility Co-locate Rev# 0	525776	CCI Sites
Tower Manufacturer Drawings	Summit, Project No. 29200-1123	1613568	CCI Sites
Mount Analysis Report	TEP, Date: 07/10/2020	9163530	CCI Sites
Tower Modification Drawings	Hutter Trankina Eng., Date: 08/04/2004	1634507	CCI Sites
Legacy Modification Inspection	TEP, Date: 08/29/2017	7041633	CCI Sites
Tower Modification Drawings	Global Signal, Date: 11/15/2005	1623517	CCI Sites
Post Modification Inspection	TEP, Date: 04/04/2007	2176310	CCI Sites
Tower Modification Drawings	B+T Group, Project No. 80185, Date: 03/30/2009	2461486	CCI Sites
Post Modification Inspection	B+T Group, Project No. 80185, Date: 07/16/2009	2461484	CCI Sites
Tower Modification Drawings	B+T Group, Project No. 83609.004, Date: 11/28/2012	3384748	CCI Sites
Post Modification Inspection	TEP, Date: 05/09/2013	3841069	CCI Sites
Foundation Drawings	Summit, Project No. 29200-1123	1613623	CCI Sites
Geotech Report	CSA, File No.99900.24	1531965	CCI Sites
Antenna Configuration	Crown CAD Package	Date:07/02/2020	CCI Sites

3.1) Analysis Method

tnxTower (version 8.0.7.4), 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.

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the pole and in the reinforcing elements. These calculations are presented in Appendix C.

3.2) Assumptions

1) The 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. B+T Group 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	177 - 172	Pole	TP22.875x22x0.2188	1	-3.953	--	4.0	Pass
L2	172 - 167	Pole	TP23.75x22.875x0.2188	2	-4.271	--	7.2	Pass
L3	167 - 162	Pole	TP24.625x23.75x0.2188	3	-6.070	--	12.1	Pass
L4	162 - 157	Pole	TP25.5x24.625x0.2188	4	-6.477	--	16.3	Pass
L5	157 - 152	Pole	TP26.375x25.5x0.2188	5	-8.601	--	22.3	Pass
L6	152 - 147	Pole	TP27.25x26.375x0.2188	6	-9.111	--	28.3	Pass
L7	147 - 142	Pole	TP28.124x27.25x0.2188	7	-9.639	--	34.0	Pass
L8	142 - 137	Pole	TP28.999x28.124x0.2188	8	-10.187	--	39.3	Pass
L9	137 - 133.5	Pole	TP30.268x28.999x0.2188	9	-10.581	--	42.9	Pass
L10	133.5 - 128.5	Pole	TP30.049x29.174x0.25	10	-11.506	--	40.9	Pass
L11	128.5 - 123.5	Pole	TP30.924x30.049x0.25	11	-15.239	--	46.5	Pass
L12	123.5 - 118.58	Pole	TP31.785x30.924x0.25	12	-15.971	--	51.4	Pass
L13	118.58 - 118.33	Pole + Reinf.	TP31.828x31.785x0.3875	13	-16.027	--	46.8	Pass
L14	118.33 - 113.33	Pole + Reinf.	TP32.703x31.828x0.3875	14	-17.160	--	51.2	Pass
L15	113.33 - 108.33	Pole + Reinf.	TP33.578x32.703x0.3813	15	-18.421	--	55.5	Pass
L16	108.33 - 106.42	Pole + Reinf.	TP33.913x33.578x0.3813	16	-19.100	--	57.1	Pass
L17	106.42 - 106.17	Pole	TP33.957x33.913x0.25	17	-19.189	--	63.4	Pass
L18	106.17 - 101.17	Pole	TP34.832x33.957x0.25	18	-20.790	--	67.9	Pass
L19	101.17 - 96.17	Pole	TP35.707x34.832x0.25	19	-23.532	--	72.3	Pass
L20	96.17 - 91.17	Pole	TP36.582x35.707x0.25	20	-25.186	--	76.4	Pass
L21	91.17 - 88.75	Pole	TP37.836x36.582x0.25	21	-25.991	--	78.3	Pass
L22	88.75 - 83.75	Pole	TP37.38x36.505x0.3125	22	-28.335	--	62.1	Pass
L23	83.75 - 78.75	Pole	TP38.255x37.38x0.3125	23	-32.217	--	64.8	Pass
L24	78.75 - 73.75	Pole	TP39.13x38.255x0.3125	24	-34.144	--	67.5	Pass
L25	73.75 - 68.75	Pole	TP40.005x39.13x0.3125	25	-36.120	--	70.0	Pass
L26	68.75 - 63.75	Pole	TP40.88x40.005x0.3125	26	-38.119	--	72.4	Pass
L27	63.75 - 58.75	Pole	TP41.755x40.88x0.3125	27	-42.605	--	74.8	Pass
L28	58.75 - 53.75	Pole	TP42.63x41.755x0.3125	28	-44.650	--	77.0	Pass
L29	53.75 - 48.75	Pole	TP43.505x42.63x0.3125	29	-46.718	--	79.1	Pass
L30	48.75 - 45	Pole	TP45.167x43.505x0.3125	30	-49.062	--	80.7	Pass
L31	45 - 38.25	Pole	TP44.717x43.536x0.375	31	-54.780	--	66.8	Pass
L32	38.25 - 33.25	Pole	TP45.592x44.717x0.375	32	-57.064	--	68.2	Pass
L33	33.25 - 28.25	Pole	TP46.467x45.592x0.375	33	-59.372	--	69.5	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L34	28.25 - 23.25	Pole	TP47.342x46.467x0.375	34	-61.702	--	70.7	Pass
L35	23.25 - 18.25	Pole	TP48.217x47.342x0.375	35	-66.569	--	71.9	Pass
L36	18.25 - 13.25	Pole	TP49.091x48.217x0.375	36	-69.052	--	73.0	Pass
L37	13.25 - 8.25	Pole	TP49.966x49.091x0.375	37	-71.556	--	74.1	Pass
L38	8.25 - 3.25	Pole	TP50.841x49.966x0.375	38	-74.083	--	75.1	Pass
L39	3.25 - 0	Pole	TP51.41x50.841x0.375	39	-75.737	--	75.7	Pass
							Summary	
						Pole (L30)	80.7	Pass
						Reinforcement	57.1	Pass
						Rating =	80.7	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rod Brackets	Base	38.8	Pass
1,2	Anchor Rods	Base	54.5	Pass
1,2	Base Plate	Base	52.8	Pass
1,2	Base Foundation (Structure)	Base	83.4	Pass
1,2	Base Foundation (Soil Interaction)	Base	75.2	Pass

Structure Rating (max from all components) =	83.4%

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

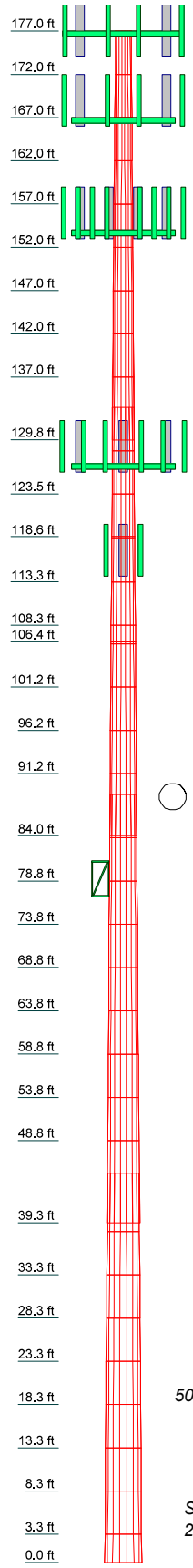
4.1) Recommendations

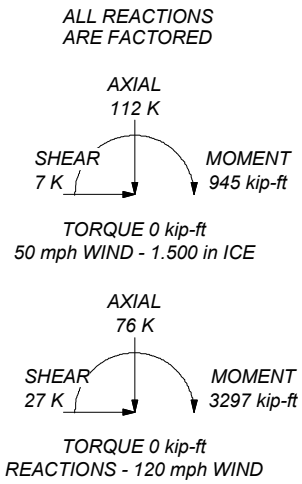
The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

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	5.000	18	0.219		22.000	22.875		0.3
2	5.000	18	0.219		22.875	23.750		0.3
3	5.000	18	0.219		23.750	24.625		0.3
4	5.000	18	0.219		24.625	25.500		0.3
5	5.000	18	0.219		25.500	26.375		0.3
6	5.000	18	0.219		26.375	27.250		0.3
7	5.000	18	0.219		27.250	28.124		0.3
8	5.000	18	0.219		28.124	28.999		0.3
9	5.000	18	0.219	3.750	28.999	29.874		0.5
10	5.000	18	0.250		29.874	30.049		0.4
11	5.000	18	0.250		30.049	30.924		0.4
12	5.000	18	0.250		30.924	31.785		0.4
13	5.000	18	0.250		31.785	32.703		0.6
14	5.000	18	0.381		32.703	33.578		0.6
15	5.000	18	0.381		33.578	34.832		0.7
16	5.000	18	0.250		34.832	35.707		0.5
17	5.000	18	0.250		35.707	36.582		0.5
18	5.000	18	0.250		36.582	37.457		0.5
19	5.000	18	0.250		37.457	38.255		0.6
20	5.000	18	0.250		38.255	39.130		0.6
21	5.000	18	0.250	4.750	39.130	40.005		0.7
22	5.000	18	0.313		40.005	40.880		0.7
23	5.000	18	0.313		40.880	41.755		0.7
24	5.000	18	0.313		41.755	42.630		0.7
25	5.000	18	0.313		42.630	43.505		0.7
26	5.000	18	0.313		43.505	44.717		1.4
27	5.000	18	0.313		44.717	45.592		1.2
28	5.000	18	0.313		45.592	46.467		0.9
29	5.000	18	0.313		46.467	47.342		0.9
30	6.750	18	0.313	5.750	47.342	48.217		1.0
31	5.000	18	0.375		48.217	49.091		1.0
32	5.000	18	0.375		49.091	49.966		1.0
33	5.000	18	0.375		49.966	50.841		1.0
34	5.000	18	0.375		50.841	51.411		0.7
35	5.000	18	0.375		51.411	52.286		1.0
36	5.000	18	0.375		52.286	53.161		1.0
37	5.000	18	0.375		53.161	54.036		1.0
38	5.000	18	0.375		54.036	54.911		1.0
39	3.250	18	0.375		54.911	55.411		0.7
							A607-65	23.2





MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Litchfield County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 120 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.50 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 0.000 ft
8. TIA-222-H Annex S
9. TOWER RATING: 80.7%

B+T Group
1717 S, Boulder, Suite 300
Tulsa, OK 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

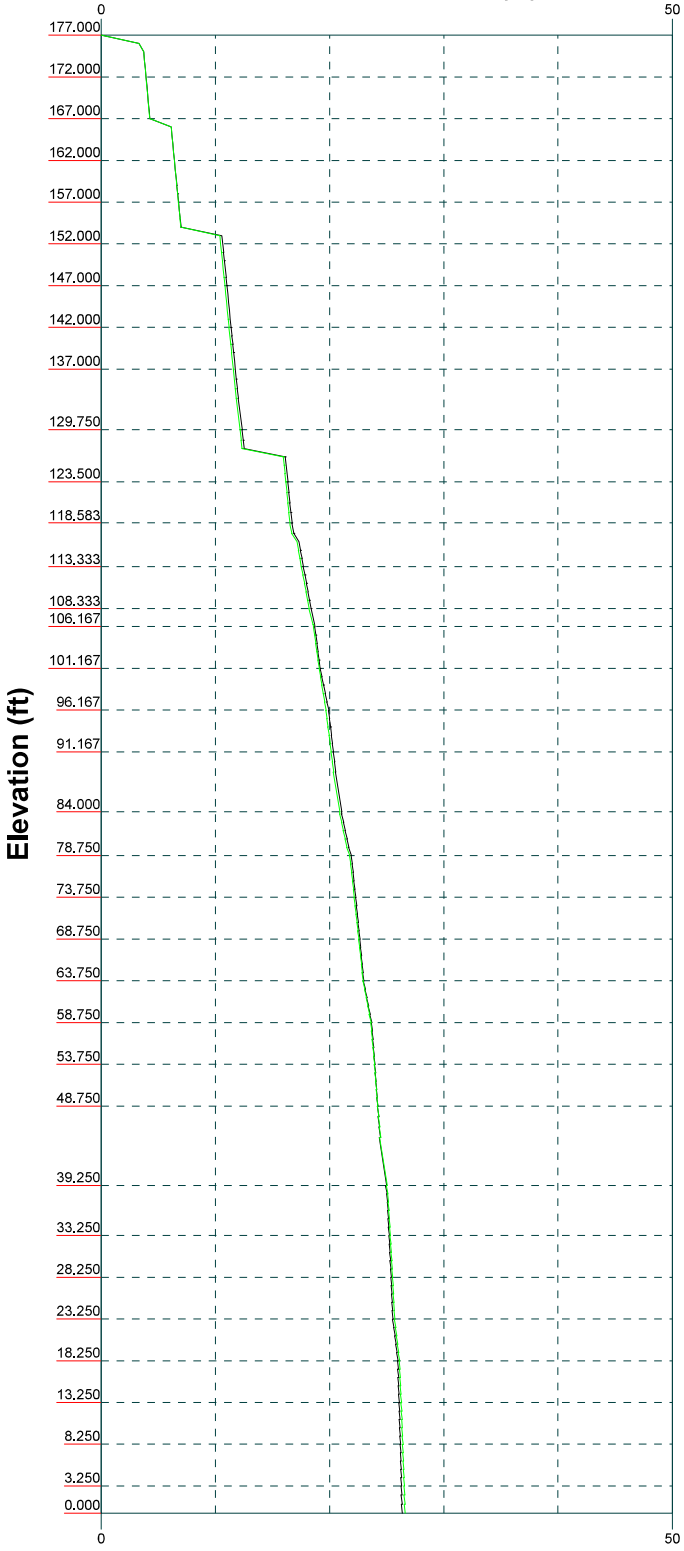
Job: 83609.009.01 - SCOVILLE HILL / HARWINTON ROD, CT (BU# 87637			
Project:			
Client: Crown Castle	Drawn by: JD Prabhu	App'd:	
Code: TIA-222-H	Date: 07/15/20	Scale: NTS	
Path:		Dwg No. E-1	

TIA-222-H - 120 mph/50 mph 1.500 in Ice Exposure B

Maximum Values

Vx Vz Mx Mz

Global Mast Shear (K)



Global Mast Moment (kip-ft)

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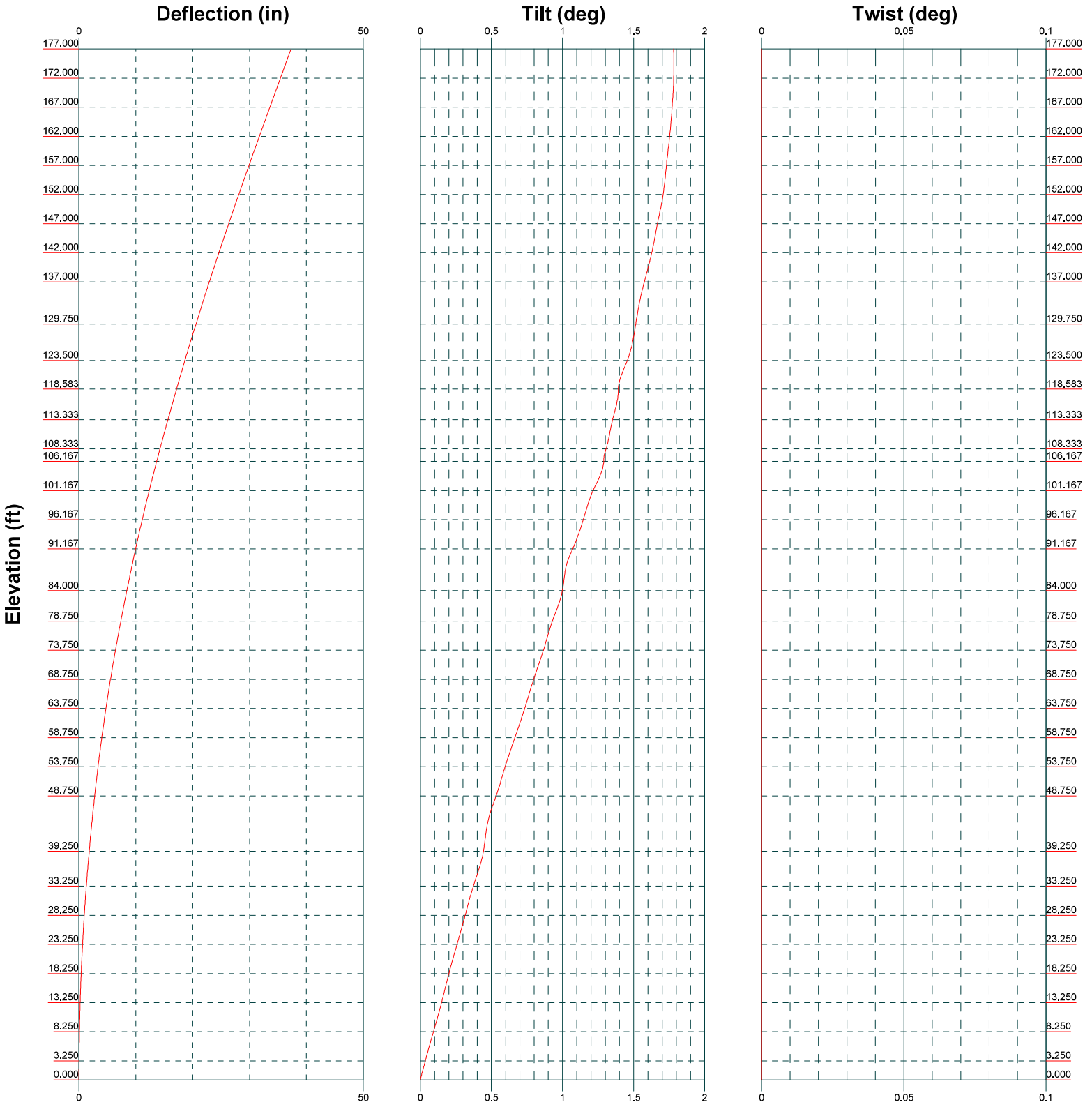
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: *83609.009.01 - SCOVILLE HILL / HARWINTON ROD, CT (BU# 87637*			
Project:			
Client: Crown Castle	Drawn by: JD Prabhu	App'd:	
Code: TIA-222-H	Date: 07/15/20	Scale: NTS	
Path:		Dwg No. E-4	

TIA-222-H - Service - 60 mph

Maximum Values



B+T Group
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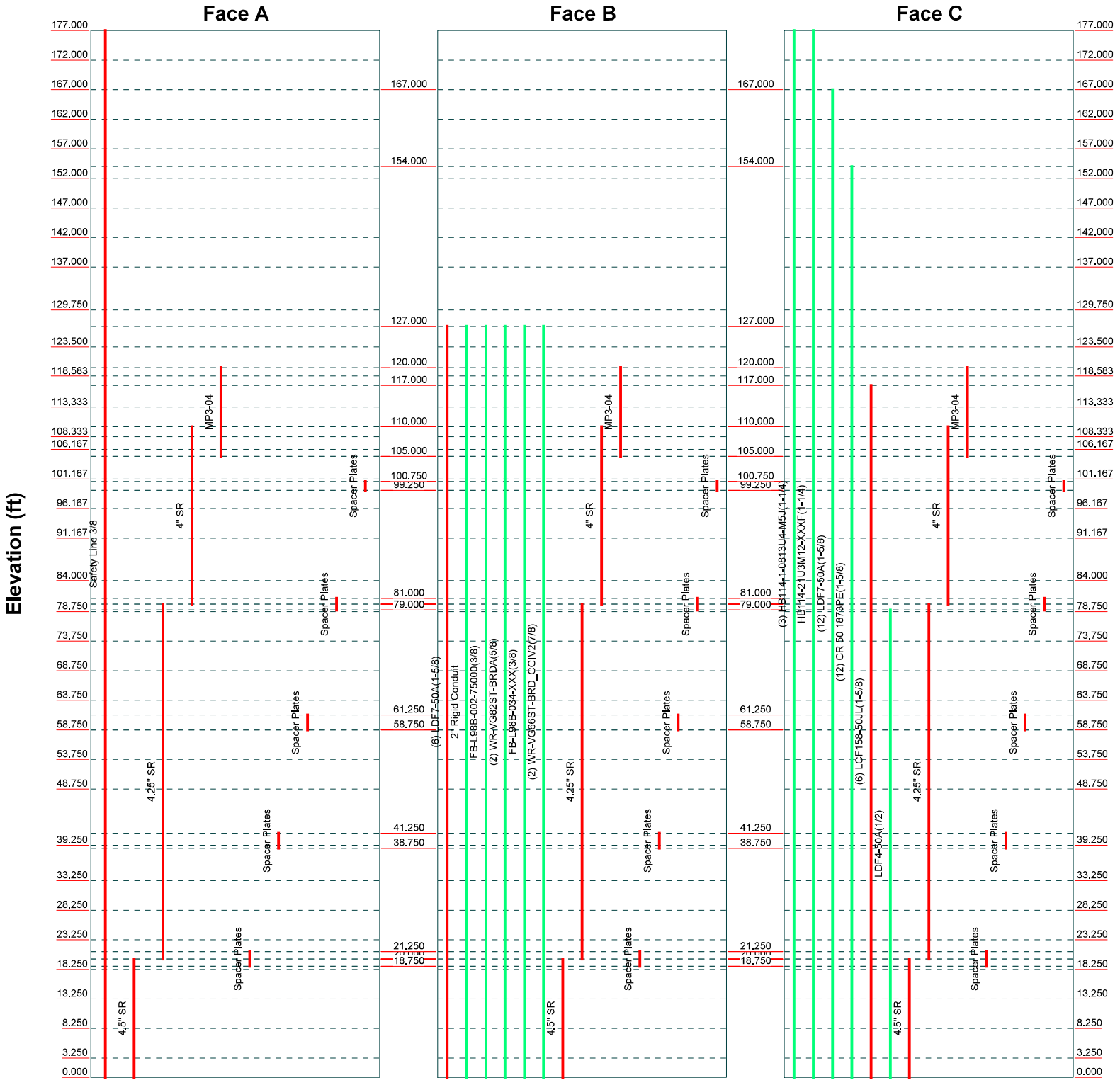
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: ***83609.009.01 - SCOVILLE HILL / HARWINTON ROD, CT (BU# 87637***			
Project:			
Client: Crown Castle	Drawn by: JD Prabhu	App'd:	
Code: TIA-222-H	Date: 07/15/20	Scale: NTS	
Path:		Dwg No. E-5	

Feed Line Distribution Chart
0' - 177'

Round | Flat | App In Face | App Out Face | Truss Leg



B+T GRP

B+T Group
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Phone: (918) 587-4630
FAX: (918) 295-0265

Job: ***83609.009.01 - SCOVILLE HILL / HARWINTON ROD, CT (BU# 87637***			
Project:			
Client: Crown Castle	Drawn by: JD Prabhu	App'd:	
Code: TIA-222-H	Date: 07/15/20	Scale: NTS	
Path:		Dwg No. E-7	

B+T Group
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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 Litchfield County, Connecticut.
Tower base elevation above sea level: 735.000 ft.
Basic wind speed of 120 mph.
Risk Category II.
Exposure Category B.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.000 ft.
Nominal ice thickness of 1.500 in.
Ice thickness is considered to increase with height.
Ice density of 56.000 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50.000 °F.
Deflections calculated using a wind speed of 60 mph.
TIA-222-H Annex S.
TOWER RATING: 80.7%.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.05.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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

Tapered Pole Section Geometry

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
L1	177.000-172.000	5.000	0.000	18	22.000	22.875	0.219	0.875	A607-65 (65 ksi)
L2	172.000-167.000	5.000	0.000	18	22.875	23.750	0.219	0.875	A607-65 (65 ksi)
L3	167.000-162.000	5.000	0.000	18	23.750	24.625	0.219	0.875	A607-65 (65 ksi)
L4	162.000-157.000	5.000	0.000	18	24.625	25.500	0.219	0.875	A607-65 (65 ksi)
L5	157.000-152.000	5.000	0.000	18	25.500	26.375	0.219	0.875	A607-65 (65 ksi)
L6	152.000-147.000	5.000	0.000	18	26.375	27.250	0.219	0.875	A607-65 (65 ksi)
L7	147.000-142.000	5.000	0.000	18	27.250	28.124	0.219	0.875	A607-65 (65 ksi)
L8	142.000-137.000	5.000	0.000	18	28.124	28.999	0.219	0.875	A607-65 (65 ksi)
L9	137.000-129.750	7.250	3.750	18	28.999	30.268	0.219	0.875	A607-65 (65 ksi)
L10	129.750-128.500	5.000	0.000	18	29.174	30.049	0.250	1.000	A607-65 (65 ksi)
L11	128.500-123.500	5.000	0.000	18	30.049	30.924	0.250	1.000	A607-65 (65 ksi)
L12	123.500-118.583	4.917	0.000	18	30.924	31.785	0.250	1.000	A607-65 (65 ksi)
L13	118.583-118.333	0.250	0.000	18	31.785	31.828	0.388	1.550	A607-65 (65 ksi)
L14	118.333-113.333	5.000	0.000	18	31.828	32.703	0.388	1.550	A607-65 (65 ksi)
L15	113.333-108.333	5.000	0.000	18	32.703	33.578	0.381	1.525	A607-65 (65 ksi)
L16	108.333-106.417	1.916	0.000	18	33.578	33.913	0.381	1.525	A607-65 (65 ksi)
L17	106.417-106.167	0.250	0.000	18	33.913	33.957	0.250	1.000	A607-65 (65 ksi)
L18	106.167-101.167	5.000	0.000	18	33.957	34.832	0.250	1.000	A607-65 (65 ksi)
L19	101.167-96.167	5.000	0.000	18	34.832	35.707	0.250	1.000	A607-65 (65 ksi)
L20	96.167-91.167	5.000	0.000	18	35.707	36.582	0.250	1.000	A607-65 (65 ksi)
L21	91.167-84.000	7.167	4.750	18	36.582	37.836	0.250	1.000	A607-65 (65 ksi)
L22	84.000-83.750	5.000	0.000	18	36.505	37.380	0.313	1.250	A607-65 (65 ksi)
L23	83.750-78.750	5.000	0.000	18	37.380	38.255	0.313	1.250	A607-65 (65 ksi)
L24	78.750-73.750	5.000	0.000	18	38.255	39.130	0.313	1.250	A607-65 (65 ksi)
L25	73.750-68.750	5.000	0.000	18	39.130	40.005	0.313	1.250	A607-65 (65 ksi)
L26	68.750-63.750	5.000	0.000	18	40.005	40.880	0.313	1.250	A607-65 (65 ksi)
L27	63.750-58.750	5.000	0.000	18	40.880	41.755	0.313	1.250	A607-65 (65 ksi)
L28	58.750-53.750	5.000	0.000	18	41.755	42.630	0.313	1.250	A607-65 (65 ksi)
L29	53.750-48.750	5.000	0.000	18	42.630	43.505	0.313	1.250	A607-65 (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
L30	48.750-39.250	9.500	5.750	18	43.505	45.167	0.313	1.250	A607-65 (65 ksi)
L31	39.250-38.250	6.750	0.000	18	43.536	44.717	0.375	1.500	A607-65 (65 ksi)
L32	38.250-33.250	5.000	0.000	18	44.717	45.592	0.375	1.500	A607-65 (65 ksi)
L33	33.250-28.250	5.000	0.000	18	45.592	46.467	0.375	1.500	A607-65 (65 ksi)
L34	28.250-23.250	5.000	0.000	18	46.467	47.342	0.375	1.500	A607-65 (65 ksi)
L35	23.250-18.250	5.000	0.000	18	47.342	48.217	0.375	1.500	A607-65 (65 ksi)
L36	18.250-13.250	5.000	0.000	18	48.217	49.091	0.375	1.500	A607-65 (65 ksi)
L37	13.250-8.250	5.000	0.000	18	49.091	49.966	0.375	1.500	A607-65 (65 ksi)
L38	8.250-3.250	5.000	0.000	18	49.966	50.841	0.375	1.500	A607-65 (65 ksi)
L39	3.250-0.000	3.250		18	50.841	51.410	0.375	1.500	A607-65 (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	22.306	15.123	906.444	7.732	11.176	81.106	1814.080	7.563	3.487	15.941
	23.194	15.730	1020.122	8.043	11.620	87.787	2041.586	7.867	3.641	16.645
L2	23.194	15.730	1020.122	8.043	11.620	87.787	2041.586	7.867	3.641	16.645
	24.082	16.338	1142.927	8.354	12.065	94.731	2287.359	8.171	3.795	17.348
L3	24.082	16.338	1142.927	8.354	12.065	94.731	2287.359	8.171	3.795	17.348
	24.971	16.945	1275.213	8.664	12.509	101.941	2552.105	8.474	3.949	18.052
L4	24.971	16.945	1275.213	8.664	12.509	101.941	2552.105	8.474	3.949	18.052
	25.859	17.553	1417.332	8.975	12.954	109.414	2836.530	8.778	4.103	18.756
L5	25.859	17.553	1417.332	8.975	12.954	109.414	2836.530	8.778	4.103	18.756
	26.748	18.160	1569.637	9.285	13.398	117.152	3141.338	9.082	4.257	19.46
L6	26.748	18.160	1569.637	9.285	13.398	117.152	3141.338	9.082	4.257	19.46
	27.636	18.768	1732.479	9.596	13.843	125.154	3467.237	9.386	4.411	20.164
L7	27.636	18.768	1732.479	9.596	13.843	125.154	3467.237	9.386	4.411	20.164
	28.525	19.375	1906.211	9.907	14.287	133.421	3814.930	9.689	4.565	20.868
L8	28.525	19.375	1906.211	9.907	14.287	133.421	3814.930	9.689	4.565	20.868
	29.413	19.983	2091.186	10.217	14.732	141.952	4185.123	9.993	4.719	21.572
L9	29.413	19.983	2091.186	10.217	14.732	141.952	4185.123	9.993	4.719	21.572
	30.701	20.864	2380.090	10.667	15.376	154.791	4763.311	10.434	4.942	22.593
L10	30.252	22.951	2425.903	10.268	14.821	163.685	4854.998	11.478	4.695	18.779
	30.474	23.646	2652.769	10.579	15.265	173.781	5309.028	11.825	4.849	19.395
L11	30.474	23.646	2652.769	10.579	15.265	173.781	5309.028	11.825	4.849	19.395
	31.363	24.340	2893.356	10.889	15.709	184.179	5790.518	12.172	5.003	20.011
L12	31.363	24.340	2893.356	10.889	15.709	184.179	5790.518	12.172	5.003	20.011
	32.236	25.023	3143.720	11.195	16.147	194.699	6291.578	12.514	5.154	20.616
L13	32.215	38.616	4809.304	11.146	16.147	297.853	9624.936	19.312	4.912	12.676
	32.260	38.670	4829.435	11.161	16.169	298.689	9665.224	19.339	4.920	12.696
L14	32.260	38.670	4829.435	11.161	16.169	298.689	9665.224	19.339	4.920	12.696
	33.148	39.746	5243.931	11.472	16.613	315.648	10494.762	19.877	5.074	13.094
L15	33.149	39.112	5162.346	11.474	16.613	310.737	10331.484	19.560	5.085	13.337
	34.037	40.171	5593.012	11.785	17.058	327.888	11193.384	20.089	5.239	13.741
L16	34.037	40.171	5593.012	11.785	17.058	327.888	11193.384	20.089	5.239	13.741

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
	34.378	40.577	5764.188	11.904	17.228	334.582	11535.960	20.292	5.298	13.896
L17	34.398	26.712	3824.353	11.951	17.228	221.985	7653.739	13.358	5.529	22.115
	34.442	26.747	3839.282	11.966	17.250	222.564	7683.616	13.376	5.536	22.146
L18	34.442	26.747	3839.282	11.966	17.250	222.564	7683.616	13.376	5.536	22.146
	35.331	27.441	4146.072	12.277	17.695	234.312	8297.599	13.723	5.690	22.762
L19	35.331	27.441	4146.072	12.277	17.695	234.312	8297.599	13.723	5.690	22.762
	36.219	28.135	4468.784	12.587	18.139	246.361	8943.449	14.070	5.844	23.378
L20	36.219	28.135	4468.784	12.587	18.139	246.361	8943.449	14.070	5.844	23.378
	37.108	28.829	4807.822	12.898	18.584	258.713	9621.971	14.417	5.998	23.994
L21	37.108	28.829	4807.822	12.898	18.584	258.713	9621.971	14.417	5.998	23.994
	38.381	29.824	5323.077	13.343	19.221	276.945	10653.157	14.915	6.219	24.877
L22	37.864	35.898	5940.787	12.848	18.544	320.354	11889.390	17.953	5.875	18.8
	37.908	36.766	6382.151	13.159	18.989	336.098	12772.700	18.387	6.029	19.292
L23	37.908	36.766	6382.151	13.159	18.989	336.098	12772.700	18.387	6.029	19.292
	38.797	37.634	6844.852	13.470	19.433	352.221	13698.710	18.821	6.183	19.785
L24	38.797	37.634	6844.852	13.470	19.433	352.221	13698.710	18.821	6.183	19.785
	39.685	38.502	7329.392	13.780	19.878	368.721	14668.428	19.255	6.337	20.278
L25	39.685	38.502	7329.392	13.780	19.878	368.721	14668.428	19.255	6.337	20.278
	40.574	39.370	7836.276	14.091	20.322	385.598	15682.864	19.689	6.491	20.771
L26	40.574	39.370	7836.276	14.091	20.322	385.598	15682.864	19.689	6.491	20.771
	41.462	40.238	8366.008	14.401	20.767	402.854	16743.024	20.123	6.645	21.263
L27	41.462	40.238	8366.008	14.401	20.767	402.854	16743.024	20.123	6.645	21.263
	42.351	41.105	8919.090	14.712	21.211	420.487	17849.917	20.557	6.799	21.756
L28	42.351	41.105	8919.090	14.712	21.211	420.487	17849.917	20.557	6.799	21.756
	43.239	41.973	9496.028	15.023	21.656	438.497	19004.550	20.991	6.953	22.249
L29	43.239	41.973	9496.028	15.023	21.656	438.497	19004.550	20.991	6.953	22.249
	44.127	42.841	10097.323	15.333	22.100	456.886	20207.932	21.425	7.107	22.742
L30	44.127	42.841	10097.323	15.333	22.100	456.886	20207.932	21.425	7.107	22.742
	45.816	44.490	11308.694	15.923	22.945	492.864	22632.268	22.249	7.399	23.678
L31	45.171	51.372	12090.485	15.322	22.116	546.681	24196.880	25.691	7.002	18.673
	45.349	52.778	13110.496	15.741	22.716	577.143	26238.243	26.394	7.210	19.227
L32	45.349	52.778	13110.496	15.741	22.716	577.143	26238.243	26.394	7.210	19.227
	46.237	53.819	13901.960	16.052	23.161	600.240	27822.213	26.915	7.364	19.638
L33	46.237	53.819	13901.960	16.052	23.161	600.240	27822.213	26.915	7.364	19.638
	47.126	54.861	14724.654	16.363	23.605	623.791	29468.683	27.436	7.518	20.048
L34	47.126	54.861	14724.654	16.363	23.605	623.791	29468.683	27.436	7.518	20.048
	48.014	55.902	15579.180	16.673	24.050	647.795	31178.859	27.956	7.672	20.459
L35	48.014	55.902	15579.180	16.673	24.050	647.795	31178.859	27.956	7.672	20.459
	48.903	56.943	16466.144	16.984	24.494	672.252	32953.955	28.477	7.826	20.87
L36	48.903	56.943	16466.144	16.984	24.494	672.252	32953.955	28.477	7.826	20.87
	49.791	57.985	17386.149	17.294	24.938	697.162	34795.175	28.998	7.980	21.28
L37	49.791	57.985	17386.149	17.294	24.938	697.162	34795.175	28.998	7.980	21.28
	50.679	59.026	18339.801	17.605	25.383	722.525	36703.734	29.519	8.134	21.691
L38	50.679	59.026	18339.801	17.605	25.383	722.525	36703.734	29.519	8.134	21.691
	51.568	60.068	19327.702	17.916	25.827	748.341	38680.835	30.039	8.288	22.102
L39	51.568	60.068	19327.702	17.916	25.827	748.341	38680.835	30.039	8.288	22.102
	52.145	60.744	19988.490	18.117	26.116	765.365	40003.282	30.378	8.388	22.368

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 177.000-172.000				1	1	1			
L2 172.000-167.000				1	1	1			
L3 167.000-162.000				1	1	1			

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
00									
L4				1	1	1			
162.000-157.0									
00									
L5				1	1	1			
157.000-152.0									
00									
L6				1	1	1			
152.000-147.0									
00									
L7				1	1	1			
147.000-142.0									
00									
L8				1	1	1			
142.000-137.0									
00									
L9				1	1	1			
137.000-129.7									
50									
L10				1	1	1			
129.750-128.5									
00									
L11				1	1	1			
128.500-123.5									
00									
L12				1	1	1			
123.500-118.5									
83									
L13				1	1	0.968399			
118.583-118.3									
33									
L14				1	1	0.959648			
118.333-113.3									
33									
L15				1	1	0.966772			
113.333-108.3									
33									
L16				1	1	0.963662			
108.333-106.4									
17									
L17				1	1	1			
106.417-106.1									
67									
L18				1	1	1			
106.167-101.1									
67									
L19				1	1	1			
101.167-96.16									
7									
L20				1	1	1			
96.167-91.167									
L21				1	1	1			
91.167-84.000									
L22				1	1	1			
84.000-83.750									
L23				1	1	1			
83.750-78.750									
L24				1	1	1			
78.750-73.750									

Tower Elevation ft	Gusset Area (per face) ft²	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
L25 73.750-68.750				1	1	1			
L26 68.750-63.750				1	1	1			
L27 63.750-58.750				1	1	1			
L28 58.750-53.750				1	1	1			
L29 53.750-48.750				1	1	1			
L30 48.750-39.250				1	1	1			
L31 39.250-38.250				1	1	1			
L32 38.250-33.250				1	1	1			
L33 33.250-28.250				1	1	1			
L34 28.250-23.250				1	1	1			
L35 23.250-18.250				1	1	1			
L36 18.250-13.250				1	1	1			
L37 13.250-8.250				1	1	1			
L38 8.250-3.250				1	1	1			
L39 3.250-0.000				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 klf
* LDF7-50A(1-5/8)	B	No	Surface Ar (CaAa)	127.000 - 0.000	6	6	0.050 0.250	1.980		0.001
* LCF158-50JL(1-5/8)	C	No	Surface Ar (CaAa)	117.000 - 0.000	6	6	0.000 0.200	1.980		0.001
* Safety Line 3/8	A	No	Surface Ar (CaAa)	177.000 - 0.000	1	1	0.400 0.400	0.375		0.000
* * 4.5" SR	A	No	Surface Ar (CaAa)	20.000 - 0.000	1	1	0.300 0.350	4.500		0.054
4.5" SR	B	No	Surface Ar (CaAa)	20.000 - 0.000	1	1	0.300 0.350	4.500		0.054
4.5" SR	C	No	Surface Ar (CaAa)	20.000 - 0.000	1	1	0.300 0.350	4.500		0.054
4.25" SR	A	No	Surface Ar	80.000 -	1	1	0.300	4.250		0.048

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 klf
			(CaAa)	20.000			0.350			
4.25" SR	B	No	Surface Ar (CaAa)	80.000 - 20.000	1	1	0.300 0.350	4.250		0.048
4.25" SR	C	No	Surface Ar (CaAa)	80.000 - 20.000	1	1	0.300 0.350	4.250		0.048
4" SR	A	No	Surface Ar (CaAa)	110.000 - 80.000	1	1	0.300 0.350	4.000		0.043
4" SR	B	No	Surface Ar (CaAa)	110.000 - 80.000	1	1	0.300 0.350	4.000		0.043
4" SR	C	No	Surface Ar (CaAa)	110.000 - 80.000	1	1	0.300 0.350	4.000		0.043
*										
MP3-04	A	No	Surface Af (CaAa)	120.000 - 105.000	1	1	0.350 0.400	4.780	12.780	0.000
MP3-04	B	No	Surface Af (CaAa)	120.000 - 105.000	1	1	0.350 0.400	4.780	12.780	0.000
MP3-04	C	No	Surface Af (CaAa)	120.000 - 105.000	1	1	0.350 0.400	4.780	12.780	0.000
*										
Spacer Plates	A	No	Surface Af (CaAa)	21.250 - 18.750	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	B	No	Surface Af (CaAa)	21.250 - 18.750	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	C	No	Surface Af (CaAa)	21.250 - 18.750	1	1	0.300 0.350	20.250	48.500	0.276
*										
Spacer Plates	A	No	Surface Af (CaAa)	41.250 - 38.750	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	B	No	Surface Af (CaAa)	41.250 - 38.750	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	C	No	Surface Af (CaAa)	41.250 - 38.750	1	1	0.300 0.350	20.250	48.500	0.276
*										
Spacer Plates	A	No	Surface Af (CaAa)	61.250 - 58.750	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	B	No	Surface Af (CaAa)	61.250 - 58.750	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	C	No	Surface Af (CaAa)	61.250 - 58.750	1	1	0.300 0.350	20.250	48.500	0.276
*										
Spacer Plates	A	No	Surface Af (CaAa)	81.000 - 79.000	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	B	No	Surface Af (CaAa)	81.000 - 79.000	1	1	0.300 0.350	20.250	48.500	0.276
Spacer Plates	C	No	Surface Af (CaAa)	81.000 - 79.000	1	1	0.300 0.350	20.250	48.500	0.276
*										
Spacer Plates	A	No	Surface Af (CaAa)	100.750 - 99.250	1	1	0.300 0.350	20.250	46.500	0.207
Spacer Plates	B	No	Surface Af (CaAa)	100.750 - 99.250	1	1	0.300 0.350	20.250	46.500	0.207
Spacer Plates	C	No	Surface Af (CaAa)	100.750 - 99.250	1	1	0.300 0.350	20.250	46.500	0.207
*										

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 klf
HB114-1-0813U4-M5J(1-1/4)	C	No	No	Inside Pole	177.000 - 0.000	3	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
HB114-21U3M12-XXXF(1-1/4)	C	No	No	Inside Pole	177.000 - 0.000	1	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
*									
LDF7-50A(1-5/8)	C	No	No	Inside Pole	167.000 - 0.000	12	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
*									
CR 50 1873PE(1-5/8)	C	No	No	Inside Pole	154.000 - 0.000	12	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
2" Rigid Conduit	B	No	No	Inside Pole	127.000 - 0.000	1	No Ice	0.000	0.003
							1/2" Ice	0.000	0.003
							1" Ice	0.000	0.003
							2" Ice	0.000	0.003
FB-L98B-002-75000 (3/8)	B	No	No	Inside Pole	127.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
WR-VG82ST-BRDA(5/8)	B	No	No	Inside Pole	127.000 - 0.000	2	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
FB-L98B-034-XXX(3/8)	B	No	No	Inside Pole	127.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
WR-VG66ST-BRD_CCIV2(7/8)	B	No	No	Inside Pole	127.000 - 0.000	2	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
*									
LDF4-50A(1/2)	C	No	No	Inside Pole	79.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
*									
*									

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	177.000-172.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.024

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
L2	172.000-167.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.024
L3	167.000-162.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.073
L4	162.000-157.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.073
L5	157.000-152.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.093
L6	152.000-147.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.123
L7	147.000-142.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.123
L8	142.000-137.000	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.123
L9	137.000-129.750	A	0.000	0.000	0.272	0.000	0.002
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.178
L10	129.750-128.500	A	0.000	0.000	0.047	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.031
L11	128.500-123.500	A	0.000	0.000	0.188	0.000	0.001
		B	0.000	0.000	4.158	0.000	0.036
		C	0.000	0.000	0.000	0.000	0.123
L12	123.500-118.583	A	0.000	0.000	1.313	0.000	0.001
		B	0.000	0.000	6.970	0.000	0.050
		C	0.000	0.000	1.129	0.000	0.121
L13	118.583-118.333	A	0.000	0.000	0.209	0.000	0.000
		B	0.000	0.000	0.496	0.000	0.003
		C	0.000	0.000	0.199	0.000	0.006
L14	118.333-113.333	A	0.000	0.000	4.171	0.000	0.001
		B	0.000	0.000	9.923	0.000	0.051
		C	0.000	0.000	8.340	0.000	0.135
L15	113.333-108.333	A	0.000	0.000	4.838	0.000	0.072
		B	0.000	0.000	10.590	0.000	0.122
		C	0.000	0.000	10.590	0.000	0.210
L16	108.333-106.417	A	0.000	0.000	2.365	0.000	0.082
		B	0.000	0.000	4.569	0.000	0.101
		C	0.000	0.000	4.569	0.000	0.135
L17	106.417-106.167	A	0.000	0.000	0.309	0.000	0.011
		B	0.000	0.000	0.596	0.000	0.013
		C	0.000	0.000	0.596	0.000	0.018
L18	106.167-101.167	A	0.000	0.000	3.117	0.000	0.215
		B	0.000	0.000	8.870	0.000	0.265
		C	0.000	0.000	8.870	0.000	0.352
L19	101.167-96.167	A	0.000	0.000	5.225	0.000	0.525
		B	0.000	0.000	10.977	0.000	0.575
		C	0.000	0.000	10.977	0.000	0.663
L20	96.167-91.167	A	0.000	0.000	2.188	0.000	0.215
		B	0.000	0.000	7.940	0.000	0.265
		C	0.000	0.000	7.940	0.000	0.352
L21	91.167-84.000	A	0.000	0.000	3.136	0.000	0.308
		B	0.000	0.000	11.381	0.000	0.380
		C	0.000	0.000	11.381	0.000	0.505
L22	84.000-83.750	A	0.000	0.000	0.109	0.000	0.011

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
		B	0.000	0.000	0.397	0.000	0.013
		C	0.000	0.000	0.397	0.000	0.018
L23	83.750-78.750	A	0.000	0.000	6.269	0.000	0.773
		B	0.000	0.000	12.021	0.000	0.823
		C	0.000	0.000	12.021	0.000	0.911
L24	78.750-73.750	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L25	73.750-68.750	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L26	68.750-63.750	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L27	63.750-58.750	A	0.000	0.000	7.375	0.000	0.932
		B	0.000	0.000	13.128	0.000	0.982
		C	0.000	0.000	13.128	0.000	1.070
L28	58.750-53.750	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L29	53.750-48.750	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L30	48.750-39.250	A	0.000	0.000	8.444	0.000	1.012
		B	0.000	0.000	19.374	0.000	1.107
		C	0.000	0.000	19.374	0.000	1.275
L31	39.250-38.250	A	0.000	0.000	1.475	0.000	0.186
		B	0.000	0.000	2.626	0.000	0.196
		C	0.000	0.000	2.626	0.000	0.214
L32	38.250-33.250	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L33	33.250-28.250	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L34	28.250-23.250	A	0.000	0.000	2.313	0.000	0.242
		B	0.000	0.000	8.065	0.000	0.292
		C	0.000	0.000	8.065	0.000	0.381
L35	23.250-18.250	A	0.000	0.000	7.419	0.000	0.942
		B	0.000	0.000	13.171	0.000	0.992
		C	0.000	0.000	13.171	0.000	1.080
L36	18.250-13.250	A	0.000	0.000	2.438	0.000	0.272
		B	0.000	0.000	8.190	0.000	0.322
		C	0.000	0.000	8.190	0.000	0.410
L37	13.250-8.250	A	0.000	0.000	2.438	0.000	0.272
		B	0.000	0.000	8.190	0.000	0.322
		C	0.000	0.000	8.190	0.000	0.410
L38	8.250-3.250	A	0.000	0.000	2.438	0.000	0.272
		B	0.000	0.000	8.190	0.000	0.322
		C	0.000	0.000	8.190	0.000	0.410
L39	3.250-0.000	A	0.000	0.000	1.584	0.000	0.177
		B	0.000	0.000	5.324	0.000	0.209
		C	0.000	0.000	5.324	0.000	0.267

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	177.000-172.000	A	1.506	0.000	0.000	1.694	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.024
L2	172.000-167.000	A	1.502	0.000	0.000	1.689	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.024
L3	167.000-162.000	A	1.497	0.000	0.000	1.685	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.073
L4	162.000-157.000	A	1.493	0.000	0.000	1.680	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.073
L5	157.000-152.000	A	1.488	0.000	0.000	1.675	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.093
L6	152.000-147.000	A	1.483	0.000	0.000	1.670	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.123
L7	147.000-142.000	A	1.478	0.000	0.000	1.665	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.123
L8	142.000-137.000	A	1.473	0.000	0.000	1.660	0.000	0.018
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.123
L9	137.000-129.750	A	1.466	0.000	0.000	2.398	0.000	0.026
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.178
L10	129.750-128.500	A	1.461	0.000	0.000	0.413	0.000	0.004
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.031
L11	128.500-123.500	A	1.458	0.000	0.000	1.645	0.000	0.017
		B		0.000	0.000	6.473	0.000	0.102
		C		0.000	0.000	0.000	0.000	0.123
L12	123.500-118.583	A	1.452	0.000	0.000	3.137	0.000	0.032
		B		0.000	0.000	10.612	0.000	0.158
		C		0.000	0.000	1.525	0.000	0.136
L13	118.583-118.333	A	1.449	0.000	0.000	0.351	0.000	0.003
		B		0.000	0.000	0.731	0.000	0.010
		C		0.000	0.000	0.269	0.000	0.009
L14	118.333-113.333	A	1.446	0.000	0.000	7.010	0.000	0.068
		B		0.000	0.000	14.609	0.000	0.196
		C		0.000	0.000	12.147	0.000	0.255
L15	113.333-108.333	A	1.439	0.000	0.000	8.145	0.000	0.155
		B		0.000	0.000	15.742	0.000	0.283
		C		0.000	0.000	15.742	0.000	0.371
L16	108.333-106.417	A	1.435	0.000	0.000	3.995	0.000	0.126
		B		0.000	0.000	6.906	0.000	0.175
		C		0.000	0.000	6.906	0.000	0.209
L17	106.417-106.167	A	1.433	0.000	0.000	0.521	0.000	0.016
		B		0.000	0.000	0.901	0.000	0.023
		C		0.000	0.000	0.901	0.000	0.027
L18	106.167-101.167	A	1.430	0.000	0.000	6.299	0.000	0.290
		B		0.000	0.000	13.894	0.000	0.417
		C		0.000	0.000	13.894	0.000	0.505
L19	101.167-96.167	A	1.423	0.000	0.000	8.319	0.000	0.631
		B		0.000	0.000	15.912	0.000	0.758
		C		0.000	0.000	15.912	0.000	0.845
L20	96.167-91.167	A	1.415	0.000	0.000	5.018	0.000	0.277
		B		0.000	0.000	12.609	0.000	0.404
		C		0.000	0.000	12.609	0.000	0.491
L21	91.167-84.000	A	1.406	0.000	0.000	7.165	0.000	0.396

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
		B		0.000	0.000	18.043	0.000	0.577
		C		0.000	0.000	18.043	0.000	0.703
L22	84.000-83.750	A	1.400	0.000	0.000	0.250	0.000	0.014
		B		0.000	0.000	0.629	0.000	0.020
		C		0.000	0.000	0.629	0.000	0.025
L23	83.750-78.750	A	1.395	0.000	0.000	9.385	0.000	0.893
		B		0.000	0.000	16.971	0.000	1.019
		C		0.000	0.000	16.971	0.000	1.106
L24	78.750-73.750	A	1.386	0.000	0.000	5.085	0.000	0.305
		B		0.000	0.000	12.669	0.000	0.430
		C		0.000	0.000	12.669	0.000	0.519
L25	73.750-68.750	A	1.377	0.000	0.000	5.066	0.000	0.305
		B		0.000	0.000	12.648	0.000	0.429
		C		0.000	0.000	12.648	0.000	0.518
L26	68.750-63.750	A	1.367	0.000	0.000	5.047	0.000	0.304
		B		0.000	0.000	12.626	0.000	0.428
		C		0.000	0.000	12.626	0.000	0.516
L27	63.750-58.750	A	1.356	0.000	0.000	10.483	0.000	1.063
		B		0.000	0.000	18.060	0.000	1.187
		C		0.000	0.000	18.060	0.000	1.275
L28	58.750-53.750	A	1.345	0.000	0.000	5.002	0.000	0.303
		B		0.000	0.000	12.576	0.000	0.426
		C		0.000	0.000	12.576	0.000	0.514
L29	53.750-48.750	A	1.332	0.000	0.000	4.977	0.000	0.302
		B		0.000	0.000	12.548	0.000	0.424
		C		0.000	0.000	12.548	0.000	0.513
L30	48.750-39.250	A	1.312	0.000	0.000	13.736	0.000	1.177
		B		0.000	0.000	28.110	0.000	1.408
		C		0.000	0.000	28.110	0.000	1.576
L31	39.250-38.250	A	1.296	0.000	0.000	2.076	0.000	0.212
		B		0.000	0.000	3.589	0.000	0.236
		C		0.000	0.000	3.589	0.000	0.254
L32	38.250-33.250	A	1.285	0.000	0.000	4.883	0.000	0.299
		B		0.000	0.000	12.442	0.000	0.419
		C		0.000	0.000	12.442	0.000	0.508
L33	33.250-28.250	A	1.266	0.000	0.000	4.844	0.000	0.298
		B		0.000	0.000	12.398	0.000	0.417
		C		0.000	0.000	12.398	0.000	0.505
L34	28.250-23.250	A	1.244	0.000	0.000	4.800	0.000	0.296
		B		0.000	0.000	12.348	0.000	0.415
		C		0.000	0.000	12.348	0.000	0.503
L35	23.250-18.250	A	1.217	0.000	0.000	10.208	0.000	1.058
		B		0.000	0.000	17.750	0.000	1.175
		C		0.000	0.000	17.750	0.000	1.263
L36	18.250-13.250	A	1.184	0.000	0.000	4.806	0.000	0.324
		B		0.000	0.000	12.339	0.000	0.439
		C		0.000	0.000	12.339	0.000	0.528
L37	13.250-8.250	A	1.140	0.000	0.000	4.717	0.000	0.322
		B		0.000	0.000	12.239	0.000	0.435
		C		0.000	0.000	12.239	0.000	0.523
L38	8.250-3.250	A	1.070	0.000	0.000	4.578	0.000	0.318
		B		0.000	0.000	12.084	0.000	0.427
		C		0.000	0.000	12.084	0.000	0.516
L39	3.250-0.000	A	0.943	0.000	0.000	2.811	0.000	0.202
		B		0.000	0.000	7.668	0.000	0.269
		C		0.000	0.000	7.668	0.000	0.327

Feed Line Center of Pressure

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
L1	177.000-172.000	-0.063	-0.294	-0.276	-1.296
L2	172.000-167.000	-0.063	-0.294	-0.277	-1.304
L3	167.000-162.000	-0.063	-0.295	-0.279	-1.310
L4	162.000-157.000	-0.063	-0.295	-0.280	-1.316
L5	157.000-152.000	-0.063	-0.295	-0.281	-1.321
L6	152.000-147.000	-0.063	-0.295	-0.282	-1.326
L7	147.000-142.000	-0.063	-0.295	-0.283	-1.330
L8	142.000-137.000	-0.063	-0.295	-0.283	-1.334
L9	137.000-129.750	-0.063	-0.295	-0.284	-1.337
L10	129.750-128.500	-0.063	-0.295	-0.285	-1.340
L11	128.500-123.500	4.777	-1.231	3.603	-1.721
L12	123.500-118.583	5.000	-1.221	4.041	-1.599
L13	118.583-118.333	2.842	-0.694	3.081	-1.219
L14	118.333-113.333	2.142	1.262	2.193	0.963
L15	113.333-108.333	1.858	1.802	1.860	1.532
L16	108.333-106.417	1.718	1.666	1.702	1.403
L17	106.417-106.167	1.724	1.671	1.709	1.408
L18	106.167-101.167	2.435	2.361	2.088	1.721
L19	101.167-96.167	2.065	2.002	1.925	1.587
L20	96.167-91.167	2.771	2.686	2.302	1.900
L21	91.167-84.000	2.827	2.741	2.345	1.936
L22	84.000-83.750	2.835	2.749	2.351	1.941
L23	83.750-78.750	1.812	1.756	1.911	1.580
L24	78.750-73.750	2.852	2.765	2.389	1.976
L25	73.750-68.750	2.897	2.808	2.423	2.006
L26	68.750-63.750	2.941	2.851	2.456	2.035
L27	63.750-58.750	1.779	1.725	1.927	1.598
L28	58.750-53.750	3.027	2.934	2.522	2.094
L29	53.750-48.750	3.069	2.975	2.554	2.124
L30	48.750-39.250	2.581	2.502	2.331	1.942
L31	39.250-38.250	1.862	1.805	2.035	1.695
L32	38.250-33.250	3.169	3.071	2.632	2.199
L33	33.250-28.250	3.210	3.111	2.664	2.230
L34	28.250-23.250	3.250	3.150	2.695	2.262
L35	23.250-18.250	1.933	1.873	2.132	1.794
L36	18.250-13.250	3.274	3.173	2.742	2.316
L37	13.250-8.250	3.312	3.210	2.775	2.355
L38	8.250-3.250	3.351	3.247	2.811	2.405
L39	3.250-0.000	3.382	3.278	2.850	2.474

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	20	Safety Line 3/8	172.00 - 177.00	1.0000	1.0000
L2	20	Safety Line 3/8	167.00 - 172.00	1.0000	1.0000
L3	20	Safety Line 3/8	162.00 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			167.00		
L4	20	Safety Line 3/8	157.00 - 162.00	1.0000	1.0000
L5	20	Safety Line 3/8	152.00 - 157.00	1.0000	1.0000
L6	20	Safety Line 3/8	147.00 - 152.00	1.0000	1.0000
L7	20	Safety Line 3/8	142.00 - 147.00	1.0000	1.0000
L8	20	Safety Line 3/8	137.00 - 142.00	1.0000	1.0000
L9	20	Safety Line 3/8	129.75 - 137.00	1.0000	1.0000
L10	20	Safety Line 3/8	128.50 - 129.75	1.0000	1.0000
L11	9	LDF7-50A(1-5/8)	123.50 - 127.00	1.0000	1.0000
L11	20	Safety Line 3/8	123.50 - 128.50	1.0000	1.0000
L12	9	LDF7-50A(1-5/8)	118.58 - 123.50	1.0000	1.0000
L12	20	Safety Line 3/8	118.58 - 123.50	1.0000	1.0000
L12	33	MP3-04	118.58 - 120.00	1.0000	1.0000
L12	34	MP3-04	118.58 - 120.00	1.0000	1.0000
L12	35	MP3-04	118.58 - 120.00	1.0000	1.0000
L13	9	LDF7-50A(1-5/8)	118.33 - 118.58	1.0000	1.0000
L13	20	Safety Line 3/8	118.33 - 118.58	1.0000	1.0000
L13	33	MP3-04	118.33 - 118.58	1.0000	1.0000
L13	34	MP3-04	118.33 - 118.58	1.0000	1.0000
L13	35	MP3-04	118.33 - 118.58	1.0000	1.0000
L14	9	LDF7-50A(1-5/8)	113.33 - 118.33	1.0000	1.0000
L14	16	LCF158-50JL(1-5/8)	113.33 - 117.00	1.0000	1.0000
L14	20	Safety Line 3/8	113.33 - 118.33	1.0000	1.0000
L14	33	MP3-04	113.33 - 118.33	1.0000	1.0000
L14	34	MP3-04	113.33 - 118.33	1.0000	1.0000
L14	35	MP3-04	113.33 - 118.33	1.0000	1.0000
L15	9	LDF7-50A(1-5/8)	108.33 - 113.33	1.0000	1.0000
L15	16	LCF158-50JL(1-5/8)	108.33 - 113.33	1.0000	1.0000
L15	20	Safety Line 3/8	108.33 - 113.33	1.0000	1.0000
L15	29	4" SR	108.33 - 110.00	1.0000	1.0000
L15	30	4" SR	108.33 - 110.00	1.0000	1.0000
L15	31	4" SR	108.33 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			110.00		
L15	33	MP3-04	108.33 - 113.33	1.0000	1.0000
L15	34	MP3-04	108.33 - 113.33	1.0000	1.0000
L15	35	MP3-04	108.33 - 113.33	1.0000	1.0000
L16	9	LDF7-50A(1-5/8)	106.42 - 108.33	1.0000	1.0000
L16	16	LCF158-50JL(1-5/8)	106.42 - 108.33	1.0000	1.0000
L16	20	Safety Line 3/8	106.42 - 108.33	1.0000	1.0000
L16	29	4" SR	106.42 - 108.33	1.0000	1.0000
L16	30	4" SR	106.42 - 108.33	1.0000	1.0000
L16	31	4" SR	106.42 - 108.33	1.0000	1.0000
L16	33	MP3-04	106.42 - 108.33	1.0000	1.0000
L16	34	MP3-04	106.42 - 108.33	1.0000	1.0000
L16	35	MP3-04	106.42 - 108.33	1.0000	1.0000
L17	9	LDF7-50A(1-5/8)	106.17 - 106.42	1.0000	1.0000
L17	16	LCF158-50JL(1-5/8)	106.17 - 106.42	1.0000	1.0000
L17	20	Safety Line 3/8	106.17 - 106.42	1.0000	1.0000
L17	29	4" SR	106.17 - 106.42	1.0000	1.0000
L17	30	4" SR	106.17 - 106.42	1.0000	1.0000
L17	31	4" SR	106.17 - 106.42	1.0000	1.0000
L17	33	MP3-04	106.17 - 106.42	1.0000	1.0000
L17	34	MP3-04	106.17 - 106.42	1.0000	1.0000
L17	35	MP3-04	106.17 - 106.42	1.0000	1.0000
L18	9	LDF7-50A(1-5/8)	101.17 - 106.17	1.0000	1.0000
L18	16	LCF158-50JL(1-5/8)	101.17 - 106.17	1.0000	1.0000
L18	20	Safety Line 3/8	101.17 - 106.17	1.0000	1.0000
L18	29	4" SR	101.17 - 106.17	1.0000	1.0000
L18	30	4" SR	101.17 - 106.17	1.0000	1.0000
L18	31	4" SR	101.17 - 106.17	1.0000	1.0000
L18	33	MP3-04	105.00 - 106.17	1.0000	1.0000
L18	34	MP3-04	105.00 - 106.17	1.0000	1.0000
L18	35	MP3-04	105.00 - 106.17	1.0000	1.0000
L19	9	LDF7-50A(1-5/8)	96.17 - 101.17	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L19	16	LCF158-50JL(1-5/8)	96.17 - 101.17	1.0000	1.0000
L19	20	Safety Line 3/8	96.17 - 101.17	1.0000	1.0000
L19	29	4" SR	96.17 - 101.17	1.0000	1.0000
L19	30	4" SR	96.17 - 101.17	1.0000	1.0000
L19	31	4" SR	96.17 - 101.17	1.0000	1.0000
L19	53	Spacer Plates	99.25 - 100.75	1.0000	1.0000
L19	54	Spacer Plates	99.25 - 100.75	1.0000	1.0000
L19	55	Spacer Plates	99.25 - 100.75	1.0000	1.0000
L20	9	LDF7-50A(1-5/8)	91.17 - 96.17	1.0000	1.0000
L20	16	LCF158-50JL(1-5/8)	91.17 - 96.17	1.0000	1.0000
L20	20	Safety Line 3/8	91.17 - 96.17	1.0000	1.0000
L20	29	4" SR	91.17 - 96.17	1.0000	1.0000
L20	30	4" SR	91.17 - 96.17	1.0000	1.0000
L20	31	4" SR	91.17 - 96.17	1.0000	1.0000
L21	9	LDF7-50A(1-5/8)	84.00 - 91.17	1.0000	1.0000
L21	16	LCF158-50JL(1-5/8)	84.00 - 91.17	1.0000	1.0000
L21	20	Safety Line 3/8	84.00 - 91.17	1.0000	1.0000
L21	29	4" SR	84.00 - 91.17	1.0000	1.0000
L21	30	4" SR	84.00 - 91.17	1.0000	1.0000
L21	31	4" SR	84.00 - 91.17	1.0000	1.0000
L22	9	LDF7-50A(1-5/8)	83.75 - 84.00	1.0000	1.0000
L22	16	LCF158-50JL(1-5/8)	83.75 - 84.00	1.0000	1.0000
L22	20	Safety Line 3/8	83.75 - 84.00	1.0000	1.0000
L22	29	4" SR	83.75 - 84.00	1.0000	1.0000
L22	30	4" SR	83.75 - 84.00	1.0000	1.0000
L22	31	4" SR	83.75 - 84.00	1.0000	1.0000
L23	9	LDF7-50A(1-5/8)	78.75 - 83.75	1.0000	1.0000
L23	16	LCF158-50JL(1-5/8)	78.75 - 83.75	1.0000	1.0000
L23	20	Safety Line 3/8	78.75 - 83.75	1.0000	1.0000
L23	26	4.25" SR	78.75 - 80.00	1.0000	1.0000
L23	27	4.25" SR	78.75 - 80.00	1.0000	1.0000
L23	28	4.25" SR	78.75 - 80.00	1.0000	1.0000
L23	29	4" SR	80.00 - 83.75	1.0000	1.0000
L23	30	4" SR	80.00 - 83.75	1.0000	1.0000
L23	31	4" SR	80.00 - 83.75	1.0000	1.0000
L23	49	Spacer Plates	79.00 - 81.00	1.0000	1.0000
L23	50	Spacer Plates	79.00 - 81.00	1.0000	1.0000
L23	51	Spacer Plates	79.00 - 81.00	1.0000	1.0000
L24	9	LDF7-50A(1-5/8)	73.75 - 78.75	1.0000	1.0000
L24	16	LCF158-50JL(1-5/8)	73.75 - 78.75	1.0000	1.0000
L24	20	Safety Line 3/8	73.75 - 78.75	1.0000	1.0000
L24	26	4.25" SR	73.75 - 78.75	1.0000	1.0000
L24	27	4.25" SR	73.75 - 78.75	1.0000	1.0000
L24	28	4.25" SR	73.75 - 78.75	1.0000	1.0000
L25	9	LDF7-50A(1-5/8)	68.75 - 73.75	1.0000	1.0000
L25	16	LCF158-50JL(1-5/8)	68.75 - 73.75	1.0000	1.0000
L25	20	Safety Line 3/8	68.75 - 73.75	1.0000	1.0000
L25	26	4.25" SR	68.75 - 73.75	1.0000	1.0000
L25	27	4.25" SR	68.75 - 73.75	1.0000	1.0000
L25	28	4.25" SR	68.75 - 73.75	1.0000	1.0000
L26	9	LDF7-50A(1-5/8)	63.75 - 68.75	1.0000	1.0000
L26	16	LCF158-50JL(1-5/8)	63.75 - 68.75	1.0000	1.0000
L26	20	Safety Line 3/8	63.75 - 68.75	1.0000	1.0000
L26	26	4.25" SR	63.75 - 68.75	1.0000	1.0000
L26	27	4.25" SR	63.75 - 68.75	1.0000	1.0000
L26	28	4.25" SR	63.75 - 68.75	1.0000	1.0000
L27	9	LDF7-50A(1-5/8)	58.75 - 63.75	1.0000	1.0000
L27	16	LCF158-50JL(1-5/8)	58.75 - 63.75	1.0000	1.0000
L27	20	Safety Line 3/8	58.75 - 63.75	1.0000	1.0000
L27	26	4.25" SR	58.75 - 63.75	1.0000	1.0000
L27	27	4.25" SR	58.75 - 63.75	1.0000	1.0000
L27	28	4.25" SR	58.75 - 63.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L27	45	Spacer Plates	58.75 - 61.25	1.0000	1.0000
L27	46	Spacer Plates	58.75 - 61.25	1.0000	1.0000
L27	47	Spacer Plates	58.75 - 61.25	1.0000	1.0000
L28	9	LDF7-50A(1-5/8)	53.75 - 58.75	1.0000	1.0000
L28	16	LCF158-50JL(1-5/8)	53.75 - 58.75	1.0000	1.0000
L28	20	Safety Line 3/8	53.75 - 58.75	1.0000	1.0000
L28	26	4.25" SR	53.75 - 58.75	1.0000	1.0000
L28	27	4.25" SR	53.75 - 58.75	1.0000	1.0000
L28	28	4.25" SR	53.75 - 58.75	1.0000	1.0000
L29	9	LDF7-50A(1-5/8)	48.75 - 53.75	1.0000	1.0000
L29	16	LCF158-50JL(1-5/8)	48.75 - 53.75	1.0000	1.0000
L29	20	Safety Line 3/8	48.75 - 53.75	1.0000	1.0000
L29	26	4.25" SR	48.75 - 53.75	1.0000	1.0000
L29	27	4.25" SR	48.75 - 53.75	1.0000	1.0000
L29	28	4.25" SR	48.75 - 53.75	1.0000	1.0000
L30	9	LDF7-50A(1-5/8)	39.25 - 48.75	1.0000	1.0000
L30	16	LCF158-50JL(1-5/8)	39.25 - 48.75	1.0000	1.0000
L30	20	Safety Line 3/8	39.25 - 48.75	1.0000	1.0000
L30	26	4.25" SR	39.25 - 48.75	1.0000	1.0000
L30	27	4.25" SR	39.25 - 48.75	1.0000	1.0000
L30	28	4.25" SR	39.25 - 48.75	1.0000	1.0000
L30	41	Spacer Plates	39.25 - 41.25	1.0000	1.0000
L30	42	Spacer Plates	39.25 - 41.25	1.0000	1.0000
L30	43	Spacer Plates	39.25 - 41.25	1.0000	1.0000
L31	9	LDF7-50A(1-5/8)	38.25 - 39.25	1.0000	1.0000
L31	16	LCF158-50JL(1-5/8)	38.25 - 39.25	1.0000	1.0000
L31	20	Safety Line 3/8	38.25 - 39.25	1.0000	1.0000
L31	26	4.25" SR	38.25 - 39.25	1.0000	1.0000
L31	27	4.25" SR	38.25 - 39.25	1.0000	1.0000
L31	28	4.25" SR	38.25 - 39.25	1.0000	1.0000
L31	41	Spacer Plates	38.75 - 39.25	1.0000	1.0000
L31	42	Spacer Plates	38.75 - 39.25	1.0000	1.0000
L31	43	Spacer Plates	38.75 - 39.25	1.0000	1.0000
L32	9	LDF7-50A(1-5/8)	33.25 - 38.25	1.0000	1.0000
L32	16	LCF158-50JL(1-5/8)	33.25 - 38.25	1.0000	1.0000
L32	20	Safety Line 3/8	33.25 - 38.25	1.0000	1.0000
L32	26	4.25" SR	33.25 - 38.25	1.0000	1.0000
L32	27	4.25" SR	33.25 - 38.25	1.0000	1.0000
L32	28	4.25" SR	33.25 - 38.25	1.0000	1.0000
L33	9	LDF7-50A(1-5/8)	28.25 - 33.25	1.0000	1.0000
L33	16	LCF158-50JL(1-5/8)	28.25 - 33.25	1.0000	1.0000
L33	20	Safety Line 3/8	28.25 - 33.25	1.0000	1.0000
L33	26	4.25" SR	28.25 - 33.25	1.0000	1.0000
L33	27	4.25" SR	28.25 - 33.25	1.0000	1.0000
L33	28	4.25" SR	28.25 - 33.25	1.0000	1.0000
L34	9	LDF7-50A(1-5/8)	23.25 - 28.25	1.0000	1.0000
L34	16	LCF158-50JL(1-5/8)	23.25 - 28.25	1.0000	1.0000
L34	20	Safety Line 3/8	23.25 - 28.25	1.0000	1.0000
L34	26	4.25" SR	23.25 - 28.25	1.0000	1.0000
L34	27	4.25" SR	23.25 - 28.25	1.0000	1.0000
L34	28	4.25" SR	23.25 - 28.25	1.0000	1.0000
L35	9	LDF7-50A(1-5/8)	18.25 - 23.25	1.0000	1.0000
L35	16	LCF158-50JL(1-5/8)	18.25 - 23.25	1.0000	1.0000
L35	20	Safety Line 3/8	18.25 - 23.25	1.0000	1.0000
L35	23	4.5" SR	18.25 - 20.00	1.0000	1.0000
L35	24	4.5" SR	18.25 - 20.00	1.0000	1.0000
L35	25	4.5" SR	18.25 - 20.00	1.0000	1.0000
L35	26	4.25" SR	20.00 - 23.25	1.0000	1.0000
L35	27	4.25" SR	20.00 - 23.25	1.0000	1.0000
L35	28	4.25" SR	20.00 - 23.25	1.0000	1.0000
L35	37	Spacer Plates	18.75 - 21.25	1.0000	1.0000
L35	38	Spacer Plates	18.75 - 21.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L35	39	Spacer Plates	18.75 - 21.25	1.0000	1.0000
L36	9	LDF7-50A(1-5/8)	13.25 - 18.25	1.0000	1.0000
L36	16	LCF158-50JL(1-5/8)	13.25 - 18.25	1.0000	1.0000
L36	20	Safety Line 3/8	13.25 - 18.25	1.0000	1.0000
L36	23	4.5" SR	13.25 - 18.25	1.0000	1.0000
L36	24	4.5" SR	13.25 - 18.25	1.0000	1.0000
L36	25	4.5" SR	13.25 - 18.25	1.0000	1.0000
L37	9	LDF7-50A(1-5/8)	8.25 - 13.25	1.0000	1.0000
L37	16	LCF158-50JL(1-5/8)	8.25 - 13.25	1.0000	1.0000
L37	20	Safety Line 3/8	8.25 - 13.25	1.0000	1.0000
L37	23	4.5" SR	8.25 - 13.25	1.0000	1.0000
L37	24	4.5" SR	8.25 - 13.25	1.0000	1.0000
L37	25	4.5" SR	8.25 - 13.25	1.0000	1.0000
L38	9	LDF7-50A(1-5/8)	3.25 - 8.25	1.0000	1.0000
L38	16	LCF158-50JL(1-5/8)	3.25 - 8.25	1.0000	1.0000
L38	20	Safety Line 3/8	3.25 - 8.25	1.0000	1.0000
L38	23	4.5" SR	3.25 - 8.25	1.0000	1.0000
L38	24	4.5" SR	3.25 - 8.25	1.0000	1.0000
L38	25	4.5" SR	3.25 - 8.25	1.0000	1.0000
L39	9	LDF7-50A(1-5/8)	0.00 - 3.25	1.0000	1.0000
L39	16	LCF158-50JL(1-5/8)	0.00 - 3.25	1.0000	1.0000
L39	20	Safety Line 3/8	0.00 - 3.25	1.0000	1.0000
L39	23	4.5" SR	0.00 - 3.25	1.0000	1.0000
L39	24	4.5" SR	0.00 - 3.25	1.0000	1.0000
L39	25	4.5" SR	0.00 - 3.25	1.0000	1.0000

Effective Width of Flat Linear Attachments / Feed Lines

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L12	33	MP3-04	118.58 - 120.00	Manual	1.0000
L12	34	MP3-04	118.58 - 120.00	Manual	1.0000
L12	35	MP3-04	118.58 - 120.00	Manual	1.0000
L13	33	MP3-04	118.33 - 118.58	Manual	1.0000
L13	34	MP3-04	118.33 - 118.58	Manual	1.0000
L13	35	MP3-04	118.33 - 118.58	Manual	1.0000
L14	33	MP3-04	113.33 - 118.33	Manual	1.0000
L14	34	MP3-04	113.33 - 118.33	Manual	1.0000
L14	35	MP3-04	113.33 - 118.33	Manual	1.0000
L15	33	MP3-04	108.33 - 113.33	Manual	1.0000
L15	34	MP3-04	108.33 - 113.33	Manual	1.0000
L15	35	MP3-04	108.33 -	Manual	1.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L16	33	MP3-04	113.33 106.42 - 108.33	Manual	1.0000
L16	34	MP3-04	106.42 - 108.33	Manual	1.0000
L16	35	MP3-04	106.42 - 108.33	Manual	1.0000
L17	33	MP3-04	106.17 - 106.42	Manual	1.0000
L17	34	MP3-04	106.17 - 106.42	Manual	1.0000
L17	35	MP3-04	106.17 - 106.42	Manual	1.0000
L18	33	MP3-04	105.00 - 106.17	Manual	1.0000
L18	34	MP3-04	105.00 - 106.17	Manual	1.0000
L18	35	MP3-04	105.00 - 106.17	Manual	1.0000
L19	53	Spacer Plates	99.25 - 100.75	Manual	1.0000
L19	54	Spacer Plates	99.25 - 100.75	Manual	1.0000
L19	55	Spacer Plates	99.25 - 100.75	Manual	1.0000
L23	49	Spacer Plates	79.00 - 81.00	Manual	1.0000
L23	50	Spacer Plates	79.00 - 81.00	Manual	1.0000
L23	51	Spacer Plates	79.00 - 81.00	Manual	1.0000
L27	45	Spacer Plates	58.75 - 61.25	Manual	1.0000
L27	46	Spacer Plates	58.75 - 61.25	Manual	1.0000
L27	47	Spacer Plates	58.75 - 61.25	Manual	1.0000
L30	41	Spacer Plates	39.25 - 41.25	Manual	1.0000
L30	42	Spacer Plates	39.25 - 41.25	Manual	1.0000
L30	43	Spacer Plates	39.25 - 41.25	Manual	1.0000
L31	41	Spacer Plates	38.75 - 39.25	Manual	1.0000
L31	42	Spacer Plates	38.75 - 39.25	Manual	1.0000
L31	43	Spacer Plates	38.75 - 39.25	Manual	1.0000
L35	37	Spacer Plates	18.75 - 21.25	Manual	1.0000
L35	38	Spacer Plates	18.75 - 21.25	Manual	1.0000
L35	39	Spacer Plates	18.75 - 21.25	Manual	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice	4.600 5.050 5.500	4.010 4.450 4.890	0.095 0.160 0.235

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	6.440	5.820	0.419
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
(3) ACU-A20-N	A	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
(3) ACU-A20-N	B	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
(3) ACU-A20-N	C	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
800 EXTERNAL NOTCH FILTER	A	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.660 0.763 0.873 1.115	0.321 0.398 0.483 0.674	0.011 0.017 0.024 0.045
800 EXTERNAL NOTCH FILTER	B	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.660 0.763 0.873 1.115	0.321 0.398 0.483 0.674	0.011 0.017 0.024 0.045
800 EXTERNAL NOTCH FILTER	C	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.660 0.763 0.873 1.115	0.321 0.398 0.483 0.674	0.011 0.017 0.024 0.045
1900MHZ RRH (65MHZ)	A	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
1900MHZ RRH (65MHZ)	B	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
1900MHZ RRH (65MHZ)	C	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
800MHZ RRH	A	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.134 2.320 2.512 2.920	1.773 1.946 2.127 2.510	0.053 0.074 0.098 0.157
800MHZ RRH	B	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.134 2.320 2.512 2.920	1.773 1.946 2.127 2.510	0.053 0.074 0.098 0.157
800MHZ RRH	C	From Leg	1.000 0.000 2.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.134 2.320 2.512 2.920	1.773 1.946 2.127 2.510	0.053 0.074 0.098 0.157
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
TD-RRH8X20-25	A	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8X20-25	B	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8X20-25	C	From Leg	4.000 0.000 0.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
6' x 2" Mount Pipe	A	From Leg	4.000 0.000 1.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
6' x 2" Mount Pipe	B	From Leg	4.000 0.000 1.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
6' x 2" Mount Pipe	C	From Leg	4.000 0.000 1.000	0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
Platform Mount [LP 1201-1]	C	None		0.000	177.000	No Ice 1/2" Ice 1" Ice 2" Ice	18.380 22.110 25.870 33.470	18.380 22.110 25.870 33.470	2.100 2.652 3.263 4.662
6' x 2" Mount Pipe	A	From Leg	1.000 0.000 3.000	0.000	176.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
6' x 2" Mount Pipe	B	From Leg	1.000 0.000 3.000	0.000	176.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
6' x 2" Mount Pipe	C	From Leg	1.000 0.000 3.000	0.000	176.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
Side Arm Mount [SO 102-3]	C	None		0.000	176.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.600 4.180 4.750 5.900	3.600 4.180 4.750 5.900	0.075 0.105 0.135 0.195
*									
APXV18-206516S-C-A20 w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.550 2.960 3.380 4.260	2.150 2.550 2.960 3.830	0.039 0.068 0.106 0.207

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
APXV18-206516S-C-A20 w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.550 2.960 3.380 4.260	2.150 2.550 2.960 3.830	0.039 0.068 0.106 0.207
APXV18-206516S-C-A20 w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.550 2.960 3.380 4.260	2.150 2.550 2.960 3.830	0.039 0.068 0.106 0.207
LNX-6515DS-A1M w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	5.310 5.800 6.300 7.330	4.270 4.750 5.240 6.240	0.083 0.165 0.261 0.495
LNX-6515DS-A1M w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	5.310 5.800 6.300 7.330	4.270 4.750 5.240 6.240	0.083 0.165 0.261 0.495
LNX-6515DS-A1M w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	5.310 5.800 6.300 7.330	4.270 4.750 5.240 6.240	0.083 0.165 0.261 0.495
KRY 112 75/1	A	From Leg	4.000 0.000 1.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.235 1.374 1.674	0.442 0.534 0.635 0.860	0.030 0.039 0.049 0.077
KRY 112 75/1	B	From Leg	4.000 0.000 1.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.235 1.374 1.674	0.442 0.534 0.635 0.860	0.030 0.039 0.049 0.077
KRY 112 75/1	C	From Leg	4.000 0.000 1.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.235 1.374 1.674	0.442 0.534 0.635 0.860	0.030 0.039 0.049 0.077
(2) 6' x 2" Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
(2) 6' x 2" Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
(2) 6' x 2" Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
T-Arm Mount [TA 602-3]	C	None		0.000	167.000	No Ice 1/2" Ice 1" Ice 2" Ice	13.400 16.440 19.700 25.860	13.400 16.440 19.700 25.860	0.774 1.004 1.292 2.053
*									
(2) LPA-80080/6CF w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.564 5.105 5.612 6.651	10.259 11.427 12.312 14.129	0.046 0.113 0.187 0.363
(2) LPA-80080/6CF w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.564 5.105 5.612 6.651	10.259 11.427 12.312 14.129	0.046 0.113 0.187 0.363

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(2) LPA-80063/6CF w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	9.831 10.400 10.933 12.026	10.215 11.384 12.269 14.086	0.052 0.145 0.246 0.476
BXA-171085-8BF-EDIN-2 w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.179 3.555 3.930 4.692	3.353 3.971 4.595 5.893	0.029 0.061 0.099 0.193
BXA-171085-8BF-EDIN-2 w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.179 3.555 3.930 4.692	3.353 3.971 4.595 5.893	0.029 0.061 0.099 0.193
BXA-171063-8BF-EDIN-2 w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.179 3.555 3.930 4.692	3.353 3.971 4.595 5.893	0.029 0.061 0.099 0.193
BXA-70063-6CF-2 w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.806 8.357 8.872 9.927	5.801 6.953 7.819 9.601	0.042 0.103 0.171 0.335
BXA-70063-6CF-2 w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.806 8.357 8.872 9.927	5.801 6.953 7.819 9.601	0.042 0.103 0.171 0.335
BXA-70063-6CF-2 w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.806 8.357 8.872 9.927	5.801 6.953 7.819 9.601	0.042 0.103 0.171 0.335
(2) FD9R6004/2C-3L	A	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.314 0.386 0.466 0.647	0.076 0.119 0.169 0.294	0.003 0.005 0.009 0.020
(2) FD9R6004/2C-3L	B	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.314 0.386 0.466 0.647	0.076 0.119 0.169 0.294	0.003 0.005 0.009 0.020
(2) FD9R6004/2C-3L	C	From Leg	4.000 0.000 2.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.314 0.386 0.466 0.647	0.076 0.119 0.169 0.294	0.003 0.005 0.009 0.020
Platform Mount [LP 303-1]	C	None		0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 18.010 21.340 28.080	14.690 18.010 21.340 28.080	1.250 1.569 1.942 2.852
*									
LGP21401	A	From Leg	4.000 0.000 -1.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.239 1.381 1.688	0.207 0.274 0.348 0.521	0.014 0.021 0.030 0.055
LGP21401	B	From Leg	4.000 0.000 -1.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.239 1.381 1.688	0.207 0.274 0.348 0.521	0.014 0.021 0.030 0.055
LGP21401	C	From Leg	4.000 0.000 -1.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.239 1.381 1.688	0.207 0.274 0.348 0.521	0.014 0.021 0.030 0.055

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
LGP21401	A	From Leg	4.000 0.000 -2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.239 1.381 1.688	0.207 0.274 0.348 0.521	0.014 0.021 0.030 0.055
LGP21401	B	From Leg	4.000 0.000 -2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.239 1.381 1.688	0.207 0.274 0.348 0.521	0.014 0.021 0.030 0.055
LGP21401	C	From Leg	4.000 0.000 -2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.104 1.239 1.381 1.688	0.207 0.274 0.348 0.521	0.014 0.021 0.030 0.055
LGP13519	A	From Leg	4.000 0.000 -1.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.290 0.362 0.441 0.622	0.181 0.241 0.310 0.473	0.005 0.008 0.012 0.024
LGP13519	B	From Leg	4.000 0.000 -1.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.290 0.362 0.441 0.622	0.181 0.241 0.310 0.473	0.005 0.008 0.012 0.024
LGP13519	C	From Leg	4.000 0.000 -1.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.290 0.362 0.441 0.622	0.181 0.241 0.310 0.473	0.005 0.008 0.012 0.024
LGP13519	A	From Leg	4.000 0.000 -2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.290 0.362 0.441 0.622	0.181 0.241 0.310 0.473	0.005 0.008 0.012 0.024
LGP13519	B	From Leg	4.000 0.000 -2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.290 0.362 0.441 0.622	0.181 0.241 0.310 0.473	0.005 0.008 0.012 0.024
LGP13519	C	From Leg	4.000 0.000 -2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.290 0.362 0.441 0.622	0.181 0.241 0.310 0.473	0.005 0.008 0.012 0.024
DC6-48-60-18-8F	C	From Leg	2.000 0.000 3.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.212 1.892 2.105 2.570	1.212 1.892 2.105 2.570	0.033 0.055 0.080 0.138
DMP65R-BU4D	A	From Leg	4.000 0.000 2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.480 8.010 8.550 9.670	2.810 3.230 3.670 4.600	0.076 0.128 0.185 0.316
DMP65R-BU4D	B	From Leg	4.000 0.000 2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.480 8.010 8.550 9.670	2.810 3.230 3.670 4.600	0.076 0.128 0.185 0.316
DMP65R-BU4D	C	From Leg	4.000 0.000 2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	7.480 8.010 8.550 9.670	2.810 3.230 3.670 4.600	0.076 0.128 0.185 0.316
OPA65R-BU4D	A	From Leg	4.000 0.000 2.000	0.000	127.000	No Ice 1/2" Ice 1" Ice 2" Ice	8.060 8.620 9.190 10.380	2.990 3.450 3.910 4.900	0.062 0.115 0.173 0.305
OPA65R-BU4D	B	From Leg	4.000	0.000	127.000	No Ice	8.060	2.990	0.062

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.000			1/2" Ice	8.620	3.450	0.115
			2.000			1" Ice	9.190	3.910	0.173
						2" Ice	10.380	4.900	0.305
OPA65R-BU4D	C	From Leg	4.000	0.000	127.000	No Ice	8.060	2.990	0.062
			0.000			1/2" Ice	8.620	3.450	0.115
			2.000			1" Ice	9.190	3.910	0.173
						2" Ice	10.380	4.900	0.305
7770.00	A	From Leg	4.000	0.000	127.000	No Ice	5.508	2.928	0.035
			0.000			1/2" Ice	5.867	3.273	0.068
			2.000			1" Ice	6.233	3.625	0.105
						2" Ice	6.986	4.352	0.195
7770.00	B	From Leg	4.000	0.000	127.000	No Ice	5.508	2.928	0.035
			0.000			1/2" Ice	5.867	3.273	0.068
			2.000			1" Ice	6.233	3.625	0.105
						2" Ice	6.986	4.352	0.195
7770.00	C	From Leg	4.000	0.000	127.000	No Ice	5.508	2.928	0.035
			0.000			1/2" Ice	5.867	3.273	0.068
			2.000			1" Ice	6.233	3.625	0.105
						2" Ice	6.986	4.352	0.195
RRUS 4449 B5/B12	A	From Leg	4.000	0.000	127.000	No Ice	1.968	1.408	0.071
			0.000			1/2" Ice	2.144	1.564	0.090
			2.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 4449 B5/B12	B	From Leg	4.000	0.000	127.000	No Ice	1.968	1.408	0.071
			0.000			1/2" Ice	2.144	1.564	0.090
			2.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 4449 B5/B12	C	From Leg	4.000	0.000	127.000	No Ice	1.968	1.408	0.071
			0.000			1/2" Ice	2.144	1.564	0.090
			2.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 4478 B14_CCIV2	A	From Leg	4.000	0.000	127.000	No Ice	2.021	1.246	0.059
			0.000			1/2" Ice	2.200	1.396	0.077
			2.000			1" Ice	2.386	1.554	0.097
						2" Ice	2.780	1.891	0.147
RRUS 4478 B14_CCIV2	B	From Leg	4.000	0.000	127.000	No Ice	2.021	1.246	0.059
			0.000			1/2" Ice	2.200	1.396	0.077
			2.000			1" Ice	2.386	1.554	0.097
						2" Ice	2.780	1.891	0.147
RRUS 4478 B14_CCIV2	C	From Leg	4.000	0.000	127.000	No Ice	2.021	1.246	0.059
			0.000			1/2" Ice	2.200	1.396	0.077
			2.000			1" Ice	2.386	1.554	0.097
						2" Ice	2.780	1.891	0.147
RRUS 8843 B2/B66A	A	From Leg	4.000	0.000	127.000	No Ice	1.639	1.353	0.072
			0.000			1/2" Ice	1.799	1.500	0.090
			2.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
RRUS 8843 B2/B66A	B	From Leg	4.000	0.000	127.000	No Ice	1.639	1.353	0.072
			0.000			1/2" Ice	1.799	1.500	0.090
			2.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
RRUS 8843 B2/B66A	C	From Leg	4.000	0.000	127.000	No Ice	1.639	1.353	0.072
			0.000			1/2" Ice	1.799	1.500	0.090
			2.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
DC6-48-60-18-8C-EV	A	From Leg	4.000	0.000	127.000	No Ice	2.736	2.736	0.026
			0.000			1/2" Ice	2.962	2.962	0.052

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			2.000			1" Ice	3.195	3.195	0.082
						2" Ice	3.683	3.683	0.152
(3) 8' x 2" Mount Pipe	A	From Leg	4.000	0.000	127.000	No Ice	1.900	1.900	0.029
			0.000			1/2" Ice	2.728	2.728	0.044
			2.000			1" Ice	3.401	3.401	0.063
						2" Ice	4.396	4.396	0.119
(3) 8' x 2" Mount Pipe	B	From Leg	4.000	0.000	127.000	No Ice	1.900	1.900	0.029
			0.000			1/2" Ice	2.728	2.728	0.044
			2.000			1" Ice	3.401	3.401	0.063
						2" Ice	4.396	4.396	0.119
(3) 8' x 2" Mount Pipe	C	From Leg	4.000	0.000	127.000	No Ice	1.900	1.900	0.029
			0.000			1/2" Ice	2.728	2.728	0.044
			2.000			1" Ice	3.401	3.401	0.063
						2" Ice	4.396	4.396	0.119
4' x 2" Pipe Mount	C	From Leg	2.000	0.000	127.000	No Ice	0.785	0.785	0.029
			0.000			1/2" Ice	1.028	1.028	0.035
			2.000			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
Platform Mount [LP 303-1]	C	None		0.000	127.000	No Ice	14.690	14.690	1.250
						1/2" Ice	18.010	18.010	1.569
						1" Ice	21.340	21.340	1.942
						2" Ice	28.080	28.080	2.852
*									
APXV18-206517S-C w/ Mount Pipe	A	From Leg	1.000	0.000	117.000	No Ice	3.790	3.160	0.053
			0.000			1/2" Ice	4.380	3.750	0.094
			0.000			1" Ice	4.990	4.350	0.145
						2" Ice	6.250	5.590	0.281
APXV18-206517S-C w/ Mount Pipe	B	From Leg	1.000	0.000	117.000	No Ice	3.790	3.160	0.053
			0.000			1/2" Ice	4.380	3.750	0.094
			0.000			1" Ice	4.990	4.350	0.145
						2" Ice	6.250	5.590	0.281
APXV18-206517S-C w/ Mount Pipe	C	From Leg	1.000	0.000	117.000	No Ice	3.790	3.160	0.053
			0.000			1/2" Ice	4.380	3.750	0.094
			0.000			1" Ice	4.990	4.350	0.145
						2" Ice	6.250	5.590	0.281
*									
8225	C	From Leg	3.000	0.000	79.000	No Ice	0.894	0.894	0.001
			0.000			1/2" Ice	1.060	1.060	0.009
			1.000			1" Ice	1.230	1.230	0.018
						2" Ice	1.590	1.590	0.046
Side Arm Mount [SO 701-1]	C	From Leg	1.500	0.000	79.000	No Ice	0.850	1.670	0.065
			0.000			1/2" Ice	1.140	2.340	0.079
			0.000			1" Ice	1.430	3.010	0.093
						2" Ice	2.010	4.350	0.121
*									

Load Combinations

Comb. No.	Description
1	Dead Only

Comb. No.	Description
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
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	177 - 172	Pole	Max Tension	26	0.000	-0.000	0.000
			Max. Compression	26	-9.076	0.019	0.006
			Max. Mx	8	-3.953	-20.452	0.025
			Max. My	2	-3.957	-0.022	20.433

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	8	3.930	-20.452	0.025
			Max. Vx	2	-3.926	-0.022	20.433
			Max. Torque	20			-0.002
L2	172 - 167	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-9.681	0.040	0.013
			Max. Mx	8	-4.271	-40.939	0.051
			Max. My	2	-4.275	-0.045	40.899
			Max. Vy	8	4.267	-40.939	0.051
			Max. Vx	2	-4.262	-0.045	40.899
			Max. Torque	20			-0.002
L3	167 - 162	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-14.515	0.063	0.018
			Max. Mx	8	-6.070	-73.646	0.088
			Max. My	2	-6.077	-0.080	73.575
			Max. Vy	8	6.423	-73.646	0.088
			Max. Vx	2	-6.416	-0.080	73.575
			Max. Torque	20			-0.004
L4	162 - 157	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-15.218	0.086	0.023
			Max. Mx	8	-6.477	-106.639	0.128
			Max. My	2	-6.485	-0.116	106.536
			Max. Vy	8	6.779	-106.639	0.128
			Max. Vx	2	-6.772	-0.116	106.536
			Max. Torque	22			-0.004
L5	157 - 152	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-21.788	0.874	-0.413
			Max. Mx	8	-8.611	-153.745	0.724
			Max. My	2	-8.644	-0.681	152.953
			Max. Vy	8	10.652	-153.745	0.724
			Max. Vx	2	-10.474	-0.681	152.953
			Max. Torque	11			0.033
L6	152 - 147	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-22.590	0.894	-0.403
			Max. Mx	8	-9.120	-207.908	1.515
			Max. My	2	-9.153	-1.467	206.228
			Max. Vy	8	11.019	-207.908	1.515
			Max. Vx	2	-10.841	-1.467	206.228
			Max. Torque	11			0.033
L7	147 - 142	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-23.411	0.912	-0.393
			Max. Mx	8	-9.648	-263.907	2.308
			Max. My	2	-9.681	-2.256	261.337
			Max. Vy	8	11.388	-263.907	2.308
			Max. Vx	2	-11.209	-2.256	261.337
			Max. Torque	3			-0.033
L8	142 - 137	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-24.251	0.931	-0.382
			Max. Mx	8	-10.195	-321.749	3.103
			Max. My	2	-10.227	-3.046	318.287
			Max. Vy	8	11.757	-321.749	3.103
			Max. Vx	2	-11.578	-3.046	318.287
			Max. Torque	3			-0.033
L9	137 - 129.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-24.853	0.944	-0.374
			Max. Mx	8	-10.589	-363.336	3.660
			Max. My	2	-10.620	-3.599	359.248
			Max. Vy	8	12.016	-363.336	3.660
			Max. Vx	2	-11.837	-3.599	359.248
			Max. Torque	3			-0.033
L10	129.75 - 128.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-26.304	0.964	-0.363

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	8	-11.513	-424.501	4.458
			Max. My	2	-11.544	-4.392	419.518
			Max. Vy	8	12.447	-424.501	4.458
			Max. Vx	2	-12.268	-4.392	419.518
			Max. Torque	3			-0.033
L11	128.5 - 123.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-34.757	1.379	0.048
			Max. Mx	8	-15.245	-504.464	5.288
			Max. My	2	-15.278	-5.030	498.815
			Max. Vy	8	16.347	-504.464	5.288
			Max. Vx	2	-16.164	-5.030	498.815
			Max. Torque	7			0.370
L12	123.5 - 118.583	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-35.901	1.252	0.144
			Max. Mx	8	-15.976	-585.722	6.109
			Max. My	2	-16.008	-5.862	579.163
			Max. Vy	8	16.707	-585.722	6.109
			Max. Vx	2	-16.525	-5.862	579.163
			Max. Torque	7			0.370
L13	118.583 - 118.333	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-35.978	1.245	0.149
			Max. Mx	8	-16.032	-589.903	6.153
			Max. My	2	-16.064	-5.905	583.297
			Max. Vy	8	16.734	-589.903	6.153
			Max. Vx	2	-16.552	-5.905	583.297
			Max. Torque	7			0.369
L14	118.333 - 113.333	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-38.253	1.113	0.131
			Max. Mx	8	-17.164	-676.413	6.969
			Max. My	2	-17.196	-6.752	668.858
			Max. Vy	8	17.715	-676.413	6.969
			Max. Vx	2	-17.530	-6.752	668.858
			Max. Torque	7			0.369
L15	113.333 - 108.333	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-40.233	0.978	0.068
			Max. Mx	8	-18.424	-766.684	7.782
			Max. My	2	-18.455	-7.604	758.163
			Max. Vy	8	18.393	-766.684	7.782
			Max. Vx	2	-18.207	-7.604	758.163
			Max. Torque	7			0.369
L16	108.333 - 106.417	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-41.230	0.925	0.044
			Max. Mx	8	-19.103	-802.192	8.094
			Max. My	2	-19.128	-7.929	793.357
			Max. Vy	8	18.677	-802.192	8.094
			Max. Vx	2	-18.551	-7.929	793.357
			Max. Torque	7			0.369
L17	106.417 - 106.167	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-41.348	0.918	0.041
			Max. Mx	8	-19.191	-806.865	8.136
			Max. My	2	-19.216	-7.973	797.997
			Max. Vy	8	18.703	-806.865	8.136
			Max. Vx	2	-18.585	-7.973	797.997
			Max. Torque	7			0.369
L18	106.167 -	Pole	Max Tension	1	0.000	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
	101.167						
			Max. Compression	26	-43.595	0.779	-0.023
			Max. Mx	8	-20.788	-901.571	8.950
			Max. My	2	-20.809	-8.828	892.148
			Max. Vy	8	19.180	-901.571	8.950
			Max. Vx	2	-19.093	-8.828	892.148
			Max. Torque	7			0.369
L19	101.167 - 96.167	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.071	0.637	-0.089
			Max. Mx	8	-23.511	-999.319	9.768
			Max. My	2	-23.543	-9.688	989.048
			Max. Vy	8	19.926	-999.319	9.768
			Max. Vx	2	-19.691	-9.688	989.048
			Max. Torque	7			0.369
L20	96.167 - 91.167	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.319	0.492	-0.155
			Max. Mx	8	-25.163	-1099.968	10.587
			Max. My	2	-25.190	-10.551	1088.555
			Max. Vy	8	20.345	-1099.968	10.587
			Max. Vx	2	-20.140	-10.551	1088.555
			Max. Torque	7			0.368
L21	91.167 - 84	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.413	0.420	-0.188
			Max. Mx	8	-25.967	-1149.358	10.982
			Max. My	2	-25.992	-10.967	1137.446
			Max. Vy	8	20.541	-1149.358	10.982
			Max. Vx	2	-20.350	-10.967	1137.446
			Max. Torque	7			0.368
L22	84 - 83.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-53.716	0.272	-0.256
			Max. Mx	8	-28.309	-1253.346	11.802
			Max. My	2	-28.331	-11.832	1240.510
			Max. Vy	8	21.057	-1253.346	11.802
			Max. Vx	2	-20.895	-11.832	1240.510
			Max. Torque	7			0.368
L23	83.75 - 78.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-58.478	0.551	-0.573
			Max. Mx	8	-32.191	-1360.414	12.508
			Max. My	2	-32.212	-12.502	1346.807
			Max. Vy	8	21.911	-1360.414	12.508
			Max. Vx	2	-21.758	-12.502	1346.807
			Max. Torque	17			-0.482
L24	78.75 - 73.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-61.036	0.399	-0.643
			Max. Mx	8	-34.144	-1470.884	13.273
			Max. My	2	-34.160	-13.315	1456.551
			Max. Vy	8	22.293	-1470.884	13.273
			Max. Vx	2	-22.174	-13.315	1456.551
			Max. Torque	17			-0.482
L25	73.75 - 68.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-63.613	0.244	-0.714
			Max. Mx	8	-36.120	-1583.206	14.035
			Max. My	2	-36.133	-14.126	1568.316
			Max. Vy	8	22.653	-1583.206	14.035
			Max. Vx	2	-22.568	-14.126	1568.316
			Max. Torque	17			-0.482
L26	68.75 - 63.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-66.210	0.086	-0.786
			Max. Mx	8	-38.119	-1697.274	14.794

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	2	-38.129	-14.934	1681.991
			Max. Vy	8	22.992	-1697.274	14.794
			Max. Vx	2	-22.940	-14.934	1681.991
			Max. Torque	17			-0.481
L27	63.75 - 58.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-71.519	-0.074	-0.859
			Max. Mx	8	-42.605	-1813.927	15.551
			Max. My	2	-42.614	-15.743	1798.322
			Max. Vy	8	23.687	-1813.927	15.551
			Max. Vx	2	-23.630	-15.743	1798.322
			Max. Torque	17			-0.481
L28	58.75 - 53.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-74.154	-0.237	-0.932
			Max. Mx	8	-44.650	-1933.002	16.304
			Max. My	2	-44.657	-16.549	1917.141
			Max. Vy	8	23.967	-1933.002	16.304
			Max. Vx	2	-23.942	-16.549	1917.141
			Max. Torque	17			-0.481
L29	53.75 - 48.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-76.807	-0.401	-1.007
			Max. Mx	8	-46.718	-2053.412	17.052
			Max. My	2	-46.722	-17.350	2037.452
			Max. Vy	8	24.223	-2053.412	17.052
			Max. Vx	2	-24.229	-17.350	2037.452
			Max. Torque	17			-0.481
L30	48.75 - 39.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-79.655	-0.527	-1.064
			Max. Mx	8	-49.062	-2144.585	17.608
			Max. My	2	-49.065	-17.948	2128.658
			Max. Vy	8	24.437	-2144.585	17.608
			Max. Vx	2	-24.469	-17.948	2128.658
			Max. Torque	17			-0.481
L31	39.25 - 38.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-86.794	-0.753	-1.167
			Max. Mx	8	-54.780	-2311.382	18.607
			Max. My	2	-54.781	-19.021	2295.761
			Max. Vy	8	25.035	-2311.382	18.607
			Max. Vx	2	-25.107	-19.021	2295.761
			Max. Torque	17			-0.480
L32	38.25 - 33.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-89.659	-0.922	-1.243
			Max. Mx	8	-57.064	-2436.979	19.343
			Max. My	2	-57.064	-19.814	2421.737
			Max. Vy	8	25.233	-2436.979	19.343
			Max. Vx	2	-25.333	-19.814	2421.737
			Max. Torque	17			-0.480
L33	33.25 - 28.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-92.541	-1.091	-1.319
			Max. Mx	8	-59.372	-2563.491	20.071
			Max. My	2	-59.371	-20.599	2548.765
			Max. Vy	8	25.402	-2563.491	20.071
			Max. Vx	2	-25.529	-20.599	2548.765
			Max. Torque	17			-0.480
L34	28.25 - 23.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-95.439	-1.262	-1.396
			Max. Mx	8	-61.702	-2690.807	20.791
			Max. My	2	-61.701	-21.377	2676.731
			Max. Vy	8	25.556	-2690.807	20.791
			Max. Vx	2	-25.710	-21.377	2676.731
			Max. Torque	17			-0.480
L35	23.25 - 18.25	Pole	Max Tension	1	0.000	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	26	-101.057	-1.434	-1.472
			Max. Mx	8	-66.569	-2819.585	21.503
			Max. My	2	-66.569	-22.148	2806.216
			Max. Vy	8	25.986	-2819.585	21.503
			Max. Vx	2	-26.137	-22.148	2806.216
			Max. Torque	17			-0.480
L36	18.25 - 13.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-104.087	-1.606	-1.549
			Max. Mx	8	-69.052	-2949.729	22.206
			Max. My	2	-69.051	-22.912	2937.135
			Max. Vy	8	26.107	-2949.729	22.206
			Max. Vx	2	-26.289	-22.912	2937.135
			Max. Torque	17			-0.480
L37	13.25 - 8.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-107.118	-1.776	-1.624
			Max. Mx	8	-71.556	-3080.448	22.899
			Max. My	2	-71.555	-23.665	3068.778
			Max. Vy	8	26.216	-3080.448	22.899
			Max. Vx	2	-26.428	-23.665	3068.778
			Max. Torque	17			-0.480
L38	8.25 - 3.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-110.135	-1.944	-1.697
			Max. Mx	8	-74.083	-3211.682	23.582
			Max. My	2	-74.083	-24.409	3201.081
			Max. Vy	8	26.314	-3211.682	23.582
			Max. Vx	2	-26.555	-24.409	3201.081
			Max. Torque	17			-0.480
L39	3.25 - 0	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-112.062	-2.046	-1.741
			Max. Mx	8	-75.737	-3297.234	24.019
			Max. My	2	-75.737	-24.887	3287.403
			Max. Vy	8	26.375	-3297.234	24.019
			Max. Vx	2	-26.633	-24.887	3287.403
			Max. Torque	17			-0.480

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	30	112.062	-6.890	0.021
	Max. H_x	20	75.748	25.576	-0.135
	Max. H_z	2	75.748	-0.135	26.599
	Max. M_x	2	3287.403	-0.135	26.599
	Max. M_z	8	3297.234	-26.341	0.135
	Max. Torsion	5	0.422	-12.678	21.688
	Min. Vert	5	56.811	-12.678	21.688
	Min. H_x	8	75.748	-26.341	0.135
	Min. H_z	14	75.748	0.135	-26.111
	Min. M_x	14	-3230.503	0.135	-26.111
	Min. M_z	20	-3209.200	25.576	-0.135
	Min. Torsion	17	-0.480	13.119	-22.453

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	63.124	0.000	0.000	0.174	-0.509	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	75.748	0.135	-26.599	-3287.403	-24.888	-0.367
0.9 Dead+1.0 Wind 0 deg - No Ice	56.811	0.135	-26.599	-3213.795	-24.108	-0.370
1.2 Dead+1.0 Wind 30 deg - No Ice	75.748	12.678	-21.688	-2733.812	-1607.143	-0.419
0.9 Dead+1.0 Wind 30 deg - No Ice	56.811	12.678	-21.688	-2671.864	-1570.466	-0.422
1.2 Dead+1.0 Wind 60 deg - No Ice	75.748	21.919	-12.655	-1597.444	-2767.891	-0.363
0.9 Dead+1.0 Wind 60 deg - No Ice	56.811	21.919	-12.655	-1561.268	-2704.962	-0.366
1.2 Dead+1.0 Wind 90 deg - No Ice	75.748	26.341	-0.135	-24.019	-3297.234	-0.211
0.9 Dead+1.0 Wind 90 deg - No Ice	56.811	26.341	-0.135	-23.464	-3222.917	-0.212
1.2 Dead+1.0 Wind 120 deg - No Ice	75.748	23.050	13.151	1621.150	-2856.654	0.024
0.9 Dead+1.0 Wind 120 deg - No Ice	56.811	23.050	13.151	1584.815	-2792.429	0.024
1.2 Dead+1.0 Wind 150 deg - No Ice	75.748	12.641	21.896	2740.222	-1582.571	0.267
0.9 Dead+1.0 Wind 150 deg - No Ice	56.811	12.641	21.896	2678.283	-1546.683	0.268
1.2 Dead+1.0 Wind 180 deg - No Ice	75.748	-0.135	26.111	3230.503	23.618	0.428
0.9 Dead+1.0 Wind 180 deg - No Ice	56.811	-0.135	26.111	3157.867	23.163	0.429
1.2 Dead+1.0 Wind 210 deg - No Ice	75.748	-13.119	22.453	2820.589	1655.700	0.478
0.9 Dead+1.0 Wind 210 deg - No Ice	56.811	-13.119	22.453	2756.932	1618.434	0.480
1.2 Dead+1.0 Wind 240 deg - No Ice	75.748	-22.444	12.958	1633.421	2828.132	0.363
0.9 Dead+1.0 Wind 240 deg - No Ice	56.811	-22.444	12.958	1596.449	2764.363	0.366
1.2 Dead+1.0 Wind 270 deg - No Ice	75.748	-25.576	0.135	24.484	3209.200	0.151
0.9 Dead+1.0 Wind 270 deg - No Ice	56.811	-25.576	0.135	23.806	3136.806	0.154
1.2 Dead+1.0 Wind 300 deg - No Ice	75.748	-22.624	-12.905	-1591.775	2805.307	-0.085
0.9 Dead+1.0 Wind 300 deg - No Ice	56.811	-22.624	-12.905	-1556.111	2742.356	-0.083
1.2 Dead+1.0 Wind 330 deg - No Ice	75.748	-13.029	-22.567	-2815.890	1625.252	-0.267
0.9 Dead+1.0 Wind 330 deg - No Ice	56.811	-13.029	-22.567	-2752.663	1588.875	-0.268
1.2 Dead+1.0 Ice+1.0 Temp	112.062	-0.000	0.000	1.741	-2.046	-0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	112.062	0.021	-6.880	-937.410	-6.597	-0.155
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	112.062	3.458	-5.947	-811.322	-476.857	-0.133
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	112.062	5.968	-3.445	-470.151	-819.878	-0.073
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	112.062	6.890	-0.021	-2.501	-944.614	0.007

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
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	112.062	5.969	3.422	467.789	-817.876	0.087
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	112.062	3.421	5.925	810.814	-469.082	0.143
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	112.062	-0.021	6.873	940.848	2.384	0.158
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	112.062	-3.463	5.956	815.988	473.040	0.136
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	112.062	-5.974	3.449	474.401	816.133	0.073
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	112.062	-6.879	0.021	6.480	939.610	-0.010
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	112.062	-5.963	-3.418	-463.542	813.199	-0.090
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	112.062	-3.426	-5.935	-807.524	465.266	-0.143
Dead+Wind 0 deg - Service	63.124	0.032	-6.263	-764.096	-6.150	-0.093
Dead+Wind 30 deg - Service	63.124	2.985	-5.107	-635.258	-373.894	-0.106
Dead+Wind 60 deg - Service	63.124	5.161	-2.980	-371.161	-643.711	-0.087
Dead+Wind 90 deg - Service	63.124	6.202	-0.032	-5.443	-766.884	-0.046
Dead+Wind 120 deg - Service	63.124	5.427	3.097	377.010	-664.459	0.011
Dead+Wind 150 deg - Service	63.124	2.977	5.155	637.016	-368.195	0.063
Dead+Wind 180 deg - Service	63.124	-0.032	6.148	751.065	5.108	0.097
Dead+Wind 210 deg - Service	63.124	-3.089	5.287	655.807	384.502	0.109
Dead+Wind 240 deg - Service	63.124	-5.285	3.051	379.830	657.043	0.087
Dead+Wind 270 deg - Service	63.124	-6.022	0.032	5.814	745.561	0.042
Dead+Wind 300 deg - Service	63.124	-5.327	-3.039	-369.882	651.712	-0.014
Dead+Wind 330 deg - Service	63.124	-3.068	-5.314	-654.438	377.426	-0.063

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.000	-63.124	0.000	0.000	63.124	0.000	0.000%
2	0.135	-75.748	-26.599	-0.135	75.748	26.599	0.000%
3	0.135	-56.811	-26.599	-0.135	56.811	26.599	0.000%
4	12.678	-75.748	-21.688	-12.678	75.748	21.688	0.000%
5	12.678	-56.811	-21.688	-12.678	56.811	21.688	0.000%
6	21.919	-75.748	-12.655	-21.919	75.748	12.655	0.000%
7	21.919	-56.811	-12.655	-21.919	56.811	12.655	0.000%
8	26.341	-75.748	-0.135	-26.341	75.748	0.135	0.000%
9	26.341	-56.811	-0.135	-26.341	56.811	0.135	0.000%
10	23.050	-75.748	13.151	-23.050	75.748	-13.151	0.000%
11	23.050	-56.811	13.151	-23.050	56.811	-13.151	0.000%
12	12.641	-75.748	21.896	-12.641	75.748	-21.896	0.000%
13	12.641	-56.811	21.896	-12.641	56.811	-21.896	0.000%
14	-0.135	-75.748	26.111	0.135	75.748	-26.111	0.000%
15	-0.135	-56.811	26.111	0.135	56.811	-26.111	0.000%
16	-13.119	-75.748	22.453	13.119	75.748	-22.453	0.000%
17	-13.119	-56.811	22.453	13.119	56.811	-22.453	0.000%
18	-22.444	-75.748	12.958	22.444	75.748	-12.958	0.000%
19	-22.444	-56.811	12.958	22.444	56.811	-12.958	0.000%
20	-25.576	-75.748	0.135	25.576	75.748	-0.135	0.000%
21	-25.576	-56.811	0.135	25.576	56.811	-0.135	0.000%
22	-22.624	-75.748	-12.905	22.624	75.748	12.905	0.000%
23	-22.624	-56.811	-12.905	22.624	56.811	12.905	0.000%
24	-13.029	-75.748	-22.567	13.029	75.748	22.567	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
25	-13.029	-56.811	-22.567	13.029	56.811	22.567	0.000%
26	0.000	-112.062	0.000	0.000	112.062	-0.000	0.000%
27	0.021	-112.062	-6.880	-0.021	112.062	6.880	0.000%
28	3.458	-112.062	-5.947	-3.458	112.062	5.947	0.000%
29	5.968	-112.062	-3.445	-5.968	112.062	3.445	0.000%
30	6.890	-112.062	-0.021	-6.890	112.062	0.021	0.000%
31	5.969	-112.062	3.422	-5.969	112.062	-3.422	0.000%
32	3.421	-112.062	5.925	-3.421	112.062	-5.925	0.000%
33	-0.021	-112.062	6.873	0.021	112.062	-6.873	0.000%
34	-3.463	-112.062	5.956	3.463	112.062	-5.956	0.000%
35	-5.974	-112.062	3.449	5.974	112.062	-3.449	0.000%
36	-6.879	-112.062	0.021	6.879	112.062	-0.021	0.000%
37	-5.963	-112.062	-3.418	5.963	112.062	3.418	0.000%
38	-3.426	-112.062	-5.935	3.426	112.062	5.935	0.000%
39	0.032	-63.124	-6.263	-0.032	63.124	6.263	0.000%
40	2.985	-63.124	-5.107	-2.985	63.124	5.107	0.000%
41	5.161	-63.124	-2.980	-5.161	63.124	2.980	0.000%
42	6.202	-63.124	-0.032	-6.202	63.124	0.032	0.000%
43	5.427	-63.124	3.097	-5.427	63.124	-3.097	0.000%
44	2.977	-63.124	5.155	-2.977	63.124	-5.155	0.000%
45	-0.032	-63.124	6.148	0.032	63.124	-6.148	0.000%
46	-3.089	-63.124	5.287	3.089	63.124	-5.287	0.000%
47	-5.285	-63.124	3.051	5.285	63.124	-3.051	0.000%
48	-6.022	-63.124	0.032	6.022	63.124	-0.032	0.000%
49	-5.327	-63.124	-3.039	5.327	63.124	3.039	0.000%
50	-3.068	-63.124	-5.314	3.068	63.124	5.314	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	6	0.00000001	0.00026511
3	Yes	6	0.00000001	0.00008943
4	Yes	8	0.00000001	0.00013061
5	Yes	7	0.00000001	0.00034911
6	Yes	8	0.00000001	0.00013273
7	Yes	7	0.00000001	0.00035483
8	Yes	6	0.00000001	0.00042782
9	Yes	6	0.00000001	0.00015264
10	Yes	8	0.00000001	0.00013427
11	Yes	7	0.00000001	0.00035754
12	Yes	8	0.00000001	0.00012841
13	Yes	7	0.00000001	0.00034367
14	Yes	6	0.00000001	0.00042715
15	Yes	6	0.00000001	0.00015344
16	Yes	8	0.00000001	0.00013753
17	Yes	7	0.00000001	0.00036631
18	Yes	8	0.00000001	0.00013558
19	Yes	7	0.00000001	0.00036091
20	Yes	6	0.00000001	0.00026984
21	Yes	6	0.00000001	0.00009176
22	Yes	8	0.00000001	0.00013101
23	Yes	7	0.00000001	0.00034990
24	Yes	8	0.00000001	0.00013383
25	Yes	7	0.00000001	0.00035692

26	Yes	4	0.00000001	0.00005020
27	Yes	7	0.00000001	0.00095850
28	Yes	8	0.00000001	0.00036303
29	Yes	8	0.00000001	0.00036508
30	Yes	7	0.00000001	0.00096407
31	Yes	8	0.00000001	0.00035999
32	Yes	8	0.00000001	0.00035625
33	Yes	7	0.00000001	0.00096203
34	Yes	8	0.00000001	0.00036727
35	Yes	8	0.00000001	0.00036631
36	Yes	7	0.00000001	0.00096473
37	Yes	8	0.00000001	0.00035713
38	Yes	8	0.00000001	0.00035722
39	Yes	5	0.00000001	0.00019006
40	Yes	6	0.00000001	0.00017480
41	Yes	6	0.00000001	0.00018162
42	Yes	5	0.00000001	0.00020816
43	Yes	6	0.00000001	0.00018298
44	Yes	6	0.00000001	0.00017041
45	Yes	5	0.00000001	0.00020560
46	Yes	6	0.00000001	0.00019183
47	Yes	6	0.00000001	0.00018556
48	Yes	5	0.00000001	0.00018752
49	Yes	6	0.00000001	0.00017648
50	Yes	6	0.00000001	0.00018229

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	177 - 172	37.285	42	1.784	0.001
L2	172 - 167	35.419	42	1.780	0.001
L3	167 - 162	33.560	42	1.771	0.001
L4	162 - 157	31.713	42	1.755	0.001
L5	157 - 152	29.887	42	1.733	0.001
L6	152 - 147	28.086	42	1.705	0.001
L7	147 - 142	26.319	42	1.669	0.001
L8	142 - 137	24.593	42	1.626	0.001
L9	137 - 129.75	22.915	42	1.578	0.001
L10	133.5 - 128.5	21.772	42	1.542	0.001
L11	128.5 - 123.5	20.172	42	1.509	0.001
L12	123.5 - 118.583	18.621	42	1.454	0.001
L13	118.583 - 118.333	17.154	42	1.395	0.000
L14	118.333 - 113.333	17.081	42	1.393	0.000
L15	113.333 - 108.333	15.644	42	1.352	0.000
L16	108.333 - 106.417	14.251	42	1.307	0.000
L17	106.417 - 106.167	13.730	42	1.290	0.000
L18	106.167 - 101.167	13.663	42	1.287	0.000
L19	101.167 - 96.167	12.352	42	1.216	0.000
L20	96.167 - 91.167	11.116	42	1.144	0.000
L21	91.167 - 84	9.958	42	1.069	0.000
L22	88.75 - 83.75	9.426	42	1.032	0.000
L23	83.75 - 78.75	8.363	42	0.996	0.000
L24	78.75 - 73.75	7.355	42	0.931	0.000
L25	73.75 - 68.75	6.415	42	0.865	0.000
L26	68.75 - 63.75	5.544	42	0.798	0.000
L27	63.75 - 58.75	4.743	42	0.732	0.000
L28	58.75 - 53.75	4.012	42	0.665	0.000
L29	53.75 - 48.75	3.351	42	0.598	0.000

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L30	48.75 - 39.25	2.760	42	0.530	0.000
L31	45 - 38.25	2.363	42	0.480	0.000
L32	38.25 - 33.25	1.715	42	0.433	0.000
L33	33.25 - 28.25	1.292	42	0.375	0.000
L34	28.25 - 23.25	0.930	42	0.317	0.000
L35	23.25 - 18.25	0.628	42	0.260	0.000
L36	18.25 - 13.25	0.386	42	0.203	0.000
L37	13.25 - 8.25	0.203	42	0.147	0.000
L38	8.25 - 3.25	0.078	42	0.091	0.000
L39	3.25 - 0	0.012	42	0.036	0.000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
177.000	APXVSPP18-C-A20 w/ Mount Pipe	42	37.285	1.784	0.001	44000
176.000	6' x 2" Mount Pipe	42	36.912	1.783	0.001	44000
167.000	APXV18-206516S-C-A20 w/ Mount Pipe	42	33.560	1.771	0.001	23259
154.000	(2) LPA-80080/6CF w/ Mount Pipe	42	28.803	1.717	0.001	9875
127.000	LGP21401	42	19.701	1.495	0.001	5674
117.000	APXV18-206517S-C w/ Mount Pipe	42	16.694	1.383	0.000	6225
79.000	8225	42	7.403	0.934	0.000	4401

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	177 - 172	160.471	8	7.693	0.002
L2	172 - 167	152.445	8	7.678	0.002
L3	167 - 162	144.448	8	7.638	0.002
L4	162 - 157	136.507	8	7.570	0.002
L5	157 - 152	128.650	8	7.475	0.002
L6	152 - 147	120.905	8	7.354	0.002
L7	147 - 142	113.303	8	7.198	0.002
L8	142 - 137	105.879	8	7.014	0.002
L9	137 - 129.75	98.659	8	6.806	0.002
L10	133.5 - 128.5	93.739	8	6.648	0.002
L11	128.5 - 123.5	86.855	8	6.506	0.002
L12	123.5 - 118.583	80.179	8	6.268	0.002
L13	118.583 - 118.333	73.865	8	6.015	0.002
L14	118.333 - 113.333	73.551	8	6.007	0.002
L15	113.333 - 108.333	67.365	8	5.828	0.002
L16	108.333 - 106.417	61.371	8	5.637	0.002
L17	106.417 - 106.167	59.127	8	5.563	0.002
L18	106.167 - 101.167	58.836	8	5.548	0.002
L19	101.167 - 96.167	53.193	8	5.244	0.001
L20	96.167 - 91.167	47.873	8	4.930	0.001
L21	91.167 - 84	42.884	8	4.608	0.001
L22	88.75 - 83.75	40.593	8	4.450	0.001

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L23	83.75 - 78.75	36.016	8	4.293	0.001
L24	78.75 - 73.75	31.672	8	4.012	0.001
L25	73.75 - 68.75	27.622	8	3.727	0.001
L26	68.75 - 63.75	23.872	8	3.441	0.001
L27	63.75 - 58.75	20.421	8	3.153	0.001
L28	58.75 - 53.75	17.272	8	2.864	0.001
L29	53.75 - 48.75	14.426	8	2.574	0.001
L30	48.75 - 39.25	11.882	8	2.285	0.001
L31	45 - 38.25	10.173	8	2.068	0.000
L32	38.25 - 33.25	7.380	8	1.863	0.000
L33	33.25 - 28.25	5.560	8	1.613	0.000
L34	28.25 - 23.25	4.001	8	1.365	0.000
L35	23.25 - 18.25	2.701	8	1.118	0.000
L36	18.25 - 13.25	1.659	8	0.873	0.000
L37	13.25 - 8.25	0.871	8	0.631	0.000
L38	8.25 - 3.25	0.337	8	0.391	0.000
L39	3.25 - 0	0.052	8	0.153	0.000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
177.000	APXVSPP18-C-A20 w/ Mount Pipe	8	160.471	7.693	0.002	10520
176.000	6' x 2" Mount Pipe	8	158.865	7.691	0.002	10520
167.000	APXV18-206516S-C-A20 w/ Mount Pipe	8	144.448	7.638	0.002	5558
154.000	(2) LPA-80080/6CF w/ Mount Pipe	8	123.988	7.406	0.002	2363
127.000	LGP21401	8	84.828	6.448	0.002	1354
117.000	APXV18-206517S-C w/ Mount Pipe	8	71.884	5.961	0.002	1480
79.000	8225	8	31.882	4.027	0.001	1030

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	177 - 172 (1)	TP22.875x22x0.219	5.000	0.000	0.0	15.731	-3.953	920.232	0.004
L2	172 - 167 (2)	TP23.75x22.875x0.219	5.000	0.000	0.0	16.338	-4.271	955.769	0.004
L3	167 - 162 (3)	TP24.625x23.75x0.219	5.000	0.000	0.0	16.945	-6.070	991.306	0.006
L4	162 - 157 (4)	TP25.5x24.625x0.219	5.000	0.000	0.0	17.553	-6.477	1026.840	0.006
L5	157 - 152 (5)	TP26.375x25.5x0.219	5.000	0.000	0.0	18.160	-8.601	1062.380	0.008
L6	152 - 147 (6)	TP27.25x26.375x0.219	5.000	0.000	0.0	18.768	-9.111	1097.920	0.008
L7	147 - 142 (7)	TP28.124x27.25x0.219	5.000	0.000	0.0	19.375	-9.639	1133.450	0.009
L8	142 - 137 (8)	TP28.999x28.124x0.219	5.000	0.000	0.0	19.983	-10.187	1168.990	0.009
L9	137 - 129.75 (9)	TP30.268x28.999x0.219	7.250	0.000	0.0	20.408	-10.581	1193.870	0.009
L10	129.75 - 128.5	TP30.049x29.174x0.25	5.000	0.000	0.0	23.646	-11.506	1383.270	0.008

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L11	128.5 - 123.5 (10)	TP30.924x30.049x0.25	5.000	0.000	0.0	24.340	-15.239	1423.890	0.011
L12	123.5 - 118.583 (11)	TP31.785x30.924x0.25	4.917	0.000	0.0	25.023	-15.971	1463.830	0.011
L13	118.583 - 118.333 (12)	TP31.828x31.785x0.388	0.250	0.000	0.0	38.670	-16.027	2262.180	0.007
L14	118.333 - 113.333 (13)	TP32.703x31.828x0.388	5.000	0.000	0.0	39.746	-17.160	2325.130	0.007
L15	113.333 - 108.333 (14)	TP33.578x32.703x0.381	5.000	0.000	0.0	40.171	-18.421	2350.010	0.008
L16	108.333 - 106.417 (15)	TP33.913x33.578x0.381	1.916	0.000	0.0	40.577	-19.100	2373.740	0.008
L17	106.417 - 106.167 (16)	TP33.957x33.913x0.25	0.250	0.000	0.0	26.747	-19.189	1564.680	0.012
L18	106.167 - 101.167 (17)	TP34.832x33.957x0.25	5.000	0.000	0.0	27.441	-20.790	1605.290	0.013
L19	101.167 - 96.167 (18)	TP35.707x34.832x0.25	5.000	0.000	0.0	28.135	-23.532	1645.900	0.014
L20	96.167 - 91.167 (19)	TP36.582x35.707x0.25	5.000	0.000	0.0	28.829	-25.186	1686.520	0.015
L21	91.167 - 84 (20)	TP37.836x36.582x0.25	7.167	0.000	0.0	29.165	-25.991	1706.150	0.015
L22	84 - 83.75 (21)	TP37.38x36.505x0.313	5.000	0.000	0.0	36.766	-28.335	2150.820	0.013
L23	83.75 - 78.75 (22)	TP38.255x37.38x0.313	5.000	0.000	0.0	37.634	-32.217	2201.590	0.015
L24	78.75 - 73.75 (23)	TP39.13x38.255x0.313	5.000	0.000	0.0	38.502	-34.144	2252.360	0.015
L25	73.75 - 68.75 (24)	TP40.005x39.13x0.313	5.000	0.000	0.0	39.370	-36.120	2303.130	0.016
L26	68.75 - 63.75 (25)	TP40.88x40.005x0.313	5.000	0.000	0.0	40.238	-38.119	2353.900	0.016
L27	63.75 - 58.75 (26)	TP41.755x40.88x0.313	5.000	0.000	0.0	41.105	-42.605	2404.670	0.018
L28	58.75 - 53.75 (27)	TP42.63x41.755x0.313	5.000	0.000	0.0	41.973	-44.650	2455.440	0.018
L29	53.75 - 48.75 (28)	TP43.505x42.63x0.313	5.000	0.000	0.0	42.841	-46.718	2506.210	0.019
L30	48.75 - 39.25 (29)	TP45.167x43.505x0.313	9.500	0.000	0.0	43.492	-49.062	2544.280	0.019
L31	39.25 - 38.25 (30)	TP44.717x43.536x0.375	6.750	0.000	0.0	52.778	-54.780	3087.510	0.018
L32	38.25 - 33.25 (31)	TP45.592x44.717x0.375	5.000	0.000	0.0	53.819	-57.064	3148.430	0.018
L33	33.25 - 28.25 (32)	TP46.467x45.592x0.375	5.000	0.000	0.0	54.861	-59.372	3209.350	0.018
L34	28.25 - 23.25 (33)	TP47.342x46.467x0.375	5.000	0.000	0.0	55.902	-61.702	3270.270	0.019
L35	23.25 - 18.25 (34)	TP48.217x47.342x0.375	5.000	0.000	0.0	56.943	-66.569	3331.190	0.020
L36	18.25 - 13.25 (35)	TP49.091x48.217x0.375	5.000	0.000	0.0	57.985	-69.052	3392.110	0.020
L37	13.25 - 8.25 (36)	TP49.966x49.091x0.375	5.000	0.000	0.0	59.026	-71.556	3453.030	0.021
L38	8.25 - 3.25 (37)	TP50.841x49.966x0.375	5.000	0.000	0.0	60.068	-74.083	3513.950	0.021
L39	3.25 - 0 (38)	TP51.41x50.841x0.375	3.250	0.000	0.0	60.744	-75.737	3553.550	0.021

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	177 - 172 (1)	TP22.875x22x0.219	20.452	531.913	0.038	0.000	531.913	0.000
L2	172 - 167 (2)	TP23.75x22.875x0.219	40.939	568.109	0.072	0.000	568.109	0.000
L3	167 - 162 (3)	TP24.625x23.75x0.219	73.646	605.013	0.122	0.000	605.013	0.000
L4	162 - 157 (4)	TP25.5x24.625x0.219	106.639	642.573	0.166	0.000	642.573	0.000
L5	157 - 152 (5)	TP26.375x25.5x0.219	154.213	680.742	0.227	0.000	680.742	0.000
L6	152 - 147 (6)	TP27.25x26.375x0.219	208.794	719.470	0.290	0.000	719.470	0.000
L7	147 - 142 (7)	TP28.124x27.25x0.219	265.212	758.707	0.350	0.000	758.707	0.000
L8	142 - 137 (8)	TP28.999x28.124x0.219	323.470	798.404	0.405	0.000	798.404	0.000
L9	137 - 129.75 (9)	TP30.268x28.999x0.219	365.348	826.440	0.442	0.000	826.440	0.000
L10	129.75 - 128.5 (10)	TP30.049x29.174x0.25	426.927	1010.808	0.422	0.000	1010.808	0.000
L11	128.5 - 123.5 (11)	TP30.924x30.049x0.25	507.615	1061.283	0.478	0.000	1061.283	0.000
L12	123.5 - 118.583 (12)	TP31.785x30.924x0.25	589.198	1111.500	0.530	0.000	1111.500	0.000
L13	118.583 - 118.333 (13)	TP31.828x31.785x0.388	593.396	1849.258	0.321	0.000	1849.258	0.000
L14	118.333 - 113.333 (14)	TP32.703x31.828x0.388	680.238	1954.258	0.348	0.000	1954.258	0.000
L15	113.333 - 108.333 (15)	TP33.578x32.703x0.381	770.834	2030.033	0.380	0.000	2030.033	0.000
L16	108.333 - 106.417 (16)	TP33.913x33.578x0.381	806.465	2071.483	0.389	0.000	2071.483	0.000
L17	106.417 - 106.167 (17)	TP33.957x33.913x0.25	811.153	1240.542	0.654	0.000	1240.542	0.000
L18	106.167 - 101.167 (18)	TP34.832x33.957x0.25	906.092	1293.292	0.701	0.000	1293.292	0.000
L19	101.167 - 96.167 (19)	TP35.707x34.832x0.25	1003.450	1346.417	0.745	0.000	1346.417	0.000
L20	96.167 - 91.167 (20)	TP36.582x35.707x0.25	1103.100	1399.867	0.788	0.000	1399.867	0.000
L21	91.167 - 84 (21)	TP37.836x36.582x0.25	1151.950	1425.800	0.808	0.000	1425.800	0.000
L22	84 - 83.75 (22)	TP37.38x36.505x0.313	1254.692	1957.967	0.641	0.000	1957.967	0.000
L23	83.75 - 78.75 (23)	TP38.255x37.38x0.313	1360.875	2036.583	0.668	0.000	2036.583	0.000
L24	78.75 - 73.75 (24)	TP39.13x38.255x0.313	1470.942	2115.958	0.695	0.000	2115.958	0.000
L25	73.75 - 68.75 (25)	TP40.005x39.13x0.313	1583.267	2196.050	0.721	0.000	2196.050	0.000
L26	68.75 - 63.75 (26)	TP40.88x40.005x0.313	1697.342	2276.808	0.745	0.000	2276.808	0.000
L27	63.75 - 58.75 (27)	TP41.755x40.88x0.313	1813.992	2358.192	0.769	0.000	2358.192	0.000
L28	58.75 - 53.75 (28)	TP42.63x41.755x0.313	1933.075	2440.133	0.792	0.000	2440.133	0.000
L29	53.75 - 48.75 (29)	TP43.505x42.63x0.313	2053.483	2522.600	0.814	0.000	2522.600	0.000
L30	48.75 - 39.25 (30)	TP45.167x43.505x0.313	2144.658	2584.767	0.830	0.000	2584.767	0.000
L31	39.25 - 38.25 (31)	TP44.717x43.536x0.375	2311.458	3365.508	0.687	0.000	3365.508	0.000
L32	38.25 - 33.25 (32)	TP45.592x44.717x0.375	2437.058	3478.458	0.701	0.000	3478.458	0.000
L33	33.25 - 28.25 (33)	TP46.467x45.592x0.375	2563.567	3592.342	0.714	0.000	3592.342	0.000

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 $\frac{M_{uy}}{\phi M_{ny}}$
L34	28.25 - 23.25 (34)	TP47.342x46.467x0.375	2690.883	3707.108	0.726	0.000	3707.108	0.000
L35	23.25 - 18.25 (35)	TP48.217x47.342x0.375	2819.667	3822.717	0.738	0.000	3822.717	0.000
L36	18.25 - 13.25 (36)	TP49.091x48.217x0.375	2949.817	3939.117	0.749	0.000	3939.117	0.000
L37	13.25 - 8.25 (37)	TP49.966x49.091x0.375	3080.533	4056.250	0.759	0.000	4056.250	0.000
L38	8.25 - 3.25 (38)	TP50.841x49.966x0.375	3211.767	4174.083	0.769	0.000	4174.083	0.000
L39	3.25 - 0 (39)	TP51.41x50.841x0.375	3297.325	4251.017	0.776	0.000	4251.017	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	177 - 172 (1)	TP22.875x22x0.219	3.930	276.070	0.014	0.002	547.753	0.000
L2	172 - 167 (2)	TP23.75x22.875x0.219	4.267	286.731	0.015	0.002	590.876	0.000
L3	167 - 162 (3)	TP24.625x23.75x0.219	6.423	297.392	0.022	0.004	635.632	0.000
L4	162 - 157 (4)	TP25.5x24.625x0.219	6.779	308.053	0.022	0.004	682.022	0.000
L5	157 - 152 (5)	TP26.375x25.5x0.219	10.735	318.714	0.034	0.000	730.046	0.000
L6	152 - 147 (6)	TP27.25x26.375x0.219	11.103	329.375	0.034	0.000	779.702	0.000
L7	147 - 142 (7)	TP28.124x27.25x0.219	11.471	340.036	0.034	0.000	830.994	0.000
L8	142 - 137 (8)	TP28.999x28.124x0.219	11.840	350.697	0.034	0.000	883.917	0.000
L9	137 - 129.75 (9)	TP30.268x28.999x0.219	12.099	358.160	0.034	0.000	921.942	0.000
L10	129.75 - 128.5 (10)	TP30.049x29.174x0.25	12.530	414.982	0.030	0.000	1082.967	0.000
L11	128.5 - 123.5 (11)	TP30.924x30.049x0.25	16.428	427.166	0.038	0.367	1147.492	0.000
L12	123.5 - 118.583 (12)	TP31.785x30.924x0.25	16.788	439.148	0.038	0.367	1212.767	0.000
L13	118.583 - 118.333 (13)	TP31.828x31.785x0.388	16.817	678.655	0.025	0.367	1868.625	0.000
L14	118.333 - 113.333 (14)	TP32.703x31.828x0.388	17.794	697.540	0.026	0.367	1974.075	0.000
L15	113.333 - 108.333 (15)	TP33.578x32.703x0.381	18.470	705.003	0.026	0.366	2049.600	0.000
L16	108.333 - 106.417 (16)	TP33.913x33.578x0.381	18.753	712.123	0.026	0.366	2091.208	0.000
L17	106.417 - 106.167 (17)	TP33.957x33.913x0.25	18.780	469.403	0.040	0.366	1385.633	0.000
L18	106.167 - 101.167 (18)	TP34.832x33.957x0.25	19.222	481.587	0.040	0.366	1458.500	0.000
L19	101.167 - 96.167 (19)	TP35.707x34.832x0.25	19.756	493.771	0.040	0.366	1533.233	0.000
L20	96.167 - 91.167 (20)	TP36.582x35.707x0.25	20.142	505.955	0.040	0.366	1609.833	0.000
L21	91.167 - 84 (21)	TP37.836x36.582x0.25	20.322	511.845	0.040	0.365	1647.525	0.000
L22	84 - 83.75 (22)	TP37.38x36.505x0.313	20.804	645.245	0.032	0.365	2094.575	0.000
L23	83.75 - 78.75 (23)	TP38.255x37.38x0.313	21.646	660.476	0.033	0.365	2194.625	0.000
L24	78.75 - 73.75 (24)	TP39.13x38.255x0.313	22.293	675.707	0.033	0.212	2297.008	0.000
L25	73.75 - 68.75 (25)	TP40.005x39.13x0.313	22.654	690.938	0.033	0.212	2401.733	0.000
L26	68.75 - 63.75 (26)	TP40.88x40.005x0.313	22.993	706.169	0.033	0.212	2508.783	0.000
L27	63.75 - 58.75 (27)	TP41.755x40.88x0.313	23.688	721.400	0.033	0.212	2618.175	0.000
L28	58.75 - 53.75 (28)	TP42.63x41.755x0.313	23.968	736.631	0.033	0.212	2729.892	0.000
L29	53.75 - 48.75 (29)	TP43.505x42.63x0.313	24.223	751.862	0.032	0.212	2843.950	0.000
L30	48.75 - 39.25 (30)	TP45.167x43.505x0.313	24.437	763.285	0.032	0.212	2931.025	0.000

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 $\frac{T_u}{\phi T_n}$
L31	39.25 - 38.25 (31)	TP44.717x43.536x0.375	25.035	926.253	0.027	0.212	3596.867	0.000
L32	38.25 - 33.25 (32)	TP45.592x44.717x0.375	25.233	944.529	0.027	0.212	3740.208	0.000
L33	33.25 - 28.25 (33)	TP46.467x45.592x0.375	25.402	962.805	0.026	0.212	3886.350	0.000
L34	28.25 - 23.25 (34)	TP47.342x46.467x0.375	25.556	981.081	0.026	0.212	4035.292	0.000
L35	23.25 - 18.25 (35)	TP48.217x47.342x0.375	25.986	999.357	0.026	0.212	4187.033	0.000
L36	18.25 - 13.25 (36)	TP49.091x48.217x0.375	26.108	1017.630	0.026	0.212	4341.575	0.000
L37	13.25 - 8.25 (37)	TP49.966x49.091x0.375	26.217	1035.910	0.025	0.212	4498.917	0.000
L38	8.25 - 3.25 (38)	TP50.841x49.966x0.375	26.315	1054.190	0.025	0.211	4659.058	0.000
L39	3.25 - 0 (39)	TP51.41x50.841x0.375	26.375	1066.060	0.025	0.211	4764.658	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	177 - 172 (1)	0.004	0.038	0.000	0.014	0.000	0.043 ✔	1.050	4.8.2 ✔
L2	172 - 167 (2)	0.004	0.072	0.000	0.015	0.000	0.077 ✔	1.050	4.8.2 ✔
L3	167 - 162 (3)	0.006	0.122	0.000	0.022	0.000	0.128 ✔	1.050	4.8.2 ✔
L4	162 - 157 (4)	0.006	0.166	0.000	0.022	0.000	0.173 ✔	1.050	4.8.2 ✔
L5	157 - 152 (5)	0.008	0.227	0.000	0.034	0.000	0.236 ✔	1.050	4.8.2 ✔
L6	152 - 147 (6)	0.008	0.290	0.000	0.034	0.000	0.300 ✔	1.050	4.8.2 ✔
L7	147 - 142 (7)	0.009	0.350	0.000	0.034	0.000	0.359 ✔	1.050	4.8.2 ✔
L8	142 - 137 (8)	0.009	0.405	0.000	0.034	0.000	0.415 ✔	1.050	4.8.2 ✔
L9	137 - 129.75 (9)	0.009	0.442	0.000	0.034	0.000	0.452 ✔	1.050	4.8.2 ✔
L10	129.75 - 128.5 (10)	0.008	0.422	0.000	0.030	0.000	0.432 ✔	1.050	4.8.2 ✔
L11	128.5 - 123.5 (11)	0.011	0.478	0.000	0.038	0.000	0.491 ✔	1.050	4.8.2 ✔
L12	123.5 - 118.583 (12)	0.011	0.530	0.000	0.038	0.000	0.542 ✔	1.050	4.8.2 ✔
L13	118.583 - 118.333 (13)	0.007	0.321	0.000	0.025	0.000	0.329 ✔	1.050	4.8.2 ✔
L14	118.333 - 113.333 (14)	0.007	0.348	0.000	0.026	0.000	0.356 ✔	1.050	4.8.2 ✔
L15	113.333 - 108.333 (15)	0.008	0.380	0.000	0.026	0.000	0.388 ✔	1.050	4.8.2 ✔
L16	108.333 - 106.417 (16)	0.008	0.389	0.000	0.026	0.000	0.398 ✔	1.050	4.8.2 ✔
L17	106.417 - 106.167 (17)	0.012	0.654	0.000	0.040	0.000	0.668 ✔	1.050	4.8.2 ✔

Section No.	Elevation ft	Ratio P_u / ϕP_n	Ratio M_{ux} / ϕM_{nx}	Ratio M_{uy} / ϕM_{ny}	Ratio V_u / ϕV_n	Ratio T_u / ϕT_n	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L18	106.167 - 101.167 (18)	0.013	0.701	0.000	0.040	0.000	0.715 ✔	1.050	4.8.2 ✔
L19	101.167 - 96.167 (19)	0.014	0.745	0.000	0.040	0.000	0.761 ✔	1.050	4.8.2 ✔
L20	96.167 - 91.167 (20)	0.015	0.788	0.000	0.040	0.000	0.805 ✔	1.050	4.8.2 ✔
L21	91.167 - 84 (21)	0.015	0.808	0.000	0.040	0.000	0.825 ✔	1.050	4.8.2 ✔
L22	84 - 83.75 (22)	0.013	0.641	0.000	0.032	0.000	0.655 ✔	1.050	4.8.2 ✔
L23	83.75 - 78.75 (23)	0.015	0.668	0.000	0.033	0.000	0.684 ✔	1.050	4.8.2 ✔
L24	78.75 - 73.75 (24)	0.015	0.695	0.000	0.033	0.000	0.711 ✔	1.050	4.8.2 ✔
L25	73.75 - 68.75 (25)	0.016	0.721	0.000	0.033	0.000	0.738 ✔	1.050	4.8.2 ✔
L26	68.75 - 63.75 (26)	0.016	0.745	0.000	0.033	0.000	0.763 ✔	1.050	4.8.2 ✔
L27	63.75 - 58.75 (27)	0.018	0.769	0.000	0.033	0.000	0.788 ✔	1.050	4.8.2 ✔
L28	58.75 - 53.75 (28)	0.018	0.792	0.000	0.033	0.000	0.811 ✔	1.050	4.8.2 ✔
L29	53.75 - 48.75 (29)	0.019	0.814	0.000	0.032	0.000	0.834 ✔	1.050	4.8.2 ✔
L30	48.75 - 39.25 (30)	0.019	0.830	0.000	0.032	0.000	0.850 ✔	1.050	4.8.2 ✔
L31	39.25 - 38.25 (31)	0.018	0.687	0.000	0.027	0.000	0.705 ✔	1.050	4.8.2 ✔
L32	38.25 - 33.25 (32)	0.018	0.701	0.000	0.027	0.000	0.719 ✔	1.050	4.8.2 ✔
L33	33.25 - 28.25 (33)	0.018	0.714	0.000	0.026	0.000	0.733 ✔	1.050	4.8.2 ✔
L34	28.25 - 23.25 (34)	0.019	0.726	0.000	0.026	0.000	0.745 ✔	1.050	4.8.2 ✔
L35	23.25 - 18.25 (35)	0.020	0.738	0.000	0.026	0.000	0.758 ✔	1.050	4.8.2 ✔
L36	18.25 - 13.25 (36)	0.020	0.749	0.000	0.026	0.000	0.770 ✔	1.050	4.8.2 ✔
L37	13.25 - 8.25 (37)	0.021	0.759	0.000	0.025	0.000	0.781 ✔	1.050	4.8.2 ✔
L38	8.25 - 3.25 (38)	0.021	0.769	0.000	0.025	0.000	0.791 ✔	1.050	4.8.2 ✔
L39	3.25 - 0 (39)	0.021	0.776	0.000	0.025	0.000	0.798 ✔	1.050	4.8.2 ✔

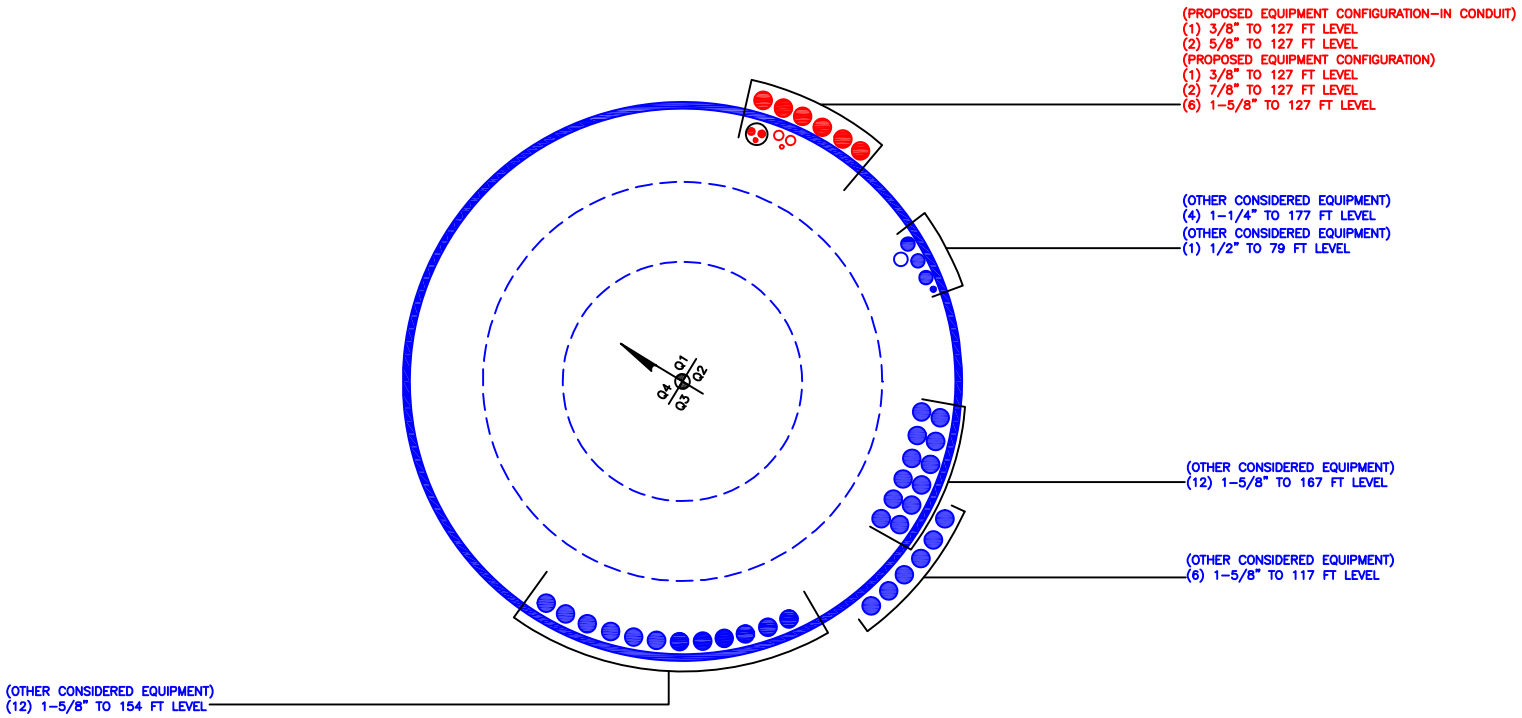
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	177 - 172	Pole	TP22.875x22x0.219	1	-3.953	966.244	**	**

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L2	172 - 167	Pole	TP23.75x22.875x0.219	2	-4.271	1003.557	**	**
L3	167 - 162	Pole	TP24.625x23.75x0.219	3	-6.070	1040.871	**	**
L4	162 - 157	Pole	TP25.5x24.625x0.219	4	-6.477	1078.182	**	**
L5	157 - 152	Pole	TP26.375x25.5x0.219	5	-8.601	1115.499	**	**
L6	152 - 147	Pole	TP27.25x26.375x0.219	6	-9.111	1152.816	**	**
L7	147 - 142	Pole	TP28.124x27.25x0.219	7	-9.639	1190.122	**	**
L8	142 - 137	Pole	TP28.999x28.124x0.219	8	-10.187	1227.439	**	**
L9	137 - 129.75	Pole	TP30.268x28.999x0.219	9	-10.581	1253.563	**	**
L10	129.75 - 128.5	Pole	TP30.049x29.174x0.25	10	-11.506	1452.433	**	**
L11	128.5 - 123.5	Pole	TP30.924x30.049x0.25	11	-15.239	1495.084	**	**
L12	123.5 - 118.583	Pole	TP31.785x30.924x0.25	12	-15.971	1537.021	**	**
L13	118.583 - 118.333	Pole	TP31.828x31.785x0.388	13	-16.027	2375.289	**	**
L14	118.333 - 113.333	Pole	TP32.703x31.828x0.388	14	-17.160	2441.386	**	**
L15	113.333 - 108.333	Pole	TP33.578x32.703x0.381	15	-18.421	2467.510	**	**
L16	108.333 - 106.417	Pole	TP33.913x33.578x0.381	16	-19.100	2492.427	**	**
L17	106.417 - 106.167	Pole	TP33.957x33.913x0.25	17	-19.189	1642.914	**	**
L18	106.167 - 101.167	Pole	TP34.832x33.957x0.25	18	-20.790	1685.554	**	**
L19	101.167 - 96.167	Pole	TP35.707x34.832x0.25	19	-23.532	1728.195	**	**
L20	96.167 - 91.167	Pole	TP36.582x35.707x0.25	20	-25.186	1770.846	**	**
L21	91.167 - 84	Pole	TP37.836x36.582x0.25	21	-25.991	1791.457	**	**
L22	84 - 83.75	Pole	TP37.38x36.505x0.313	22	-28.335	2258.361	**	**
L23	83.75 - 78.75	Pole	TP38.255x37.38x0.313	23	-32.217	2311.669	**	**
L24	78.75 - 73.75	Pole	TP39.13x38.255x0.313	24	-34.144	2364.978	**	**
L25	73.75 - 68.75	Pole	TP40.005x39.13x0.313	25	-36.120	2418.286	**	**
L26	68.75 - 63.75	Pole	TP40.88x40.005x0.313	26	-38.119	2471.595	**	**
L27	63.75 - 58.75	Pole	TP41.755x40.88x0.313	27	-42.605	2524.903	**	**
L28	58.75 - 53.75	Pole	TP42.63x41.755x0.313	28	-44.650	2578.212	**	**
L29	53.75 - 48.75	Pole	TP43.505x42.63x0.313	29	-46.718	2631.520	**	**
L30	48.75 - 39.25	Pole	TP45.167x43.505x0.313	30	-49.062	2671.494	**	**
L31	39.25 - 38.25	Pole	TP44.717x43.536x0.375	31	-54.780	3241.885	**	**
L32	38.25 - 33.25	Pole	TP45.592x44.717x0.375	32	-57.064	3305.851	**	**
L33	33.25 - 28.25	Pole	TP46.467x45.592x0.375	33	-59.372	3369.817	**	**
L34	28.25 - 23.25	Pole	TP47.342x46.467x0.375	34	-61.702	3433.783	**	**
L35	23.25 - 18.25	Pole	TP48.217x47.342x0.375	35	-66.569	3497.749	**	**
L36	18.25 - 13.25	Pole	TP49.091x48.217x0.375	36	-69.052	3561.715	**	**
L37	13.25 - 8.25	Pole	TP49.966x49.091x0.375	37	-71.556	3625.681	**	**
L38	8.25 - 3.25	Pole	TP50.841x49.966x0.375	38	-74.083	3689.647	**	**
L39	3.25 - 0	Pole	TP51.41x50.841x0.375	39	-75.737	3731.227	**	**
							Summary	
						Pole (L30)	**	**
						RATING =	**	**

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 876376

APPENDIX C

ADDITIONAL CALCULATIONS

CCIpole

per TIA-222- H

Site BU: 876376

Work Order: 1867685

Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	177	47.25	3.75	18	22	30.268	0.21875	Auto	A607-65
2	133.5	49.5	4.75	18	29.17	37.836	0.25	Auto	A607-65
3	88.75	49.5	5.75	18	36.50	45.167	0.3125	Auto	A607-65
4	45	45	0	18	43.54	51.41	0.375	Auto	A607-65

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	106.417	118.583	channel	MP3-04 (1.1875in)	3	E4						E4						E4					
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

Reinforcement Details

	B (in)	H (in)	Gross Area (in^2)	Pole Face to Centroid (in)	Bottom Termination Length (in)	Top Termination Length (in)	L_u (in)	Net Area (in^2)	Bolt Hole Size (in)	Reinforcement Material
1	4.78	1.61	4.13	0.61	17.000	17.000	18.000	3.593	1.1875	A572-65

TNX Geometry Input

Increment (ft): 5 Export to TNX

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	177 - 172	5		18	22.000	22.875	0.21875	A607-65	1.000
2	172 - 167	5		18	22.875	23.750	0.21875	A607-65	1.000
3	167 - 162	5		18	23.750	24.625	0.21875	A607-65	1.000
4	162 - 157	5		18	24.625	25.500	0.21875	A607-65	1.000
5	157 - 152	5		18	25.500	26.375	0.21875	A607-65	1.000
6	152 - 147	5		18	26.375	27.250	0.21875	A607-65	1.000
7	147 - 142	5		18	27.250	28.124	0.21875	A607-65	1.000
8	142 - 137	5		18	28.124	28.999	0.21875	A607-65	1.000
9	137 - 133.5	7.25	3.75	18	28.999	30.268	0.21875	A607-65	1.000
10	133.5 - 128.5	5		18	29.174	30.049	0.25	A607-65	1.000
11	128.5 - 123.5	5		18	30.049	30.924	0.25	A607-65	1.000
12	123.5 - 118.583	4.917		18	30.924	31.785	0.25	A607-65	1.000
13	118.583 - 118.333	0.25		18	31.785	31.828	0.3875	A607-65	0.968
14	118.333 - 113.333	5		18	31.828	32.703	0.3875	A607-65	0.960
15	113.333 - 108.333	5		18	32.703	33.578	0.38125	A607-65	0.967
16	108.333 - 106.417	1.916		18	33.578	33.913	0.38125	A607-65	0.964
17	106.417 - 106.167	0.25		18	33.913	33.957	0.25	A607-65	1.000
18	106.167 - 101.167	5		18	33.957	34.832	0.25	A607-65	1.000
19	101.167 - 96.167	5		18	34.832	35.707	0.25	A607-65	1.000
20	96.167 - 91.167	5		18	35.707	36.582	0.25	A607-65	1.000
21	91.167 - 88.75	7.167	4.75	18	36.582	37.836	0.25	A607-65	1.000
22	88.75 - 83.75	5		18	36.505	37.380	0.3125	A607-65	1.000
23	83.75 - 78.75	5		18	37.380	38.255	0.3125	A607-65	1.000
24	78.75 - 73.75	5		18	38.255	39.130	0.3125	A607-65	1.000
25	73.75 - 68.75	5		18	39.130	40.005	0.3125	A607-65	1.000
26	68.75 - 63.75	5		18	40.005	40.880	0.3125	A607-65	1.000
27	63.75 - 58.75	5		18	40.880	41.755	0.3125	A607-65	1.000
28	58.75 - 53.75	5		18	41.755	42.630	0.3125	A607-65	1.000
29	53.75 - 48.75	5		18	42.630	43.505	0.3125	A607-65	1.000
30	48.75 - 45	9.5	5.75	18	43.505	45.167	0.3125	A607-65	1.000
31	45 - 38.25	6.75		18	43.536	44.717	0.375	A607-65	1.000
32	38.25 - 33.25	5		18	44.717	45.592	0.375	A607-65	1.000
33	33.25 - 28.25	5		18	45.592	46.467	0.375	A607-65	1.000
34	28.25 - 23.25	5		18	46.467	47.342	0.375	A607-65	1.000
35	23.25 - 18.25	5		18	47.342	48.217	0.375	A607-65	1.000
36	18.25 - 13.25	5		18	48.217	49.091	0.375	A607-65	1.000
37	13.25 - 8.25	5		18	49.091	49.966	0.375	A607-65	1.000
38	8.25 - 3.25	5		18	49.966	50.841	0.375	A607-65	1.000
39	3.25 - 0	3.25		18	50.841	51.410	0.375	A607-65	1.000

TNX Section Forces

Increment (ft):	5	TNX Output		
	Section Height (ft)	P_u (K)	M_{ux} (kip-ft)	V_u (K)
1	177 - 172	3.95	20.45	3.93
2	172 - 167	4.27	40.94	4.27
3	167 - 162	6.07	73.65	6.42
4	162 - 157	6.48	106.64	6.78
5	157 - 152	8.60	154.21	10.74
6	152 - 147	9.11	208.79	11.10
7	147 - 142	9.64	265.21	11.47
8	142 - 137	10.19	323.47	11.84
9	137 - 133.5	10.58	365.35	12.10
10	133.5 - 128.5	11.51	426.93	12.53
11	128.5 - 123.5	15.24	507.61	16.43
12	123.5 - 118.583	15.97	589.20	16.79
13	118.583 - 118.333	16.03	593.40	16.82
14	118.333 - 113.333	17.16	680.24	17.79
15	113.333 - 108.333	18.42	770.83	18.47
16	108.333 - 106.417	19.10	806.47	18.75
17	106.417 - 106.167	19.19	811.15	18.78
18	106.167 - 101.167	20.79	906.09	19.22
19	101.167 - 96.167	23.53	1003.45	19.76
20	96.167 - 91.167	25.19	1103.10	20.14
21	91.167 - 88.75	25.99	1151.95	20.32
22	88.75 - 83.75	28.34	1254.69	20.80
23	83.75 - 78.75	32.22	1360.87	21.65
24	78.75 - 73.75	34.14	1470.94	22.29
25	73.75 - 68.75	36.12	1583.27	22.65
26	68.75 - 63.75	38.12	1697.34	22.99
27	63.75 - 58.75	42.60	1813.99	23.69
28	58.75 - 53.75	44.65	1933.07	23.97
29	53.75 - 48.75	46.72	2053.48	24.22
30	48.75 - 45	49.06	2144.66	24.44
31	45 - 38.25	54.78	2311.46	25.04
32	38.25 - 33.25	57.06	2437.06	25.23
33	33.25 - 28.25	59.37	2563.57	25.40
34	28.25 - 23.25	61.70	2690.89	25.56
35	23.25 - 18.25	66.57	2819.67	25.99
36	18.25 - 13.25	69.05	2949.81	26.11
37	13.25 - 8.25	71.56	3080.53	26.22
38	8.25 - 3.25	74.08	3211.77	26.31
39	3.25 - 0	75.74	3297.32	26.38

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
177 - 172	Pole	TP22.875x22x0.2188	Pole	4.0%	Pass
172 - 167	Pole	TP23.75x22.875x0.2188	Pole	7.2%	Pass
167 - 162	Pole	TP24.625x23.75x0.2188	Pole	12.1%	Pass
162 - 157	Pole	TP25.5x24.625x0.2188	Pole	16.3%	Pass
157 - 152	Pole	TP26.375x25.5x0.2188	Pole	22.3%	Pass
152 - 147	Pole	TP27.25x26.375x0.2188	Pole	28.3%	Pass
147 - 142	Pole	TP28.124x27.25x0.2188	Pole	34.0%	Pass
142 - 137	Pole	TP28.999x28.124x0.2188	Pole	39.3%	Pass
137 - 133.5	Pole	TP30.268x28.999x0.2188	Pole	42.9%	Pass
133.5 - 128.5	Pole	TP30.049x29.174x0.25	Pole	40.9%	Pass
128.5 - 123.5	Pole	TP30.924x30.049x0.25	Pole	46.5%	Pass
123.5 - 118.58	Pole	TP31.785x30.924x0.25	Pole	51.4%	Pass
118.58 - 118.33	Pole + Reinf.	TP31.828x31.785x0.3875	Reinf. 1 Tension Rupture	46.8%	Pass
118.33 - 113.33	Pole + Reinf.	TP32.703x31.828x0.3875	Reinf. 1 Tension Rupture	51.2%	Pass
113.33 - 108.33	Pole + Reinf.	TP33.578x32.703x0.3813	Reinf. 1 Tension Rupture	55.5%	Pass
108.33 - 106.42	Pole + Reinf.	TP33.913x33.578x0.3813	Reinf. 1 Tension Rupture	57.1%	Pass
106.42 - 106.17	Pole	TP33.957x33.913x0.25	Pole	63.4%	Pass
106.17 - 101.17	Pole	TP34.832x33.957x0.25	Pole	67.9%	Pass
101.17 - 96.17	Pole	TP35.707x34.832x0.25	Pole	72.3%	Pass
96.17 - 91.17	Pole	TP36.582x35.707x0.25	Pole	76.4%	Pass
91.17 - 88.75	Pole	TP37.836x36.582x0.25	Pole	78.3%	Pass
88.75 - 83.75	Pole	TP37.38x36.505x0.3125	Pole	62.1%	Pass
83.75 - 78.75	Pole	TP38.255x37.38x0.3125	Pole	64.8%	Pass
78.75 - 73.75	Pole	TP39.13x38.255x0.3125	Pole	67.5%	Pass
73.75 - 68.75	Pole	TP40.005x39.13x0.3125	Pole	70.0%	Pass
68.75 - 63.75	Pole	TP40.88x40.005x0.3125	Pole	72.4%	Pass
63.75 - 58.75	Pole	TP41.755x40.88x0.3125	Pole	74.8%	Pass
58.75 - 53.75	Pole	TP42.63x41.755x0.3125	Pole	77.0%	Pass
53.75 - 48.75	Pole	TP43.505x42.63x0.3125	Pole	79.1%	Pass
48.75 - 45	Pole	TP45.167x43.505x0.3125	Pole	80.7%	Pass
45 - 38.25	Pole	TP44.717x43.536x0.375	Pole	66.8%	Pass
38.25 - 33.25	Pole	TP45.592x44.717x0.375	Pole	68.2%	Pass
33.25 - 28.25	Pole	TP46.467x45.592x0.375	Pole	69.5%	Pass
28.25 - 23.25	Pole	TP47.342x46.467x0.375	Pole	70.7%	Pass
23.25 - 18.25	Pole	TP48.217x47.342x0.375	Pole	71.9%	Pass
18.25 - 13.25	Pole	TP49.091x48.217x0.375	Pole	73.0%	Pass
13.25 - 8.25	Pole	TP49.966x49.091x0.375	Pole	74.1%	Pass
8.25 - 3.25	Pole	TP50.841x49.966x0.375	Pole	75.1%	Pass
3.25 - 0	Pole	TP51.41x50.841x0.375	Pole	75.7%	Pass
				Summary	
			Pole	80.7%	Pass
			Reinforcement	57.1%	Pass
			Overall	80.7%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in^4)			Area (in^2)			% Capacity*	
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1
177 - 172	1020	n/a	1020	15.73	n/a	15.73	4.0%	
172 - 167	1143	n/a	1143	16.34	n/a	16.34	7.2%	
167 - 162	1275	n/a	1275	16.94	n/a	16.94	12.1%	
162 - 157	1417	n/a	1417	17.55	n/a	17.55	16.3%	
157 - 152	1569	n/a	1569	18.16	n/a	18.16	22.3%	
152 - 147	1732	n/a	1732	18.77	n/a	18.77	28.3%	
147 - 142	1906	n/a	1906	19.37	n/a	19.37	34.0%	
142 - 137	2090	n/a	2090	19.98	n/a	19.98	39.3%	
137 - 133.5	2227	n/a	2227	20.41	n/a	20.41	42.9%	
133.5 - 128.5	2652	n/a	2652	23.64	n/a	23.64	40.9%	
128.5 - 123.5	2892	n/a	2892	24.34	n/a	24.34	46.5%	
123.5 - 118.58	3143	n/a	3143	25.02	n/a	25.02	51.4%	
118.58 - 118.33	3156	1698	4854	25.06	12.39	37.45	33.2%	46.8%
118.33 - 113.33	3425	1789	5214	25.75	12.39	38.14	36.7%	51.2%
113.33 - 108.33	3710	1882	5592	26.44	12.39	38.83	40.1%	55.5%
108.33 - 106.42	3823	1918	5741	26.71	12.39	39.10	41.5%	57.1%
106.42 - 106.17	3838	n/a	3838	26.75	n/a	26.75	63.4%	
106.17 - 101.17	4145	n/a	4145	27.44	n/a	27.44	67.9%	
101.17 - 96.17	4467	n/a	4467	28.13	n/a	28.13	72.3%	
96.17 - 91.17	4806	n/a	4806	28.83	n/a	28.83	76.4%	
91.17 - 88.75	4976	n/a	4976	29.16	n/a	29.16	78.3%	
88.75 - 83.75	6380	n/a	6380	36.76	n/a	36.76	62.1%	
83.75 - 78.75	6842	n/a	6842	37.63	n/a	37.63	64.8%	
78.75 - 73.75	7327	n/a	7327	38.50	n/a	38.50	67.5%	
73.75 - 68.75	7833	n/a	7833	39.37	n/a	39.37	70.0%	
68.75 - 63.75	8363	n/a	8363	40.24	n/a	40.24	72.4%	
63.75 - 58.75	8916	n/a	8916	41.10	n/a	41.10	74.8%	
58.75 - 53.75	9493	n/a	9493	41.97	n/a	41.97	77.0%	
53.75 - 48.75	10094	n/a	10094	42.84	n/a	42.84	79.1%	
48.75 - 45	10561	n/a	10561	43.49	n/a	43.49	80.7%	
45 - 38.25	13106	n/a	13106	52.78	n/a	52.78	66.8%	
38.25 - 33.25	13897	n/a	13897	53.82	n/a	53.82	68.2%	
33.25 - 28.25	14719	n/a	14719	54.86	n/a	54.86	69.5%	
28.25 - 23.25	15574	n/a	15574	55.90	n/a	55.90	70.7%	
23.25 - 18.25	16460	n/a	16460	56.94	n/a	56.94	71.9%	
18.25 - 13.25	17380	n/a	17380	57.98	n/a	57.98	73.0%	
13.25 - 8.25	18333	n/a	18333	59.02	n/a	59.02	74.1%	
8.25 - 3.25	19321	n/a	19321	60.07	n/a	60.07	75.1%	
3.25 - 0	19981	n/a	19981	60.74	n/a	60.74	75.7%	

Note: Section capacity checked in 5 degree increments.
Rating per TIA-222-H Section 15.5.

PROJECT	**83609.009.01 - SCOVILLE HILL /HARWINTON ROD, CT**
SUBJECT	**Anchor Rod Bracket Analysis**
DATE	**07/15/20**
v4.6.0	

TIA-222 Rev. H
Apply TIA-222-H Section 15.5? Yes

B+T GRP
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630

Analysis Criteria		
Design/Analysis	Analysis	
Load Type	Current Load	
Current load	100.32	kips
AR Capacity	276.4	kips

Tower Type	Monopole	

Manufacturers Tower Prop.		
Pole Thickness	0.375	in
Pole Grade	A572-65	
Fy	65	ksi
Fu	80	ksi
Base Plate Gr.	Custom	
Fy	55	ksi
Fu	70	ksi

Post-Installed Adhesive AR Mod.		
ARB Type	Welded	
Size	1.75	in
Grade	'22-150 (William	
Fy	127.7	ksi
Fu	150	ksi

Anchor Rod Bracket Analysis Checks		
Tube Bearing	25.9%	-
Tube Compression	38.8%	-
Gusset Shear	20.2%	-
Gusset Flexure	N/A	-
Welds: Gusset to Tower and BP	29.2%	-
Welds: Gusset to Tube	20.5%	-
Welds: Geometry	N/A	
Tower Punching	18.3%	-
Tube Punching	25.9%	-
Utilization	**38.8%**	

Bracket Properties

Gusset		
Thickness	1.25	in
Width at Tube	6	in
Height at Pole	30	in
Height at Tube	10.5	in
Grade	A572-65	
Fy	65	ksi
Fu	80	ksi

Pipe/Tube		
Size	3 XXS Pipe	
Total Length	10.5	in
Length above Gusset	0	in
Length below Gusset	0	in
Grade	Custom	
Fy	50	50 ksi
Fu	65	65 ksi

Weld - Gusset to Pipe/Tube		
FEXX	70	ksi
Weld Type	CJP - Double Bevel	
Fillet Size	3/8	in
Bevel Depth	3/8	in

Weld - Gusset to Tower		
FEXX	70	ksi
Weld Type	Double Fillet	
Fillet Size	3/8	in

Weld - Gusset to Base Plate		
FEXX	70	ksi
Weld Type	CJP - Double Bevel	
Fillet Size	1/2	in
Bevel Depth	1/2	in
Gap	0	in
Notch (horiz)	0.75	in
Notch (vert)	0.75	in
Pipe/Tube Welded to Base/Footpad?	Yes	
Fillet Size	1/2	in

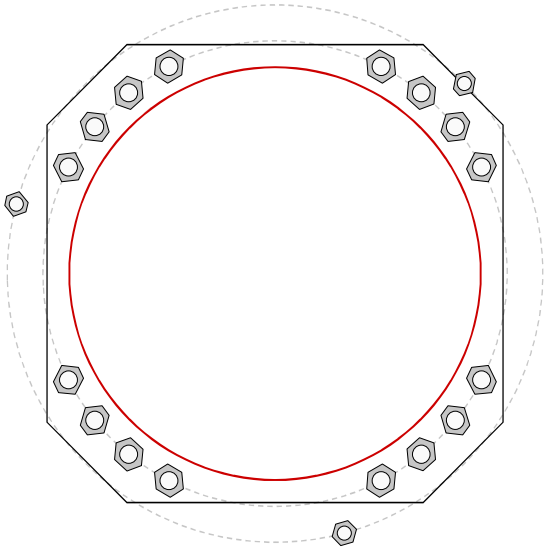
Monopole Base Plate Connection

Site Info	
BU #	876376
Site Name	LE HILL /HARWINTON F
Order #	525776, Rev# 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	0

Applied Loads	
Moment (kip-ft)	3297.32
Axial Force (kips)	75.74
Shear Force (kips)	26.38

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

GROUP 1: (16) 2-1/4" ø bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 58" BC

Anchor Spacing: 6 in

GROUP 2: (3) 1-3/4" ø bolts (A722 N; Fy=127.7 ksi, Fu=125 ksi) on 66.91" BC

Base Plate Data

57" OD x 2.75" Plate (A572-55; Fy=55 ksi, Fu=70 ksi)

Stiffener Data

N/A

Pole Data

51.41" x 0.375" 18-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

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

GROUP 1:		
Pu_c = 153.47	ϕPn_c = 268.39	**Stress Rating**
Vu = 1.65	ϕVn = 120.77	**54.5%**
Mu = n/a	ϕMn = n/a	**Pass**
GROUP 2:		
Pu_c = 100.32	ϕPn_c = 276.44	**Stress Rating**
Vu = 0	ϕVn = 124.4	**34.6%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	27.46	(Flexural)
Allowable Stress (ksi):	49.5	
Stress Rating:	**52.8%**	**Pass**

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Phone I Fax:	|	E-Mail:	
Design:	Concrete - Jul 15, 2020 (1)	Date:	7/15/2020
Fastening point:			

Specifier's comments: Hilti Software has limited AR size,depth and grade. Modeled 2" diameter AR with Fy=105 Ksi anchor rod. The calculations are then refined with existing 2.25" AR A615 - Gr. 75 ksi with 7ft embedded depth. We have also rearranged the spacing of anchor rods and anchor plate dimensions to meet the min requirements of the software.

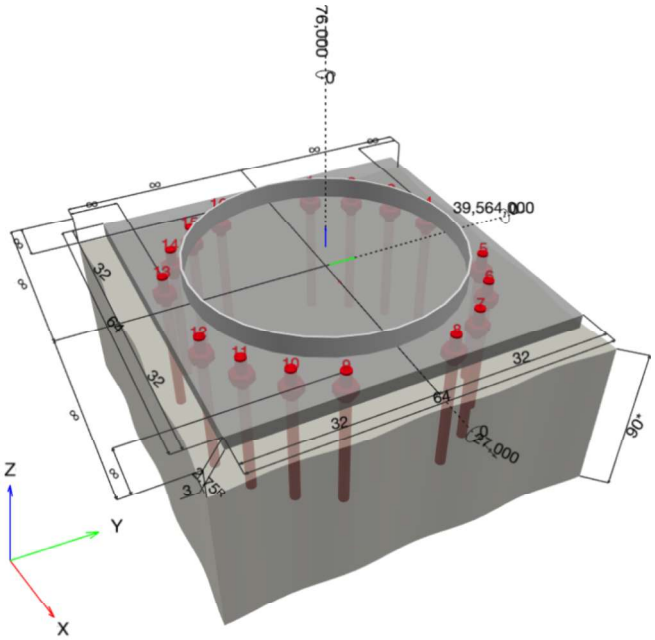
1 Input data

2.25" dia Anchor Rods

Anchor type and diameter:	**Heavy Hex Head**
Item number:	not available
Effective embedment depth:	h_{ef} = 84in
Material:	ASTM F 1554
Proof:	Design Method ACI 318-08 / CIP
Stand-off installation:	without clamping (anchor); restraint level (anchor plate): 1.00; e_b = 3.000 in.; t = 2.750 in.
Anchor plate[R] :	l_x x l_y x t = 57in x 57in x 2.750 in.; (Recommended plate thickness: not calculated)
Profile:	Steel pipe, ; (L x W x T) = 51.410 in. x 51.410 in. x 0.375 in.
Base material:	cracked concrete, 3000, f_c' = 3,000 psi; h = 90.000 in.
Reinforcement:	tension: condition B, shear: condition B; edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	no

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



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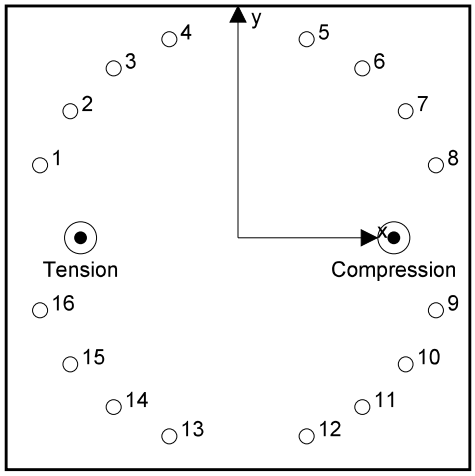
Fastening point:			

1.1 Load combination and design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = -76,000; V_x = 27,000; V_y = 0; M_x = 0; M_y = 39,564,000; M_z = 0;	no	359
2	Combination 2	N = -76,000; V_x = 0; V_y = 27,000; M_x = -39,564,000; M_y = 0; M_z = 0;	no	357

2 Load case/Resulting anchor forces

Controlling load case: 1 Combination 1



Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	157,400	1,688	1,688	0
2	132,597	1,688	1,688	0
3	97,099	1,688	1,688	0
4	51,485	1,688	1,688	0
5	-60,986	1,688	1,688	0
6	-106,599	1,688	1,688	0
7	-142,096	1,688	1,688	0
8	-166,899	1,688	1,688	0
9	-166,899	1,687	1,687	0
10	-142,096	1,687	1,687	0
11	-106,599	1,687	1,687	0
12	-60,985	1,687	1,687	0
13	51,485	1,687	1,687	0
14	97,099	1,687	1,687	0
15	132,595	1,687	1,687	0
16	157,399	1,687	1,687	0

max. concrete compressive strain: - [‰]
max. concrete compressive stress: - [psi]
resulting tension force in (x/y)=(-21.717/0.000): 877,159 [lb]
resulting compression force in (x/y)=(21.523/0.000): 953,159 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

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Fastening point:			

3 Tension load

	Load N_{ua} [lb]	Capacity ϕN_n [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	-166,899	243750	68.47%	OK
Pullout Strength*	157,400	137760	87.52%	OK
Concrete Breakout Failure**	877,159	1495661	58.64%	OK
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (anchors in tension)

Governing Rating:
87.52/1.05
= 83.35%

3.1 Steel Strength

$N_{sa} = A_{se,N} f_{uta}$ ACI 318-08 Eq. (D-3)
$\phi N_{sa} \geq N_{ua}$ ACI 318-08 Eq. (D-1)

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
3.25	100000

Calculations

N_{sa} [lb]
325000

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
325000	0.750	243750	-166,899

The steel proof was done for the highest absolute force per anchor - in this case compression loading. Please be aware that buckling should be verified separately

3.2 Pullout Strength

$N_{pN} = \psi_{c,p} N_p$ ACI 318-08 Eq. (D-14)
$N_p = 8 A_{brg} f'_c$ ACI 318-08 Eq. (D-15)
$\phi N_{pN} \geq N_{ua}$ ACI 318-08 Eq. (D-1)

Bearing area Abrg = 0.866*(distance across the flats)^2 - (Pi/4)*Dia. of AR^2
For 2.25" AR, the hexnut distance across the flats = 3.75"
Abrg = 0.866*(3.75^2) - (Pi/4)*2.25^2
Abrg = 8.2 in2

Variables

$\psi_{c,p}$	A_{brg} [in.^{2}]	f'_c [psi]
1.000	8.2	3,000

Calculations

N_p [lb]
196800

Results

N_{pn} [lb]	$\phi_{concrete}$	ϕN_{pn} [lb]	N_{ua} [lb]
196800	0.700	137760	157,400

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Fastening point:			

3.3 Concrete Breakout Failure

$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b$ ACI 318-08 Eq. (D-5)

$\phi N_{cbg} \geq N_{ua}$ ACI 318-08 Eq. (D-1)

A_{Nc} see ACI 318-08, Part D.5.2.1, Fig. RD.5.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-08 Eq. (D-6)

$\Psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}}\right) \leq 1.0$ ACI 318-08 Eq. (D-9)

$\Psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}}\right) \leq 1.0$ ACI 318-08 Eq. (D-11)

$\Psi_{cp,N} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}}\right) \leq 1.0$ ACI 318-08 Eq. (D-13)

$N_b = 16 \lambda \sqrt{f'_c} h_{ef}^{5/3}$ ACI 318-08 Eq. (D-8)

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\Psi_{c,N}$
84.00	2.439	0.000	∞	1.000

c_{ac} [in.]	k_c	λ	f'_c [psi]
0.000	16	1	3,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\Psi_{ec1,N}$	$\Psi_{ec2,N}$	$\Psi_{ed,N}$	$\Psi_{cp,N}$	N_b [lb]
96100	63504	1	1.000	1.000	1.000	1411929

Results

N_{cbg} [lb]	$\phi_{concrete}$	ϕN_{cbg} [lb]	N_{ua} [lb]
2136659	0.700	1495661	877,159

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Fastening point:			

4 Shear load

	Load V_{ua} [lb]	Capacity ϕV_n [lb]	Utilization $\beta_V = V_{ua}/\phi V_n$	Status
Steel Strength*	1,688	126750	1.3	OK
Steel failure (with lever arm)*	1,688	6121.1	27.57	OK
Pryout Strength**	27,000	2991322.6	1	OK
Concrete edge failure in direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

$V_{sa} = 0.6\, A_{se,V}\, f_{uta}$ ACI 318-08 Eq. (D-20)
$\phi\, V_{steel} \geq V_{ua}$ ACI 318-08 Eq. (D-2)

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]
3.25	100000

Calculations

V_{sa} [lb]
195000

Results

V_{sa} [lb]	ϕ_{steel}	$\phi\, V_{sa}$ [lb]	V_{ua} [lb]
195000	0.650	126750	1,688

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Design:	Concrete - Jul 15, 2020 (1)	Date:	7/15/2020
Fastening point:			

4.2 Steel failure (with lever arm)

V_s^M	$= \frac{\alpha_M \cdot M_s}{L_b}$	bending equation for stand-off
M_s	$= M_s^0 \left(1 - \frac{N_{ua}}{\phi N_{sa}}\right)$	resultant flexural resistance of anchor
M_s^0	$= (1.2)\ (S)\ (f_{u,min})$	characteristic flexural resistance of anchor
$\left(1 - \frac{N_{ua}}{\phi N_{sa}}\right)$		reduction for tensile force acting simultaneously with a shear force on the anchor
S	$= \frac{\pi (d)^3}{32}$	elastic section modulus of anchor bolt at concrete surface
L_b	$= z + (n)(d_0)$	internal lever arm adjusted for spalling of the surface concrete
ϕV_s^M	$\geq V_{ua}$	ACI 318-08 Eq. (D-2)

Variables

α_M	$f_{u,min}$ [psi]	N_{ua} [lb]	ϕN_{sa} [lb]	z [in.]	n	d_0 [in.]
1.00	100000	-60,986	243750	4.375	0.500	2.25

Calculations

M_s^0 [in.lb]	$\left(1 - \frac{N_{ua}}{\phi N_{sa}}\right)$	M_s [in.lb]	L_b [in.]
80,202	0.683	54835	5.375

Results

V_s^M [lb]	ϕ_{steel}	ϕV_s^M [lb]	V_{ua} [lb]
10201.86	0.650	6121.1162	1,688

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Fastening point:			

4.3 Pryout Strength

$V_{cpg} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b \right]$ ACI 318-08 Eq. (D-31)

$\phi V_{cpg} \geq V_{ua}$ ACI 318-08 Eq. (D-2)

A_{Nc} see ACI 318-08, Part D.5.2.1, Fig. RD.5.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-08 Eq. (D-6)

$\Psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}} \right) \leq 1.0$ ACI 318-08 Eq. (D-9)

$\Psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-08 Eq. (D-11)

$\Psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-08 Eq. (D-13)

$N_b = 16 \lambda \sqrt{f'_c} h_{ef}^{5/3}$ ACI 318-08 Eq. (D-8)

Variables

k_{cp}	h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	84	0.000	0.000	∞

$\Psi_{c,N}$	c_{ac} [in.]	k_c	λ	f'_c [psi]
1.000	-	16	1	3,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\Psi_{ec1,N}$	$\Psi_{ec2,N}$	$\Psi_{ed,N}$	$\Psi_{cp,N}$	N_b [lb]
96100	63504	1.000	1.000	1.000	1.000	1411929

Results

V_{cpg} [lb]	$\phi_{concrete}$	ϕV_{cpg} [lb]	V_{ua} [lb]
4273318	0.700	2991322.6	27,000

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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- ACI 318 does not specifically address anchor bending when a stand-off condition exists. PROFIS Engineering calculates a shear load corresponding to anchor bending when stand-off exists and includes the results as a shear Design Strength!
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- Attention! In case of compressive anchor forces a buckling check as well as the proof of the local load transfer into and within the base material (incl. punching) has to be done separately.

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7 Installation data

Profile: Steel pipe, ; (L x W x T) = 51.410 in. x 51.410 in. x 0.375 in.

Hole diameter in the fixture: d_f = 2.063 in.

Plate thickness (input): 2.750 in.

Recommended plate thickness: not calculated

Anchor type and diameter: Heavy Hex Head ASTM F 1554 GR. 105 2

Item number: not available

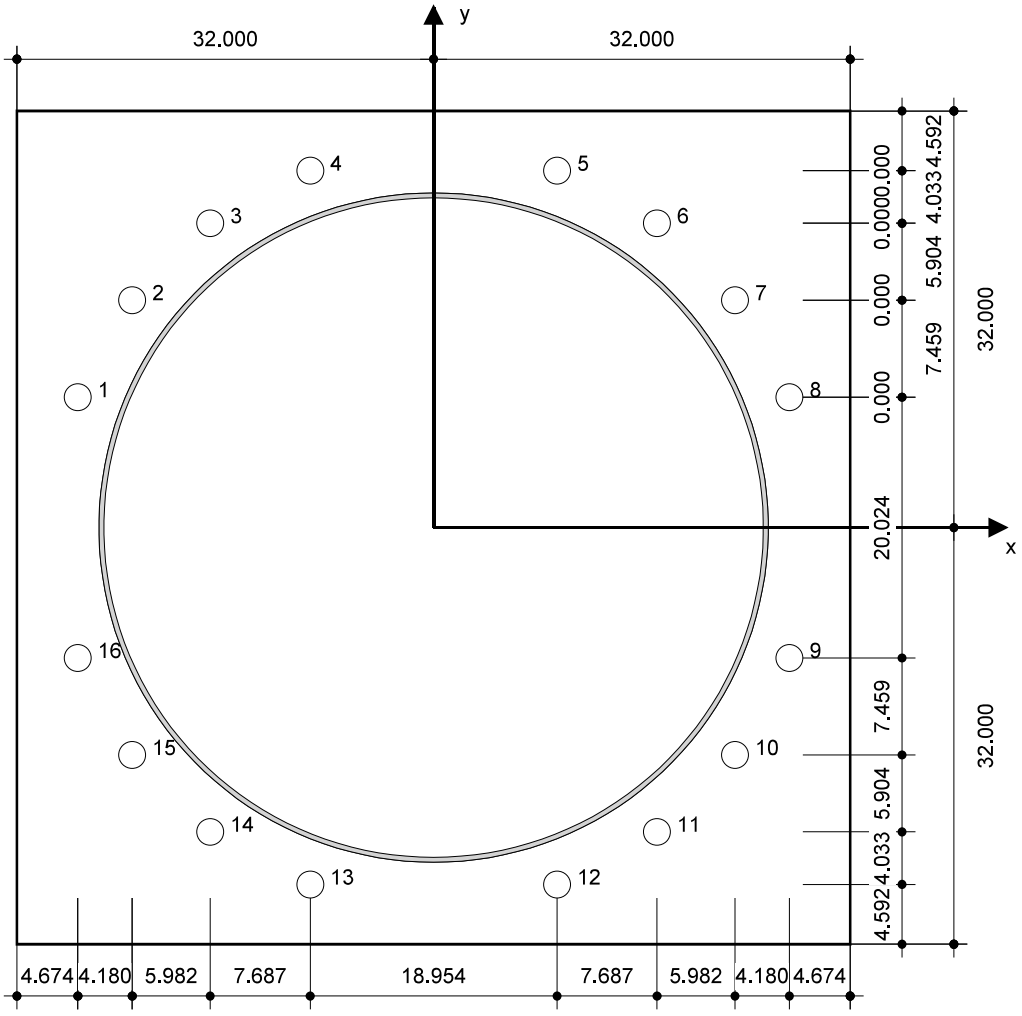
Installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 24.000 in.

Minimum thickness of the base material: 25.844 in.

Hilti Heavy Hex Head headed stud anchor with 24 in embedment, 2, Steel galvanized, installation per instruction for use



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Fastening point:			

Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-27.326	10.012	-	-	-	-
2	-23.146	17.471	-	-	-	-
3	-17.164	23.375	-	-	-	-
4	-9.477	27.408	-	-	-	-
5	9.477	27.408	-	-	-	-
6	17.164	23.375	-	-	-	-
7	23.146	17.471	-	-	-	-
8	27.326	10.012	-	-	-	-
9	27.326	-10.012	-	-	-	-
10	23.146	-17.471	-	-	-	-
11	17.164	-23.375	-	-	-	-
12	9.477	-27.408	-	-	-	-
13	-9.477	-27.408	-	-	-	-
14	-17.164	-23.375	-	-	-	-
15	-23.146	-17.471	-	-	-	-
16	-27.326	-10.012	-	-	-	-

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Fastening point:			

8 Remarks; Your Cooperation Duties

- Any and all information and data contained in the Software concern solely the use of Hilti products and are based on the principles, formulas and security regulations in accordance with Hilti's technical directions and operating, mounting and assembly instructions, etc., that must be strictly complied with by the user. All figures contained therein are average figures, and therefore use-specific tests are to be conducted prior to using the relevant Hilti product. The results of the calculations carried out by means of the Software are based essentially on the data you put in. Therefore, you bear the sole responsibility for the absence of errors, the completeness and the relevance of the data to be put in by you. Moreover, you bear sole responsibility for having the results of the calculation checked and cleared by an expert, particularly with regard to compliance with applicable norms and permits, prior to using them for your specific facility. The Software serves only as an aid to interpret norms and permits without any guarantee as to the absence of errors, the correctness and the relevance of the results or suitability for a specific application.
- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.

Pier and Pad Foundation

BU # :	876376
Site Name:	SCOVILLE HILL /H
App. Number:	525776, Rev. 0

TIA-222 Revision:	H
Tower Type:	Monopole

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

Superstructure Analysis Reactions		
Compression, P_{comp}:	76	kips
Base Shear, Vu_comp:	27	kips
Moment, M_u:	3297	ft-kips
Tower Height, **H**:	177	ft
BP Dist. Above Fdn, bp_{dist}:	3.75	in
Bolt Circle / Bearing Plate Width, **BC**:	58	in

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	204.10	27.00	**12.6%**	**Pass**
Bearing Pressure (ksf)	30.00	4.08	**13.6%**	**Pass**
*Overturning (kip*ft)*	4537.48	3413.44	**75.2%**	**Pass**
*Pad Flexure (kip*ft)*	4945.31	1852.73	**35.7%**	**Pass**
Pad Shear - 1-way (kips)	1046.09	246.57	**22.4%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.164	0.000	**0.0%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	7561.23	0.00	**0.0%**	**Pass**

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

Soil Rating*:	**75.2%**
Structural Rating*:	**35.7%**

Pad Properties		
Depth, **D**:	3.5	ft
Pad Width, **W**:	24.5	ft
Pad Thickness, **T**:	4	ft
Pad Rebar Size (Bottom), **Sp**:	9	
Pad Rebar Quantity (Bottom), **mp**:	26	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	3	ksi
Dry Concrete Density, δc:	150	pcf

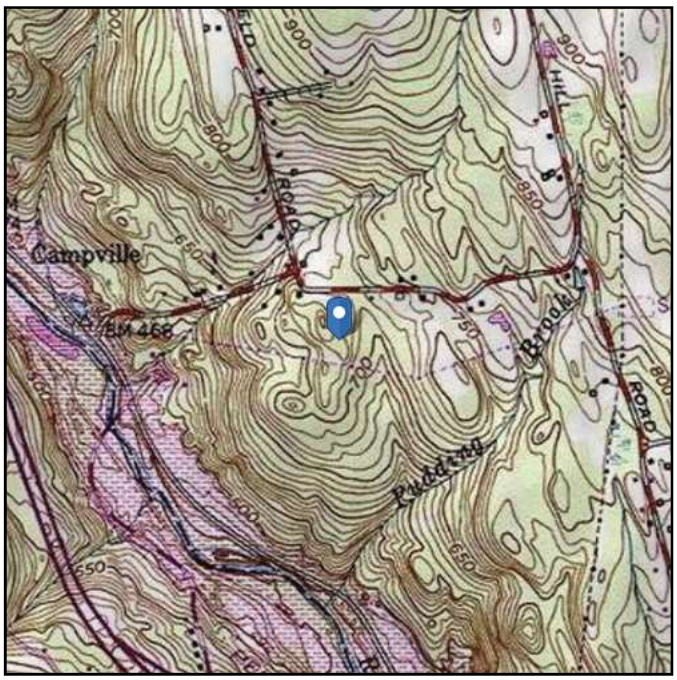
Soil Properties		
Total Soil Unit Weight, γ:	125	pcf
Ultimate Gross Bearing, Qult:	40.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:	30	degrees
SPT Blow Count, N_{blows}:		
Base Friction, μ:	0.7	
Neglected Depth, **N**:	3.33	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, **gw**:	N/A	ft

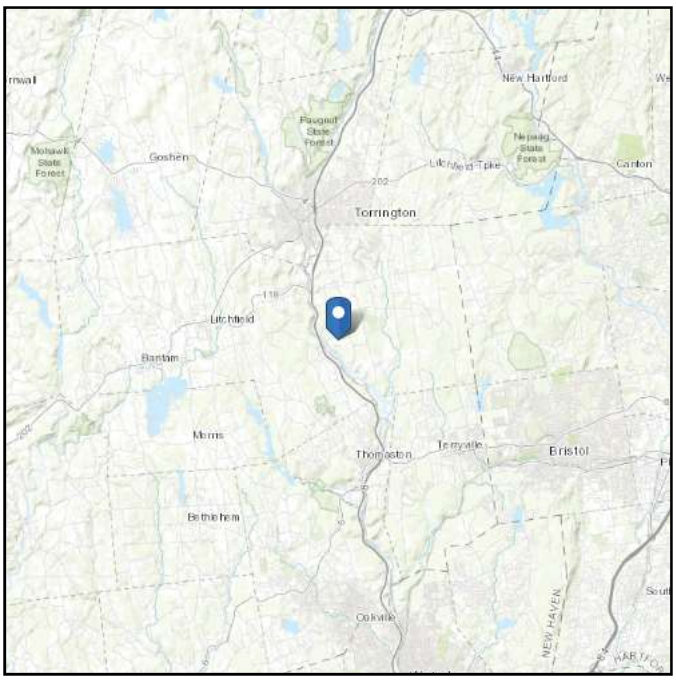
<--Toggle between Gross and Net

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-10	**Elevation:**	734.96 ft (NAVD 88)
Risk Category:	II	**Latitude:**	41.736778
Soil Class:	D - Stiff Soil	**Longitude:**	-73.097056





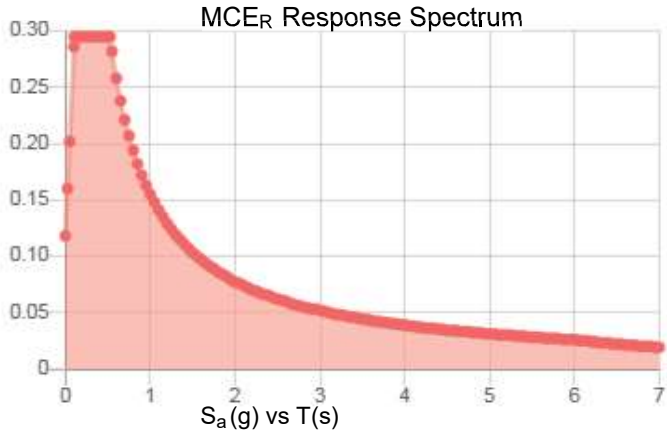
Seismic

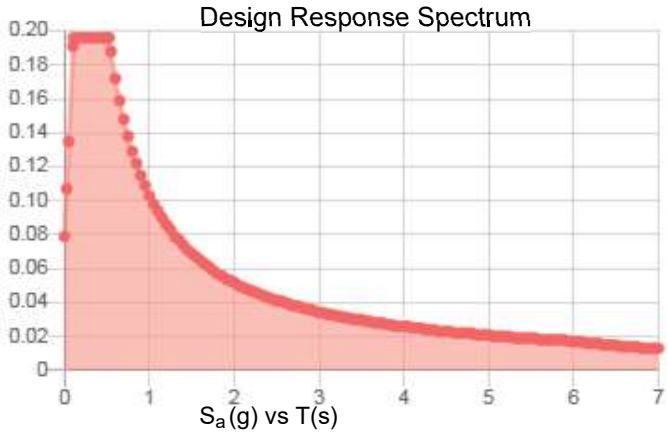
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.184	S_{DS} :	0.196
S_1 :	0.065	S_{D1} :	0.103
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.093
S_{MS} :	0.295	PGA_M :	0.15
S_{M1} :	0.155	F_{PGA} :	1.6
		I_e :	1

Seismic Design Category B





Data Accessed: Wed Jul 15 2020

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	0.75 in.
Concurrent Temperature:	5 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Wed Jul 15 2020

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 50-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 E

Mount Analysis

July 10, 2020

Darcy Tarr
Crown Castle
6325 Ardrey Kell Road, Suite 600
Charlotte, NC 28277
(704) 405-6589

Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
DS@tepgroup.net

Subject:	**Mount Analysis**	
Carrier Designation:	***AT&T Mobility* Reconfiguration**	
	Client Site Number:	10041787
	Client Site Name:	Harwinton-Campvill Hill Rd
Crown Castle Designation:	**Crown Castle BU Number:**	876376
	Crown Castle Site Name:	Scoville Hill / Harwinton Rod
	Crown Castle JDE Job Number:	616003
	Crown Castle Order Number:	525776 Rev. 0
Engineering Firm Designation:	**TEP Project Number:**	25679.428877
Site Data:	**123 Campville Hill Rd., Harwinton, Litchfield County, CT 06791** **Latitude *41° 44' 12.40"*, Longitude *-73° 5' 49.40"***	
Structure Information:	**Tower Height & Type:**	177.0± ft Monopole
	Mount Elevation:	127.0 ft
	Mount Width & Type:	12.5 ft Low Profile Platform

Dear Darcy Tarr,

Tower Engineering Professionals is pleased to submit this **"Mount Analysis"** to determine the structural integrity of AT&T Mobility's antenna mounting system with proposed appurtenance and equipment addition on the above mentioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount stress level. Based on our analysis, we have determined the mount stress level to be:

Low Profile Platform Mount **Sufficient Capacity - 63.7%**

The analysis has been performed in accordance with the 2018 International Building Code based upon an ultimate 3-second gust wind speed of 120 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Cooper Bowen, E.I. / PRS

Respectfully submitted by:

Graham M. Andres, P.E.
Executive Vice-President

STATE OF CONNECTICUT · GRAHAM M. ANDRES · 29538 · LICENSED PROFESSIONAL ENGINEER

7/10/20

Electronic Copy

TABLE OF CONTENTS

1) INTRODUCTION

The mount is an existing 12.5-ft Low Profile Platform mount. The proposed equipment is to be installed at the 127 ft elevation on the 177 ft monopole.

2) ANALYSIS CRITERIA

Building Code:	2018 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	120 mph
Exposure Category:	B
Topographic Category at Base:	1.0
Topographic Category at Mount:	1.0
Ice Thickness:	1.0 in
Wind Speed with Ice:	50 mph
Seismic Design Category:	B
Seismic S_s:	0.179
Seismic S_1:	0.054
Live Loading Wind Speed:	30 mph
Live Loading at Mid/End-Points:	250 lb
Man Live Loading at Mount Pipes:	500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
127.0	130.0	1	Raycap	DC6-48-60-18-8F	Low Profile Platform Mount
	129.0	3	CCI Antennas	DMP65R-BU4D	
		3	CCI Antennas	OPA65R-BU4D	
		3	Powerwave Technologies	7770.00	
		3	Ericsson	RRUS 4449 B5/ B12	
		3	Ericsson	RRUS 4478 B14_CCIV2	
		3	Ericsson	RRUS 8843 B2/B66A	
		1	Raycap	DC6-48-60-18-8C-EV	
	126.0	3	Powerwave Technologies	LGP13519	
		3	Powerwave Technologies	LGP21401	
	125.0	3	Powerwave Technologies	LGP13519	
		3	Powerwave Technologies	LGP21401	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Previous Mount Analysis	Tower Engineering Professionals	9059627	CCIsites
Loading Application	AT&T Mobility	Order 525776 Rev. 0	CCIsites

3.1) Analysis Method

RISA-3D (Version 17.0.1), a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A and Appendix C.

TEP Mount Analysis Tool, a tool internally developed by TEP using Microsoft Excel, was used to calculate member loading for various load cases. Selected output from the analysis is included in Appendix B.

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 *Tower Mount Analysis (Revision C)*.

In addition, this analysis is in accordance with AT&T's *Mount Technical Guidance – Revision 15*

3.2) Assumptions

1) The mount was built in accordance with the manufacturer's specifications.
2) The mount has been maintained in accordance with the manufacturer's specification.
3) The configuration of antennas, mounts and other appurtenances are as specified in Table 1. All mount components have been assumed to be in sufficient condition to carry their full design capacity for this analysis. Refer to the issued mapping for any structural and/or maintenance issues found during our site visit if applicable.
4) All mount components are in sufficient condition to carry their full design capacity.
5) TEP did not analyze the collar mount connection to the pole and assumes it to have sufficient structural capacity to transfer the applied forces from the mount to the tower.
6) All material grades used for this analysis, unless verified by mount manufacturer design, were assumed per AISC Table 2-4, 15th Edition. See RISA-3D output for confirmation on grades used in this analysis.

This analysis may be affected if any assumptions are not valid or have been made in error. Tower Engineering Professionals should be notified to determine the effect on the structural integrity of the antenna mounting system.

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (Low Profile Platform Mount)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	SF2-TH	127.0	27.2	Pass
1	Support Horizontals	SA-2	127.0	49.1	Pass
1	Internals	GSI-2B	127.0	21.2	Pass
1	Mount Pipes	MP-7	127.0	63.7	Pass
2	Connection Bolts	-	127.0	26.0	Pass
2	Connection Plate	-	127.0	49.9	Pass

Structure Rating (max from all components) =	63.7%

Notes:
1) See additional documentation in “Appendix C - Analysis Output” for calculations supporting the % capacity listed.
2) See additional documentation in “Appendix D - Additional Calculations” for calculations supporting the % capacity listed.

Table 4 - Tieback Connection Data Table

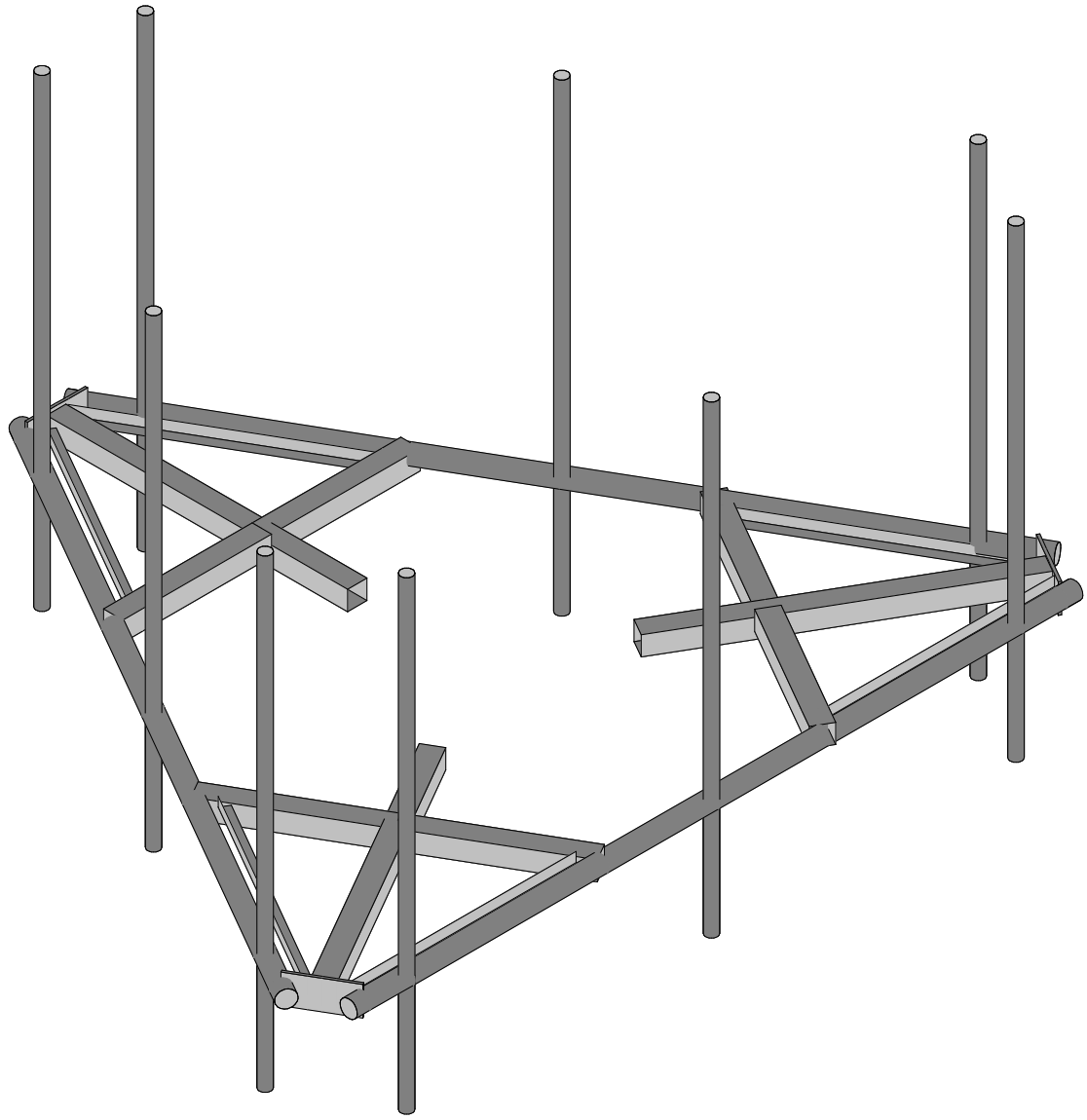
Tower Connection Node No.	Existing/ Proposed	Resultant End Reaction (lb)	Connected Member Type	Connected Member Size	Member Compressive Capacity (lb)	Notes
N/A						

4.1) Recommendations

1) If the load differs from that described in Table 1 of this report or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
2) The mount and its connection have sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

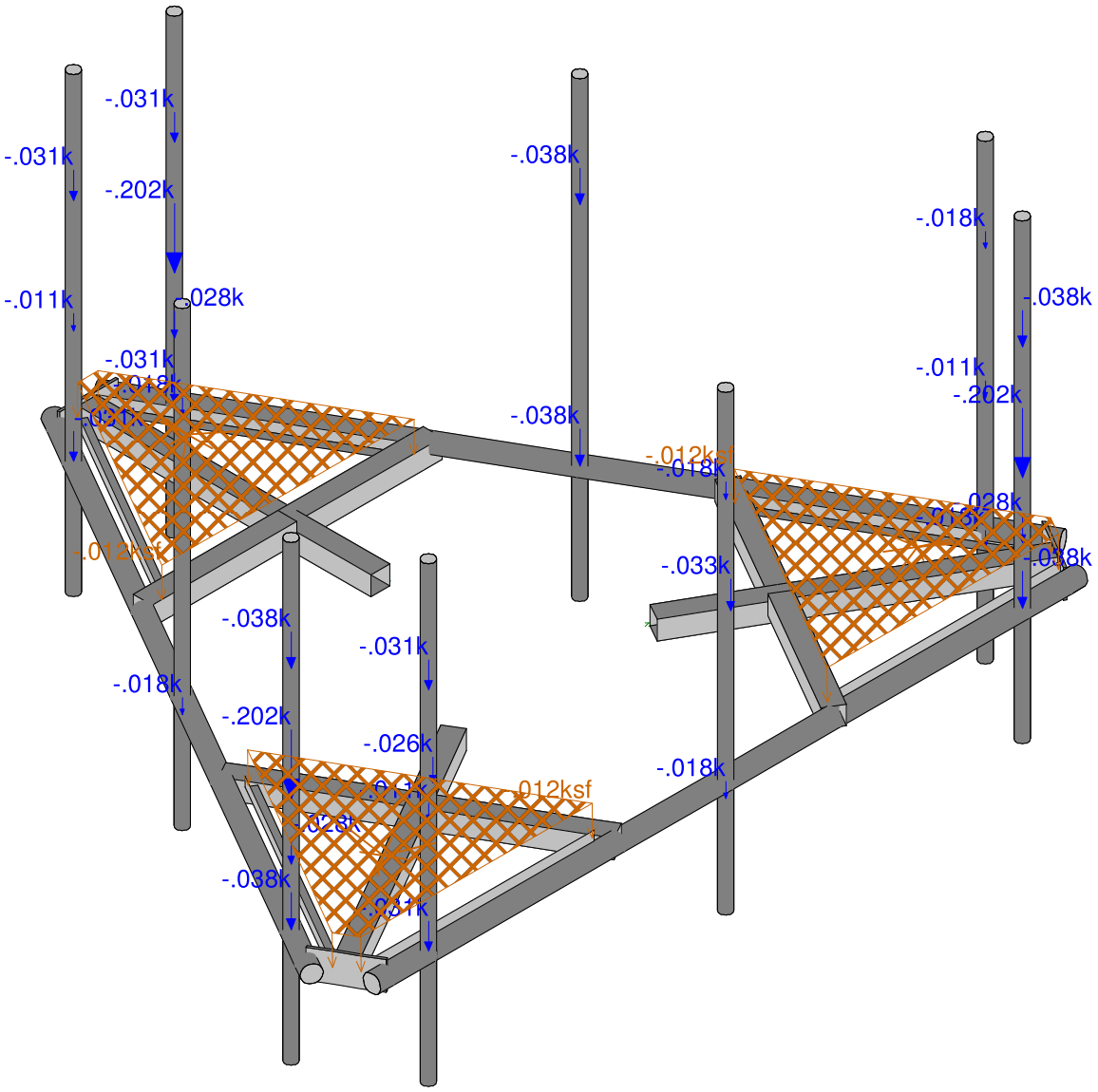
APPENDIX A

WIRE FRAME AND RENDERED MODELS



Envelope Only Solution

Tower Engineering Profes...	Scoville Hill / Harwington (BU 876376)	SK - 1
CJB		July 10, 2020 at 10:13 AM
25679.428877		PL-22 (12.5ft FW).r3d



Loads: BLC 1, Dead
Envelope Only Solution

Tower Engineering Profess...	Scoville Hill / Harwington (BU 876376)	SK - 1
CJB		July 10, 2020 at 1:35 PM
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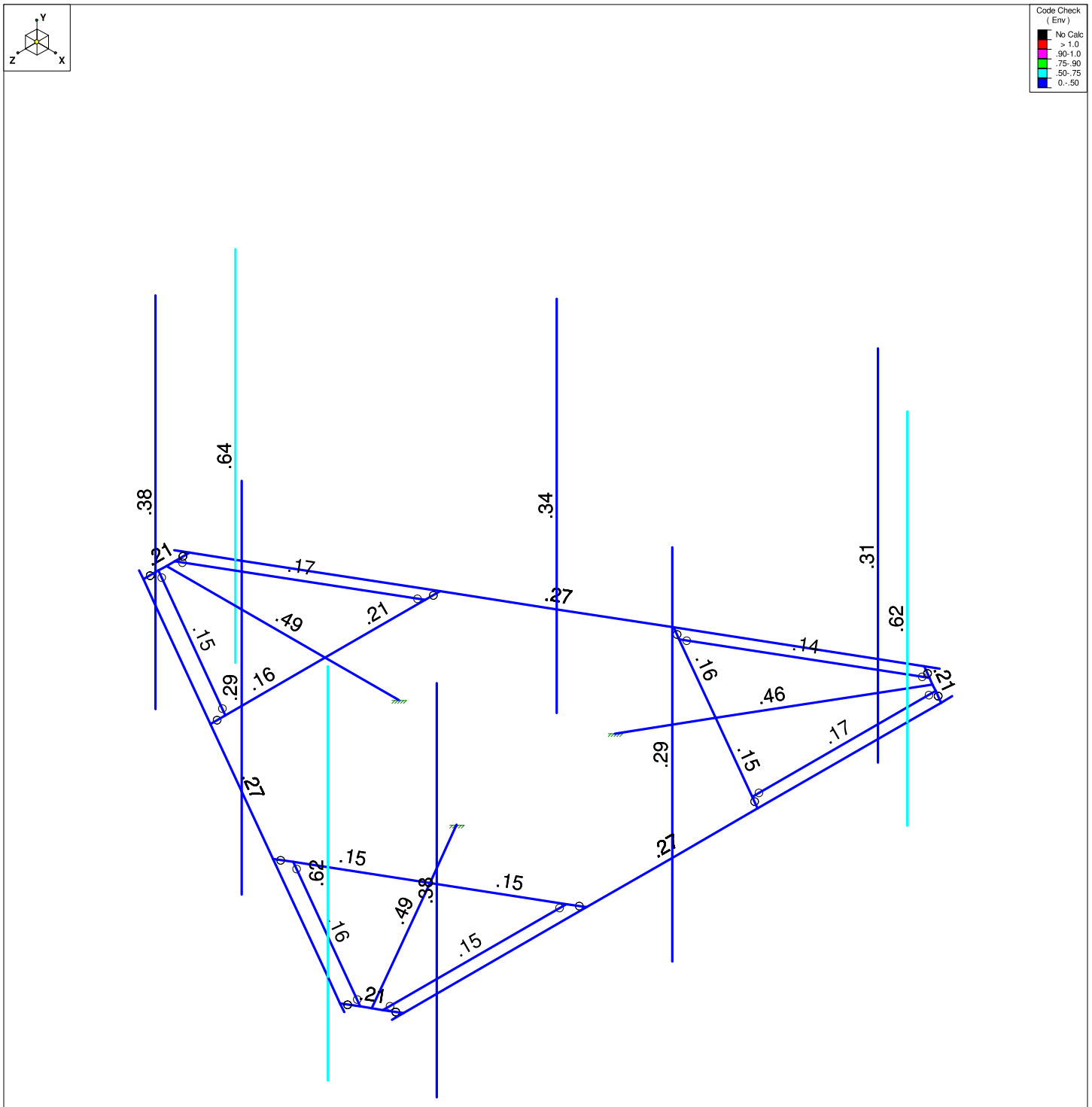

Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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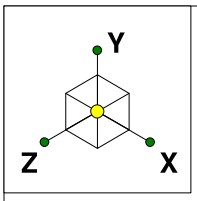

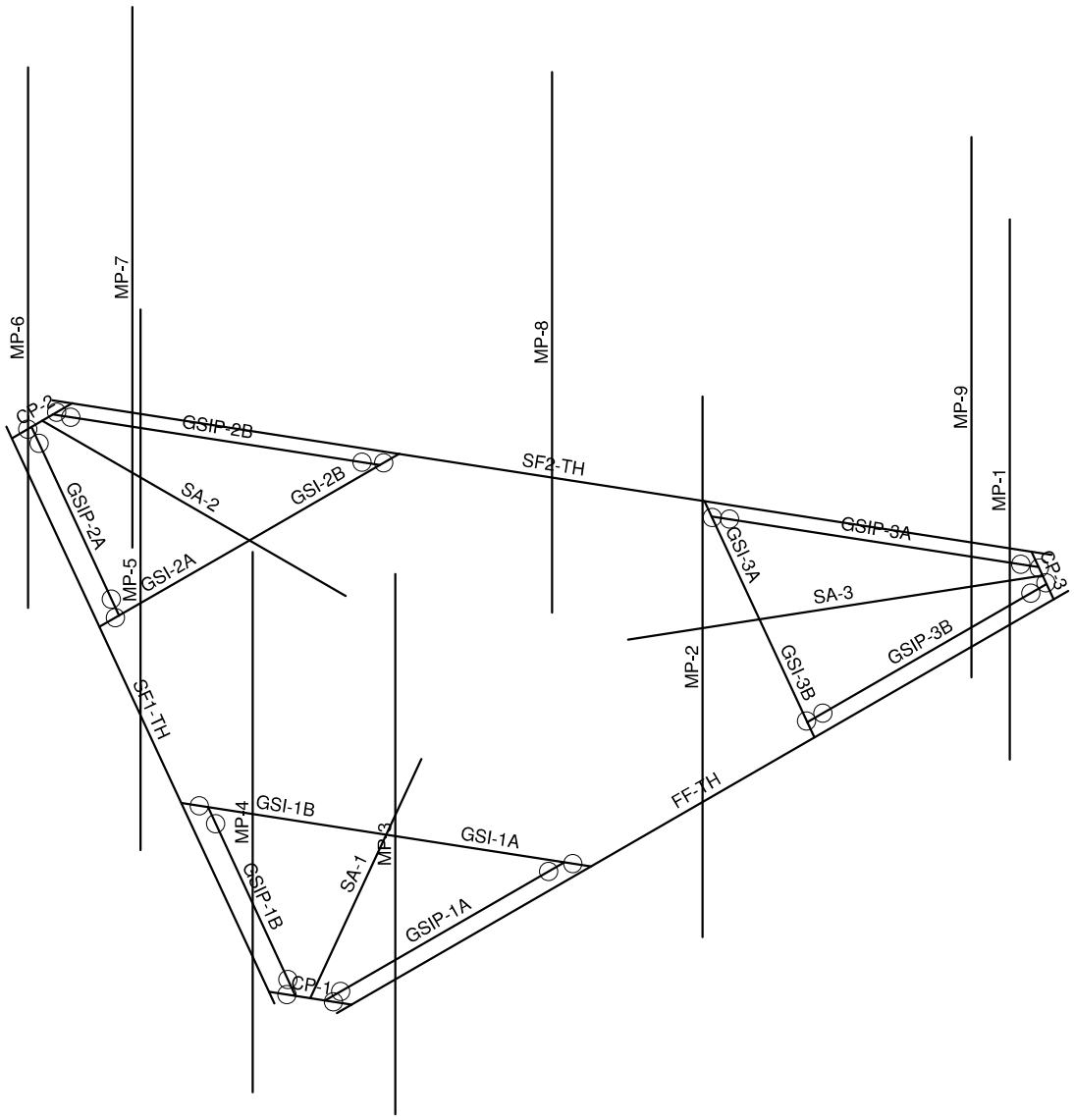

Envelope Only Solution

Tower Engineering Profes...	Scoville Hill / Harwington (BU 876376)	SK - 4
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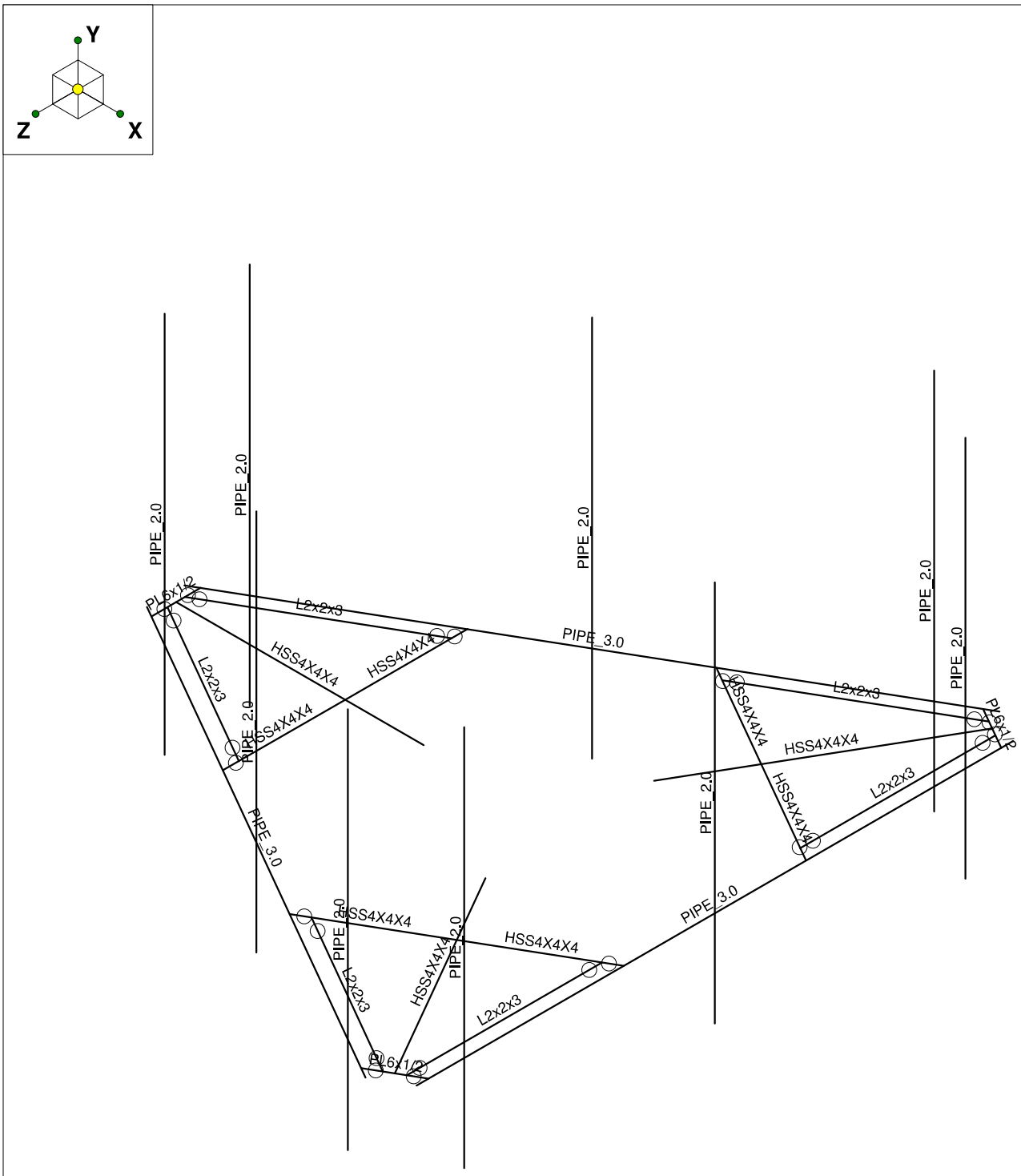


Envelope Only Solution

Tower Engineering Profes...	Scoville Hill / Harwington (BU 876376)	SK - 5
CJB		July 10, 2020 at 10:14 AM
25679.428877		PL-22 (12.5ft FW).r3d

APPENDIX B

SOFTWARE INPUT CALCULATIONS

TOWER ENGINEERING PROFESSIONALS

Scoville Hill / Harwinton Rod (BU 876376)

TEP No.	25679.428877	
Analysis By:	CJB	7/10/2020
Checked By:	PRS	7/10/2020

Code Revisions:	TIA-222-H	IBC 2018
Tower Type:	Monopole	

Wind Inputs:

Ult. Wind Velocity:	120.0	mph
Live Load Velocity:	30.0	mph
Ice Wind Velocity:	50.0	mph
Base Ice Thickness:	1.00	inches
Mount Centerline:	127.0	ft
Antenna Centerline:	129.0	ft
Exposure Category:	B	
Topo Category:	1	
Risk Category:	II	
Ground Elevation:	735	ft

Wind Calculations:

K_{zt}:	1.000	Section 2.6.6
K_d:	0.950	
$K_{z\text{-}Mount}$:	1.058	Section 2.6.5.2
$K_{z\text{-}Antenna}$:	1.063	Section 2.6.5.2
K_{iz}:	1.145	Section 2.6.10
Ice Thickness:	1.145	inches - Section 2.6.10

Without Ice - (psf)		With Ice - (psf)	
$(q_zG_h)_{Mount}$:	36.08	**$(q_zG_h)_{Mount}$:**	6.26
$(q_zG_h)_{Antenna}$:	36.24	**$(q_zG_h)_{Antenna}$:**	6.29

Antenna Loads are Calculated in Accordance with TIA-222-H
Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

										Distance from start node of the member		
MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
CCI ANTENNAS	DMP65R-BU4D	48.00	20.70	7.70	76.50	0.00	1	Flat	MP-1	2.00	6.00	
POWERWAVE TECHNOLOGIES	LGP21401	14.40	9.20	2.60	14.10	0.00	2	Flat	MP-1	5.00		
ERICSSON	RRUS 4478 B14_CCIV2	18.10	13.40	8.26	59.40	0.00	1	Flat	MP-1	4.00		
ERICSSON	RRUS 4449 B5/B12	17.90	13.19	9.44	71.00	0.00	1	Flat	MP-1	4.00		
ERICSSON	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	0.00	1	Flat	MP-1	4.00		
POWERWAVE TECHNOLOGIES	7770.00	55.00	11.00	5.00	35.00	0.00	1	Flat	MP-2	1.71	6.29	
CCI ANTENNAS	OPA65R-BU4D	48.00	21.00	7.80	62.30	0.00	1	Flat	MP-3	2.00	6.00	
POWERWAVE TECHNOLOGIES	LGP13519	7.90	4.40	2.70	5.30	0.00	2	Flat	MP-3	4.00		
CCI ANTENNAS	DMP65R-BU4D	48.00	20.70	7.70	76.50	120.00	1	Flat	MP-4	2.00	6.00	
POWERWAVE TECHNOLOGIES	LGP21401	14.40	9.20	2.60	14.10	120.00	2	Flat	MP-4	5.00		
ERICSSON	RRUS 4478 B14_CCIV2	18.10	13.40	8.26	59.40	120.00	1	Flat	MP-4	4.00		
ERICSSON	RRUS 4449 B5/B12	17.90	13.19	9.44	71.00	120.00	1	Flat	MP-4	4.00		
ERICSSON	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	120.00	1	Flat	MP-4	4.00		
POWERWAVE TECHNOLOGIES	7770.00	55.00	11.00	5.00	35.00	120.00	1	Flat	MP-5	1.71	6.29	
CCI ANTENNAS	OPA65R-BU4D	48.00	21.00	7.80	62.30	120.00	1	Flat	MP-6	2.00	6.00	
POWERWAVE TECHNOLOGIES	LGP13519	7.90	4.40	2.70	5.30	120.00	2	Flat	MP-6	4.00		
CCI ANTENNAS	OPA65R-BU4D	48.00	21.00	7.80	62.30	240.00	1	Flat	MP-7	2.00	6.00	
POWERWAVE TECHNOLOGIES	LGP21401	14.40	9.20	2.60	14.10	240.00	2	Flat	MP-7	5.00		
ERICSSON	RRUS 4478 B14_CCIV2	18.10	13.40	8.26	59.40	240.00	1	Flat	MP-7	4.00		
ERICSSON	RRUS 4449 B5/B12	17.90	13.19	9.44	71.00	240.00	1	Flat	MP-7	4.00		
ERICSSON	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	240.00	1	Flat	MP-7	4.00		
CCI ANTENNAS	DMP65R-BU4D	48.00	20.70	7.70	76.50	240.00	1	Flat	MP-8	2.00	6.00	
POWERWAVE TECHNOLOGIES	7770.00	55.00	11.00	5.00	35.00	240.00	1	Flat	MP-9	1.71	6.29	
POWERWAVE TECHNOLOGIES	LGP13519	7.90	4.40	2.70	5.30	240.00	2	Flat	MP-9	4.00		
RAYCAP	DC6-48-60-18-8C-EV	31.40	10.24	10.24	26.20	60.00	1	Round	SA-1	1.00		
RAYCAP	DC6-48-60-18-8F	31.25	11.00	11.00	32.80	300.00	1	Round	SA-3	1.00		

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876376

TEP No.	25679.428877	
Analysis By:	CJB	7/10/2020
Checked By:	PRS	7/10/2020

Member Forces are Calculated in Accordance with TIA-222-H

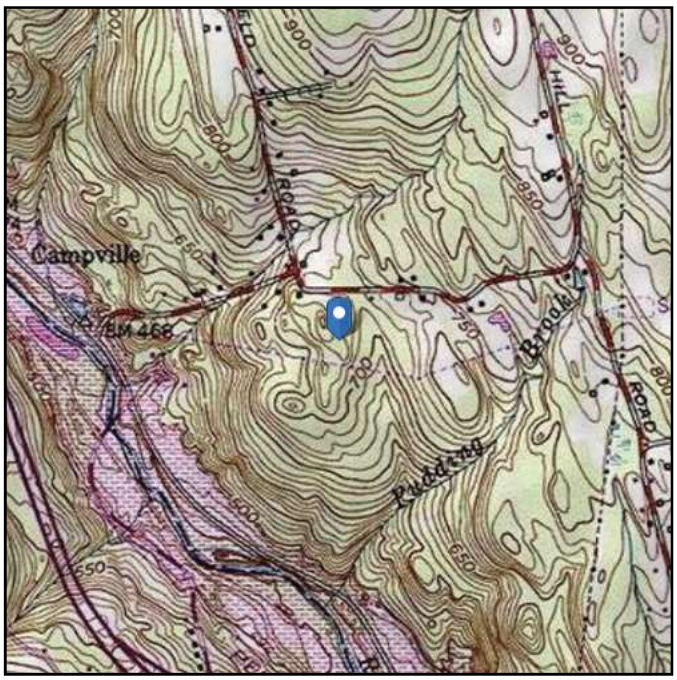
Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
CP-1	6.000	12.41	Flat	30.00	13.00
CP-2	6.000	12.41	Flat	90.00	13.00
CP-3	6.000	12.41	Flat	-30.00	13.00
FF-TH	3.500	150.00	Round	90.00	11.00
SF1-TH	3.500	150.00	Round	-30.00	11.00
SF2-TH	3.500	150.00	Round	30.00	11.00
GSIP-1A	2.000	49.09	Flat	90.00	8.00
GSIP-1B	2.000	49.09	Flat	-30.00	8.00
GSIP-2A	2.000	49.09	Flat	-30.00	8.00
GSIP-2B	2.000	49.09	Flat	30.00	8.00
GSIP-3A	2.000	49.09	Flat	30.00	8.00
GSIP-3B	2.000	49.09	Flat	90.00	8.00
GSI-1A	4.000	30.75	Flat	30.00	16.00
GSI-1B	4.000	30.75	Flat	30.00	16.00
GSI-2A	4.000	30.75	Flat	90.00	16.00
GSI-2B	4.000	30.75	Flat	90.00	16.00
GSI-3A	4.000	30.75	Flat	-30.00	16.00
GSI-3B	4.000	30.75	Flat	-30.00	16.00
SA-1	4.000	62.25	Flat	-60.00	16.00
SA-2	4.000	62.25	Flat	0.00	16.00
SA-3	4.000	62.25	Flat	60.00	16.00
MP-1	2.375	96.00	Round		7.46
MP-2	2.375	96.00	Round		7.46
MP-3	2.375	96.00	Round		7.46
MP-4	2.375	96.00	Round		7.46
MP-5	2.375	96.00	Round		7.46
MP-6	2.375	96.00	Round		7.46
MP-7	2.375	96.00	Round		7.46
MP-8	2.375	96.00	Round		7.46
MP-9	2.375	96.00	Round		7.46

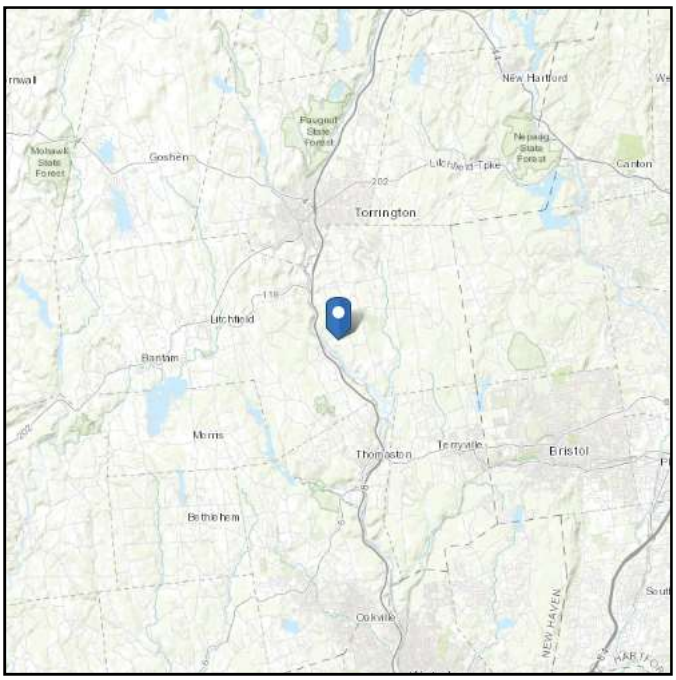
ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see Section 11.4.3)

Elevation: 734.96 ft (NAVD 88)
Latitude: 41.736778
Longitude: -73.097056





Wind

Results:

Wind Speed:	115 Vmph	*Harwinton, CT requires 120 Vmph*
10-year MRI	75 Vmph	
25-year MRI	84 Vmph	
50-year MRI	89 Vmph	
100-year MRI	96 Vmph	

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4
Date Accessed: Thu Jul 09 2020

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 not in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2.

Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

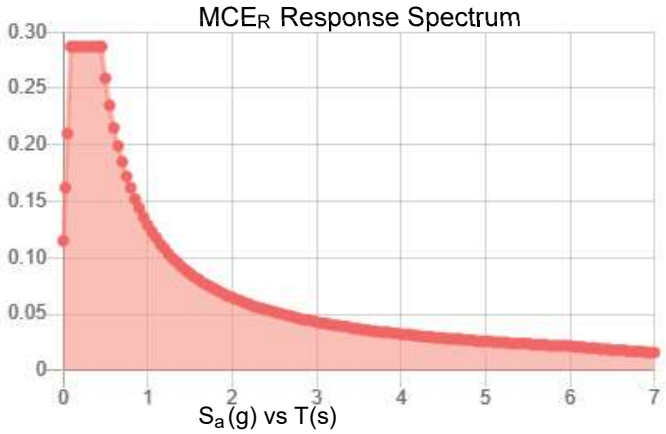
Seismic

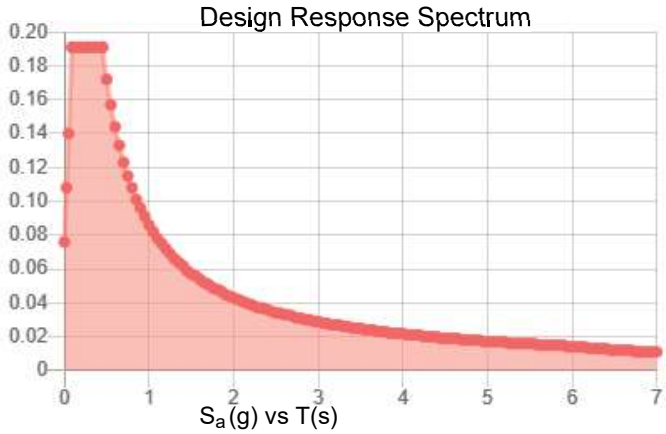
Site Soil Class: D - Default (see Section 11.4.3)

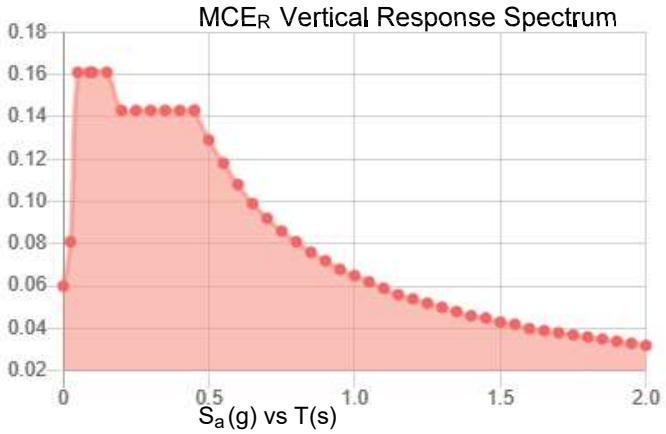
Results:

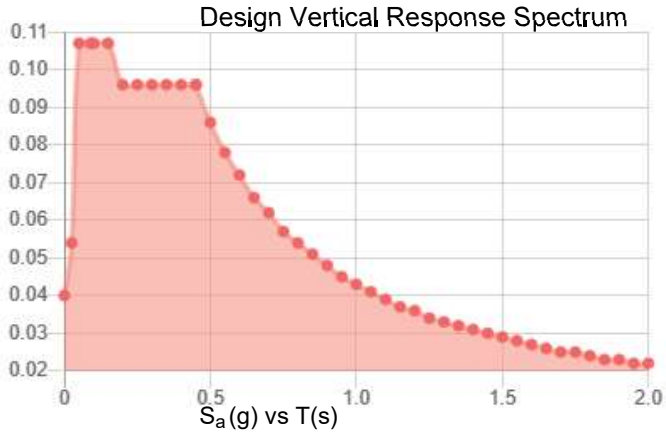
S_S :	0.179	S_{D1} :	0.086
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.096
F_v :	2.4	PGA_M :	0.154
S_{MS} :	0.287	F_{PGA} :	1.6
S_{M1} :	0.129	I_e :	1
S_{DS} :	0.191	C_v :	0.7

Seismic Design Category B









Data Accessed: Thu Jul 09 2020

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:	5 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Thu Jul 09 2020

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.

APPENDIX C

SOFTWARE ANALYSIS OUTPUT

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISAConnection Code	None
Cold Formed Steel Code	None
Wood Code	None
Wood Temperature	< 100F
Concrete Code	None
Masonry Code	None
Aluminum Code	None - Building
Stainless Steel Code	None

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

Company : Tower Engineering Professionals, Inc.
Designer : CJB
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(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Properties

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

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Ru...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horiz	PIPE 3.0	None	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
2	Support Arm	HSS4X4X4	None	None	A53 Gr.B	Typical	3.37	7.8	7.8	12.8
3	Internal	HSS4X4X4	None	None	A53 Gr.B	Typical	3.37	7.8	7.8	12.8
4	Grating Support	L2x2x3	None	None	A53 Gr.B	Typical	.722	.271	.271	.009
5	Corner Plate	PL6x1/2	None	None	A53 Gr.B	Typical	3	.063	9	.237
6	Mount Pipe	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	CF1A	8CU1.25X057	Beam	None	A653 SS Gr33	Typical	.581	.057	4.41	.00063

Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	Hot Rolled Steel				
2	A53 Gr.B	HSS4X4X4	9	30.9	.355
3	A53 Gr.B	L2x2x3	6	24.5	.06
4	A53 Gr.B	PIPE 2.0	9	72	.25
5	A53 Gr.B	PIPE 3.0	3	37.5	.264
6	A53 Gr.B	PL6x1/2	3	3.1	.032
7	Total HR Steel		30	168.1	.961

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	SA-1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	SA-3	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	SA-2	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	CP-1	CP1-1	CP1-2			Corner Plate	None	None	A53 Gr.B	Typical
2	CP-2	CP2-1	CP2-2			Corner Plate	None	None	A53 Gr.B	Typical
3	CP-3	CP3-1	CP3-2			Corner Plate	None	None	A53 Gr.B	Typical
4	FF-TH	FF-1	FF-2			Face Horiz	None	None	A53 Gr.B	Typical
5	SF1-TH	SF1-1	SF1-2			Face Horiz	None	None	A53 Gr.B	Typical
6	SF2-TH	SF2-1	SF2-2			Face Horiz	None	None	A53 Gr.B	Typical
7	GSIP-1A	GSIP-1A	GSIP-1B			Grating Support	None	None	A53 Gr.B	Typical
8	GSIP-1B	GSIP-1C	GSIP-1D			Grating Support	None	None	A53 Gr.B	Typical
9	GSIP-2A	GSIP-2A	GSIP-2B			Grating Support	None	None	A53 Gr.B	Typical
10	GSIP-2B	GSIP-2C	GSIP-2D			Grating Support	None	None	A53 Gr.B	Typical
11	GSIP-3A	GSIP-3A	GSIP-3B			Grating Support	None	None	A53 Gr.B	Typical
12	GSIP-3B	GSIP-3C	GSIP-3D			Grating Support	None	None	A53 Gr.B	Typical
13	GSI-1A	GSI1-1	GSI1-2			Internal	None	None	A53 Gr.B	Typical
14	GSI-1B	GSI1-2	GSI1-3			Internal	None	None	A53 Gr.B	Typical
15	GSI-2A	GSI2-1	GSI2-2			Internal	None	None	A53 Gr.B	Typical
16	GSI-2B	GSI2-2	GSI2-3			Internal	None	None	A53 Gr.B	Typical
17	GSI-3A	GSI3-1	GSI3-2			Internal	None	None	A53 Gr.B	Typical
18	GSI-3B	GSI3-2	GSI3-3			Internal	None	None	A53 Gr.B	Typical
19	SA-1	SA-1	SA-1B			Support Arm	None	None	A53 Gr.B	Typical
20	SA-2	SA-2	SA-2B			Support Arm	None	None	A53 Gr.B	Typical
21	SA-3	SA-3	SA-3B			Support Arm	None	None	A53 Gr.B	Typical
22	MP-1	N41	N42			Mount Pipe	None	None	A53 Gr.B	Typical
23	MP-2	N43	N44			Mount Pipe	None	None	A53 Gr.B	Typical
24	MP-3	N45	N46			Mount Pipe	None	None	A53 Gr.B	Typical
25	MP-4	N47	N48			Mount Pipe	None	None	A53 Gr.B	Typical
26	MP-5	N49	N50			Mount Pipe	None	None	A53 Gr.B	Typical
27	MP-6	N51	N52			Mount Pipe	None	None	A53 Gr.B	Typical
28	MP-7	N59	N60			Mount Pipe	None	None	A53 Gr.B	Typical
29	MP-8	N61	N62			Mount Pipe	None	None	A53 Gr.B	Typical
30	MP-9	N63	N64			Mount Pipe	None	None	A53 Gr.B	Typical

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Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	CP-1	BenPIN	BenPIN				Yes	** NA **			None
2	CP-2	BenPIN	BenPIN				Yes	** NA **			None
3	CP-3	BenPIN	BenPIN				Yes	** NA **			None
4	FF-TH						Yes	** NA **			None
5	SF1-TH						Yes	** NA **			None
6	SF2-TH						Yes	** NA **			None
7	GSIP-1A	BenPIN	BenPIN				Yes	** NA **			None
8	GSIP-1B	BenPIN	BenPIN				Yes	** NA **			None
9	GSIP-2A	BenPIN	BenPIN				Yes	** NA **			None
10	GSIP-2B	BenPIN	BenPIN				Yes	** NA **			None
11	GSIP-3A	BenPIN	BenPIN				Yes	** NA **			None
12	GSIP-3B	BenPIN	BenPIN				Yes	** NA **			None
13	GSI-1A	BenPIN					Yes	** NA **			None
14	GSI-1B		BenPIN				Yes	** NA **			None
15	GSI-2A	BenPIN					Yes	** NA **			None
16	GSI-2B		BenPIN				Yes	** NA **			None
17	GSI-3A	BenPIN					Yes	** NA **			None
18	GSI-3B		BenPIN				Yes	** NA **			None
19	SA-1						Yes	** NA **			None
20	SA-2						Yes	** NA **			None
21	SA-3						Yes	** NA **			None
22	MP-1						Yes	** NA **			None
23	MP-2						Yes	** NA **			None
24	MP-3						Yes	** NA **			None
25	MP-4						Yes	** NA **			None
26	MP-5						Yes	** NA **			None
27	MP-6						Yes	** NA **			None
28	MP-7						Yes	** NA **			None
29	MP-8						Yes	** NA **			None
30	MP-9						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torq...	Kyy	Kzz	Cb	Functi...
1	CP-1	Corner Plate	1.034	.5	.5				1	1		Lateral
2	CP-2	Corner Plate	1.034	.5	.5				1	1		Lateral
3	CP-3	Corner Plate	1.034	.5	.5				1	1		Lateral
4	FF-TH	Face Horiz	12.5	4.9					2.1	2.1		Lateral
5	SF1-TH	Face Horiz	12.5	4.9					2.1	2.1		Lateral
6	SF2-TH	Face Horiz	12.5	4.9					2.1	2.1		Lateral
7	GSIP-1A	Grating Su...	4.091						1	1		Lateral
8	GSIP-1B	Grating Su...	4.091						1	1		Lateral
9	GSIP-2A	Grating Su...	4.091						1	1		Lateral
10	GSIP-2B	Grating Su...	4.091						1	1		Lateral
11	GSIP-3A	Grating Su...	4.091						1	1		Lateral
12	GSIP-3B	Grating Su...	4.091						1	1		Lateral
13	GSI-1A	Internal	2.562						.8	.8		Lateral
14	GSI-1B	Internal	2.562						.8	.8		Lateral
15	GSI-2A	Internal	2.562						.8	.8		Lateral
16	GSI-2B	Internal	2.562						.8	.8		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torq...	Kyy	Kzz	Cb	Functi...
17	GSI-3A	Internal	2.562						.8	.8		Lateral
18	GSI-3B	Internal	2.562						.8	.8		Lateral
19	SA-1	Support Arm	5.187	3.54					1	1		Lateral
20	SA-2	Support Arm	5.187	3.54					1	1		Lateral
21	SA-3	Support Arm	5.187	3.54					1	1		Lateral
22	MP-1	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
23	MP-2	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
24	MP-3	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
25	MP-4	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
26	MP-5	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
27	MP-6	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
28	MP-7	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
29	MP-8	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
30	MP-9	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral

Cold Formed Steel Design Parameters

Label	Shape	Lengt...	Lbyy[ft]	Lbzz[ft]	Lcomp to..	Lcomp b...	Kyy	Kzz	Cm-yy	Cm-zz	Cb	R	y sway	z sway
No Data to Print ...														

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Dead	None		-1			35		3	
2	0 Wind - No Ice	None					35	30		
3	30 Wind - No Ice	None					70	60		
4	45 Wind - No Ice	None					70	60		
5	60 Wind - No Ice	None					70	60		
6	90 Wind - No Ice	None					35	30		
7	120 Wind - No Ice	None					70	60		
8	135 Wind - No Ice	None					70	60		
9	150 Wind - No Ice	None					70	60		
10	180 Wind - No Ice	None					35	30		
11	210 Wind - No Ice	None					70	60		
12	225 Wind - No Ice	None					70	60		
13	240 Wind - No Ice	None					70	60		
14	270 Wind - No Ice	None					35	30		
15	300 Wind - No Ice	None					70	60		
16	315 Wind - No Ice	None					70	60		
17	330 Wind - No Ice	None					70	60		
18	Ice Weight	None					35	30	3	
19	0 Wind - Ice	None					35	30		
20	30 Wind - Ice	None					70	60		
21	45 Wind - Ice	None					70	60		
22	60 Wind - Ice	None					70	60		
23	90 Wind - Ice	None					35	30		
24	120 Wind - Ice	None					70	60		
25	135 Wind - Ice	None					70	60		
26	150 Wind - Ice	None					70	60		
27	180 Wind - Ice	None					35	30		
28	210 Wind - Ice	None					70	60		

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Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
29	225 Wind - Ice	None					70	60		
30	240 Wind - Ice	None					70	60		
31	270 Wind - Ice	None					35	30		
32	300 Wind - Ice	None					70	60		
33	315 Wind - Ice	None					70	60		
34	330 Wind - Ice	None					70	60		
35	Lm	None				1				
36	Lv	None				1				
37	Seismic Load X	ELX	-1				35			
38	Seismic Load Z	ELZ			-1		35			
39	BLC 1 Transient Area...	None						54		
40	BLC 18 Transient Are..	None						54		

Load Combinations

	Description	Sol...	PD...	SR...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...
1	1.4D	Yes	Y		1	1.4																				
2	0.9D+1.0 ...	Yes	Y		1	.9	2	1																		
3	0.9D+1.0 ...	Yes	Y		1	.9	3	1																		
4	0.9D+1.0 ...	Yes	Y		1	.9	4	1																		
5	0.9D+1.0 ...	Yes	Y		1	.9	5	1																		
6	0.9D+1.0 ...	Yes	Y		1	.9	6	1																		
7	0.9D+1.0 ...	Yes	Y		1	.9	7	1																		
8	0.9D+1.0 ...	Yes	Y		1	.9	8	1																		
9	0.9D+1.0 ...	Yes	Y		1	.9	9	1																		
10	0.9D+1.0 ...	Yes	Y		1	.9	10	1																		
11	0.9D+1.0 ...	Yes	Y		1	.9	11	1																		
12	0.9D+1.0 ...	Yes	Y		1	.9	12	1																		
13	0.9D+1.0 ...	Yes	Y		1	.9	13	1																		
14	0.9D+1.0 ...	Yes	Y		1	.9	14	1																		
15	0.9D+1.0 ...	Yes	Y		1	.9	15	1																		
16	0.9D+1.0 ...	Yes	Y		1	.9	16	1																		
17	0.9D+1.0 ...	Yes	Y		1	.9	17	1																		
18	1.2D+1.0 ...	Yes	Y		1	1.2	2	1																		
19	1.2D+1.0 ...	Yes	Y		1	1.2	3	1																		
20	1.2D+1.0 ...	Yes	Y		1	1.2	4	1																		
21	1.2D+1.0 ...	Yes	Y		1	1.2	5	1																		
22	1.2D+1.0 ...	Yes	Y		1	1.2	6	1																		
23	1.2D+1.0 ...	Yes	Y		1	1.2	7	1																		
24	1.2D+1.0 ...	Yes	Y		1	1.2	8	1																		
25	1.2D+1.0 ...	Yes	Y		1	1.2	9	1																		
26	1.2D+1.0 ...	Yes	Y		1	1.2	10	1																		
27	1.2D+1.0 ...	Yes	Y		1	1.2	11	1																		
28	1.2D+1.0 ...	Yes	Y		1	1.2	12	1																		
29	1.2D+1.0 ...	Yes	Y		1	1.2	13	1																		
30	1.2D+1.0 ...	Yes	Y		1	1.2	14	1																		
31	1.2D+1.0 ...	Yes	Y		1	1.2	15	1																		
32	1.2D+1.0 ...	Yes	Y		1	1.2	16	1																		
33	1.2D+1.0 ...	Yes	Y		1	1.2	17	1																		
34	1.2D+1.0...	Yes	Y		1	1.2	18	1	19	1																
35	1.2D+1.0...	Yes	Y		1	1.2	18	1	20	1																

Load Combinations (Continued)

	Description	Sol..	PD..	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
36	1.2D+1.0...	Yes	Y		1	1.2	18	1	21	1																		
37	1.2D+1.0...	Yes	Y		1	1.2	18	1	22	1																		
38	1.2D+1.0...	Yes	Y		1	1.2	18	1	23	1																		
39	1.2D+1.0...	Yes	Y		1	1.2	18	1	24	1																		
40	1.2D+1.0...	Yes	Y		1	1.2	18	1	25	1																		
41	1.2D+1.0...	Yes	Y		1	1.2	18	1	26	1																		
42	1.2D+1.0...	Yes	Y		1	1.2	18	1	27	1																		
43	1.2D+1.0...	Yes	Y		1	1.2	18	1	28	1																		
44	1.2D+1.0...	Yes	Y		1	1.2	18	1	29	1																		
45	1.2D+1.0...	Yes	Y		1	1.2	18	1	30	1																		
46	1.2D+1.0...	Yes	Y		1	1.2	18	1	31	1																		
47	1.2D+1.0...	Yes	Y		1	1.2	18	1	32	1																		
48	1.2D+1.0...	Yes	Y		1	1.2	18	1	33	1																		
49	1.2D+1.0...	Yes	Y		1	1.2	18	1	34	1																		
50	1.2D+1.5Lv	Yes	Y		36	1.5	1	1.2																				
51	1.2D+1.5L..	Yes	Y		1	1.2	2	.063	35	1.5																		
52	1.2D+1.5L..	Yes	Y		1	1.2	3	.063	35	1.5																		
53	1.2D+1.5L..	Yes	Y		1	1.2	4	.063	35	1.5																		
54	1.2D+1.5L..	Yes	Y		1	1.2	5	.063	35	1.5																		
55	1.2D+1.5L..	Yes	Y		1	1.2	6	.063	35	1.5																		
56	1.2D+1.5L..	Yes	Y		1	1.2	7	.063	35	1.5																		
57	1.2D+1.5L..	Yes	Y		1	1.2	8	.063	35	1.5																		
58	1.2D+1.5L..	Yes	Y		1	1.2	9	.063	35	1.5																		
59	1.2D+1.5L..	Yes	Y		1	1.2	10	.063	35	1.5																		
60	1.2D+1.5L..	Yes	Y		1	1.2	11	.063	35	1.5																		
61	1.2D+1.5L..	Yes	Y		1	1.2	12	.063	35	1.5																		
62	1.2D+1.5L..	Yes	Y		1	1.2	13	.063	35	1.5																		
63	1.2D+1.5L..	Yes	Y		1	1.2	14	.063	35	1.5																		
64	1.2D+1.5L..	Yes	Y		1	1.2	15	.063	35	1.5																		
65	1.2D+1.5L..	Yes	Y		1	1.2	16	.063	35	1.5																		
66	1.2D+1.5L..	Yes	Y		1	1.2	17	.063	35	1.5																		
67	(1.2+0.2S...	Yes	Y		1	1.2	ELX	.03	0																			
68	(1.2+0.2S...	Yes	Y		1	1.2	ELX	.026	ELZ	.015																		
69	(1.2+0.2S...	Yes	Y		1	1.2	ELX	.021	ELZ	.021																		
70	(1.2+0.2S...	Yes	Y		1	1.2	ELX	.015	ELZ	.026																		
71	(1.2+0.2S...	Yes	Y		1	1.2	0		ELZ	.03																		
72	(1.2+0.2S...	Yes	Y		1	1.2	ELX	-.015	ELZ	.026																		
73	(1.2+0.2S...	Yes	Y		1	1.2	ELX	-.021	ELZ	.021																		
74	(1.2+0.2S...	Yes	Y		1	1.2	ELX	-.026	ELZ	.015																		
75	(1.2+0.2S...	Yes	Y		1	1.2	ELX	-.03	0																			
76	(1.2+0.2S...	Yes	Y		1	1.2	ELX	-.026	ELZ	-.015																		
77	(1.2+0.2S...	Yes	Y		1	1.2	ELX	-.021	ELZ	-.021																		
78	(1.2+0.2S...	Yes	Y		1	1.2	ELX	-.015	ELZ	-.026																		
79	(1.2+0.2S...	Yes	Y		1	1.2	0		ELZ	-.03																		
80	(1.2+0.2S...	Yes	Y		1	1.2	ELX	.015	ELZ	-.026																		
81	(1.2+0.2S...	Yes	Y		1	1.2	ELX	.021	ELZ	-.021																		
82	(1.2+0.2S...	Yes	Y		1	1.2	ELX	.026	ELZ	-.015																		
83	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	.03	0																			
84	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	.026	ELZ	.015																		
85	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	.021	ELZ	.021																		
86	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	.015	ELZ	.026																		
87	(0.9-0.2Sd..	Yes	Y		1	.9	0		ELZ	.03																		

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Load Combinations (Continued)

	Description	Sol..	PD..	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..
88	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	-.015	ELZ	.026																		
89	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	-.021	ELZ	.021																		
90	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	-.026	ELZ	.015																		
91	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	-.03	0																			
92	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	-.026	ELZ	-.015																		
93	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	-.021	ELZ	-.021																		
94	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	-.015	ELZ	-.026																		
95	(0.9-0.2Sd..	Yes	Y		1	.9	0		ELZ	-.03																		
96	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	.015	ELZ	-.026																		
97	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	.021	ELZ	-.021																		
98	(0.9-0.2Sd..	Yes	Y		1	.9	ELX	.026	ELZ	-.015																		

Joint Loads and Enforced Displacements (BLC 35 : Lm)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/...
1	N61A	L	Y	-.5

Joint Loads and Enforced Displacements (BLC 36 : Lv)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/...
1	SF1-1	L	Y	-.25

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.038	2
2	MP-1	Y	-.028	5
3	MP-1	Y	-.059	4
4	MP-1	Y	-.071	4
5	MP-1	Y	-.072	4
6	MP-2	Y	-.018	1.708
7	MP-3	Y	-.031	2
8	MP-3	Y	-.011	4
9	MP-4	Y	-.038	2
10	MP-4	Y	-.028	5
11	MP-4	Y	-.059	4
12	MP-4	Y	-.071	4
13	MP-4	Y	-.072	4
14	MP-5	Y	-.018	1.708
15	MP-6	Y	-.031	2
16	MP-6	Y	-.011	4
17	MP-7	Y	-.031	2
18	MP-7	Y	-.028	5
19	MP-7	Y	-.059	4
20	MP-7	Y	-.071	4
21	MP-7	Y	-.072	4
22	MP-8	Y	-.038	2
23	MP-9	Y	-.018	1.708
24	MP-9	Y	-.011	4
25	SA-1	Y	-.026	1
26	SA-3	Y	-.033	1

Member Point Loads (BLC 1 : Dead) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
27	MP-1	Y	-.038	6
28	MP-2	Y	-.018	6.292
29	MP-3	Y	-.031	6
30	MP-4	Y	-.038	6
31	MP-5	Y	-.018	6.292
32	MP-6	Y	-.031	6
33	MP-7	Y	-.031	6
34	MP-8	Y	-.038	6
35	MP-9	Y	-.018	6.292

Member Point Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.122	2
2	MP-1	X	-.072	5
3	MP-1	X	-.066	4
4	MP-1	X	-.064	4
5	MP-1	X	-.053	4
6	MP-2	X	-.09	1.708
7	MP-3	X	-.131	2
8	MP-3	X	-.019	4
9	MP-4	X	-.065	2
10	MP-4	X	-.035	5
11	MP-4	X	-.047	4
12	MP-4	X	-.05	4
13	MP-4	X	-.046	4
14	MP-5	X	-.058	1.708
15	MP-6	X	-.069	2
16	MP-6	X	-.014	4
17	MP-7	X	-.069	2
18	MP-7	X	-.035	5
19	MP-7	X	-.047	4
20	MP-7	X	-.05	4
21	MP-7	X	-.046	4
22	MP-8	X	-.065	2
23	MP-9	X	-.058	1.708
24	MP-9	X	-.014	4
25	SA-1	X	-.037	1
26	SA-3	X	-.04	1
27	MP-1	X	-.122	6
28	MP-2	X	-.09	6.292
29	MP-3	X	-.131	6
30	MP-4	X	-.065	6
31	MP-5	X	-.058	6.292
32	MP-6	X	-.069	6
33	MP-7	X	-.069	6
34	MP-8	X	-.065	6
35	MP-9	X	-.058	6.292

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.089	2

Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP-1	X	-.052	5
3	MP-1	X	-.052	4
4	MP-1	X	-.052	4
5	MP-1	X	-.044	4
6	MP-2	X	-.069	1.708
7	MP-3	X	-.096	2
8	MP-3	X	-.015	4
9	MP-4	X	-.04	2
10	MP-4	X	-.02	5
11	MP-4	X	-.035	4
12	MP-4	X	-.04	4
13	MP-4	X	-.038	4
14	MP-5	X	-.041	1.708
15	MP-6	X	-.042	2
16	MP-6	X	-.01	4
17	MP-7	X	-.096	2
18	MP-7	X	-.052	5
19	MP-7	X	-.052	4
20	MP-7	X	-.052	4
21	MP-7	X	-.044	4
22	MP-8	X	-.089	2
23	MP-9	X	-.069	1.708
24	MP-9	X	-.015	4
25	SA-1	X	-.032	1
26	SA-3	X	-.034	1
27	MP-1	X	-.089	6
28	MP-2	X	-.069	6.292
29	MP-3	X	-.096	6
30	MP-4	X	-.04	6
31	MP-5	X	-.041	6.292
32	MP-6	X	-.042	6
33	MP-7	X	-.096	6
34	MP-8	X	-.089	6
35	MP-9	X	-.069	6.292
36	MP-1	Z	-.051	2
37	MP-1	Z	-.03	5
38	MP-1	Z	-.03	4
39	MP-1	Z	-.03	4
40	MP-1	Z	-.026	4
41	MP-2	Z	-.04	1.708
42	MP-3	Z	-.055	2
43	MP-3	Z	-.009	4
44	MP-4	Z	-.023	2
45	MP-4	Z	-.011	5
46	MP-4	Z	-.02	4
47	MP-4	Z	-.023	4
48	MP-4	Z	-.022	4
49	MP-5	Z	-.024	1.708
50	MP-6	Z	-.024	2
51	MP-6	Z	-.006	4
52	MP-7	Z	-.055	2
53	MP-7	Z	-.03	5

Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
54	MP-7	Z	-.03	4
55	MP-7	Z	-.03	4
56	MP-7	Z	-.026	4
57	MP-8	Z	-.051	2
58	MP-9	Z	-.04	1.708
59	MP-9	Z	-.009	4
60	SA-1	Z	-.019	1
61	SA-3	Z	-.02	1
62	MP-1	Z	-.051	6
63	MP-2	Z	-.04	6.292
64	MP-3	Z	-.055	6
65	MP-4	Z	-.023	6
66	MP-5	Z	-.024	6.292
67	MP-6	Z	-.024	6
68	MP-7	Z	-.055	6
69	MP-8	Z	-.051	6
70	MP-9	Z	-.04	6.292

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.059	2
2	MP-1	X	-.033	5
3	MP-1	X	-.038	4
4	MP-1	X	-.039	4
5	MP-1	X	-.035	4
6	MP-2	X	-.049	1.708
7	MP-3	X	-.064	2
8	MP-3	X	-.011	4
9	MP-4	X	-.036	2
10	MP-4	X	-.018	5
11	MP-4	X	-.03	4
12	MP-4	X	-.033	4
13	MP-4	X	-.032	4
14	MP-5	X	-.036	1.708
15	MP-6	X	-.038	2
16	MP-6	X	-.009	4
17	MP-7	X	-.089	2
18	MP-7	X	-.049	5
19	MP-7	X	-.045	4
20	MP-7	X	-.045	4
21	MP-7	X	-.037	4
22	MP-8	X	-.083	2
23	MP-9	X	-.062	1.708
24	MP-9	X	-.013	4
25	SA-1	X	-.026	1
26	SA-3	X	-.028	1
27	MP-1	X	-.059	6
28	MP-2	X	-.049	6.292
29	MP-3	X	-.064	6
30	MP-4	X	-.036	6
31	MP-5	X	-.036	6.292

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Designer : CJB
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Member Point Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
32	MP-6	X	-.038	6
33	MP-7	X	-.089	6
34	MP-8	X	-.083	6
35	MP-9	X	-.062	6.292
36	MP-1	Z	-.059	2
37	MP-1	Z	-.033	5
38	MP-1	Z	-.038	4
39	MP-1	Z	-.039	4
40	MP-1	Z	-.035	4
41	MP-2	Z	-.049	1.708
42	MP-3	Z	-.064	2
43	MP-3	Z	-.011	4
44	MP-4	Z	-.036	2
45	MP-4	Z	-.018	5
46	MP-4	Z	-.03	4
47	MP-4	Z	-.033	4
48	MP-4	Z	-.032	4
49	MP-5	Z	-.036	1.708
50	MP-6	Z	-.038	2
51	MP-6	Z	-.009	4
52	MP-7	Z	-.089	2
53	MP-7	Z	-.049	5
54	MP-7	Z	-.045	4
55	MP-7	Z	-.045	4
56	MP-7	Z	-.037	4
57	MP-8	Z	-.083	2
58	MP-9	Z	-.062	1.708
59	MP-9	Z	-.013	4
60	SA-1	Z	-.026	1
61	SA-3	Z	-.028	1
62	MP-1	Z	-.059	6
63	MP-2	Z	-.049	6.292
64	MP-3	Z	-.064	6
65	MP-4	Z	-.036	6
66	MP-5	Z	-.036	6.292
67	MP-6	Z	-.038	6
68	MP-7	Z	-.089	6
69	MP-8	Z	-.083	6
70	MP-9	Z	-.062	6.292

Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.032	2
2	MP-1	X	-.017	5
3	MP-1	X	-.023	4
4	MP-1	X	-.025	4
5	MP-1	X	-.023	4
6	MP-2	X	-.029	1.708
7	MP-3	X	-.035	2
8	MP-3	X	-.007	4
9	MP-4	X	-.032	2

Member Point Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
10	MP-4	X	-.017	5
11	MP-4	X	-.023	4
12	MP-4	X	-.025	4
13	MP-4	X	-.023	4
14	MP-5	X	-.029	1.708
15	MP-6	X	-.035	2
16	MP-6	X	-.007	4
17	MP-7	X	-.066	2
18	MP-7	X	-.036	5
19	MP-7	X	-.033	4
20	MP-7	X	-.032	4
21	MP-7	X	-.027	4
22	MP-8	X	-.061	2
23	MP-9	X	-.045	1.708
24	MP-9	X	-.009	4
25	SA-1	X	-.019	1
26	SA-3	X	-.02	1
27	MP-1	X	-.032	6
28	MP-2	X	-.029	6.292
29	MP-3	X	-.035	6
30	MP-4	X	-.032	6
31	MP-5	X	-.029	6.292
32	MP-6	X	-.035	6
33	MP-7	X	-.066	6
34	MP-8	X	-.061	6
35	MP-9	X	-.045	6.292
36	MP-1	Z	-.056	2
37	MP-1	Z	-.03	5
38	MP-1	Z	-.041	4
39	MP-1	Z	-.044	4
40	MP-1	Z	-.04	4
41	MP-2	Z	-.05	1.708
42	MP-3	Z	-.06	2
43	MP-3	Z	-.012	4
44	MP-4	Z	-.056	2
45	MP-4	Z	-.03	5
46	MP-4	Z	-.041	4
47	MP-4	Z	-.044	4
48	MP-4	Z	-.04	4
49	MP-5	Z	-.05	1.708
50	MP-6	Z	-.06	2
51	MP-6	Z	-.012	4
52	MP-7	Z	-.114	2
53	MP-7	Z	-.062	5
54	MP-7	Z	-.057	4
55	MP-7	Z	-.056	4
56	MP-7	Z	-.046	4
57	MP-8	Z	-.106	2
58	MP-9	Z	-.078	1.708
59	MP-9	Z	-.016	4
60	SA-1	Z	-.032	1
61	SA-3	Z	-.034	1

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Member Point Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
62	MP-1	Z	-.056	6
63	MP-2	Z	-.05	6.292
64	MP-3	Z	-.06	6
65	MP-4	Z	-.056	6
66	MP-5	Z	-.05	6.292
67	MP-6	Z	-.06	6
68	MP-7	Z	-.114	6
69	MP-8	Z	-.106	6
70	MP-9	Z	-.078	6.292

Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.046	2
2	MP-1	Z	-.023	5
3	MP-1	Z	-.041	4
4	MP-1	Z	-.046	4
5	MP-1	Z	-.044	4
6	MP-2	Z	-.048	1.708
7	MP-3	Z	-.049	2
8	MP-3	Z	-.012	4
9	MP-4	Z	-.103	2
10	MP-4	Z	-.06	5
11	MP-4	Z	-.06	4
12	MP-4	Z	-.06	4
13	MP-4	Z	-.051	4
14	MP-5	Z	-.079	1.708
15	MP-6	Z	-.111	2
16	MP-6	Z	-.017	4
17	MP-7	Z	-.111	2
18	MP-7	Z	-.06	5
19	MP-7	Z	-.06	4
20	MP-7	Z	-.06	4
21	MP-7	Z	-.051	4
22	MP-8	Z	-.103	2
23	MP-9	Z	-.079	1.708
24	MP-9	Z	-.017	4
25	SA-1	Z	-.037	1
26	SA-3	Z	-.04	1
27	MP-1	Z	-.046	6
28	MP-2	Z	-.048	6.292
29	MP-3	Z	-.049	6
30	MP-4	Z	-.103	6
31	MP-5	Z	-.079	6.292
32	MP-6	Z	-.111	6
33	MP-7	Z	-.111	6
34	MP-8	Z	-.103	6
35	MP-9	Z	-.079	6.292

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.032	2

Member Point Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP-1	X	.017	5
3	MP-1	X	.023	4
4	MP-1	X	.025	4
5	MP-1	X	.023	4
6	MP-2	X	.029	1.708
7	MP-3	X	.035	2
8	MP-3	X	.007	4
9	MP-4	X	.061	2
10	MP-4	X	.036	5
11	MP-4	X	.033	4
12	MP-4	X	.032	4
13	MP-4	X	.027	4
14	MP-5	X	.045	1.708
15	MP-6	X	.066	2
16	MP-6	X	.009	4
17	MP-7	X	.035	2
18	MP-7	X	.017	5
19	MP-7	X	.023	4
20	MP-7	X	.025	4
21	MP-7	X	.023	4
22	MP-8	X	.032	2
23	MP-9	X	.029	1.708
24	MP-9	X	.007	4
25	SA-1	X	.019	1
26	SA-3	X	.02	1
27	MP-1	X	.032	6
28	MP-2	X	.029	6.292
29	MP-3	X	.035	6
30	MP-4	X	.061	6
31	MP-5	X	.045	6.292
32	MP-6	X	.066	6
33	MP-7	X	.035	6
34	MP-8	X	.032	6
35	MP-9	X	.029	6.292
36	MP-1	Z	-.056	2
37	MP-1	Z	-.03	5
38	MP-1	Z	-.041	4
39	MP-1	Z	-.044	4
40	MP-1	Z	-.04	4
41	MP-2	Z	-.05	1.708
42	MP-3	Z	-.06	2
43	MP-3	Z	-.012	4
44	MP-4	Z	-.106	2
45	MP-4	Z	-.062	5
46	MP-4	Z	-.057	4
47	MP-4	Z	-.056	4
48	MP-4	Z	-.046	4
49	MP-5	Z	-.078	1.708
50	MP-6	Z	-.114	2
51	MP-6	Z	-.016	4
52	MP-7	Z	-.06	2
53	MP-7	Z	-.03	5

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Member Point Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
54	MP-7	Z	-.041	4
55	MP-7	Z	-.044	4
56	MP-7	Z	-.04	4
57	MP-8	Z	-.056	2
58	MP-9	Z	-.05	1.708
59	MP-9	Z	-.012	4
60	SA-1	Z	-.032	1
61	SA-3	Z	-.034	1
62	MP-1	Z	-.056	6
63	MP-2	Z	-.05	6.292
64	MP-3	Z	-.06	6
65	MP-4	Z	-.106	6
66	MP-5	Z	-.078	6.292
67	MP-6	Z	-.114	6
68	MP-7	Z	-.06	6
69	MP-8	Z	-.056	6
70	MP-9	Z	-.05	6.292

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.059	2
2	MP-1	X	.033	5
3	MP-1	X	.038	4
4	MP-1	X	.039	4
5	MP-1	X	.035	4
6	MP-2	X	.049	1.708
7	MP-3	X	.064	2
8	MP-3	X	.011	4
9	MP-4	X	.083	2
10	MP-4	X	.049	5
11	MP-4	X	.045	4
12	MP-4	X	.045	4
13	MP-4	X	.037	4
14	MP-5	X	.062	1.708
15	MP-6	X	.089	2
16	MP-6	X	.013	4
17	MP-7	X	.038	2
18	MP-7	X	.018	5
19	MP-7	X	.03	4
20	MP-7	X	.033	4
21	MP-7	X	.032	4
22	MP-8	X	.036	2
23	MP-9	X	.036	1.708
24	MP-9	X	.009	4
25	SA-1	X	.026	1
26	SA-3	X	.028	1
27	MP-1	X	.059	6
28	MP-2	X	.049	6.292
29	MP-3	X	.064	6
30	MP-4	X	.083	6
31	MP-5	X	.062	6.292

Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
32	MP-6	X	.089	6
33	MP-7	X	.038	6
34	MP-8	X	.036	6
35	MP-9	X	.036	6.292
36	MP-1	Z	-.059	2
37	MP-1	Z	-.033	5
38	MP-1	Z	-.038	4
39	MP-1	Z	-.039	4
40	MP-1	Z	-.035	4
41	MP-2	Z	-.049	1.708
42	MP-3	Z	-.064	2
43	MP-3	Z	-.011	4
44	MP-4	Z	-.083	2
45	MP-4	Z	-.049	5
46	MP-4	Z	-.045	4
47	MP-4	Z	-.045	4
48	MP-4	Z	-.037	4
49	MP-5	Z	-.062	1.708
50	MP-6	Z	-.089	2
51	MP-6	Z	-.013	4
52	MP-7	Z	-.038	2
53	MP-7	Z	-.018	5
54	MP-7	Z	-.03	4
55	MP-7	Z	-.033	4
56	MP-7	Z	-.032	4
57	MP-8	Z	-.036	2
58	MP-9	Z	-.036	1.708
59	MP-9	Z	-.009	4
60	SA-1	Z	-.026	1
61	SA-3	Z	-.028	1
62	MP-1	Z	-.059	6
63	MP-2	Z	-.049	6.292
64	MP-3	Z	-.064	6
65	MP-4	Z	-.083	6
66	MP-5	Z	-.062	6.292
67	MP-6	Z	-.089	6
68	MP-7	Z	-.038	6
69	MP-8	Z	-.036	6
70	MP-9	Z	-.036	6.292

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.089	2
2	MP-1	X	.052	5
3	MP-1	X	.052	4
4	MP-1	X	.052	4
5	MP-1	X	.044	4
6	MP-2	X	.069	1.708
7	MP-3	X	.096	2
8	MP-3	X	.015	4
9	MP-4	X	.089	2

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Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Point Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
10	MP-4	X	.052	5
11	MP-4	X	.052	4
12	MP-4	X	.052	4
13	MP-4	X	.044	4
14	MP-5	X	.069	1.708
15	MP-6	X	.096	2
16	MP-6	X	.015	4
17	MP-7	X	.042	2
18	MP-7	X	.02	5
19	MP-7	X	.035	4
20	MP-7	X	.04	4
21	MP-7	X	.038	4
22	MP-8	X	.04	2
23	MP-9	X	.041	1.708
24	MP-9	X	.01	4
25	SA-1	X	.032	1
26	SA-3	X	.034	1
27	MP-1	X	.089	6
28	MP-2	X	.069	6.292
29	MP-3	X	.096	6
30	MP-4	X	.089	6
31	MP-5	X	.069	6.292
32	MP-6	X	.096	6
33	MP-7	X	.042	6
34	MP-8	X	.04	6
35	MP-9	X	.041	6.292
36	MP-1	Z	-.051	2
37	MP-1	Z	-.03	5
38	MP-1	Z	-.03	4
39	MP-1	Z	-.03	4
40	MP-1	Z	-.026	4
41	MP-2	Z	-.04	1.708
42	MP-3	Z	-.055	2
43	MP-3	Z	-.009	4
44	MP-4	Z	-.051	2
45	MP-4	Z	-.03	5
46	MP-4	Z	-.03	4
47	MP-4	Z	-.03	4
48	MP-4	Z	-.026	4
49	MP-5	Z	-.04	1.708
50	MP-6	Z	-.055	2
51	MP-6	Z	-.009	4
52	MP-7	Z	-.024	2
53	MP-7	Z	-.011	5
54	MP-7	Z	-.02	4
55	MP-7	Z	-.023	4
56	MP-7	Z	-.022	4
57	MP-8	Z	-.023	2
58	MP-9	Z	-.024	1.708
59	MP-9	Z	-.006	4
60	SA-1	Z	-.019	1
61	SA-3	Z	-.02	1

Member Point Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
62	MP-1	Z	-.051	6
63	MP-2	Z	-.04	6.292
64	MP-3	Z	-.055	6
65	MP-4	Z	-.051	6
66	MP-5	Z	-.04	6.292
67	MP-6	Z	-.055	6
68	MP-7	Z	-.024	6
69	MP-8	Z	-.023	6
70	MP-9	Z	-.024	6.292

Member Point Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.122	2
2	MP-1	X	.072	5
3	MP-1	X	.066	4
4	MP-1	X	.064	4
5	MP-1	X	.053	4
6	MP-2	X	.09	1.708
7	MP-3	X	.131	2
8	MP-3	X	.019	4
9	MP-4	X	.065	2
10	MP-4	X	.035	5
11	MP-4	X	.047	4
12	MP-4	X	.05	4
13	MP-4	X	.046	4
14	MP-5	X	.058	1.708
15	MP-6	X	.069	2
16	MP-6	X	.014	4
17	MP-7	X	.069	2
18	MP-7	X	.035	5
19	MP-7	X	.047	4
20	MP-7	X	.05	4
21	MP-7	X	.046	4
22	MP-8	X	.065	2
23	MP-9	X	.058	1.708
24	MP-9	X	.014	4
25	SA-1	X	.037	1
26	SA-3	X	.04	1
27	MP-1	X	.122	6
28	MP-2	X	.09	6.292
29	MP-3	X	.131	6
30	MP-4	X	.065	6
31	MP-5	X	.058	6.292
32	MP-6	X	.069	6
33	MP-7	X	.069	6
34	MP-8	X	.065	6
35	MP-9	X	.058	6.292

Member Point Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.089	2

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Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP-1	X	.052	5
3	MP-1	X	.052	4
4	MP-1	X	.052	4
5	MP-1	X	.044	4
6	MP-2	X	.069	1.708
7	MP-3	X	.096	2
8	MP-3	X	.015	4
9	MP-4	X	.04	2
10	MP-4	X	.02	5
11	MP-4	X	.035	4
12	MP-4	X	.04	4
13	MP-4	X	.038	4
14	MP-5	X	.041	1.708
15	MP-6	X	.042	2
16	MP-6	X	.01	4
17	MP-7	X	.096	2
18	MP-7	X	.052	5
19	MP-7	X	.052	4
20	MP-7	X	.052	4
21	MP-7	X	.044	4
22	MP-8	X	.089	2
23	MP-9	X	.069	1.708
24	MP-9	X	.015	4
25	SA-1	X	.032	1
26	SA-3	X	.034	1
27	MP-1	X	.089	6
28	MP-2	X	.069	6.292
29	MP-3	X	.096	6
30	MP-4	X	.04	6
31	MP-5	X	.041	6.292
32	MP-6	X	.042	6
33	MP-7	X	.096	6
34	MP-8	X	.089	6
35	MP-9	X	.069	6.292
36	MP-1	Z	.051	2
37	MP-1	Z	.03	5
38	MP-1	Z	.03	4
39	MP-1	Z	.03	4
40	MP-1	Z	.026	4
41	MP-2	Z	.04	1.708
42	MP-3	Z	.055	2
43	MP-3	Z	.009	4
44	MP-4	Z	.023	2
45	MP-4	Z	.011	5
46	MP-4	Z	.02	4
47	MP-4	Z	.023	4
48	MP-4	Z	.022	4
49	MP-5	Z	.024	1.708
50	MP-6	Z	.024	2
51	MP-6	Z	.006	4
52	MP-7	Z	.055	2
53	MP-7	Z	.03	5

Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
54	MP-7	Z	.03	4
55	MP-7	Z	.03	4
56	MP-7	Z	.026	4
57	MP-8	Z	.051	2
58	MP-9	Z	.04	1.708
59	MP-9	Z	.009	4
60	SA-1	Z	.019	1
61	SA-3	Z	.02	1
62	MP-1	Z	.051	6
63	MP-2	Z	.04	6.292
64	MP-3	Z	.055	6
65	MP-4	Z	.023	6
66	MP-5	Z	.024	6.292
67	MP-6	Z	.024	6
68	MP-7	Z	.055	6
69	MP-8	Z	.051	6
70	MP-9	Z	.04	6.292

Member Point Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.059	2
2	MP-1	X	.033	5
3	MP-1	X	.038	4
4	MP-1	X	.039	4
5	MP-1	X	.035	4
6	MP-2	X	.049	1.708
7	MP-3	X	.064	2
8	MP-3	X	.011	4
9	MP-4	X	.036	2
10	MP-4	X	.018	5
11	MP-4	X	.03	4
12	MP-4	X	.033	4
13	MP-4	X	.032	4
14	MP-5	X	.036	1.708
15	MP-6	X	.038	2
16	MP-6	X	.009	4
17	MP-7	X	.089	2
18	MP-7	X	.049	5
19	MP-7	X	.045	4
20	MP-7	X	.045	4
21	MP-7	X	.037	4
22	MP-8	X	.083	2
23	MP-9	X	.062	1.708
24	MP-9	X	.013	4
25	SA-1	X	.026	1
26	SA-3	X	.028	1
27	MP-1	X	.059	6
28	MP-2	X	.049	6.292
29	MP-3	X	.064	6
30	MP-4	X	.036	6
31	MP-5	X	.036	6.292

Company : Tower Engineering Professionals, Inc.
Designer : CJB
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Member Point Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
32	MP-6	X	.038	6
33	MP-7	X	.089	6
34	MP-8	X	.083	6
35	MP-9	X	.062	6.292
36	MP-1	Z	.059	2
37	MP-1	Z	.033	5
38	MP-1	Z	.038	4
39	MP-1	Z	.039	4
40	MP-1	Z	.035	4
41	MP-2	Z	.049	1.708
42	MP-3	Z	.064	2
43	MP-3	Z	.011	4
44	MP-4	Z	.036	2
45	MP-4	Z	.018	5
46	MP-4	Z	.03	4
47	MP-4	Z	.033	4
48	MP-4	Z	.032	4
49	MP-5	Z	.036	1.708
50	MP-6	Z	.038	2
51	MP-6	Z	.009	4
52	MP-7	Z	.089	2
53	MP-7	Z	.049	5
54	MP-7	Z	.045	4
55	MP-7	Z	.045	4
56	MP-7	Z	.037	4
57	MP-8	Z	.083	2
58	MP-9	Z	.062	1.708
59	MP-9	Z	.013	4
60	SA-1	Z	.026	1
61	SA-3	Z	.028	1
62	MP-1	Z	.059	6
63	MP-2	Z	.049	6.292
64	MP-3	Z	.064	6
65	MP-4	Z	.036	6
66	MP-5	Z	.036	6.292
67	MP-6	Z	.038	6
68	MP-7	Z	.089	6
69	MP-8	Z	.083	6
70	MP-9	Z	.062	6.292

Member Point Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.032	2
2	MP-1	X	.017	5
3	MP-1	X	.023	4
4	MP-1	X	.025	4
5	MP-1	X	.023	4
6	MP-2	X	.029	1.708
7	MP-3	X	.035	2
8	MP-3	X	.007	4
9	MP-4	X	.032	2

Member Point Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
10	MP-4	X	.017	5
11	MP-4	X	.023	4
12	MP-4	X	.025	4
13	MP-4	X	.023	4
14	MP-5	X	.029	1.708
15	MP-6	X	.035	2
16	MP-6	X	.007	4
17	MP-7	X	.066	2
18	MP-7	X	.036	5
19	MP-7	X	.033	4
20	MP-7	X	.032	4
21	MP-7	X	.027	4
22	MP-8	X	.061	2
23	MP-9	X	.045	1.708
24	MP-9	X	.009	4
25	SA-1	X	.019	1
26	SA-3	X	.02	1
27	MP-1	X	.032	6
28	MP-2	X	.029	6.292
29	MP-3	X	.035	6
30	MP-4	X	.032	6
31	MP-5	X	.029	6.292
32	MP-6	X	.035	6
33	MP-7	X	.066	6
34	MP-8	X	.061	6
35	MP-9	X	.045	6.292
36	MP-1	Z	.056	2
37	MP-1	Z	.03	5
38	MP-1	Z	.041	4
39	MP-1	Z	.044	4
40	MP-1	Z	.04	4
41	MP-2	Z	.05	1.708
42	MP-3	Z	.06	2
43	MP-3	Z	.012	4
44	MP-4	Z	.056	2
45	MP-4	Z	.03	5
46	MP-4	Z	.041	4
47	MP-4	Z	.044	4
48	MP-4	Z	.04	4
49	MP-5	Z	.05	1.708
50	MP-6	Z	.06	2
51	MP-6	Z	.012	4
52	MP-7	Z	.114	2
53	MP-7	Z	.062	5
54	MP-7	Z	.057	4
55	MP-7	Z	.056	4
56	MP-7	Z	.046	4
57	MP-8	Z	.106	2
58	MP-9	Z	.078	1.708
59	MP-9	Z	.016	4
60	SA-1	Z	.032	1
61	SA-3	Z	.034	1

Company : Tower Engineering Professionals, Inc.
Designer : CJB
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Member Point Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
62	MP-1	Z	.056	6
63	MP-2	Z	.05	6.292
64	MP-3	Z	.06	6
65	MP-4	Z	.056	6
66	MP-5	Z	.05	6.292
67	MP-6	Z	.06	6
68	MP-7	Z	.114	6
69	MP-8	Z	.106	6
70	MP-9	Z	.078	6.292

Member Point Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.046	2
2	MP-1	Z	.023	5
3	MP-1	Z	.041	4
4	MP-1	Z	.046	4
5	MP-1	Z	.044	4
6	MP-2	Z	.048	1.708
7	MP-3	Z	.049	2
8	MP-3	Z	.012	4
9	MP-4	Z	.103	2
10	MP-4	Z	.06	5
11	MP-4	Z	.06	4
12	MP-4	Z	.06	4
13	MP-4	Z	.051	4
14	MP-5	Z	.079	1.708
15	MP-6	Z	.111	2
16	MP-6	Z	.017	4
17	MP-7	Z	.111	2
18	MP-7	Z	.06	5
19	MP-7	Z	.06	4
20	MP-7	Z	.06	4
21	MP-7	Z	.051	4
22	MP-8	Z	.103	2
23	MP-9	Z	.079	1.708
24	MP-9	Z	.017	4
25	SA-1	Z	.037	1
26	SA-3	Z	.04	1
27	MP-1	Z	.046	6
28	MP-2	Z	.048	6.292
29	MP-3	Z	.049	6
30	MP-4	Z	.103	6
31	MP-5	Z	.079	6.292
32	MP-6	Z	.111	6
33	MP-7	Z	.111	6
34	MP-8	Z	.103	6
35	MP-9	Z	.079	6.292

Member Point Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.032	2

Member Point Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP-1	X	-.017	5
3	MP-1	X	-.023	4
4	MP-1	X	-.025	4
5	MP-1	X	-.023	4
6	MP-2	X	-.029	1.708
7	MP-3	X	-.035	2
8	MP-3	X	-.007	4
9	MP-4	X	-.061	2
10	MP-4	X	-.036	5
11	MP-4	X	-.033	4
12	MP-4	X	-.032	4
13	MP-4	X	-.027	4
14	MP-5	X	-.045	1.708
15	MP-6	X	-.066	2
16	MP-6	X	-.009	4
17	MP-7	X	-.035	2
18	MP-7	X	-.017	5
19	MP-7	X	-.023	4
20	MP-7	X	-.025	4
21	MP-7	X	-.023	4
22	MP-8	X	-.032	2
23	MP-9	X	-.029	1.708
24	MP-9	X	-.007	4
25	SA-1	X	-.019	1
26	SA-3	X	-.02	1
27	MP-1	X	-.032	6
28	MP-2	X	-.029	6.292
29	MP-3	X	-.035	6
30	MP-4	X	-.061	6
31	MP-5	X	-.045	6.292
32	MP-6	X	-.066	6
33	MP-7	X	-.035	6
34	MP-8	X	-.032	6
35	MP-9	X	-.029	6.292
36	MP-1	Z	.056	2
37	MP-1	Z	.03	5
38	MP-1	Z	.041	4
39	MP-1	Z	.044	4
40	MP-1	Z	.04	4
41	MP-2	Z	.05	1.708
42	MP-3	Z	.06	2
43	MP-3	Z	.012	4
44	MP-4	Z	.106	2
45	MP-4	Z	.062	5
46	MP-4	Z	.057	4
47	MP-4	Z	.056	4
48	MP-4	Z	.046	4
49	MP-5	Z	.078	1.708
50	MP-6	Z	.114	2
51	MP-6	Z	.016	4
52	MP-7	Z	.06	2
53	MP-7	Z	.03	5

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Point Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
54	MP-7	Z	.041	4
55	MP-7	Z	.044	4
56	MP-7	Z	.04	4
57	MP-8	Z	.056	2
58	MP-9	Z	.05	1.708
59	MP-9	Z	.012	4
60	SA-1	Z	.032	1
61	SA-3	Z	.034	1
62	MP-1	Z	.056	6
63	MP-2	Z	.05	6.292
64	MP-3	Z	.06	6
65	MP-4	Z	.106	6
66	MP-5	Z	.078	6.292
67	MP-6	Z	.114	6
68	MP-7	Z	.06	6
69	MP-8	Z	.056	6
70	MP-9	Z	.05	6.292

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.059	2
2	MP-1	X	-.033	5
3	MP-1	X	-.038	4
4	MP-1	X	-.039	4
5	MP-1	X	-.035	4
6	MP-2	X	-.049	1.708
7	MP-3	X	-.064	2
8	MP-3	X	-.011	4
9	MP-4	X	-.083	2
10	MP-4	X	-.049	5
11	MP-4	X	-.045	4
12	MP-4	X	-.045	4
13	MP-4	X	-.037	4
14	MP-5	X	-.062	1.708
15	MP-6	X	-.089	2
16	MP-6	X	-.013	4
17	MP-7	X	-.038	2
18	MP-7	X	-.018	5
19	MP-7	X	-.03	4
20	MP-7	X	-.033	4
21	MP-7	X	-.032	4
22	MP-8	X	-.036	2
23	MP-9	X	-.036	1.708
24	MP-9	X	-.009	4
25	SA-1	X	-.026	1
26	SA-3	X	-.028	1
27	MP-1	X	-.059	6
28	MP-2	X	-.049	6.292
29	MP-3	X	-.064	6
30	MP-4	X	-.083	6
31	MP-5	X	-.062	6.292

Member Point Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
32	MP-6	X	-.089	6
33	MP-7	X	-.038	6
34	MP-8	X	-.036	6
35	MP-9	X	-.036	6.292
36	MP-1	Z	.059	2
37	MP-1	Z	.033	5
38	MP-1	Z	.038	4
39	MP-1	Z	.039	4
40	MP-1	Z	.035	4
41	MP-2	Z	.049	1.708
42	MP-3	Z	.064	2
43	MP-3	Z	.011	4
44	MP-4	Z	.083	2
45	MP-4	Z	.049	5
46	MP-4	Z	.045	4
47	MP-4	Z	.045	4
48	MP-4	Z	.037	4
49	MP-5	Z	.062	1.708
50	MP-6	Z	.089	2
51	MP-6	Z	.013	4
52	MP-7	Z	.038	2
53	MP-7	Z	.018	5
54	MP-7	Z	.03	4
55	MP-7	Z	.033	4
56	MP-7	Z	.032	4
57	MP-8	Z	.036	2
58	MP-9	Z	.036	1.708
59	MP-9	Z	.009	4
60	SA-1	Z	.026	1
61	SA-3	Z	.028	1
62	MP-1	Z	.059	6
63	MP-2	Z	.049	6.292
64	MP-3	Z	.064	6
65	MP-4	Z	.083	6
66	MP-5	Z	.062	6.292
67	MP-6	Z	.089	6
68	MP-7	Z	.038	6
69	MP-8	Z	.036	6
70	MP-9	Z	.036	6.292

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.089	2
2	MP-1	X	-.052	5
3	MP-1	X	-.052	4
4	MP-1	X	-.052	4
5	MP-1	X	-.044	4
6	MP-2	X	-.069	1.708
7	MP-3	X	-.096	2
8	MP-3	X	-.015	4
9	MP-4	X	-.089	2

Member Point Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
10	MP-4	X	-.052	5
11	MP-4	X	-.052	4
12	MP-4	X	-.052	4
13	MP-4	X	-.044	4
14	MP-5	X	-.069	1.708
15	MP-6	X	-.096	2
16	MP-6	X	-.015	4
17	MP-7	X	-.042	2
18	MP-7	X	-.02	5
19	MP-7	X	-.035	4
20	MP-7	X	-.04	4
21	MP-7	X	-.038	4
22	MP-8	X	-.04	2
23	MP-9	X	-.041	1.708
24	MP-9	X	-.01	4
25	SA-1	X	-.032	1
26	SA-3	X	-.034	1
27	MP-1	X	-.089	6
28	MP-2	X	-.069	6.292
29	MP-3	X	-.096	6
30	MP-4	X	-.089	6
31	MP-5	X	-.069	6.292
32	MP-6	X	-.096	6
33	MP-7	X	-.042	6
34	MP-8	X	-.04	6
35	MP-9	X	-.041	6.292
36	MP-1	Z	.051	2
37	MP-1	Z	.03	5
38	MP-1	Z	.03	4
39	MP-1	Z	.03	4
40	MP-1	Z	.026	4
41	MP-2	Z	.04	1.708
42	MP-3	Z	.055	2
43	MP-3	Z	.009	4
44	MP-4	Z	.051	2
45	MP-4	Z	.03	5
46	MP-4	Z	.03	4
47	MP-4	Z	.03	4
48	MP-4	Z	.026	4
49	MP-5	Z	.04	1.708
50	MP-6	Z	.055	2
51	MP-6	Z	.009	4
52	MP-7	Z	.024	2
53	MP-7	Z	.011	5
54	MP-7	Z	.02	4
55	MP-7	Z	.023	4
56	MP-7	Z	.022	4
57	MP-8	Z	.023	2
58	MP-9	Z	.024	1.708
59	MP-9	Z	.006	4
60	SA-1	Z	.019	1
61	SA-3	Z	.02	1

Member Point Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
62	MP-1	Z	.051	6
63	MP-2	Z	.04	6.292
64	MP-3	Z	.055	6
65	MP-4	Z	.051	6
66	MP-5	Z	.04	6.292
67	MP-6	Z	.055	6
68	MP-7	Z	.024	6
69	MP-8	Z	.023	6
70	MP-9	Z	.024	6.292

Member Point Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.063	2
2	MP-1	Y	-.038	5
3	MP-1	Y	-.044	4
4	MP-1	Y	-.047	4
5	MP-1	Y	-.044	4
6	MP-2	Y	-.041	1.708
7	MP-3	Y	-.064	2
8	MP-3	Y	-.016	4
9	MP-4	Y	-.063	2
10	MP-4	Y	-.038	5
11	MP-4	Y	-.044	4
12	MP-4	Y	-.047	4
13	MP-4	Y	-.044	4
14	MP-5	Y	-.041	1.708
15	MP-6	Y	-.064	2
16	MP-6	Y	-.016	4
17	MP-7	Y	-.064	2
18	MP-7	Y	-.038	5
19	MP-7	Y	-.044	4
20	MP-7	Y	-.047	4
21	MP-7	Y	-.044	4
22	MP-8	Y	-.063	2
23	MP-9	Y	-.041	1.708
24	MP-9	Y	-.016	4
25	SA-1	Y	-.045	1
26	SA-3	Y	-.047	1
27	MP-1	Y	-.063	6
28	MP-2	Y	-.041	6.292
29	MP-3	Y	-.064	6
30	MP-4	Y	-.063	6
31	MP-5	Y	-.041	6.292
32	MP-6	Y	-.064	6
33	MP-7	Y	-.064	6
34	MP-8	Y	-.063	6
35	MP-9	Y	-.041	6.292

Member Point Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.024	2

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Member Point Loads (BLC 19 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP-1	X	-.018	5
3	MP-1	X	-.015	4
4	MP-1	X	-.015	4
5	MP-1	X	-.013	4
6	MP-2	X	-.019	1.708
7	MP-3	X	-.026	2
8	MP-3	X	-.006	4
9	MP-4	X	-.024	2
10	MP-4	X	-.018	5
11	MP-4	X	-.015	4
12	MP-4	X	-.015	4
13	MP-4	X	-.013	4
14	MP-5	X	-.019	1.708
15	MP-6	X	-.026	2
16	MP-6	X	-.006	4
17	MP-7	X	-.026	2
18	MP-7	X	-.018	5
19	MP-7	X	-.015	4
20	MP-7	X	-.015	4
21	MP-7	X	-.013	4
22	MP-8	X	-.024	2
23	MP-9	X	-.019	1.708
24	MP-9	X	-.006	4
25	SA-1	X	-.008	1
26	SA-3	X	-.009	1
27	MP-1	X	-.024	6
28	MP-2	X	-.019	6.292
29	MP-3	X	-.026	6
30	MP-4	X	-.024	6
31	MP-5	X	-.019	6.292
32	MP-6	X	-.026	6
33	MP-7	X	-.026	6
34	MP-8	X	-.024	6
35	MP-9	X	-.019	6.292

Member Point Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.018	2
2	MP-1	X	-.013	5
3	MP-1	X	-.012	4
4	MP-1	X	-.012	4
5	MP-1	X	-.01	4
6	MP-2	X	-.015	1.708
7	MP-3	X	-.019	2
8	MP-3	X	-.005	4
9	MP-4	X	-.009	2
10	MP-4	X	-.007	5
11	MP-4	X	-.009	4
12	MP-4	X	-.01	4
13	MP-4	X	-.009	4
14	MP-5	X	-.01	1.708

Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-6	X	-.01	2
16	MP-6	X	-.004	4
17	MP-7	X	-.019	2
18	MP-7	X	-.013	5
19	MP-7	X	-.012	4
20	MP-7	X	-.012	4
21	MP-7	X	-.01	4
22	MP-8	X	-.018	2
23	MP-9	X	-.015	1.708
24	MP-9	X	-.005	4
25	SA-1	X	-.007	1
26	SA-3	X	-.008	1
27	MP-1	X	-.018	6
28	MP-2	X	-.015	6.292
29	MP-3	X	-.019	6
30	MP-4	X	-.009	6
31	MP-5	X	-.01	6.292
32	MP-6	X	-.01	6
33	MP-7	X	-.019	6
34	MP-8	X	-.018	6
35	MP-9	X	-.015	6.292
36	MP-1	Z	-.01	2
37	MP-1	Z	-.008	5
38	MP-1	Z	-.007	4
39	MP-1	Z	-.007	4
40	MP-1	Z	-.006	4
41	MP-2	Z	-.009	1.708
42	MP-3	Z	-.011	2
43	MP-3	Z	-.003	4
44	MP-4	Z	-.005	2
45	MP-4	Z	-.004	5
46	MP-4	Z	-.005	4
47	MP-4	Z	-.006	4
48	MP-4	Z	-.005	4
49	MP-5	Z	-.006	1.708
50	MP-6	Z	-.006	2
51	MP-6	Z	-.002	4
52	MP-7	Z	-.011	2
53	MP-7	Z	-.008	5
54	MP-7	Z	-.007	4
55	MP-7	Z	-.007	4
56	MP-7	Z	-.006	4
57	MP-8	Z	-.01	2
58	MP-9	Z	-.009	1.708
59	MP-9	Z	-.003	4
60	SA-1	Z	-.004	1
61	SA-3	Z	-.004	1
62	MP-1	Z	-.01	6
63	MP-2	Z	-.009	6.292
64	MP-3	Z	-.011	6
65	MP-4	Z	-.005	6
66	MP-5	Z	-.006	6.292

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Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
67	MP-6	Z	-.006	6
68	MP-7	Z	-.011	6
69	MP-8	Z	-.01	6
70	MP-9	Z	-.009	6.292

Member Point Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.012	2
2	MP-1	X	-.009	5
3	MP-1	X	-.009	4
4	MP-1	X	-.009	4
5	MP-1	X	-.008	4
6	MP-2	X	-.011	1.708
7	MP-3	X	-.013	2
8	MP-3	X	-.004	4
9	MP-4	X	-.008	2
10	MP-4	X	-.006	5
11	MP-4	X	-.007	4
12	MP-4	X	-.008	4
13	MP-4	X	-.008	4
14	MP-5	X	-.009	1.708
15	MP-6	X	-.009	2
16	MP-6	X	-.003	4
17	MP-7	X	-.018	2
18	MP-7	X	-.012	5
19	MP-7	X	-.01	4
20	MP-7	X	-.01	4
21	MP-7	X	-.009	4
22	MP-8	X	-.016	2
23	MP-9	X	-.013	1.708
24	MP-9	X	-.004	4
25	SA-1	X	-.006	1
26	SA-3	X	-.006	1
27	MP-1	X	-.012	6
28	MP-2	X	-.011	6.292
29	MP-3	X	-.013	6
30	MP-4	X	-.008	6
31	MP-5	X	-.009	6.292
32	MP-6	X	-.009	6
33	MP-7	X	-.018	6
34	MP-8	X	-.016	6
35	MP-9	X	-.013	6.292
36	MP-1	Z	-.012	2
37	MP-1	Z	-.009	5
38	MP-1	Z	-.009	4
39	MP-1	Z	-.009	4
40	MP-1	Z	-.008	4
41	MP-2	Z	-.011	1.708
42	MP-3	Z	-.013	2
43	MP-3	Z	-.004	4
44	MP-4	Z	-.008	2

Member Point Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
45	MP-4	Z	-.006	5
46	MP-4	Z	-.007	4
47	MP-4	Z	-.008	4
48	MP-4	Z	-.008	4
49	MP-5	Z	-.009	1.708
50	MP-6	Z	-.009	2
51	MP-6	Z	-.003	4
52	MP-7	Z	-.018	2
53	MP-7	Z	-.012	5
54	MP-7	Z	-.01	4
55	MP-7	Z	-.01	4
56	MP-7	Z	-.009	4
57	MP-8	Z	-.016	2
58	MP-9	Z	-.013	1.708
59	MP-9	Z	-.004	4
60	SA-1	Z	-.006	1
61	SA-3	Z	-.006	1
62	MP-1	Z	-.012	6
63	MP-2	Z	-.011	6.292
64	MP-3	Z	-.013	6
65	MP-4	Z	-.008	6
66	MP-5	Z	-.009	6.292
67	MP-6	Z	-.009	6
68	MP-7	Z	-.018	6
69	MP-8	Z	-.016	6
70	MP-9	Z	-.013	6.292

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.007	2
2	MP-1	X	-.005	5
3	MP-1	X	-.006	4
4	MP-1	X	-.006	4
5	MP-1	X	-.006	4
6	MP-2	X	-.007	1.708
7	MP-3	X	-.007	2
8	MP-3	X	-.003	4
9	MP-4	X	-.007	2
10	MP-4	X	-.005	5
11	MP-4	X	-.006	4
12	MP-4	X	-.006	4
13	MP-4	X	-.006	4
14	MP-5	X	-.007	1.708
15	MP-6	X	-.007	2
16	MP-6	X	-.003	4
17	MP-7	X	-.013	2
18	MP-7	X	-.009	5
19	MP-7	X	-.008	4
20	MP-7	X	-.007	4
21	MP-7	X	-.006	4
22	MP-8	X	-.012	2

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Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
23	MP-9	X	-.01	1.708
24	MP-9	X	-.003	4
25	SA-1	X	-.004	1
26	SA-3	X	-.004	1
27	MP-1	X	-.007	6
28	MP-2	X	-.007	6.292
29	MP-3	X	-.007	6
30	MP-4	X	-.007	6
31	MP-5	X	-.007	6.292
32	MP-6	X	-.007	6
33	MP-7	X	-.013	6
34	MP-8	X	-.012	6
35	MP-9	X	-.01	6.292
36	MP-1	Z	-.012	2
37	MP-1	Z	-.009	5
38	MP-1	Z	-.01	4
39	MP-1	Z	-.01	4
40	MP-1	Z	-.01	4
41	MP-2	Z	-.012	1.708
42	MP-3	Z	-.013	2
43	MP-3	Z	-.005	4
44	MP-4	Z	-.012	2
45	MP-4	Z	-.009	5
46	MP-4	Z	-.01	4
47	MP-4	Z	-.01	4
48	MP-4	Z	-.01	4
49	MP-5	Z	-.012	1.708
50	MP-6	Z	-.013	2
51	MP-6	Z	-.005	4
52	MP-7	Z	-.023	2
53	MP-7	Z	-.016	5
54	MP-7	Z	-.013	4
55	MP-7	Z	-.013	4
56	MP-7	Z	-.011	4
57	MP-8	Z	-.021	2
58	MP-9	Z	-.017	1.708
59	MP-9	Z	-.006	4
60	SA-1	Z	-.007	1
61	SA-3	Z	-.008	1
62	MP-1	Z	-.012	6
63	MP-2	Z	-.012	6.292
64	MP-3	Z	-.013	6
65	MP-4	Z	-.012	6
66	MP-5	Z	-.012	6.292
67	MP-6	Z	-.013	6
68	MP-7	Z	-.023	6
69	MP-8	Z	-.021	6
70	MP-9	Z	-.017	6.292

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]

Member Point Loads (BLC 23 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.01	2
2	MP-1	Z	-.008	5
3	MP-1	Z	-.01	4
4	MP-1	Z	-.011	4
5	MP-1	Z	-.011	4
6	MP-2	Z	-.012	1.708
7	MP-3	Z	-.011	2
8	MP-3	Z	-.005	4
9	MP-4	Z	-.01	2
10	MP-4	Z	-.008	5
11	MP-4	Z	-.01	4
12	MP-4	Z	-.011	4
13	MP-4	Z	-.011	4
14	MP-5	Z	-.012	1.708
15	MP-6	Z	-.011	2
16	MP-6	Z	-.005	4
17	MP-7	Z	-.011	2
18	MP-7	Z	-.008	5
19	MP-7	Z	-.01	4
20	MP-7	Z	-.011	4
21	MP-7	Z	-.011	4
22	MP-8	Z	-.01	2
23	MP-9	Z	-.012	1.708
24	MP-9	Z	-.005	4
25	SA-1	Z	-.008	1
26	SA-3	Z	-.009	1
27	MP-1	Z	-.01	6
28	MP-2	Z	-.012	6.292
29	MP-3	Z	-.011	6
30	MP-4	Z	-.01	6
31	MP-5	Z	-.012	6.292
32	MP-6	Z	-.011	6
33	MP-7	Z	-.011	6
34	MP-8	Z	-.01	6
35	MP-9	Z	-.012	6.292

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.007	2
2	MP-1	X	.005	5
3	MP-1	X	.006	4
4	MP-1	X	.006	4
5	MP-1	X	.006	4
6	MP-2	X	.007	1.708
7	MP-3	X	.007	2
8	MP-3	X	.003	4
9	MP-4	X	.012	2
10	MP-4	X	.009	5
11	MP-4	X	.008	4
12	MP-4	X	.007	4
13	MP-4	X	.006	4

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Member Point Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
14	MP-5	X	.01	1.708
15	MP-6	X	.013	2
16	MP-6	X	.003	4
17	MP-7	X	.007	2
18	MP-7	X	.005	5
19	MP-7	X	.006	4
20	MP-7	X	.006	4
21	MP-7	X	.006	4
22	MP-8	X	.007	2
23	MP-9	X	.007	1.708
24	MP-9	X	.003	4
25	SA-1	X	.004	1
26	SA-3	X	.004	1
27	MP-1	X	.007	6
28	MP-2	X	.007	6.292
29	MP-3	X	.007	6
30	MP-4	X	.012	6
31	MP-5	X	.01	6.292
32	MP-6	X	.013	6
33	MP-7	X	.007	6
34	MP-8	X	.007	6
35	MP-9	X	.007	6.292
36	MP-1	Z	-.012	2
37	MP-1	Z	-.009	5
38	MP-1	Z	-.01	4
39	MP-1	Z	-.01	4
40	MP-1	Z	-.01	4
41	MP-2	Z	-.012	1.708
42	MP-3	Z	-.013	2
43	MP-3	Z	-.005	4
44	MP-4	Z	-.021	2
45	MP-4	Z	-.016	5
46	MP-4	Z	-.013	4
47	MP-4	Z	-.013	4
48	MP-4	Z	-.011	4
49	MP-5	Z	-.017	1.708
50	MP-6	Z	-.023	2
51	MP-6	Z	-.006	4
52	MP-7	Z	-.013	2
53	MP-7	Z	-.009	5
54	MP-7	Z	-.01	4
55	MP-7	Z	-.01	4
56	MP-7	Z	-.01	4
57	MP-8	Z	-.012	2
58	MP-9	Z	-.012	1.708
59	MP-9	Z	-.005	4
60	SA-1	Z	-.007	1
61	SA-3	Z	-.008	1
62	MP-1	Z	-.012	6
63	MP-2	Z	-.012	6.292
64	MP-3	Z	-.013	6
65	MP-4	Z	-.021	6

Member Point Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
66	MP-5	Z	-.017	6.292
67	MP-6	Z	-.023	6
68	MP-7	Z	-.013	6
69	MP-8	Z	-.012	6
70	MP-9	Z	-.012	6.292

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.012	2
2	MP-1	X	.009	5
3	MP-1	X	.009	4
4	MP-1	X	.009	4
5	MP-1	X	.008	4
6	MP-2	X	.011	1.708
7	MP-3	X	.013	2
8	MP-3	X	.004	4
9	MP-4	X	.016	2
10	MP-4	X	.012	5
11	MP-4	X	.01	4
12	MP-4	X	.01	4
13	MP-4	X	.009	4
14	MP-5	X	.013	1.708
15	MP-6	X	.018	2
16	MP-6	X	.004	4
17	MP-7	X	.009	2
18	MP-7	X	.006	5
19	MP-7	X	.007	4
20	MP-7	X	.008	4
21	MP-7	X	.008	4
22	MP-8	X	.008	2
23	MP-9	X	.009	1.708
24	MP-9	X	.003	4
25	SA-1	X	.006	1
26	SA-3	X	.006	1
27	MP-1	X	.012	6
28	MP-2	X	.011	6.292
29	MP-3	X	.013	6
30	MP-4	X	.016	6
31	MP-5	X	.013	6.292
32	MP-6	X	.018	6
33	MP-7	X	.009	6
34	MP-8	X	.008	6
35	MP-9	X	.009	6.292
36	MP-1	Z	-.012	2
37	MP-1	Z	-.009	5
38	MP-1	Z	-.009	4
39	MP-1	Z	-.009	4
40	MP-1	Z	-.008	4
41	MP-2	Z	-.011	1.708
42	MP-3	Z	-.013	2
43	MP-3	Z	-.004	4

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Point Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
44	MP-4	Z	-.016	2
45	MP-4	Z	-.012	5
46	MP-4	Z	-.01	4
47	MP-4	Z	-.01	4
48	MP-4	Z	-.009	4
49	MP-5	Z	-.013	1.708
50	MP-6	Z	-.018	2
51	MP-6	Z	-.004	4
52	MP-7	Z	-.009	2
53	MP-7	Z	-.006	5
54	MP-7	Z	-.007	4
55	MP-7	Z	-.008	4
56	MP-7	Z	-.008	4
57	MP-8	Z	-.008	2
58	MP-9	Z	-.009	1.708
59	MP-9	Z	-.003	4
60	SA-1	Z	-.006	1
61	SA-3	Z	-.006	1
62	MP-1	Z	-.012	6
63	MP-2	Z	-.011	6.292
64	MP-3	Z	-.013	6
65	MP-4	Z	-.016	6
66	MP-5	Z	-.013	6.292
67	MP-6	Z	-.018	6
68	MP-7	Z	-.009	6
69	MP-8	Z	-.008	6
70	MP-9	Z	-.009	6.292

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.018	2
2	MP-1	X	.013	5
3	MP-1	X	.012	4
4	MP-1	X	.012	4
5	MP-1	X	.01	4
6	MP-2	X	.015	1.708
7	MP-3	X	.019	2
8	MP-3	X	.005	4
9	MP-4	X	.018	2
10	MP-4	X	.013	5
11	MP-4	X	.012	4
12	MP-4	X	.012	4
13	MP-4	X	.01	4
14	MP-5	X	.015	1.708
15	MP-6	X	.019	2
16	MP-6	X	.005	4
17	MP-7	X	.01	2
18	MP-7	X	.007	5
19	MP-7	X	.009	4
20	MP-7	X	.01	4
21	MP-7	X	.009	4

Member Point Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
22	MP-8	X	.009	2
23	MP-9	X	.01	1.708
24	MP-9	X	.004	4
25	SA-1	X	.007	1
26	SA-3	X	.008	1
27	MP-1	X	.018	6
28	MP-2	X	.015	6.292
29	MP-3	X	.019	6
30	MP-4	X	.018	6
31	MP-5	X	.015	6.292
32	MP-6	X	.019	6
33	MP-7	X	.01	6
34	MP-8	X	.009	6
35	MP-9	X	.01	6.292
36	MP-1	Z	-.01	2
37	MP-1	Z	-.008	5
38	MP-1	Z	-.007	4
39	MP-1	Z	-.007	4
40	MP-1	Z	-.006	4
41	MP-2	Z	-.009	1.708
42	MP-3	Z	-.011	2
43	MP-3	Z	-.003	4
44	MP-4	Z	-.01	2
45	MP-4	Z	-.008	5
46	MP-4	Z	-.007	4
47	MP-4	Z	-.007	4
48	MP-4	Z	-.006	4
49	MP-5	Z	-.009	1.708
50	MP-6	Z	-.011	2
51	MP-6	Z	-.003	4
52	MP-7	Z	-.006	2
53	MP-7	Z	-.004	5
54	MP-7	Z	-.005	4
55	MP-7	Z	-.006	4
56	MP-7	Z	-.005	4
57	MP-8	Z	-.005	2
58	MP-9	Z	-.006	1.708
59	MP-9	Z	-.002	4
60	SA-1	Z	-.004	1
61	SA-3	Z	-.004	1
62	MP-1	Z	-.01	6
63	MP-2	Z	-.009	6.292
64	MP-3	Z	-.011	6
65	MP-4	Z	-.01	6
66	MP-5	Z	-.009	6.292
67	MP-6	Z	-.011	6
68	MP-7	Z	-.006	6
69	MP-8	Z	-.005	6
70	MP-9	Z	-.006	6.292

Member Point Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]

Member Point Loads (BLC 27 : 180 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.024	2
2	MP-1	X	.018	5
3	MP-1	X	.015	4
4	MP-1	X	.015	4
5	MP-1	X	.013	4
6	MP-2	X	.019	1.708
7	MP-3	X	.026	2
8	MP-3	X	.006	4
9	MP-4	X	.024	2
10	MP-4	X	.018	5
11	MP-4	X	.015	4
12	MP-4	X	.015	4
13	MP-4	X	.013	4
14	MP-5	X	.019	1.708
15	MP-6	X	.026	2
16	MP-6	X	.006	4
17	MP-7	X	.026	2
18	MP-7	X	.018	5
19	MP-7	X	.015	4
20	MP-7	X	.015	4
21	MP-7	X	.013	4
22	MP-8	X	.024	2
23	MP-9	X	.019	1.708
24	MP-9	X	.006	4
25	SA-1	X	.008	1
26	SA-3	X	.009	1
27	MP-1	X	.024	6
28	MP-2	X	.019	6.292
29	MP-3	X	.026	6
30	MP-4	X	.024	6
31	MP-5	X	.019	6.292
32	MP-6	X	.026	6
33	MP-7	X	.026	6
34	MP-8	X	.024	6
35	MP-9	X	.019	6.292

Member Point Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.018	2
2	MP-1	X	.013	5
3	MP-1	X	.012	4
4	MP-1	X	.012	4
5	MP-1	X	.01	4
6	MP-2	X	.015	1.708
7	MP-3	X	.019	2
8	MP-3	X	.005	4
9	MP-4	X	.009	2
10	MP-4	X	.007	5
11	MP-4	X	.009	4
12	MP-4	X	.01	4
13	MP-4	X	.009	4

Member Point Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
14	MP-5	X	.01	1.708
15	MP-6	X	.01	2
16	MP-6	X	.004	4
17	MP-7	X	.019	2
18	MP-7	X	.013	5
19	MP-7	X	.012	4
20	MP-7	X	.012	4
21	MP-7	X	.01	4
22	MP-8	X	.018	2
23	MP-9	X	.015	1.708
24	MP-9	X	.005	4
25	SA-1	X	.007	1
26	SA-3	X	.008	1
27	MP-1	X	.018	6
28	MP-2	X	.015	6.292
29	MP-3	X	.019	6
30	MP-4	X	.009	6
31	MP-5	X	.01	6.292
32	MP-6	X	.01	6
33	MP-7	X	.019	6
34	MP-8	X	.018	6
35	MP-9	X	.015	6.292
36	MP-1	Z	.01	2
37	MP-1	Z	.008	5
38	MP-1	Z	.007	4
39	MP-1	Z	.007	4
40	MP-1	Z	.006	4
41	MP-2	Z	.009	1.708
42	MP-3	Z	.011	2
43	MP-3	Z	.003	4
44	MP-4	Z	.005	2
45	MP-4	Z	.004	5
46	MP-4	Z	.005	4
47	MP-4	Z	.006	4
48	MP-4	Z	.005	4
49	MP-5	Z	.006	1.708
50	MP-6	Z	.006	2
51	MP-6	Z	.002	4
52	MP-7	Z	.011	2
53	MP-7	Z	.008	5
54	MP-7	Z	.007	4
55	MP-7	Z	.007	4
56	MP-7	Z	.006	4
57	MP-8	Z	.01	2
58	MP-9	Z	.009	1.708
59	MP-9	Z	.003	4
60	SA-1	Z	.004	1
61	SA-3	Z	.004	1
62	MP-1	Z	.01	6
63	MP-2	Z	.009	6.292
64	MP-3	Z	.011	6
65	MP-4	Z	.005	6

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Point Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
66	MP-5	Z	.006	6.292
67	MP-6	Z	.006	6
68	MP-7	Z	.011	6
69	MP-8	Z	.01	6
70	MP-9	Z	.009	6.292

Member Point Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.012	2
2	MP-1	X	.009	5
3	MP-1	X	.009	4
4	MP-1	X	.009	4
5	MP-1	X	.008	4
6	MP-2	X	.011	1.708
7	MP-3	X	.013	2
8	MP-3	X	.004	4
9	MP-4	X	.008	2
10	MP-4	X	.006	5
11	MP-4	X	.007	4
12	MP-4	X	.008	4
13	MP-4	X	.008	4
14	MP-5	X	.009	1.708
15	MP-6	X	.009	2
16	MP-6	X	.003	4
17	MP-7	X	.018	2
18	MP-7	X	.012	5
19	MP-7	X	.01	4
20	MP-7	X	.01	4
21	MP-7	X	.009	4
22	MP-8	X	.016	2
23	MP-9	X	.013	1.708
24	MP-9	X	.004	4
25	SA-1	X	.006	1
26	SA-3	X	.006	1
27	MP-1	X	.012	6
28	MP-2	X	.011	6.292
29	MP-3	X	.013	6
30	MP-4	X	.008	6
31	MP-5	X	.009	6.292
32	MP-6	X	.009	6
33	MP-7	X	.018	6
34	MP-8	X	.016	6
35	MP-9	X	.013	6.292
36	MP-1	Z	.012	2
37	MP-1	Z	.009	5
38	MP-1	Z	.009	4
39	MP-1	Z	.009	4
40	MP-1	Z	.008	4
41	MP-2	Z	.011	1.708
42	MP-3	Z	.013	2
43	MP-3	Z	.004	4

Member Point Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
44	MP-4	Z	.008	2
45	MP-4	Z	.006	5
46	MP-4	Z	.007	4
47	MP-4	Z	.008	4
48	MP-4	Z	.008	4
49	MP-5	Z	.009	1.708
50	MP-6	Z	.009	2
51	MP-6	Z	.003	4
52	MP-7	Z	.018	2
53	MP-7	Z	.012	5
54	MP-7	Z	.01	4
55	MP-7	Z	.01	4
56	MP-7	Z	.009	4
57	MP-8	Z	.016	2
58	MP-9	Z	.013	1.708
59	MP-9	Z	.004	4
60	SA-1	Z	.006	1
61	SA-3	Z	.006	1
62	MP-1	Z	.012	6
63	MP-2	Z	.011	6.292
64	MP-3	Z	.013	6
65	MP-4	Z	.008	6
66	MP-5	Z	.009	6.292
67	MP-6	Z	.009	6
68	MP-7	Z	.018	6
69	MP-8	Z	.016	6
70	MP-9	Z	.013	6.292

Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.007	2
2	MP-1	X	.005	5
3	MP-1	X	.006	4
4	MP-1	X	.006	4
5	MP-1	X	.006	4
6	MP-2	X	.007	1.708
7	MP-3	X	.007	2
8	MP-3	X	.003	4
9	MP-4	X	.007	2
10	MP-4	X	.005	5
11	MP-4	X	.006	4
12	MP-4	X	.006	4
13	MP-4	X	.006	4
14	MP-5	X	.007	1.708
15	MP-6	X	.007	2
16	MP-6	X	.003	4
17	MP-7	X	.013	2
18	MP-7	X	.009	5
19	MP-7	X	.008	4
20	MP-7	X	.007	4
21	MP-7	X	.006	4

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Point Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
22	MP-8	X	.012	2
23	MP-9	X	.01	1.708
24	MP-9	X	.003	4
25	SA-1	X	.004	1
26	SA-3	X	.004	1
27	MP-1	X	.007	6
28	MP-2	X	.007	6.292
29	MP-3	X	.007	6
30	MP-4	X	.007	6
31	MP-5	X	.007	6.292
32	MP-6	X	.007	6
33	MP-7	X	.013	6
34	MP-8	X	.012	6
35	MP-9	X	.01	6.292
36	MP-1	Z	.012	2
37	MP-1	Z	.009	5
38	MP-1	Z	.01	4
39	MP-1	Z	.01	4
40	MP-1	Z	.01	4
41	MP-2	Z	.012	1.708
42	MP-3	Z	.013	2
43	MP-3	Z	.005	4
44	MP-4	Z	.012	2
45	MP-4	Z	.009	5
46	MP-4	Z	.01	4
47	MP-4	Z	.01	4
48	MP-4	Z	.01	4
49	MP-5	Z	.012	1.708
50	MP-6	Z	.013	2
51	MP-6	Z	.005	4
52	MP-7	Z	.023	2
53	MP-7	Z	.016	5
54	MP-7	Z	.013	4
55	MP-7	Z	.013	4
56	MP-7	Z	.011	4
57	MP-8	Z	.021	2
58	MP-9	Z	.017	1.708
59	MP-9	Z	.006	4
60	SA-1	Z	.007	1
61	SA-3	Z	.008	1
62	MP-1	Z	.012	6
63	MP-2	Z	.012	6.292
64	MP-3	Z	.013	6
65	MP-4	Z	.012	6
66	MP-5	Z	.012	6.292
67	MP-6	Z	.013	6
68	MP-7	Z	.023	6
69	MP-8	Z	.021	6
70	MP-9	Z	.017	6.292

Member Point Loads (BLC 31 : 270 Wind - Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]

Member Point Loads (BLC 31 : 270 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.01	2
2	MP-1	Z	.008	5
3	MP-1	Z	.01	4
4	MP-1	Z	.011	4
5	MP-1	Z	.011	4
6	MP-2	Z	.012	1.708
7	MP-3	Z	.011	2
8	MP-3	Z	.005	4
9	MP-4	Z	.01	2
10	MP-4	Z	.008	5
11	MP-4	Z	.01	4
12	MP-4	Z	.011	4
13	MP-4	Z	.011	4
14	MP-5	Z	.012	1.708
15	MP-6	Z	.011	2
16	MP-6	Z	.005	4
17	MP-7	Z	.011	2
18	MP-7	Z	.008	5
19	MP-7	Z	.01	4
20	MP-7	Z	.011	4
21	MP-7	Z	.011	4
22	MP-8	Z	.01	2
23	MP-9	Z	.012	1.708
24	MP-9	Z	.005	4
25	SA-1	Z	.008	1
26	SA-3	Z	.009	1
27	MP-1	Z	.01	6
28	MP-2	Z	.012	6.292
29	MP-3	Z	.011	6
30	MP-4	Z	.01	6
31	MP-5	Z	.012	6.292
32	MP-6	Z	.011	6
33	MP-7	Z	.011	6
34	MP-8	Z	.01	6
35	MP-9	Z	.012	6.292

Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.007	2
2	MP-1	X	-.005	5
3	MP-1	X	-.006	4
4	MP-1	X	-.006	4
5	MP-1	X	-.006	4
6	MP-2	X	-.007	1.708
7	MP-3	X	-.007	2
8	MP-3	X	-.003	4
9	MP-4	X	-.012	2
10	MP-4	X	-.009	5
11	MP-4	X	-.008	4
12	MP-4	X	-.007	4
13	MP-4	X	-.006	4

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Point Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
14	MP-5	X	-.01	1.708
15	MP-6	X	-.013	2
16	MP-6	X	-.003	4
17	MP-7	X	-.007	2
18	MP-7	X	-.005	5
19	MP-7	X	-.006	4
20	MP-7	X	-.006	4
21	MP-7	X	-.006	4
22	MP-8	X	-.007	2
23	MP-9	X	-.007	1.708
24	MP-9	X	-.003	4
25	SA-1	X	-.004	1
26	SA-3	X	-.004	1
27	MP-1	X	-.007	6
28	MP-2	X	-.007	6.292
29	MP-3	X	-.007	6
30	MP-4	X	-.012	6
31	MP-5	X	-.01	6.292
32	MP-6	X	-.013	6
33	MP-7	X	-.007	6
34	MP-8	X	-.007	6
35	MP-9	X	-.007	6.292
36	MP-1	Z	.012	2
37	MP-1	Z	.009	5
38	MP-1	Z	.01	4
39	MP-1	Z	.01	4
40	MP-1	Z	.01	4
41	MP-2	Z	.012	1.708
42	MP-3	Z	.013	2
43	MP-3	Z	.005	4
44	MP-4	Z	.021	2
45	MP-4	Z	.016	5
46	MP-4	Z	.013	4
47	MP-4	Z	.013	4
48	MP-4	Z	.011	4
49	MP-5	Z	.017	1.708
50	MP-6	Z	.023	2
51	MP-6	Z	.006	4
52	MP-7	Z	.013	2
53	MP-7	Z	.009	5
54	MP-7	Z	.01	4
55	MP-7	Z	.01	4
56	MP-7	Z	.01	4
57	MP-8	Z	.012	2
58	MP-9	Z	.012	1.708
59	MP-9	Z	.005	4
60	SA-1	Z	.007	1
61	SA-3	Z	.008	1
62	MP-1	Z	.012	6
63	MP-2	Z	.012	6.292
64	MP-3	Z	.013	6
65	MP-4	Z	.021	6

Member Point Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
66	MP-5	Z	.017	6.292
67	MP-6	Z	.023	6
68	MP-7	Z	.013	6
69	MP-8	Z	.012	6
70	MP-9	Z	.012	6.292

Member Point Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.012	2
2	MP-1	X	-.009	5
3	MP-1	X	-.009	4
4	MP-1	X	-.009	4
5	MP-1	X	-.008	4
6	MP-2	X	-.011	1.708
7	MP-3	X	-.013	2
8	MP-3	X	-.004	4
9	MP-4	X	-.016	2
10	MP-4	X	-.012	5
11	MP-4	X	-.01	4
12	MP-4	X	-.01	4
13	MP-4	X	-.009	4
14	MP-5	X	-.013	1.708
15	MP-6	X	-.018	2
16	MP-6	X	-.004	4
17	MP-7	X	-.009	2
18	MP-7	X	-.006	5
19	MP-7	X	-.007	4
20	MP-7	X	-.008	4
21	MP-7	X	-.008	4
22	MP-8	X	-.008	2
23	MP-9	X	-.009	1.708
24	MP-9	X	-.003	4
25	SA-1	X	-.006	1
26	SA-3	X	-.006	1
27	MP-1	X	-.012	6
28	MP-2	X	-.011	6.292
29	MP-3	X	-.013	6
30	MP-4	X	-.016	6
31	MP-5	X	-.013	6.292
32	MP-6	X	-.018	6
33	MP-7	X	-.009	6
34	MP-8	X	-.008	6
35	MP-9	X	-.009	6.292
36	MP-1	Z	.012	2
37	MP-1	Z	.009	5
38	MP-1	Z	.009	4
39	MP-1	Z	.009	4
40	MP-1	Z	.008	4
41	MP-2	Z	.011	1.708
42	MP-3	Z	.013	2
43	MP-3	Z	.004	4

Member Point Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
44	MP-4	Z	.016	2
45	MP-4	Z	.012	5
46	MP-4	Z	.01	4
47	MP-4	Z	.01	4
48	MP-4	Z	.009	4
49	MP-5	Z	.013	1.708
50	MP-6	Z	.018	2
51	MP-6	Z	.004	4
52	MP-7	Z	.009	2
53	MP-7	Z	.006	5
54	MP-7	Z	.007	4
55	MP-7	Z	.008	4
56	MP-7	Z	.008	4
57	MP-8	Z	.008	2
58	MP-9	Z	.009	1.708
59	MP-9	Z	.003	4
60	SA-1	Z	.006	1
61	SA-3	Z	.006	1
62	MP-1	Z	.012	6
63	MP-2	Z	.011	6.292
64	MP-3	Z	.013	6
65	MP-4	Z	.016	6
66	MP-5	Z	.013	6.292
67	MP-6	Z	.018	6
68	MP-7	Z	.009	6
69	MP-8	Z	.008	6
70	MP-9	Z	.009	6.292

Member Point Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.018	2
2	MP-1	X	-.013	5
3	MP-1	X	-.012	4
4	MP-1	X	-.012	4
5	MP-1	X	-.01	4
6	MP-2	X	-.015	1.708
7	MP-3	X	-.019	2
8	MP-3	X	-.005	4
9	MP-4	X	-.018	2
10	MP-4	X	-.013	5
11	MP-4	X	-.012	4
12	MP-4	X	-.012	4
13	MP-4	X	-.01	4
14	MP-5	X	-.015	1.708
15	MP-6	X	-.019	2
16	MP-6	X	-.005	4
17	MP-7	X	-.01	2
18	MP-7	X	-.007	5
19	MP-7	X	-.009	4
20	MP-7	X	-.01	4
21	MP-7	X	-.009	4

Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
22	MP-8	X	-.009	2
23	MP-9	X	-.01	1.708
24	MP-9	X	-.004	4
25	SA-1	X	-.007	1
26	SA-3	X	-.008	1
27	MP-1	X	-.018	6
28	MP-2	X	-.015	6.292
29	MP-3	X	-.019	6
30	MP-4	X	-.018	6
31	MP-5	X	-.015	6.292
32	MP-6	X	-.019	6
33	MP-7	X	-.01	6
34	MP-8	X	-.009	6
35	MP-9	X	-.01	6.292
36	MP-1	Z	.01	2
37	MP-1	Z	.008	5
38	MP-1	Z	.007	4
39	MP-1	Z	.007	4
40	MP-1	Z	.006	4
41	MP-2	Z	.009	1.708
42	MP-3	Z	.011	2
43	MP-3	Z	.003	4
44	MP-4	Z	.01	2
45	MP-4	Z	.008	5
46	MP-4	Z	.007	4
47	MP-4	Z	.007	4
48	MP-4	Z	.006	4
49	MP-5	Z	.009	1.708
50	MP-6	Z	.011	2
51	MP-6	Z	.003	4
52	MP-7	Z	.006	2
53	MP-7	Z	.004	5
54	MP-7	Z	.005	4
55	MP-7	Z	.006	4
56	MP-7	Z	.005	4
57	MP-8	Z	.005	2
58	MP-9	Z	.006	1.708
59	MP-9	Z	.002	4
60	SA-1	Z	.004	1
61	SA-3	Z	.004	1
62	MP-1	Z	.01	6
63	MP-2	Z	.009	6.292
64	MP-3	Z	.011	6
65	MP-4	Z	.01	6
66	MP-5	Z	.009	6.292
67	MP-6	Z	.011	6
68	MP-7	Z	.006	6
69	MP-8	Z	.005	6
70	MP-9	Z	.006	6.292

Member Point Loads (BLC 37 : Seismic Load X)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]

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Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Point Loads (BLC 37 : Seismic Load X) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.038	2
2	MP-1	X	-.028	5
3	MP-1	X	-.059	4
4	MP-1	X	-.071	4
5	MP-1	X	-.072	4
6	MP-2	X	-.018	1.708
7	MP-3	X	-.031	2
8	MP-3	X	-.011	4
9	MP-4	X	-.038	2
10	MP-4	X	-.028	5
11	MP-4	X	-.059	4
12	MP-4	X	-.071	4
13	MP-4	X	-.072	4
14	MP-5	X	-.018	1.708
15	MP-6	X	-.031	2
16	MP-6	X	-.011	4
17	MP-7	X	-.031	2
18	MP-7	X	-.028	5
19	MP-7	X	-.059	4
20	MP-7	X	-.071	4
21	MP-7	X	-.072	4
22	MP-8	X	-.038	2
23	MP-9	X	-.018	1.708
24	MP-9	X	-.011	4
25	SA-1	X	-.026	1
26	SA-3	X	-.033	1
27	MP-1	X	-.038	6
28	MP-2	X	-.018	6.292
29	MP-3	X	-.031	6
30	MP-4	X	-.038	6
31	MP-5	X	-.018	6.292
32	MP-6	X	-.031	6
33	MP-7	X	-.031	6
34	MP-8	X	-.038	6
35	MP-9	X	-.018	6.292

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.038	2
2	MP-1	Z	-.028	5
3	MP-1	Z	-.059	4
4	MP-1	Z	-.071	4
5	MP-1	Z	-.072	4
6	MP-2	Z	-.018	1.708
7	MP-3	Z	-.031	2
8	MP-3	Z	-.011	4
9	MP-4	Z	-.038	2
10	MP-4	Z	-.028	5
11	MP-4	Z	-.059	4
12	MP-4	Z	-.071	4
13	MP-4	Z	-.072	4

Member Point Loads (BLC 38 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
14	MP-5	Z	-.018	1.708
15	MP-6	Z	-.031	2
16	MP-6	Z	-.011	4
17	MP-7	Z	-.031	2
18	MP-7	Z	-.028	5
19	MP-7	Z	-.059	4
20	MP-7	Z	-.071	4
21	MP-7	Z	-.072	4
22	MP-8	Z	-.038	2
23	MP-9	Z	-.018	1.708
24	MP-9	Z	-.011	4
25	SA-1	Z	-.026	1
26	SA-3	Z	-.033	1
27	MP-1	Z	-.038	6
28	MP-2	Z	-.018	6.292
29	MP-3	Z	-.031	6
30	MP-4	Z	-.038	6
31	MP-5	Z	-.018	6.292
32	MP-6	Z	-.031	6
33	MP-7	Z	-.031	6
34	MP-8	Z	-.038	6
35	MP-9	Z	-.018	6.292

Member Distributed Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.01	-.01	0	%100
2	CP-2	X	-.019	-.019	0	%100
3	CP-3	X	-.01	-.01	0	%100
4	FF-TH	X	-.01	-.01	0	%100
5	SF1-TH	X	-.005	-.005	0	%100
6	SF2-TH	X	-.005	-.005	0	%100
7	GSIP-1A	X	-.011	-.011	0	%100
8	GSIP-1B	X	-.004	-.004	0	%100
9	GSIP-2A	X	-.004	-.004	0	%100
10	GSIP-2B	X	-.004	-.004	0	%100
11	GSIP-3A	X	-.004	-.004	0	%100
12	GSIP-3B	X	-.011	-.011	0	%100
13	GSI-1A	X	-.007	-.007	0	%100
14	GSI-1B	X	-.007	-.007	0	%100
15	GSI-2A	X	-.015	-.015	0	%100
16	GSI-2B	X	-.015	-.015	0	%100
17	GSI-3A	X	-.007	-.007	0	%100
18	GSI-3B	X	-.007	-.007	0	%100
19	SA-1	X	-.015	-.015	0	%100
20	SA-2	X	0	0	0	%100
21	SA-3	X	-.015	-.015	0	%100
22	MP-1	X	-.008	-.008	0	%100
23	MP-2	X	-.008	-.008	0	%100
24	MP-3	X	-.008	-.008	0	%100
25	MP-4	X	-.008	-.008	0	%100

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Member Distributed Loads (BLC 2 : 0 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
26	MP-5	X	-.008	-.008	0	%100
27	MP-6	X	-.008	-.008	0	%100
28	MP-7	X	-.008	-.008	0	%100
29	MP-8	X	-.008	-.008	0	%100
30	MP-9	X	-.008	-.008	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.015	-.015	0	%100
2	CP-2	X	-.015	-.015	0	%100
3	CP-3	X	0	0	0	%100
4	FF-TH	X	-.008	-.008	0	%100
5	SF1-TH	X	0	0	0	%100
6	SF2-TH	X	-.007	-.007	0	%100
7	GSIP-1A	X	-.008	-.008	0	%100
8	GSIP-1B	X	0	0	0	%100
9	GSIP-2A	X	0	0	0	%100
10	GSIP-2B	X	-.006	-.006	0	%100
11	GSIP-3A	X	-.006	-.006	0	%100
12	GSIP-3B	X	-.008	-.008	0	%100
13	GSI-1A	X	-.01	-.01	0	%100
14	GSI-1B	X	-.01	-.01	0	%100
15	GSI-2A	X	-.012	-.012	0	%100
16	GSI-2B	X	-.012	-.012	0	%100
17	GSI-3A	X	0	0	0	%100
18	GSI-3B	X	0	0	0	%100
19	SA-1	X	-.008	-.008	0	%100
20	SA-2	X	-.006	-.006	0	%100
21	SA-3	X	-.015	-.015	0	%100
22	MP-1	X	-.007	-.007	0	%100
23	MP-2	X	-.007	-.007	0	%100
24	MP-3	X	-.007	-.007	0	%100
25	MP-4	X	-.007	-.007	0	%100
26	MP-5	X	-.007	-.007	0	%100
27	MP-6	X	-.007	-.007	0	%100
28	MP-7	X	-.007	-.007	0	%100
29	MP-8	X	-.007	-.007	0	%100
30	MP-9	X	-.007	-.007	0	%100
31	CP-1	Z	-.008	-.008	0	%100
32	CP-2	Z	-.008	-.008	0	%100
33	CP-3	Z	0	0	0	%100
34	FF-TH	Z	-.004	-.004	0	%100
35	SF1-TH	Z	0	0	0	%100
36	SF2-TH	Z	-.004	-.004	0	%100
37	GSIP-1A	Z	-.005	-.005	0	%100
38	GSIP-1B	Z	0	0	0	%100
39	GSIP-2A	Z	0	0	0	%100
40	GSIP-2B	Z	-.004	-.004	0	%100
41	GSIP-3A	Z	-.004	-.004	0	%100
42	GSIP-3B	Z	-.005	-.005	0	%100
43	GSI-1A	Z	-.006	-.006	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	GSI-1B	Z	-.006	-.006	0	%100
45	GSI-2A	Z	-.007	-.007	0	%100
46	GSI-2B	Z	-.007	-.007	0	%100
47	GSI-3A	Z	0	0	0	%100
48	GSI-3B	Z	0	0	0	%100
49	SA-1	Z	-.004	-.004	0	%100
50	SA-2	Z	-.005	-.005	0	%100
51	SA-3	Z	-.008	-.008	0	%100
52	MP-1	Z	-.004	-.004	0	%100
53	MP-2	Z	-.004	-.004	0	%100
54	MP-3	Z	-.004	-.004	0	%100
55	MP-4	Z	-.004	-.004	0	%100
56	MP-5	Z	-.004	-.004	0	%100
57	MP-6	Z	-.004	-.004	0	%100
58	MP-7	Z	-.004	-.004	0	%100
59	MP-8	Z	-.004	-.004	0	%100
60	MP-9	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.013	-.013	0	%100
2	CP-2	X	-.01	-.01	0	%100
3	CP-3	X	-.004	-.004	0	%100
4	FF-TH	X	-.005	-.005	0	%100
5	SF1-TH	X	-.002	-.002	0	%100
6	SF2-TH	X	-.006	-.006	0	%100
7	GSIP-1A	X	-.005	-.005	0	%100
8	GSIP-1B	X	-.002	-.002	0	%100
9	GSIP-2A	X	-.002	-.002	0	%100
10	GSIP-2B	X	-.006	-.006	0	%100
11	GSIP-3A	X	-.006	-.006	0	%100
12	GSIP-3B	X	-.005	-.005	0	%100
13	GSI-1A	X	-.009	-.009	0	%100
14	GSI-1B	X	-.009	-.009	0	%100
15	GSI-2A	X	-.008	-.008	0	%100
16	GSI-2B	X	-.008	-.008	0	%100
17	GSI-3A	X	-.002	-.002	0	%100
18	GSI-3B	X	-.002	-.002	0	%100
19	SA-1	X	-.003	-.003	0	%100
20	SA-2	X	-.006	-.006	0	%100
21	SA-3	X	-.012	-.012	0	%100
22	MP-1	X	-.005	-.005	0	%100
23	MP-2	X	-.005	-.005	0	%100
24	MP-3	X	-.005	-.005	0	%100
25	MP-4	X	-.005	-.005	0	%100
26	MP-5	X	-.005	-.005	0	%100
27	MP-6	X	-.005	-.005	0	%100
28	MP-7	X	-.005	-.005	0	%100
29	MP-8	X	-.005	-.005	0	%100
30	MP-9	X	-.005	-.005	0	%100
31	CP-1	Z	-.013	-.013	0	%100

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Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	CP-2	Z	-.01	-.01	0	%100
33	CP-3	Z	-.004	-.004	0	%100
34	FF-TH	Z	-.005	-.005	0	%100
35	SF1-TH	Z	-.002	-.002	0	%100
36	SF2-TH	Z	-.007	-.007	0	%100
37	GSIP-1A	Z	-.005	-.005	0	%100
38	GSIP-1B	Z	-.002	-.002	0	%100
39	GSIP-2A	Z	-.002	-.002	0	%100
40	GSIP-2B	Z	-.007	-.007	0	%100
41	GSIP-3A	Z	-.007	-.007	0	%100
42	GSIP-3B	Z	-.005	-.005	0	%100
43	GSI-1A	Z	-.01	-.01	0	%100
44	GSI-1B	Z	-.01	-.01	0	%100
45	GSI-2A	Z	-.008	-.008	0	%100
46	GSI-2B	Z	-.008	-.008	0	%100
47	GSI-3A	Z	-.003	-.003	0	%100
48	GSI-3B	Z	-.003	-.003	0	%100
49	SA-1	Z	-.003	-.003	0	%100
50	SA-2	Z	-.009	-.009	0	%100
51	SA-3	Z	-.011	-.011	0	%100
52	MP-1	Z	-.005	-.005	0	%100
53	MP-2	Z	-.005	-.005	0	%100
54	MP-3	Z	-.005	-.005	0	%100
55	MP-4	Z	-.005	-.005	0	%100
56	MP-5	Z	-.005	-.005	0	%100
57	MP-6	Z	-.005	-.005	0	%100
58	MP-7	Z	-.005	-.005	0	%100
59	MP-8	Z	-.005	-.005	0	%100
60	MP-9	Z	-.005	-.005	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.01	-.01	0	%100
2	CP-2	X	-.005	-.005	0	%100
3	CP-3	X	-.005	-.005	0	%100
4	FF-TH	X	-.003	-.003	0	%100
5	SF1-TH	X	-.002	-.002	0	%100
6	SF2-TH	X	-.005	-.005	0	%100
7	GSIP-1A	X	-.003	-.003	0	%100
8	GSIP-1B	X	-.002	-.002	0	%100
9	GSIP-2A	X	-.002	-.002	0	%100
10	GSIP-2B	X	-.004	-.004	0	%100
11	GSIP-3A	X	-.004	-.004	0	%100
12	GSIP-3B	X	-.003	-.003	0	%100
13	GSI-1A	X	-.007	-.007	0	%100
14	GSI-1B	X	-.007	-.007	0	%100
15	GSI-2A	X	-.004	-.004	0	%100
16	GSI-2B	X	-.004	-.004	0	%100
17	GSI-3A	X	-.003	-.003	0	%100
18	GSI-3B	X	-.003	-.003	0	%100
19	SA-1	X	0	0	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
20	SA-2	X	-.006	-.006	0	%100
21	SA-3	X	-.008	-.008	0	%100
22	MP-1	X	-.004	-.004	0	%100
23	MP-2	X	-.004	-.004	0	%100
24	MP-3	X	-.004	-.004	0	%100
25	MP-4	X	-.004	-.004	0	%100
26	MP-5	X	-.004	-.004	0	%100
27	MP-6	X	-.004	-.004	0	%100
28	MP-7	X	-.004	-.004	0	%100
29	MP-8	X	-.004	-.004	0	%100
30	MP-9	X	-.004	-.004	0	%100
31	CP-1	Z	-.017	-.017	0	%100
32	CP-2	Z	-.008	-.008	0	%100
33	CP-3	Z	-.008	-.008	0	%100
34	FF-TH	Z	-.004	-.004	0	%100
35	SF1-TH	Z	-.004	-.004	0	%100
36	SF2-TH	Z	-.009	-.009	0	%100
37	GSIP-1A	Z	-.005	-.005	0	%100
38	GSIP-1B	Z	-.004	-.004	0	%100
39	GSIP-2A	Z	-.004	-.004	0	%100
40	GSIP-2B	Z	-.009	-.009	0	%100
41	GSIP-3A	Z	-.009	-.009	0	%100
42	GSIP-3B	Z	-.005	-.005	0	%100
43	GSI-1A	Z	-.013	-.013	0	%100
44	GSI-1B	Z	-.013	-.013	0	%100
45	GSI-2A	Z	-.007	-.007	0	%100
46	GSI-2B	Z	-.007	-.007	0	%100
47	GSI-3A	Z	-.006	-.006	0	%100
48	GSI-3B	Z	-.006	-.006	0	%100
49	SA-1	Z	0	0	0	%100
50	SA-2	Z	-.014	-.014	0	%100
51	SA-3	Z	-.012	-.012	0	%100
52	MP-1	Z	-.007	-.007	0	%100
53	MP-2	Z	-.007	-.007	0	%100
54	MP-3	Z	-.007	-.007	0	%100
55	MP-4	Z	-.007	-.007	0	%100
56	MP-5	Z	-.007	-.007	0	%100
57	MP-6	Z	-.007	-.007	0	%100
58	MP-7	Z	-.007	-.007	0	%100
59	MP-8	Z	-.007	-.007	0	%100
60	MP-9	Z	-.007	-.007	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	Z	-.017	-.017	0	%100
2	CP-2	Z	0	0	0	%100
3	CP-3	Z	-.017	-.017	0	%100
4	FF-TH	Z	0	0	0	%100
5	SF1-TH	Z	-.009	-.009	0	%100
6	SF2-TH	Z	-.009	-.009	0	%100
7	GSIP-1A	Z	0	0	0	%100

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Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 6 : 90 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
8	GSIP-1B	Z	-.009	-.009	0	%100
9	GSIP-2A	Z	-.009	-.009	0	%100
10	GSIP-2B	Z	-.009	-.009	0	%100
11	GSIP-3A	Z	-.009	-.009	0	%100
12	GSIP-3B	Z	0	0	0	%100
13	GSI-1A	Z	-.013	-.013	0	%100
14	GSI-1B	Z	-.013	-.013	0	%100
15	GSI-2A	Z	0	0	0	%100
16	GSI-2B	Z	0	0	0	%100
17	GSI-3A	Z	-.013	-.013	0	%100
18	GSI-3B	Z	-.013	-.013	0	%100
19	SA-1	Z	-.008	-.008	0	%100
20	SA-2	Z	-.018	-.018	0	%100
21	SA-3	Z	-.008	-.008	0	%100
22	MP-1	Z	-.008	-.008	0	%100
23	MP-2	Z	-.008	-.008	0	%100
24	MP-3	Z	-.008	-.008	0	%100
25	MP-4	Z	-.008	-.008	0	%100
26	MP-5	Z	-.008	-.008	0	%100
27	MP-6	Z	-.008	-.008	0	%100
28	MP-7	Z	-.008	-.008	0	%100
29	MP-8	Z	-.008	-.008	0	%100
30	MP-9	Z	-.008	-.008	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.005	.005	0	%100
2	CP-2	X	.005	.005	0	%100
3	CP-3	X	.01	.01	0	%100
4	FF-TH	X	.003	.003	0	%100
5	SF1-TH	X	.005	.005	0	%100
6	SF2-TH	X	.002	.002	0	%100
7	GSIP-1A	X	.003	.003	0	%100
8	GSIP-1B	X	.004	.004	0	%100
9	GSIP-2A	X	.004	.004	0	%100
10	GSIP-2B	X	.002	.002	0	%100
11	GSIP-3A	X	.002	.002	0	%100
12	GSIP-3B	X	.003	.003	0	%100
13	GSI-1A	X	.003	.003	0	%100
14	GSI-1B	X	.003	.003	0	%100
15	GSI-2A	X	.004	.004	0	%100
16	GSI-2B	X	.004	.004	0	%100
17	GSI-3A	X	.007	.007	0	%100
18	GSI-3B	X	.007	.007	0	%100
19	SA-1	X	.008	.008	0	%100
20	SA-2	X	.006	.006	0	%100
21	SA-3	X	0	0	0	%100
22	MP-1	X	.004	.004	0	%100
23	MP-2	X	.004	.004	0	%100
24	MP-3	X	.004	.004	0	%100
25	MP-4	X	.004	.004	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
26	MP-5	X	.004	.004	0	%100
27	MP-6	X	.004	.004	0	%100
28	MP-7	X	.004	.004	0	%100
29	MP-8	X	.004	.004	0	%100
30	MP-9	X	.004	.004	0	%100
31	CP-1	Z	-.008	-.008	0	%100
32	CP-2	Z	-.008	-.008	0	%100
33	CP-3	Z	-.017	-.017	0	%100
34	FF-TH	Z	-.004	-.004	0	%100
35	SF1-TH	Z	-.009	-.009	0	%100
36	SF2-TH	Z	-.004	-.004	0	%100
37	GSIP-1A	Z	-.005	-.005	0	%100
38	GSIP-1B	Z	-.009	-.009	0	%100
39	GSIP-2A	Z	-.009	-.009	0	%100
40	GSIP-2B	Z	-.004	-.004	0	%100
41	GSIP-3A	Z	-.004	-.004	0	%100
42	GSIP-3B	Z	-.005	-.005	0	%100
43	GSI-1A	Z	-.006	-.006	0	%100
44	GSI-1B	Z	-.006	-.006	0	%100
45	GSI-2A	Z	-.007	-.007	0	%100
46	GSI-2B	Z	-.007	-.007	0	%100
47	GSI-3A	Z	-.013	-.013	0	%100
48	GSI-3B	Z	-.013	-.013	0	%100
49	SA-1	Z	-.012	-.012	0	%100
50	SA-2	Z	-.014	-.014	0	%100
51	SA-3	Z	0	0	0	%100
52	MP-1	Z	-.007	-.007	0	%100
53	MP-2	Z	-.007	-.007	0	%100
54	MP-3	Z	-.007	-.007	0	%100
55	MP-4	Z	-.007	-.007	0	%100
56	MP-5	Z	-.007	-.007	0	%100
57	MP-6	Z	-.007	-.007	0	%100
58	MP-7	Z	-.007	-.007	0	%100
59	MP-8	Z	-.007	-.007	0	%100
60	MP-9	Z	-.007	-.007	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.004	.004	0	%100
2	CP-2	X	.01	.01	0	%100
3	CP-3	X	.013	.013	0	%100
4	FF-TH	X	.005	.005	0	%100
5	SF1-TH	X	.006	.006	0	%100
6	SF2-TH	X	.002	.002	0	%100
7	GSIP-1A	X	.005	.005	0	%100
8	GSIP-1B	X	.006	.006	0	%100
9	GSIP-2A	X	.006	.006	0	%100
10	GSIP-2B	X	.002	.002	0	%100
11	GSIP-3A	X	.002	.002	0	%100
12	GSIP-3B	X	.005	.005	0	%100
13	GSI-1A	X	.002	.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
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Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	GSI-1B	X	.002	.002	0	%100
15	GSI-2A	X	.008	.008	0	%100
16	GSI-2B	X	.008	.008	0	%100
17	GSI-3A	X	.009	.009	0	%100
18	GSI-3B	X	.009	.009	0	%100
19	SA-1	X	.012	.012	0	%100
20	SA-2	X	.006	.006	0	%100
21	SA-3	X	.003	.003	0	%100
22	MP-1	X	.005	.005	0	%100
23	MP-2	X	.005	.005	0	%100
24	MP-3	X	.005	.005	0	%100
25	MP-4	X	.005	.005	0	%100
26	MP-5	X	.005	.005	0	%100
27	MP-6	X	.005	.005	0	%100
28	MP-7	X	.005	.005	0	%100
29	MP-8	X	.005	.005	0	%100
30	MP-9	X	.005	.005	0	%100
31	CP-1	Z	-.004	-.004	0	%100
32	CP-2	Z	-.01	-.01	0	%100
33	CP-3	Z	-.013	-.013	0	%100
34	FF-TH	Z	-.005	-.005	0	%100
35	SF1-TH	Z	-.007	-.007	0	%100
36	SF2-TH	Z	-.002	-.002	0	%100
37	GSIP-1A	Z	-.005	-.005	0	%100
38	GSIP-1B	Z	-.007	-.007	0	%100
39	GSIP-2A	Z	-.007	-.007	0	%100
40	GSIP-2B	Z	-.002	-.002	0	%100
41	GSIP-3A	Z	-.002	-.002	0	%100
42	GSIP-3B	Z	-.005	-.005	0	%100
43	GSI-1A	Z	-.003	-.003	0	%100
44	GSI-1B	Z	-.003	-.003	0	%100
45	GSI-2A	Z	-.008	-.008	0	%100
46	GSI-2B	Z	-.008	-.008	0	%100
47	GSI-3A	Z	-.01	-.01	0	%100
48	GSI-3B	Z	-.01	-.01	0	%100
49	SA-1	Z	-.011	-.011	0	%100
50	SA-2	Z	-.009	-.009	0	%100
51	SA-3	Z	-.003	-.003	0	%100
52	MP-1	Z	-.005	-.005	0	%100
53	MP-2	Z	-.005	-.005	0	%100
54	MP-3	Z	-.005	-.005	0	%100
55	MP-4	Z	-.005	-.005	0	%100
56	MP-5	Z	-.005	-.005	0	%100
57	MP-6	Z	-.005	-.005	0	%100
58	MP-7	Z	-.005	-.005	0	%100
59	MP-8	Z	-.005	-.005	0	%100
60	MP-9	Z	-.005	-.005	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	0	0	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	CP-2	X	.015	.015	0	%100
3	CP-3	X	.015	.015	0	%100
4	FF-TH	X	.008	.008	0	%100
5	SF1-TH	X	.007	.007	0	%100
6	SF2-TH	X	0	0	0	%100
7	GSIP-1A	X	.008	.008	0	%100
8	GSIP-1B	X	.006	.006	0	%100
9	GSIP-2A	X	.006	.006	0	%100
10	GSIP-2B	X	0	0	0	%100
11	GSIP-3A	X	0	0	0	%100
12	GSIP-3B	X	.008	.008	0	%100
13	GSI-1A	X	0	0	0	%100
14	GSI-1B	X	0	0	0	%100
15	GSI-2A	X	.012	.012	0	%100
16	GSI-2B	X	.012	.012	0	%100
17	GSI-3A	X	.01	.01	0	%100
18	GSI-3B	X	.01	.01	0	%100
19	SA-1	X	.015	.015	0	%100
20	SA-2	X	.006	.006	0	%100
21	SA-3	X	.008	.008	0	%100
22	MP-1	X	.007	.007	0	%100
23	MP-2	X	.007	.007	0	%100
24	MP-3	X	.007	.007	0	%100
25	MP-4	X	.007	.007	0	%100
26	MP-5	X	.007	.007	0	%100
27	MP-6	X	.007	.007	0	%100
28	MP-7	X	.007	.007	0	%100
29	MP-8	X	.007	.007	0	%100
30	MP-9	X	.007	.007	0	%100
31	CP-1	Z	0	0	0	%100
32	CP-2	Z	-.008	-.008	0	%100
33	CP-3	Z	-.008	-.008	0	%100
34	FF-TH	Z	-.004	-.004	0	%100
35	SF1-TH	Z	-.004	-.004	0	%100
36	SF2-TH	Z	0	0	0	%100
37	GSIP-1A	Z	-.005	-.005	0	%100
38	GSIP-1B	Z	-.004	-.004	0	%100
39	GSIP-2A	Z	-.004	-.004	0	%100
40	GSIP-2B	Z	0	0	0	%100
41	GSIP-3A	Z	0	0	0	%100
42	GSIP-3B	Z	-.005	-.005	0	%100
43	GSI-1A	Z	0	0	0	%100
44	GSI-1B	Z	0	0	0	%100
45	GSI-2A	Z	-.007	-.007	0	%100
46	GSI-2B	Z	-.007	-.007	0	%100
47	GSI-3A	Z	-.006	-.006	0	%100
48	GSI-3B	Z	-.006	-.006	0	%100
49	SA-1	Z	-.008	-.008	0	%100
50	SA-2	Z	-.005	-.005	0	%100
51	SA-3	Z	-.004	-.004	0	%100
52	MP-1	Z	-.004	-.004	0	%100
53	MP-2	Z	-.004	-.004	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
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Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
54	MP-3	Z	-.004	-.004	0	%100
55	MP-4	Z	-.004	-.004	0	%100
56	MP-5	Z	-.004	-.004	0	%100
57	MP-6	Z	-.004	-.004	0	%100
58	MP-7	Z	-.004	-.004	0	%100
59	MP-8	Z	-.004	-.004	0	%100
60	MP-9	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.01	.01	0	%100
2	CP-2	X	.019	.019	0	%100
3	CP-3	X	.01	.01	0	%100
4	FF-TH	X	.01	.01	0	%100
5	SF1-TH	X	.005	.005	0	%100
6	SF2-TH	X	.005	.005	0	%100
7	GSIP-1A	X	.011	.011	0	%100
8	GSIP-1B	X	.004	.004	0	%100
9	GSIP-2A	X	.004	.004	0	%100
10	GSIP-2B	X	.004	.004	0	%100
11	GSIP-3A	X	.004	.004	0	%100
12	GSIP-3B	X	.011	.011	0	%100
13	GSI-1A	X	.007	.007	0	%100
14	GSI-1B	X	.007	.007	0	%100
15	GSI-2A	X	.015	.015	0	%100
16	GSI-2B	X	.015	.015	0	%100
17	GSI-3A	X	.007	.007	0	%100
18	GSI-3B	X	.007	.007	0	%100
19	SA-1	X	.015	.015	0	%100
20	SA-2	X	0	0	0	%100
21	SA-3	X	.015	.015	0	%100
22	MP-1	X	.008	.008	0	%100
23	MP-2	X	.008	.008	0	%100
24	MP-3	X	.008	.008	0	%100
25	MP-4	X	.008	.008	0	%100
26	MP-5	X	.008	.008	0	%100
27	MP-6	X	.008	.008	0	%100
28	MP-7	X	.008	.008	0	%100
29	MP-8	X	.008	.008	0	%100
30	MP-9	X	.008	.008	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.015	.015	0	%100
2	CP-2	X	.015	.015	0	%100
3	CP-3	X	0	0	0	%100
4	FF-TH	X	.008	.008	0	%100
5	SF1-TH	X	0	0	0	%100
6	SF2-TH	X	.007	.007	0	%100
7	GSIP-1A	X	.008	.008	0	%100
8	GSIP-1B	X	0	0	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
9	GSIP-2A	X	0	0	0	%100
10	GSIP-2B	X	.006	.006	0	%100
11	GSIP-3A	X	.006	.006	0	%100
12	GSIP-3B	X	.008	.008	0	%100
13	GSI-1A	X	.01	.01	0	%100
14	GSI-1B	X	.01	.01	0	%100
15	GSI-2A	X	.012	.012	0	%100
16	GSI-2B	X	.012	.012	0	%100
17	GSI-3A	X	0	0	0	%100
18	GSI-3B	X	0	0	0	%100
19	SA-1	X	.008	.008	0	%100
20	SA-2	X	.006	.006	0	%100
21	SA-3	X	.015	.015	0	%100
22	MP-1	X	.007	.007	0	%100
23	MP-2	X	.007	.007	0	%100
24	MP-3	X	.007	.007	0	%100
25	MP-4	X	.007	.007	0	%100
26	MP-5	X	.007	.007	0	%100
27	MP-6	X	.007	.007	0	%100
28	MP-7	X	.007	.007	0	%100
29	MP-8	X	.007	.007	0	%100
30	MP-9	X	.007	.007	0	%100
31	CP-1	Z	.008	.008	0	%100
32	CP-2	Z	.008	.008	0	%100
33	CP-3	Z	0	0	0	%100
34	FF-TH	Z	.004	.004	0	%100
35	SF1-TH	Z	0	0	0	%100
36	SF2-TH	Z	.004	.004	0	%100
37	GSIP-1A	Z	.005	.005	0	%100
38	GSIP-1B	Z	0	0	0	%100
39	GSIP-2A	Z	0	0	0	%100
40	GSIP-2B	Z	.004	.004	0	%100
41	GSIP-3A	Z	.004	.004	0	%100
42	GSIP-3B	Z	.005	.005	0	%100
43	GSI-1A	Z	.006	.006	0	%100
44	GSI-1B	Z	.006	.006	0	%100
45	GSI-2A	Z	.007	.007	0	%100
46	GSI-2B	Z	.007	.007	0	%100
47	GSI-3A	Z	0	0	0	%100
48	GSI-3B	Z	0	0	0	%100
49	SA-1	Z	.004	.004	0	%100
50	SA-2	Z	.005	.005	0	%100
51	SA-3	Z	.008	.008	0	%100
52	MP-1	Z	.004	.004	0	%100
53	MP-2	Z	.004	.004	0	%100
54	MP-3	Z	.004	.004	0	%100
55	MP-4	Z	.004	.004	0	%100
56	MP-5	Z	.004	.004	0	%100
57	MP-6	Z	.004	.004	0	%100
58	MP-7	Z	.004	.004	0	%100
59	MP-8	Z	.004	.004	0	%100
60	MP-9	Z	.004	.004	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.013	.013	0	%100
2	CP-2	X	.01	.01	0	%100
3	CP-3	X	.004	.004	0	%100
4	FF-TH	X	.005	.005	0	%100
5	SF1-TH	X	.002	.002	0	%100
6	SF2-TH	X	.006	.006	0	%100
7	GSIP-1A	X	.005	.005	0	%100
8	GSIP-1B	X	.002	.002	0	%100
9	GSIP-2A	X	.002	.002	0	%100
10	GSIP-2B	X	.006	.006	0	%100
11	GSIP-3A	X	.006	.006	0	%100
12	GSIP-3B	X	.005	.005	0	%100
13	GSI-1A	X	.009	.009	0	%100
14	GSI-1B	X	.009	.009	0	%100
15	GSI-2A	X	.008	.008	0	%100
16	GSI-2B	X	.008	.008	0	%100
17	GSI-3A	X	.002	.002	0	%100
18	GSI-3B	X	.002	.002	0	%100
19	SA-1	X	.003	.003	0	%100
20	SA-2	X	.006	.006	0	%100
21	SA-3	X	.012	.012	0	%100
22	MP-1	X	.005	.005	0	%100
23	MP-2	X	.005	.005	0	%100
24	MP-3	X	.005	.005	0	%100
25	MP-4	X	.005	.005	0	%100
26	MP-5	X	.005	.005	0	%100
27	MP-6	X	.005	.005	0	%100
28	MP-7	X	.005	.005	0	%100
29	MP-8	X	.005	.005	0	%100
30	MP-9	X	.005	.005	0	%100
31	CP-1	Z	.013	.013	0	%100
32	CP-2	Z	.01	.01	0	%100
33	CP-3	Z	.004	.004	0	%100
34	FF-TH	Z	.005	.005	0	%100
35	SF1-TH	Z	.002	.002	0	%100
36	SF2-TH	Z	.007	.007	0	%100
37	GSIP-1A	Z	.005	.005	0	%100
38	GSIP-1B	Z	.002	.002	0	%100
39	GSIP-2A	Z	.002	.002	0	%100
40	GSIP-2B	Z	.007	.007	0	%100
41	GSIP-3A	Z	.007	.007	0	%100
42	GSIP-3B	Z	.005	.005	0	%100
43	GSI-1A	Z	.01	.01	0	%100
44	GSI-1B	Z	.01	.01	0	%100
45	GSI-2A	Z	.008	.008	0	%100
46	GSI-2B	Z	.008	.008	0	%100
47	GSI-3A	Z	.003	.003	0	%100
48	GSI-3B	Z	.003	.003	0	%100
49	SA-1	Z	.003	.003	0	%100
50	SA-2	Z	.009	.009	0	%100
51	SA-3	Z	.011	.011	0	%100
52	MP-1	Z	.005	.005	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	MP-2	Z	.005	.005	0	%100
54	MP-3	Z	.005	.005	0	%100
55	MP-4	Z	.005	.005	0	%100
56	MP-5	Z	.005	.005	0	%100
57	MP-6	Z	.005	.005	0	%100
58	MP-7	Z	.005	.005	0	%100
59	MP-8	Z	.005	.005	0	%100
60	MP-9	Z	.005	.005	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.01	.01	0	%100
2	CP-2	X	.005	.005	0	%100
3	CP-3	X	.005	.005	0	%100
4	FF-TH	X	.003	.003	0	%100
5	SF1-TH	X	.002	.002	0	%100
6	SF2-TH	X	.005	.005	0	%100
7	GSIP-1A	X	.003	.003	0	%100
8	GSIP-1B	X	.002	.002	0	%100
9	GSIP-2A	X	.002	.002	0	%100
10	GSIP-2B	X	.004	.004	0	%100
11	GSIP-3A	X	.004	.004	0	%100
12	GSIP-3B	X	.003	.003	0	%100
13	GSI-1A	X	.007	.007	0	%100
14	GSI-1B	X	.007	.007	0	%100
15	GSI-2A	X	.004	.004	0	%100
16	GSI-2B	X	.004	.004	0	%100
17	GSI-3A	X	.003	.003	0	%100
18	GSI-3B	X	.003	.003	0	%100
19	SA-1	X	0	0	0	%100
20	SA-2	X	.006	.006	0	%100
21	SA-3	X	.008	.008	0	%100
22	MP-1	X	.004	.004	0	%100
23	MP-2	X	.004	.004	0	%100
24	MP-3	X	.004	.004	0	%100
25	MP-4	X	.004	.004	0	%100
26	MP-5	X	.004	.004	0	%100
27	MP-6	X	.004	.004	0	%100
28	MP-7	X	.004	.004	0	%100
29	MP-8	X	.004	.004	0	%100
30	MP-9	X	.004	.004	0	%100
31	CP-1	Z	.017	.017	0	%100
32	CP-2	Z	.008	.008	0	%100
33	CP-3	Z	.008	.008	0	%100
34	FF-TH	Z	.004	.004	0	%100
35	SF1-TH	Z	.004	.004	0	%100
36	SF2-TH	Z	.009	.009	0	%100
37	GSIP-1A	Z	.005	.005	0	%100
38	GSIP-1B	Z	.004	.004	0	%100
39	GSIP-2A	Z	.004	.004	0	%100
40	GSIP-2B	Z	.009	.009	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
41	GSIP-3A	Z	.009	.009	0	%100
42	GSIP-3B	Z	.005	.005	0	%100
43	GSI-1A	Z	.013	.013	0	%100
44	GSI-1B	Z	.013	.013	0	%100
45	GSI-2A	Z	.007	.007	0	%100
46	GSI-2B	Z	.007	.007	0	%100
47	GSI-3A	Z	.006	.006	0	%100
48	GSI-3B	Z	.006	.006	0	%100
49	SA-1	Z	0	0	0	%100
50	SA-2	Z	.014	.014	0	%100
51	SA-3	Z	.012	.012	0	%100
52	MP-1	Z	.007	.007	0	%100
53	MP-2	Z	.007	.007	0	%100
54	MP-3	Z	.007	.007	0	%100
55	MP-4	Z	.007	.007	0	%100
56	MP-5	Z	.007	.007	0	%100
57	MP-6	Z	.007	.007	0	%100
58	MP-7	Z	.007	.007	0	%100
59	MP-8	Z	.007	.007	0	%100
60	MP-9	Z	.007	.007	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	Z	.017	.017	0	%100
2	CP-2	Z	0	0	0	%100
3	CP-3	Z	.017	.017	0	%100
4	FF-TH	Z	0	0	0	%100
5	SF1-TH	Z	.009	.009	0	%100
6	SF2-TH	Z	.009	.009	0	%100
7	GSIP-1A	Z	0	0	0	%100
8	GSIP-1B	Z	.009	.009	0	%100
9	GSIP-2A	Z	.009	.009	0	%100
10	GSIP-2B	Z	.009	.009	0	%100
11	GSIP-3A	Z	.009	.009	0	%100
12	GSIP-3B	Z	0	0	0	%100
13	GSI-1A	Z	.013	.013	0	%100
14	GSI-1B	Z	.013	.013	0	%100
15	GSI-2A	Z	0	0	0	%100
16	GSI-2B	Z	0	0	0	%100
17	GSI-3A	Z	.013	.013	0	%100
18	GSI-3B	Z	.013	.013	0	%100
19	SA-1	Z	.008	.008	0	%100
20	SA-2	Z	.018	.018	0	%100
21	SA-3	Z	.008	.008	0	%100
22	MP-1	Z	.008	.008	0	%100
23	MP-2	Z	.008	.008	0	%100
24	MP-3	Z	.008	.008	0	%100
25	MP-4	Z	.008	.008	0	%100
26	MP-5	Z	.008	.008	0	%100
27	MP-6	Z	.008	.008	0	%100
28	MP-7	Z	.008	.008	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-8	Z	.008	.008	0	%100
30	MP-9	Z	.008	.008	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.005	-.005	0	%100
2	CP-2	X	-.005	-.005	0	%100
3	CP-3	X	-.01	-.01	0	%100
4	FF-TH	X	-.003	-.003	0	%100
5	SF1-TH	X	-.005	-.005	0	%100
6	SF2-TH	X	-.002	-.002	0	%100
7	GSIP-1A	X	-.003	-.003	0	%100
8	GSIP-1B	X	-.004	-.004	0	%100
9	GSIP-2A	X	-.004	-.004	0	%100
10	GSIP-2B	X	-.002	-.002	0	%100
11	GSIP-3A	X	-.002	-.002	0	%100
12	GSIP-3B	X	-.003	-.003	0	%100
13	GSI-1A	X	-.003	-.003	0	%100
14	GSI-1B	X	-.003	-.003	0	%100
15	GSI-2A	X	-.004	-.004	0	%100
16	GSI-2B	X	-.004	-.004	0	%100
17	GSI-3A	X	-.007	-.007	0	%100
18	GSI-3B	X	-.007	-.007	0	%100
19	SA-1	X	-.008	-.008	0	%100
20	SA-2	X	-.006	-.006	0	%100
21	SA-3	X	0	0	0	%100
22	MP-1	X	-.004	-.004	0	%100
23	MP-2	X	-.004	-.004	0	%100
24	MP-3	X	-.004	-.004	0	%100
25	MP-4	X	-.004	-.004	0	%100
26	MP-5	X	-.004	-.004	0	%100
27	MP-6	X	-.004	-.004	0	%100
28	MP-7	X	-.004	-.004	0	%100
29	MP-8	X	-.004	-.004	0	%100
30	MP-9	X	-.004	-.004	0	%100
31	CP-1	Z	.008	.008	0	%100
32	CP-2	Z	.008	.008	0	%100
33	CP-3	Z	.017	.017	0	%100
34	FF-TH	Z	.004	.004	0	%100
35	SF1-TH	Z	.009	.009	0	%100
36	SF2-TH	Z	.004	.004	0	%100
37	GSIP-1A	Z	.005	.005	0	%100
38	GSIP-1B	Z	.009	.009	0	%100
39	GSIP-2A	Z	.009	.009	0	%100
40	GSIP-2B	Z	.004	.004	0	%100
41	GSIP-3A	Z	.004	.004	0	%100
42	GSIP-3B	Z	.005	.005	0	%100
43	GSI-1A	Z	.006	.006	0	%100
44	GSI-1B	Z	.006	.006	0	%100
45	GSI-2A	Z	.007	.007	0	%100
46	GSI-2B	Z	.007	.007	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
47	GSI-3A	Z	.013	.013	0	%100
48	GSI-3B	Z	.013	.013	0	%100
49	SA-1	Z	.012	.012	0	%100
50	SA-2	Z	.014	.014	0	%100
51	SA-3	Z	0	0	0	%100
52	MP-1	Z	.007	.007	0	%100
53	MP-2	Z	.007	.007	0	%100
54	MP-3	Z	.007	.007	0	%100
55	MP-4	Z	.007	.007	0	%100
56	MP-5	Z	.007	.007	0	%100
57	MP-6	Z	.007	.007	0	%100
58	MP-7	Z	.007	.007	0	%100
59	MP-8	Z	.007	.007	0	%100
60	MP-9	Z	.007	.007	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.004	-.004	0	%100
2	CP-2	X	-.01	-.01	0	%100
3	CP-3	X	-.013	-.013	0	%100
4	FF-TH	X	-.005	-.005	0	%100
5	SF1-TH	X	-.006	-.006	0	%100
6	SF2-TH	X	-.002	-.002	0	%100
7	GSIP-1A	X	-.005	-.005	0	%100
8	GSIP-1B	X	-.006	-.006	0	%100
9	GSIP-2A	X	-.006	-.006	0	%100
10	GSIP-2B	X	-.002	-.002	0	%100
11	GSIP-3A	X	-.002	-.002	0	%100
12	GSIP-3B	X	-.005	-.005	0	%100
13	GSI-1A	X	-.002	-.002	0	%100
14	GSI-1B	X	-.002	-.002	0	%100
15	GSI-2A	X	-.008	-.008	0	%100
16	GSI-2B	X	-.008	-.008	0	%100
17	GSI-3A	X	-.009	-.009	0	%100
18	GSI-3B	X	-.009	-.009	0	%100
19	SA-1	X	-.012	-.012	0	%100
20	SA-2	X	-.006	-.006	0	%100
21	SA-3	X	-.003	-.003	0	%100
22	MP-1	X	-.005	-.005	0	%100
23	MP-2	X	-.005	-.005	0	%100
24	MP-3	X	-.005	-.005	0	%100
25	MP-4	X	-.005	-.005	0	%100
26	MP-5	X	-.005	-.005	0	%100
27	MP-6	X	-.005	-.005	0	%100
28	MP-7	X	-.005	-.005	0	%100
29	MP-8	X	-.005	-.005	0	%100
30	MP-9	X	-.005	-.005	0	%100
31	CP-1	Z	.004	.004	0	%100
32	CP-2	Z	.01	.01	0	%100
33	CP-3	Z	.013	.013	0	%100
34	FF-TH	Z	.005	.005	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
35	SF1-TH	Z	.007	.007	0	%100
36	SF2-TH	Z	.002	.002	0	%100
37	GSIP-1A	Z	.005	.005	0	%100
38	GSIP-1B	Z	.007	.007	0	%100
39	GSIP-2A	Z	.007	.007	0	%100
40	GSIP-2B	Z	.002	.002	0	%100
41	GSIP-3A	Z	.002	.002	0	%100
42	GSIP-3B	Z	.005	.005	0	%100
43	GSI-1A	Z	.003	.003	0	%100
44	GSI-1B	Z	.003	.003	0	%100
45	GSI-2A	Z	.008	.008	0	%100
46	GSI-2B	Z	.008	.008	0	%100
47	GSI-3A	Z	.01	.01	0	%100
48	GSI-3B	Z	.01	.01	0	%100
49	SA-1	Z	.011	.011	0	%100
50	SA-2	Z	.009	.009	0	%100
51	SA-3	Z	.003	.003	0	%100
52	MP-1	Z	.005	.005	0	%100
53	MP-2	Z	.005	.005	0	%100
54	MP-3	Z	.005	.005	0	%100
55	MP-4	Z	.005	.005	0	%100
56	MP-5	Z	.005	.005	0	%100
57	MP-6	Z	.005	.005	0	%100
58	MP-7	Z	.005	.005	0	%100
59	MP-8	Z	.005	.005	0	%100
60	MP-9	Z	.005	.005	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	0	0	0	%100
2	CP-2	X	-.015	-.015	0	%100
3	CP-3	X	-.015	-.015	0	%100
4	FF-TH	X	-.008	-.008	0	%100
5	SF1-TH	X	-.007	-.007	0	%100
6	SF2-TH	X	0	0	0	%100
7	GSIP-1A	X	-.008	-.008	0	%100
8	GSIP-1B	X	-.006	-.006	0	%100
9	GSIP-2A	X	-.006	-.006	0	%100
10	GSIP-2B	X	0	0	0	%100
11	GSIP-3A	X	0	0	0	%100
12	GSIP-3B	X	-.008	-.008	0	%100
13	GSI-1A	X	0	0	0	%100
14	GSI-1B	X	0	0	0	%100
15	GSI-2A	X	-.012	-.012	0	%100
16	GSI-2B	X	-.012	-.012	0	%100
17	GSI-3A	X	-.01	-.01	0	%100
18	GSI-3B	X	-.01	-.01	0	%100
19	SA-1	X	-.015	-.015	0	%100
20	SA-2	X	-.006	-.006	0	%100
21	SA-3	X	-.008	-.008	0	%100
22	MP-1	X	-.007	-.007	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	MP-2	X	-.007	-.007	0	%100
24	MP-3	X	-.007	-.007	0	%100
25	MP-4	X	-.007	-.007	0	%100
26	MP-5	X	-.007	-.007	0	%100
27	MP-6	X	-.007	-.007	0	%100
28	MP-7	X	-.007	-.007	0	%100
29	MP-8	X	-.007	-.007	0	%100
30	MP-9	X	-.007	-.007	0	%100
31	CP-1	Z	0	0	0	%100
32	CP-2	Z	.008	.008	0	%100
33	CP-3	Z	.008	.008	0	%100
34	FF-TH	Z	.004	.004	0	%100
35	SF1-TH	Z	.004	.004	0	%100
36	SF2-TH	Z	0	0	0	%100
37	GSIP-1A	Z	.005	.005	0	%100
38	GSIP-1B	Z	.004	.004	0	%100
39	GSIP-2A	Z	.004	.004	0	%100
40	GSIP-2B	Z	0	0	0	%100
41	GSIP-3A	Z	0	0	0	%100
42	GSIP-3B	Z	.005	.005	0	%100
43	GSI-1A	Z	0	0	0	%100
44	GSI-1B	Z	0	0	0	%100
45	GSI-2A	Z	.007	.007	0	%100
46	GSI-2B	Z	.007	.007	0	%100
47	GSI-3A	Z	.006	.006	0	%100
48	GSI-3B	Z	.006	.006	0	%100
49	SA-1	Z	.008	.008	0	%100
50	SA-2	Z	.005	.005	0	%100
51	SA-3	Z	.004	.004	0	%100
52	MP-1	Z	.004	.004	0	%100
53	MP-2	Z	.004	.004	0	%100
54	MP-3	Z	.004	.004	0	%100
55	MP-4	Z	.004	.004	0	%100
56	MP-5	Z	.004	.004	0	%100
57	MP-6	Z	.004	.004	0	%100
58	MP-7	Z	.004	.004	0	%100
59	MP-8	Z	.004	.004	0	%100
60	MP-9	Z	.004	.004	0	%100

Member Distributed Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	Y	-.007	-.007	0	%100
2	CP-2	Y	-.007	-.007	0	%100
3	CP-3	Y	-.007	-.007	0	%100
4	FF-TH	Y	-.007	-.007	0	%100
5	SF1-TH	Y	-.007	-.007	0	%100
6	SF2-TH	Y	-.007	-.007	0	%100
7	GSIP-1A	Y	-.004	-.004	0	%100
8	GSIP-1B	Y	-.004	-.004	0	%100
9	GSIP-2A	Y	-.004	-.004	0	%100
10	GSIP-2B	Y	-.004	-.004	0	%100

Member Distributed Loads (BLC 18 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	GSIP-3A	Y	-.004	-.004	0	%100
12	GSIP-3B	Y	-.004	-.004	0	%100
13	GSI-1A	Y	-.008	-.008	0	%100
14	GSI-1B	Y	-.008	-.008	0	%100
15	GSI-2A	Y	-.008	-.008	0	%100
16	GSI-2B	Y	-.008	-.008	0	%100
17	GSI-3A	Y	-.008	-.008	0	%100
18	GSI-3B	Y	-.008	-.008	0	%100
19	SA-1	Y	-.007	-.007	0	%100
20	SA-2	Y	-.007	-.007	0	%100
21	SA-3	Y	-.007	-.007	0	%100
22	MP-1	Y	-.005	-.005	0	%100
23	MP-2	Y	-.005	-.005	0	%100
24	MP-3	Y	-.005	-.005	0	%100
25	MP-4	Y	-.005	-.005	0	%100
26	MP-5	Y	-.005	-.005	0	%100
27	MP-6	Y	-.005	-.005	0	%100
28	MP-7	Y	-.005	-.005	0	%100
29	MP-8	Y	-.005	-.005	0	%100
30	MP-9	Y	-.005	-.005	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.006	-.006	0	%100
2	CP-2	X	-.006	-.006	0	%100
3	CP-3	X	-.006	-.006	0	%100
4	FF-TH	X	-.003	-.003	0	%100
5	SF1-TH	X	-.003	-.003	0	%100
6	SF2-TH	X	-.003	-.003	0	%100
7	GSIP-1A	X	-.003	-.003	0	%100
8	GSIP-1B	X	-.003	-.003	0	%100
9	GSIP-2A	X	-.003	-.003	0	%100
10	GSIP-2B	X	-.003	-.003	0	%100
11	GSIP-3A	X	-.003	-.003	0	%100
12	GSIP-3B	X	-.003	-.003	0	%100
13	GSI-1A	X	-.004	-.004	0	%100
14	GSI-1B	X	-.004	-.004	0	%100
15	GSI-2A	X	-.004	-.004	0	%100
16	GSI-2B	X	-.004	-.004	0	%100
17	GSI-3A	X	-.004	-.004	0	%100
18	GSI-3B	X	-.004	-.004	0	%100
19	SA-1	X	-.004	-.004	0	%100
20	SA-2	X	-.004	-.004	0	%100
21	SA-3	X	-.004	-.004	0	%100
22	MP-1	X	-.002	-.002	0	%100
23	MP-2	X	-.002	-.002	0	%100
24	MP-3	X	-.002	-.002	0	%100
25	MP-4	X	-.002	-.002	0	%100
26	MP-5	X	-.002	-.002	0	%100
27	MP-6	X	-.002	-.002	0	%100
28	MP-7	X	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 19 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-8	X	-.002	-.002	0	%100
30	MP-9	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.004	-.004	0	%100
2	CP-2	X	-.004	-.004	0	%100
3	CP-3	X	0	0	0	%100
4	FF-TH	X	-.002	-.002	0	%100
5	SF1-TH	X	0	0	0	%100
6	SF2-TH	X	-.002	-.002	0	%100
7	GSIP-1A	X	-.002	-.002	0	%100
8	GSIP-1B	X	0	0	0	%100
9	GSIP-2A	X	0	0	0	%100
10	GSIP-2B	X	-.002	-.002	0	%100
11	GSIP-3A	X	-.002	-.002	0	%100
12	GSIP-3B	X	-.002	-.002	0	%100
13	GSI-1A	X	-.003	-.003	0	%100
14	GSI-1B	X	-.003	-.003	0	%100
15	GSI-2A	X	-.003	-.003	0	%100
16	GSI-2B	X	-.003	-.003	0	%100
17	GSI-3A	X	0	0	0	%100
18	GSI-3B	X	0	0	0	%100
19	SA-1	X	-.002	-.002	0	%100
20	SA-2	X	-.002	-.002	0	%100
21	SA-3	X	-.004	-.004	0	%100
22	MP-1	X	-.002	-.002	0	%100
23	MP-2	X	-.002	-.002	0	%100
24	MP-3	X	-.002	-.002	0	%100
25	MP-4	X	-.002	-.002	0	%100
26	MP-5	X	-.002	-.002	0	%100
27	MP-6	X	-.002	-.002	0	%100
28	MP-7	X	-.002	-.002	0	%100
29	MP-8	X	-.002	-.002	0	%100
30	MP-9	X	-.002	-.002	0	%100
31	CP-1	Z	-.002	-.002	0	%100
32	CP-2	Z	-.002	-.002	0	%100
33	CP-3	Z	0	0	0	%100
34	FF-TH	Z	-.001	-.001	0	%100
35	SF1-TH	Z	0	0	0	%100
36	SF2-TH	Z	-.001	-.001	0	%100
37	GSIP-1A	Z	-.001	-.001	0	%100
38	GSIP-1B	Z	0	0	0	%100
39	GSIP-2A	Z	0	0	0	%100
40	GSIP-2B	Z	-.001	-.001	0	%100
41	GSIP-3A	Z	-.001	-.001	0	%100
42	GSIP-3B	Z	-.001	-.001	0	%100
43	GSI-1A	Z	-.002	-.002	0	%100
44	GSI-1B	Z	-.002	-.002	0	%100
45	GSI-2A	Z	-.002	-.002	0	%100
46	GSI-2B	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
47	GSI-3A	Z	0	0	0	%100
48	GSI-3B	Z	0	0	0	%100
49	SA-1	Z	-.001	-.001	0	%100
50	SA-2	Z	-.001	-.001	0	%100
51	SA-3	Z	-.002	-.002	0	%100
52	MP-1	Z	-.001	-.001	0	%100
53	MP-2	Z	-.001	-.001	0	%100
54	MP-3	Z	-.001	-.001	0	%100
55	MP-4	Z	-.001	-.001	0	%100
56	MP-5	Z	-.001	-.001	0	%100
57	MP-6	Z	-.001	-.001	0	%100
58	MP-7	Z	-.001	-.001	0	%100
59	MP-8	Z	-.001	-.001	0	%100
60	MP-9	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.004	-.004	0	%100
2	CP-2	X	-.003	-.003	0	%100
3	CP-3	X	-.001	-.001	0	%100
4	FF-TH	X	-.002	-.002	0	%100
5	SF1-TH	X	-.000476	-.000476	0	%100
6	SF2-TH	X	-.002	-.002	0	%100
7	GSIP-1A	X	-.002	-.002	0	%100
8	GSIP-1B	X	-.000528	-.000528	0	%100
9	GSIP-2A	X	-.000528	-.000528	0	%100
10	GSIP-2B	X	-.002	-.002	0	%100
11	GSIP-3A	X	-.002	-.002	0	%100
12	GSIP-3B	X	-.002	-.002	0	%100
13	GSI-1A	X	-.003	-.003	0	%100
14	GSI-1B	X	-.003	-.003	0	%100
15	GSI-2A	X	-.002	-.002	0	%100
16	GSI-2B	X	-.002	-.002	0	%100
17	GSI-3A	X	-.000705	-.000705	0	%100
18	GSI-3B	X	-.000705	-.000705	0	%100
19	SA-1	X	-.000821	-.000821	0	%100
20	SA-2	X	-.002	-.002	0	%100
21	SA-3	X	-.003	-.003	0	%100
22	MP-1	X	-.002	-.002	0	%100
23	MP-2	X	-.002	-.002	0	%100
24	MP-3	X	-.002	-.002	0	%100
25	MP-4	X	-.002	-.002	0	%100
26	MP-5	X	-.002	-.002	0	%100
27	MP-6	X	-.002	-.002	0	%100
28	MP-7	X	-.002	-.002	0	%100
29	MP-8	X	-.002	-.002	0	%100
30	MP-9	X	-.002	-.002	0	%100
31	CP-1	Z	-.004	-.004	0	%100
32	CP-2	Z	-.002	-.002	0	%100
33	CP-3	Z	-.001	-.001	0	%100
34	FF-TH	Z	-.001	-.001	0	%100

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Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
35	SF1-TH	Z	-.000582	-.000582	0	%100
36	SF2-TH	Z	-.002	-.002	0	%100
37	GSIP-1A	Z	-.001	-.001	0	%100
38	GSIP-1B	Z	-.000585	-.000585	0	%100
39	GSIP-2A	Z	-.000585	-.000585	0	%100
40	GSIP-2B	Z	-.002	-.002	0	%100
41	GSIP-3A	Z	-.002	-.002	0	%100
42	GSIP-3B	Z	-.001	-.001	0	%100
43	GSI-1A	Z	-.003	-.003	0	%100
44	GSI-1B	Z	-.003	-.003	0	%100
45	GSI-2A	Z	-.002	-.002	0	%100
46	GSI-2B	Z	-.002	-.002	0	%100
47	GSI-3A	Z	-.000752	-.000752	0	%100
48	GSI-3B	Z	-.000752	-.000752	0	%100
49	SA-1	Z	-.000743	-.000743	0	%100
50	SA-2	Z	-.002	-.002	0	%100
51	SA-3	Z	-.003	-.003	0	%100
52	MP-1	Z	-.002	-.002	0	%100
53	MP-2	Z	-.002	-.002	0	%100
54	MP-3	Z	-.002	-.002	0	%100
55	MP-4	Z	-.002	-.002	0	%100
56	MP-5	Z	-.002	-.002	0	%100
57	MP-6	Z	-.002	-.002	0	%100
58	MP-7	Z	-.002	-.002	0	%100
59	MP-8	Z	-.002	-.002	0	%100
60	MP-9	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.003	-.003	0	%100
2	CP-2	X	-.001	-.001	0	%100
3	CP-3	X	-.001	-.001	0	%100
4	FF-TH	X	-.000829	-.000829	0	%100
5	SF1-TH	X	-.00065	-.00065	0	%100
6	SF2-TH	X	-.001	-.001	0	%100
7	GSIP-1A	X	-.000826	-.000826	0	%100
8	GSIP-1B	X	-.000721	-.000721	0	%100
9	GSIP-2A	X	-.000721	-.000721	0	%100
10	GSIP-2B	X	-.001	-.001	0	%100
11	GSIP-3A	X	-.001	-.001	0	%100
12	GSIP-3B	X	-.000826	-.000826	0	%100
13	GSI-1A	X	-.002	-.002	0	%100
14	GSI-1B	X	-.002	-.002	0	%100
15	GSI-2A	X	-.001	-.001	0	%100
16	GSI-2B	X	-.001	-.001	0	%100
17	GSI-3A	X	-.000964	-.000964	0	%100
18	GSI-3B	X	-.000964	-.000964	0	%100
19	SA-1	X	0	0	0	%100
20	SA-2	X	-.002	-.002	0	%100
21	SA-3	X	-.002	-.002	0	%100
22	MP-1	X	-.001	-.001	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	MP-2	X	-.001	-.001	0	%100
24	MP-3	X	-.001	-.001	0	%100
25	MP-4	X	-.001	-.001	0	%100
26	MP-5	X	-.001	-.001	0	%100
27	MP-6	X	-.001	-.001	0	%100
28	MP-7	X	-.001	-.001	0	%100
29	MP-8	X	-.001	-.001	0	%100
30	MP-9	X	-.001	-.001	0	%100
31	CP-1	Z	-.005	-.005	0	%100
32	CP-2	Z	-.002	-.002	0	%100
33	CP-3	Z	-.002	-.002	0	%100
34	FF-TH	Z	-.001	-.001	0	%100
35	SF1-TH	Z	-.001	-.001	0	%100
36	SF2-TH	Z	-.003	-.003	0	%100
37	GSIP-1A	Z	-.001	-.001	0	%100
38	GSIP-1B	Z	-.001	-.001	0	%100
39	GSIP-2A	Z	-.001	-.001	0	%100
40	GSIP-2B	Z	-.003	-.003	0	%100
41	GSIP-3A	Z	-.003	-.003	0	%100
42	GSIP-3B	Z	-.001	-.001	0	%100
43	GSI-1A	Z	-.004	-.004	0	%100
44	GSI-1B	Z	-.004	-.004	0	%100
45	GSI-2A	Z	-.002	-.002	0	%100
46	GSI-2B	Z	-.002	-.002	0	%100
47	GSI-3A	Z	-.002	-.002	0	%100
48	GSI-3B	Z	-.002	-.002	0	%100
49	SA-1	Z	0	0	0	%100
50	SA-2	Z	-.003	-.003	0	%100
51	SA-3	Z	-.003	-.003	0	%100
52	MP-1	Z	-.002	-.002	0	%100
53	MP-2	Z	-.002	-.002	0	%100
54	MP-3	Z	-.002	-.002	0	%100
55	MP-4	Z	-.002	-.002	0	%100
56	MP-5	Z	-.002	-.002	0	%100
57	MP-6	Z	-.002	-.002	0	%100
58	MP-7	Z	-.002	-.002	0	%100
59	MP-8	Z	-.002	-.002	0	%100
60	MP-9	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	Z	-.005	-.005	0	%100
2	CP-2	Z	0	0	0	%100
3	CP-3	Z	-.005	-.005	0	%100
4	FF-TH	Z	0	0	0	%100
5	SF1-TH	Z	-.003	-.003	0	%100
6	SF2-TH	Z	-.003	-.003	0	%100
7	GSIP-1A	Z	0	0	0	%100
8	GSIP-1B	Z	-.003	-.003	0	%100
9	GSIP-2A	Z	-.003	-.003	0	%100
10	GSIP-2B	Z	-.003	-.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
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Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 23 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	GSIP-3A	Z	-.003	-.003	0	%100
12	GSIP-3B	Z	0	0	0	%100
13	GSI-1A	Z	-.004	-.004	0	%100
14	GSI-1B	Z	-.004	-.004	0	%100
15	GSI-2A	Z	0	0	0	%100
16	GSI-2B	Z	0	0	0	%100
17	GSI-3A	Z	-.004	-.004	0	%100
18	GSI-3B	Z	-.004	-.004	0	%100
19	SA-1	Z	-.002	-.002	0	%100
20	SA-2	Z	-.005	-.005	0	%100
21	SA-3	Z	-.002	-.002	0	%100
22	MP-1	Z	-.002	-.002	0	%100
23	MP-2	Z	-.002	-.002	0	%100
24	MP-3	Z	-.002	-.002	0	%100
25	MP-4	Z	-.002	-.002	0	%100
26	MP-5	Z	-.002	-.002	0	%100
27	MP-6	Z	-.002	-.002	0	%100
28	MP-7	Z	-.002	-.002	0	%100
29	MP-8	Z	-.002	-.002	0	%100
30	MP-9	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.001	.001	0	%100
2	CP-2	X	.001	.001	0	%100
3	CP-3	X	.003	.003	0	%100
4	FF-TH	X	.000829	.000829	0	%100
5	SF1-TH	X	.001	.001	0	%100
6	SF2-TH	X	.00065	.00065	0	%100
7	GSIP-1A	X	.000826	.000826	0	%100
8	GSIP-1B	X	.001	.001	0	%100
9	GSIP-2A	X	.001	.001	0	%100
10	GSIP-2B	X	.000721	.000721	0	%100
11	GSIP-3A	X	.000721	.000721	0	%100
12	GSIP-3B	X	.000826	.000826	0	%100
13	GSI-1A	X	.000964	.000964	0	%100
14	GSI-1B	X	.000964	.000964	0	%100
15	GSI-2A	X	.001	.001	0	%100
16	GSI-2B	X	.001	.001	0	%100
17	GSI-3A	X	.002	.002	0	%100
18	GSI-3B	X	.002	.002	0	%100
19	SA-1	X	.002	.002	0	%100
20	SA-2	X	.002	.002	0	%100
21	SA-3	X	0	0	0	%100
22	MP-1	X	.001	.001	0	%100
23	MP-2	X	.001	.001	0	%100
24	MP-3	X	.001	.001	0	%100
25	MP-4	X	.001	.001	0	%100
26	MP-5	X	.001	.001	0	%100
27	MP-6	X	.001	.001	0	%100
28	MP-7	X	.001	.001	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-8	X	.001	.001	0	%100
30	MP-9	X	.001	.001	0	%100
31	CP-1	Z	-.002	-.002	0	%100
32	CP-2	Z	-.002	-.002	0	%100
33	CP-3	Z	-.005	-.005	0	%100
34	FF-TH	Z	-.001	-.001	0	%100
35	SF1-TH	Z	-.003	-.003	0	%100
36	SF2-TH	Z	-.001	-.001	0	%100
37	GSIP-1A	Z	-.001	-.001	0	%100
38	GSIP-1B	Z	-.003	-.003	0	%100
39	GSIP-2A	Z	-.003	-.003	0	%100
40	GSIP-2B	Z	-.001	-.001	0	%100
41	GSIP-3A	Z	-.001	-.001	0	%100
42	GSIP-3B	Z	-.001	-.001	0	%100
43	GSI-1A	Z	-.002	-.002	0	%100
44	GSI-1B	Z	-.002	-.002	0	%100
45	GSI-2A	Z	-.002	-.002	0	%100
46	GSI-2B	Z	-.002	-.002	0	%100
47	GSI-3A	Z	-.004	-.004	0	%100
48	GSI-3B	Z	-.004	-.004	0	%100
49	SA-1	Z	-.003	-.003	0	%100
50	SA-2	Z	-.003	-.003	0	%100
51	SA-3	Z	0	0	0	%100
52	MP-1	Z	-.002	-.002	0	%100
53	MP-2	Z	-.002	-.002	0	%100
54	MP-3	Z	-.002	-.002	0	%100
55	MP-4	Z	-.002	-.002	0	%100
56	MP-5	Z	-.002	-.002	0	%100
57	MP-6	Z	-.002	-.002	0	%100
58	MP-7	Z	-.002	-.002	0	%100
59	MP-8	Z	-.002	-.002	0	%100
60	MP-9	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.001	.001	0	%100
2	CP-2	X	.003	.003	0	%100
3	CP-3	X	.004	.004	0	%100
4	FF-TH	X	.002	.002	0	%100
5	SF1-TH	X	.002	.002	0	%100
6	SF2-TH	X	.000476	.000476	0	%100
7	GSIP-1A	X	.002	.002	0	%100
8	GSIP-1B	X	.002	.002	0	%100
9	GSIP-2A	X	.002	.002	0	%100
10	GSIP-2B	X	.000528	.000528	0	%100
11	GSIP-3A	X	.000528	.000528	0	%100
12	GSIP-3B	X	.002	.002	0	%100
13	GSI-1A	X	.000705	.000705	0	%100
14	GSI-1B	X	.000705	.000705	0	%100
15	GSI-2A	X	.002	.002	0	%100
16	GSI-2B	X	.002	.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
17	GSI-3A	X	.003	.003	0	%100
18	GSI-3B	X	.003	.003	0	%100
19	SA-1	X	.003	.003	0	%100
20	SA-2	X	.002	.002	0	%100
21	SA-3	X	.000821	.000821	0	%100
22	MP-1	X	.002	.002	0	%100
23	MP-2	X	.002	.002	0	%100
24	MP-3	X	.002	.002	0	%100
25	MP-4	X	.002	.002	0	%100
26	MP-5	X	.002	.002	0	%100
27	MP-6	X	.002	.002	0	%100
28	MP-7	X	.002	.002	0	%100
29	MP-8	X	.002	.002	0	%100
30	MP-9	X	.002	.002	0	%100
31	CP-1	Z	-.001	-.001	0	%100
32	CP-2	Z	-.002	-.002	0	%100
33	CP-3	Z	-.004	-.004	0	%100
34	FF-TH	Z	-.001	-.001	0	%100
35	SF1-TH	Z	-.002	-.002	0	%100
36	SF2-TH	Z	-.000582	-.000582	0	%100
37	GSIP-1A	Z	-.001	-.001	0	%100
38	GSIP-1B	Z	-.002	-.002	0	%100
39	GSIP-2A	Z	-.002	-.002	0	%100
40	GSIP-2B	Z	-.000585	-.000585	0	%100
41	GSIP-3A	Z	-.000585	-.000585	0	%100
42	GSIP-3B	Z	-.001	-.001	0	%100
43	GSI-1A	Z	-.000752	-.000752	0	%100
44	GSI-1B	Z	-.000752	-.000752	0	%100
45	GSI-2A	Z	-.002	-.002	0	%100
46	GSI-2B	Z	-.002	-.002	0	%100
47	GSI-3A	Z	-.003	-.003	0	%100
48	GSI-3B	Z	-.003	-.003	0	%100
49	SA-1	Z	-.003	-.003	0	%100
50	SA-2	Z	-.002	-.002	0	%100
51	SA-3	Z	-.000743	-.000743	0	%100
52	MP-1	Z	-.002	-.002	0	%100
53	MP-2	Z	-.002	-.002	0	%100
54	MP-3	Z	-.002	-.002	0	%100
55	MP-4	Z	-.002	-.002	0	%100
56	MP-5	Z	-.002	-.002	0	%100
57	MP-6	Z	-.002	-.002	0	%100
58	MP-7	Z	-.002	-.002	0	%100
59	MP-8	Z	-.002	-.002	0	%100
60	MP-9	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	0	0	0	%100
2	CP-2	X	.004	.004	0	%100
3	CP-3	X	.004	.004	0	%100
4	FF-TH	X	.002	.002	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	SF1-TH	X	.002	.002	0	%100
6	SF2-TH	X	0	0	0	%100
7	GSIP-1A	X	.002	.002	0	%100
8	GSIP-1B	X	.002	.002	0	%100
9	GSIP-2A	X	.002	.002	0	%100
10	GSIP-2B	X	0	0	0	%100
11	GSIP-3A	X	0	0	0	%100
12	GSIP-3B	X	.002	.002	0	%100
13	GSI-1A	X	0	0	0	%100
14	GSI-1B	X	0	0	0	%100
15	GSI-2A	X	.003	.003	0	%100
16	GSI-2B	X	.003	.003	0	%100
17	GSI-3A	X	.003	.003	0	%100
18	GSI-3B	X	.003	.003	0	%100
19	SA-1	X	.004	.004	0	%100
20	SA-2	X	.002	.002	0	%100
21	SA-3	X	.002	.002	0	%100
22	MP-1	X	.002	.002	0	%100
23	MP-2	X	.002	.002	0	%100
24	MP-3	X	.002	.002	0	%100
25	MP-4	X	.002	.002	0	%100
26	MP-5	X	.002	.002	0	%100
27	MP-6	X	.002	.002	0	%100
28	MP-7	X	.002	.002	0	%100
29	MP-8	X	.002	.002	0	%100
30	MP-9	X	.002	.002	0	%100
31	CP-1	Z	0	0	0	%100
32	CP-2	Z	-.002	-.002	0	%100
33	CP-3	Z	-.002	-.002	0	%100
34	FF-TH	Z	-.001	-.001	0	%100
35	SF1-TH	Z	-.001	-.001	0	%100
36	SF2-TH	Z	0	0	0	%100
37	GSIP-1A	Z	-.001	-.001	0	%100
38	GSIP-1B	Z	-.001	-.001	0	%100
39	GSIP-2A	Z	-.001	-.001	0	%100
40	GSIP-2B	Z	0	0	0	%100
41	GSIP-3A	Z	0	0	0	%100
42	GSIP-3B	Z	-.001	-.001	0	%100
43	GSI-1A	Z	0	0	0	%100
44	GSI-1B	Z	0	0	0	%100
45	GSI-2A	Z	-.002	-.002	0	%100
46	GSI-2B	Z	-.002	-.002	0	%100
47	GSI-3A	Z	-.002	-.002	0	%100
48	GSI-3B	Z	-.002	-.002	0	%100
49	SA-1	Z	-.002	-.002	0	%100
50	SA-2	Z	-.001	-.001	0	%100
51	SA-3	Z	-.001	-.001	0	%100
52	MP-1	Z	-.001	-.001	0	%100
53	MP-2	Z	-.001	-.001	0	%100
54	MP-3	Z	-.001	-.001	0	%100
55	MP-4	Z	-.001	-.001	0	%100
56	MP-5	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
57	MP-6	Z	-.001	-.001	0	%100
58	MP-7	Z	-.001	-.001	0	%100
59	MP-8	Z	-.001	-.001	0	%100
60	MP-9	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.006	.006	0	%100
2	CP-2	X	.006	.006	0	%100
3	CP-3	X	.006	.006	0	%100
4	FF-TH	X	.003	.003	0	%100
5	SF1-TH	X	.003	.003	0	%100
6	SF2-TH	X	.003	.003	0	%100
7	GSIP-1A	X	.003	.003	0	%100
8	GSIP-1B	X	.003	.003	0	%100
9	GSIP-2A	X	.003	.003	0	%100
10	GSIP-2B	X	.003	.003	0	%100
11	GSIP-3A	X	.003	.003	0	%100
12	GSIP-3B	X	.003	.003	0	%100
13	GSI-1A	X	.004	.004	0	%100
14	GSI-1B	X	.004	.004	0	%100
15	GSI-2A	X	.004	.004	0	%100
16	GSI-2B	X	.004	.004	0	%100
17	GSI-3A	X	.004	.004	0	%100
18	GSI-3B	X	.004	.004	0	%100
19	SA-1	X	.004	.004	0	%100
20	SA-2	X	.004	.004	0	%100
21	SA-3	X	.004	.004	0	%100
22	MP-1	X	.002	.002	0	%100
23	MP-2	X	.002	.002	0	%100
24	MP-3	X	.002	.002	0	%100
25	MP-4	X	.002	.002	0	%100
26	MP-5	X	.002	.002	0	%100
27	MP-6	X	.002	.002	0	%100
28	MP-7	X	.002	.002	0	%100
29	MP-8	X	.002	.002	0	%100
30	MP-9	X	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.004	.004	0	%100
2	CP-2	X	.004	.004	0	%100
3	CP-3	X	0	0	0	%100
4	FF-TH	X	.002	.002	0	%100
5	SF1-TH	X	0	0	0	%100
6	SF2-TH	X	.002	.002	0	%100
7	GSIP-1A	X	.002	.002	0	%100
8	GSIP-1B	X	0	0	0	%100
9	GSIP-2A	X	0	0	0	%100
10	GSIP-2B	X	.002	.002	0	%100
11	GSIP-3A	X	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	GSIP-3B	X	.002	.002	0	%100
13	GSI-1A	X	.003	.003	0	%100
14	GSI-1B	X	.003	.003	0	%100
15	GSI-2A	X	.003	.003	0	%100
16	GSI-2B	X	.003	.003	0	%100
17	GSI-3A	X	0	0	0	%100
18	GSI-3B	X	0	0	0	%100
19	SA-1	X	.002	.002	0	%100
20	SA-2	X	.002	.002	0	%100
21	SA-3	X	.004	.004	0	%100
22	MP-1	X	.002	.002	0	%100
23	MP-2	X	.002	.002	0	%100
24	MP-3	X	.002	.002	0	%100
25	MP-4	X	.002	.002	0	%100
26	MP-5	X	.002	.002	0	%100
27	MP-6	X	.002	.002	0	%100
28	MP-7	X	.002	.002	0	%100
29	MP-8	X	.002	.002	0	%100
30	MP-9	X	.002	.002	0	%100
31	CP-1	Z	.002	.002	0	%100
32	CP-2	Z	.002	.002	0	%100
33	CP-3	Z	0	0	0	%100
34	FF-TH	Z	.001	.001	0	%100
35	SF1-TH	Z	0	0	0	%100
36	SF2-TH	Z	.001	.001	0	%100
37	GSIP-1A	Z	.001	.001	0	%100
38	GSIP-1B	Z	0	0	0	%100
39	GSIP-2A	Z	0	0	0	%100
40	GSIP-2B	Z	.001	.001	0	%100
41	GSIP-3A	Z	.001	.001	0	%100
42	GSIP-3B	Z	.001	.001	0	%100
43	GSI-1A	Z	.002	.002	0	%100
44	GSI-1B	Z	.002	.002	0	%100
45	GSI-2A	Z	.002	.002	0	%100
46	GSI-2B	Z	.002	.002	0	%100
47	GSI-3A	Z	0	0	0	%100
48	GSI-3B	Z	0	0	0	%100
49	SA-1	Z	.001	.001	0	%100
50	SA-2	Z	.001	.001	0	%100
51	SA-3	Z	.002	.002	0	%100
52	MP-1	Z	.001	.001	0	%100
53	MP-2	Z	.001	.001	0	%100
54	MP-3	Z	.001	.001	0	%100
55	MP-4	Z	.001	.001	0	%100
56	MP-5	Z	.001	.001	0	%100
57	MP-6	Z	.001	.001	0	%100
58	MP-7	Z	.001	.001	0	%100
59	MP-8	Z	.001	.001	0	%100
60	MP-9	Z	.001	.001	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.004	.004	0	%100
2	CP-2	X	.003	.003	0	%100
3	CP-3	X	.001	.001	0	%100
4	FF-TH	X	.002	.002	0	%100
5	SF1-TH	X	.000476	.000476	0	%100
6	SF2-TH	X	.002	.002	0	%100
7	GSIP-1A	X	.002	.002	0	%100
8	GSIP-1B	X	.000528	.000528	0	%100
9	GSIP-2A	X	.000528	.000528	0	%100
10	GSIP-2B	X	.002	.002	0	%100
11	GSIP-3A	X	.002	.002	0	%100
12	GSIP-3B	X	.002	.002	0	%100
13	GSI-1A	X	.003	.003	0	%100
14	GSI-1B	X	.003	.003	0	%100
15	GSI-2A	X	.002	.002	0	%100
16	GSI-2B	X	.002	.002	0	%100
17	GSI-3A	X	.000705	.000705	0	%100
18	GSI-3B	X	.000705	.000705	0	%100
19	SA-1	X	.000821	.000821	0	%100
20	SA-2	X	.002	.002	0	%100
21	SA-3	X	.003	.003	0	%100
22	MP-1	X	.002	.002	0	%100
23	MP-2	X	.002	.002	0	%100
24	MP-3	X	.002	.002	0	%100
25	MP-4	X	.002	.002	0	%100
26	MP-5	X	.002	.002	0	%100
27	MP-6	X	.002	.002	0	%100
28	MP-7	X	.002	.002	0	%100
29	MP-8	X	.002	.002	0	%100
30	MP-9	X	.002	.002	0	%100
31	CP-1	Z	.004	.004	0	%100
32	CP-2	Z	.002	.002	0	%100
33	CP-3	Z	.001	.001	0	%100
34	FF-TH	Z	.001	.001	0	%100
35	SF1-TH	Z	.000582	.000582	0	%100
36	SF2-TH	Z	.002	.002	0	%100
37	GSIP-1A	Z	.001	.001	0	%100
38	GSIP-1B	Z	.000585	.000585	0	%100
39	GSIP-2A	Z	.000585	.000585	0	%100
40	GSIP-2B	Z	.002	.002	0	%100
41	GSIP-3A	Z	.002	.002	0	%100
42	GSIP-3B	Z	.001	.001	0	%100
43	GSI-1A	Z	.003	.003	0	%100
44	GSI-1B	Z	.003	.003	0	%100
45	GSI-2A	Z	.002	.002	0	%100
46	GSI-2B	Z	.002	.002	0	%100
47	GSI-3A	Z	.000752	.000752	0	%100
48	GSI-3B	Z	.000752	.000752	0	%100
49	SA-1	Z	.000743	.000743	0	%100
50	SA-2	Z	.002	.002	0	%100
51	SA-3	Z	.003	.003	0	%100
52	MP-1	Z	.002	.002	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	MP-2	Z	.002	.002	0	%100
54	MP-3	Z	.002	.002	0	%100
55	MP-4	Z	.002	.002	0	%100
56	MP-5	Z	.002	.002	0	%100
57	MP-6	Z	.002	.002	0	%100
58	MP-7	Z	.002	.002	0	%100
59	MP-8	Z	.002	.002	0	%100
60	MP-9	Z	.002	.002	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	.003	.003	0	%100
2	CP-2	X	.001	.001	0	%100
3	CP-3	X	.001	.001	0	%100
4	FF-TH	X	.000829	.000829	0	%100
5	SF1-TH	X	.00065	.00065	0	%100
6	SF2-TH	X	.001	.001	0	%100
7	GSIP-1A	X	.000826	.000826	0	%100
8	GSIP-1B	X	.000721	.000721	0	%100
9	GSIP-2A	X	.000721	.000721	0	%100
10	GSIP-2B	X	.001	.001	0	%100
11	GSIP-3A	X	.001	.001	0	%100
12	GSIP-3B	X	.000826	.000826	0	%100
13	GSI-1A	X	.002	.002	0	%100
14	GSI-1B	X	.002	.002	0	%100
15	GSI-2A	X	.001	.001	0	%100
16	GSI-2B	X	.001	.001	0	%100
17	GSI-3A	X	.000964	.000964	0	%100
18	GSI-3B	X	.000964	.000964	0	%100
19	SA-1	X	0	0	0	%100
20	SA-2	X	.002	.002	0	%100
21	SA-3	X	.002	.002	0	%100
22	MP-1	X	.001	.001	0	%100
23	MP-2	X	.001	.001	0	%100
24	MP-3	X	.001	.001	0	%100
25	MP-4	X	.001	.001	0	%100
26	MP-5	X	.001	.001	0	%100
27	MP-6	X	.001	.001	0	%100
28	MP-7	X	.001	.001	0	%100
29	MP-8	X	.001	.001	0	%100
30	MP-9	X	.001	.001	0	%100
31	CP-1	Z	.005	.005	0	%100
32	CP-2	Z	.002	.002	0	%100
33	CP-3	Z	.002	.002	0	%100
34	FF-TH	Z	.001	.001	0	%100
35	SF1-TH	Z	.001	.001	0	%100
36	SF2-TH	Z	.003	.003	0	%100
37	GSIP-1A	Z	.001	.001	0	%100
38	GSIP-1B	Z	.001	.001	0	%100
39	GSIP-2A	Z	.001	.001	0	%100
40	GSIP-2B	Z	.003	.003	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
41	GSIP-3A	Z	.003	.003	0	%100
42	GSIP-3B	Z	.001	.001	0	%100
43	GSI-1A	Z	.004	.004	0	%100
44	GSI-1B	Z	.004	.004	0	%100
45	GSI-2A	Z	.002	.002	0	%100
46	GSI-2B	Z	.002	.002	0	%100
47	GSI-3A	Z	.002	.002	0	%100
48	GSI-3B	Z	.002	.002	0	%100
49	SA-1	Z	0	0	0	%100
50	SA-2	Z	.003	.003	0	%100
51	SA-3	Z	.003	.003	0	%100
52	MP-1	Z	.002	.002	0	%100
53	MP-2	Z	.002	.002	0	%100
54	MP-3	Z	.002	.002	0	%100
55	MP-4	Z	.002	.002	0	%100
56	MP-5	Z	.002	.002	0	%100
57	MP-6	Z	.002	.002	0	%100
58	MP-7	Z	.002	.002	0	%100
59	MP-8	Z	.002	.002	0	%100
60	MP-9	Z	.002	.002	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	Z	.005	.005	0	%100
2	CP-2	Z	0	0	0	%100
3	CP-3	Z	.005	.005	0	%100
4	FF-TH	Z	0	0	0	%100
5	SF1-TH	Z	.003	.003	0	%100
6	SF2-TH	Z	.003	.003	0	%100
7	GSIP-1A	Z	0	0	0	%100
8	GSIP-1B	Z	.003	.003	0	%100
9	GSIP-2A	Z	.003	.003	0	%100
10	GSIP-2B	Z	.003	.003	0	%100
11	GSIP-3A	Z	.003	.003	0	%100
12	GSIP-3B	Z	0	0	0	%100
13	GSI-1A	Z	.004	.004	0	%100
14	GSI-1B	Z	.004	.004	0	%100
15	GSI-2A	Z	0	0	0	%100
16	GSI-2B	Z	0	0	0	%100
17	GSI-3A	Z	.004	.004	0	%100
18	GSI-3B	Z	.004	.004	0	%100
19	SA-1	Z	.002	.002	0	%100
20	SA-2	Z	.005	.005	0	%100
21	SA-3	Z	.002	.002	0	%100
22	MP-1	Z	.002	.002	0	%100
23	MP-2	Z	.002	.002	0	%100
24	MP-3	Z	.002	.002	0	%100
25	MP-4	Z	.002	.002	0	%100
26	MP-5	Z	.002	.002	0	%100
27	MP-6	Z	.002	.002	0	%100
28	MP-7	Z	.002	.002	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-8	Z	.002	.002	0	%100
30	MP-9	Z	.002	.002	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.001	-.001	0	%100
2	CP-2	X	-.001	-.001	0	%100
3	CP-3	X	-.003	-.003	0	%100
4	FF-TH	X	-.000829	-.000829	0	%100
5	SF1-TH	X	-.001	-.001	0	%100
6	SF2-TH	X	-.00065	-.00065	0	%100
7	GSIP-1A	X	-.000826	-.000826	0	%100
8	GSIP-1B	X	-.001	-.001	0	%100
9	GSIP-2A	X	-.001	-.001	0	%100
10	GSIP-2B	X	-.000721	-.000721	0	%100
11	GSIP-3A	X	-.000721	-.000721	0	%100
12	GSIP-3B	X	-.000826	-.000826	0	%100
13	GSI-1A	X	-.000964	-.000964	0	%100
14	GSI-1B	X	-.000964	-.000964	0	%100
15	GSI-2A	X	-.001	-.001	0	%100
16	GSI-2B	X	-.001	-.001	0	%100
17	GSI-3A	X	-.002	-.002	0	%100
18	GSI-3B	X	-.002	-.002	0	%100
19	SA-1	X	-.002	-.002	0	%100
20	SA-2	X	-.002	-.002	0	%100
21	SA-3	X	0	0	0	%100
22	MP-1	X	-.001	-.001	0	%100
23	MP-2	X	-.001	-.001	0	%100
24	MP-3	X	-.001	-.001	0	%100
25	MP-4	X	-.001	-.001	0	%100
26	MP-5	X	-.001	-.001	0	%100
27	MP-6	X	-.001	-.001	0	%100
28	MP-7	X	-.001	-.001	0	%100
29	MP-8	X	-.001	-.001	0	%100
30	MP-9	X	-.001	-.001	0	%100
31	CP-1	Z	.002	.002	0	%100
32	CP-2	Z	.002	.002	0	%100
33	CP-3	Z	.005	.005	0	%100
34	FF-TH	Z	.001	.001	0	%100
35	SF1-TH	Z	.003	.003	0	%100
36	SF2-TH	Z	.001	.001	0	%100
37	GSIP-1A	Z	.001	.001	0	%100
38	GSIP-1B	Z	.003	.003	0	%100
39	GSIP-2A	Z	.003	.003	0	%100
40	GSIP-2B	Z	.001	.001	0	%100
41	GSIP-3A	Z	.001	.001	0	%100
42	GSIP-3B	Z	.001	.001	0	%100
43	GSI-1A	Z	.002	.002	0	%100
44	GSI-1B	Z	.002	.002	0	%100
45	GSI-2A	Z	.002	.002	0	%100
46	GSI-2B	Z	.002	.002	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
47	GSI-3A	Z	.004	.004	0	%100
48	GSI-3B	Z	.004	.004	0	%100
49	SA-1	Z	.003	.003	0	%100
50	SA-2	Z	.003	.003	0	%100
51	SA-3	Z	0	0	0	%100
52	MP-1	Z	.002	.002	0	%100
53	MP-2	Z	.002	.002	0	%100
54	MP-3	Z	.002	.002	0	%100
55	MP-4	Z	.002	.002	0	%100
56	MP-5	Z	.002	.002	0	%100
57	MP-6	Z	.002	.002	0	%100
58	MP-7	Z	.002	.002	0	%100
59	MP-8	Z	.002	.002	0	%100
60	MP-9	Z	.002	.002	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	-.001	-.001	0	%100
2	CP-2	X	-.003	-.003	0	%100
3	CP-3	X	-.004	-.004	0	%100
4	FF-TH	X	-.002	-.002	0	%100
5	SF1-TH	X	-.002	-.002	0	%100
6	SF2-TH	X	-.000476	-.000476	0	%100
7	GSIP-1A	X	-.002	-.002	0	%100
8	GSIP-1B	X	-.002	-.002	0	%100
9	GSIP-2A	X	-.002	-.002	0	%100
10	GSIP-2B	X	-.000528	-.000528	0	%100
11	GSIP-3A	X	-.000528	-.000528	0	%100
12	GSIP-3B	X	-.002	-.002	0	%100
13	GSI-1A	X	-.000705	-.000705	0	%100
14	GSI-1B	X	-.000705	-.000705	0	%100
15	GSI-2A	X	-.002	-.002	0	%100
16	GSI-2B	X	-.002	-.002	0	%100
17	GSI-3A	X	-.003	-.003	0	%100
18	GSI-3B	X	-.003	-.003	0	%100
19	SA-1	X	-.003	-.003	0	%100
20	SA-2	X	-.002	-.002	0	%100
21	SA-3	X	-.000821	-.000821	0	%100
22	MP-1	X	-.002	-.002	0	%100
23	MP-2	X	-.002	-.002	0	%100
24	MP-3	X	-.002	-.002	0	%100
25	MP-4	X	-.002	-.002	0	%100
26	MP-5	X	-.002	-.002	0	%100
27	MP-6	X	-.002	-.002	0	%100
28	MP-7	X	-.002	-.002	0	%100
29	MP-8	X	-.002	-.002	0	%100
30	MP-9	X	-.002	-.002	0	%100
31	CP-1	Z	.001	.001	0	%100
32	CP-2	Z	.002	.002	0	%100
33	CP-3	Z	.004	.004	0	%100
34	FF-TH	Z	.001	.001	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
35	SF1-TH	Z	.002	.002	0	%100
36	SF2-TH	Z	.000582	.000582	0	%100
37	GSIP-1A	Z	.001	.001	0	%100
38	GSIP-1B	Z	.002	.002	0	%100
39	GSIP-2A	Z	.002	.002	0	%100
40	GSIP-2B	Z	.000585	.000585	0	%100
41	GSIP-3A	Z	.000585	.000585	0	%100
42	GSIP-3B	Z	.001	.001	0	%100
43	GSI-1A	Z	.000752	.000752	0	%100
44	GSI-1B	Z	.000752	.000752	0	%100
45	GSI-2A	Z	.002	.002	0	%100
46	GSI-2B	Z	.002	.002	0	%100
47	GSI-3A	Z	.003	.003	0	%100
48	GSI-3B	Z	.003	.003	0	%100
49	SA-1	Z	.003	.003	0	%100
50	SA-2	Z	.002	.002	0	%100
51	SA-3	Z	.000743	.000743	0	%100
52	MP-1	Z	.002	.002	0	%100
53	MP-2	Z	.002	.002	0	%100
54	MP-3	Z	.002	.002	0	%100
55	MP-4	Z	.002	.002	0	%100
56	MP-5	Z	.002	.002	0	%100
57	MP-6	Z	.002	.002	0	%100
58	MP-7	Z	.002	.002	0	%100
59	MP-8	Z	.002	.002	0	%100
60	MP-9	Z	.002	.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	X	0	0	0	%100
2	CP-2	X	-.004	-.004	0	%100
3	CP-3	X	-.004	-.004	0	%100
4	FF-TH	X	-.002	-.002	0	%100
5	SF1-TH	X	-.002	-.002	0	%100
6	SF2-TH	X	0	0	0	%100
7	GSIP-1A	X	-.002	-.002	0	%100
8	GSIP-1B	X	-.002	-.002	0	%100
9	GSIP-2A	X	-.002	-.002	0	%100
10	GSIP-2B	X	0	0	0	%100
11	GSIP-3A	X	0	0	0	%100
12	GSIP-3B	X	-.002	-.002	0	%100
13	GSI-1A	X	0	0	0	%100
14	GSI-1B	X	0	0	0	%100
15	GSI-2A	X	-.003	-.003	0	%100
16	GSI-2B	X	-.003	-.003	0	%100
17	GSI-3A	X	-.003	-.003	0	%100
18	GSI-3B	X	-.003	-.003	0	%100
19	SA-1	X	-.004	-.004	0	%100
20	SA-2	X	-.002	-.002	0	%100
21	SA-3	X	-.002	-.002	0	%100
22	MP-1	X	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	MP-2	X	-.002	-.002	0	%100
24	MP-3	X	-.002	-.002	0	%100
25	MP-4	X	-.002	-.002	0	%100
26	MP-5	X	-.002	-.002	0	%100
27	MP-6	X	-.002	-.002	0	%100
28	MP-7	X	-.002	-.002	0	%100
29	MP-8	X	-.002	-.002	0	%100
30	MP-9	X	-.002	-.002	0	%100
31	CP-1	Z	0	0	0	%100
32	CP-2	Z	.002	.002	0	%100
33	CP-3	Z	.002	.002	0	%100
34	FF-TH	Z	.001	.001	0	%100
35	SF1-TH	Z	.001	.001	0	%100
36	SF2-TH	Z	0	0	0	%100
37	GSIP-1A	Z	.001	.001	0	%100
38	GSIP-1B	Z	.001	.001	0	%100
39	GSIP-2A	Z	.001	.001	0	%100
40	GSIP-2B	Z	0	0	0	%100
41	GSIP-3A	Z	0	0	0	%100
42	GSIP-3B	Z	.001	.001	0	%100
43	GSI-1A	Z	0	0	0	%100
44	GSI-1B	Z	0	0	0	%100
45	GSI-2A	Z	.002	.002	0	%100
46	GSI-2B	Z	.002	.002	0	%100
47	GSI-3A	Z	.002	.002	0	%100
48	GSI-3B	Z	.002	.002	0	%100
49	SA-1	Z	.002	.002	0	%100
50	SA-2	Z	.001	.001	0	%100
51	SA-3	Z	.001	.001	0	%100
52	MP-1	Z	.001	.001	0	%100
53	MP-2	Z	.001	.001	0	%100
54	MP-3	Z	.001	.001	0	%100
55	MP-4	Z	.001	.001	0	%100
56	MP-5	Z	.001	.001	0	%100
57	MP-6	Z	.001	.001	0	%100
58	MP-7	Z	.001	.001	0	%100
59	MP-8	Z	.001	.001	0	%100
60	MP-9	Z	.001	.001	0	%100

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	Y	-.001	-.001	.41	.623
2	GSIP-1A	Y	-.00017	-.007	.409	1.146
3	GSIP-1A	Y	-.007	-.009	1.146	1.882
4	GSIP-1A	Y	-.009	-.005	1.882	2.618
5	GSIP-1A	Y	-.005	-.004	2.618	3.355
6	GSIP-1A	Y	-.004	-.0007068	3.355	4.091
7	GSIP-1B	Y	-.0007093	-.004	0	.736
8	GSIP-1B	Y	-.004	-.005	.736	1.473
9	GSIP-1B	Y	-.005	-.009	1.473	2.209
10	GSIP-1B	Y	-.009	-.007	2.209	2.946

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	GSIP-1B	Y	-.007	-.00017	2.946	3.682
12	GSI-1A	Y	-.008	-.008	.536	2.562
13	GSI-1B	Y	-.008	-.008	0	2.027
14	SA-1	Y	-.0003559	-.008	1.556	2.282
15	SA-1	Y	-.008	-.017	2.282	3.009
16	SA-1	Y	-.017	-.015	3.009	3.735
17	SA-1	Y	-.015	-.008	3.735	4.461
18	SA-1	Y	-.008	-.001	4.461	5.187
19	CP-2	Y	-.001	-.001	.41	.623
20	GSIP-2A	Y	-.00017	-.007	.409	1.146
21	GSIP-2A	Y	-.007	-.009	1.146	1.882
22	GSIP-2A	Y	-.009	-.005	1.882	2.618
23	GSIP-2A	Y	-.005	-.004	2.618	3.355
24	GSIP-2A	Y	-.004	-.0007068	3.355	4.091
25	GSIP-2B	Y	-.0007093	-.004	0	.736
26	GSIP-2B	Y	-.004	-.005	.736	1.473
27	GSIP-2B	Y	-.005	-.009	1.473	2.209
28	GSIP-2B	Y	-.009	-.007	2.209	2.946
29	GSIP-2B	Y	-.007	-.00017	2.946	3.682
30	GSI-2A	Y	-.008	-.008	.536	2.562
31	GSI-2B	Y	-.008	-.008	0	2.027
32	SA-2	Y	-.0003559	-.008	1.556	2.282
33	SA-2	Y	-.008	-.017	2.282	3.009
34	SA-2	Y	-.017	-.015	3.009	3.735
35	SA-2	Y	-.015	-.008	3.735	4.461
36	SA-2	Y	-.008	-.001	4.461	5.187
37	CP-3	Y	-.001	-.001	.411	.623
38	GSIP-3A	Y	-.00017	-.007	.409	1.146
39	GSIP-3A	Y	-.007	-.009	1.146	1.882
40	GSIP-3A	Y	-.009	-.005	1.882	2.618
41	GSIP-3A	Y	-.005	-.004	2.618	3.355
42	GSIP-3A	Y	-.004	-.0007068	3.355	4.091
43	GSIP-3B	Y	-.0007068	-.004	0	.736
44	GSIP-3B	Y	-.004	-.005	.736	1.473
45	GSIP-3B	Y	-.005	-.009	1.473	2.209
46	GSIP-3B	Y	-.009	-.007	2.209	2.946
47	GSIP-3B	Y	-.007	-.00017	2.946	3.682
48	GSI-3A	Y	-.008	-.008	.536	2.562
49	GSI-3B	Y	-.008	-.008	0	2.027
50	SA-3	Y	-.0003559	-.008	1.556	2.282
51	SA-3	Y	-.008	-.017	2.282	3.009
52	SA-3	Y	-.017	-.015	3.009	3.735
53	SA-3	Y	-.015	-.008	3.735	4.461
54	SA-3	Y	-.008	-.001	4.461	5.187

Member Distributed Loads (BLC 40 : BLC 18 Transient Area Loads)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	CP-1	Y	-.0007148	-.0007148	.41	.623
2	GSIP-1A	Y	-9.919e-5	-.004	.409	1.146
3	GSIP-1A	Y	-.004	-.005	1.146	1.882
4	GSIP-1A	Y	-.005	-.003	1.882	2.618

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

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Member Distributed Loads (BLC 40 : BLC 18 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	GSIP-1A	Y	-.003	-.002	2.618	3.355
6	GSIP-1A	Y	-.002	-.0004123	3.355	4.091
7	GSIP-1B	Y	-.0004137	-.002	0	.736
8	GSIP-1B	Y	-.002	-.003	.736	1.473
9	GSIP-1B	Y	-.003	-.005	1.473	2.209
10	GSIP-1B	Y	-.005	-.004	2.209	2.946
11	GSIP-1B	Y	-.004	-9.918e-5	2.946	3.682
12	GSI-1A	Y	-.004	-.004	.536	2.562
13	GSI-1B	Y	-.004	-.004	0	2.027
14	SA-1	Y	-.0002076	-.005	1.556	2.282
15	SA-1	Y	-.005	-.01	2.282	3.009
16	SA-1	Y	-.01	-.009	3.009	3.735
17	SA-1	Y	-.009	-.005	3.735	4.461
18	SA-1	Y	-.005	-.0005944	4.461	5.187
19	CP-2	Y	-.0007148	-.0007148	.41	.623
20	GSIP-2A	Y	-9.919e-5	-.004	.409	1.146
21	GSIP-2A	Y	-.004	-.005	1.146	1.882
22	GSIP-2A	Y	-.005	-.003	1.882	2.618
23	GSIP-2A	Y	-.003	-.002	2.618	3.355
24	GSIP-2A	Y	-.002	-.0004123	3.355	4.091
25	GSIP-2B	Y	-.0004137	-.002	0	.736
26	GSIP-2B	Y	-.002	-.003	.736	1.473
27	GSIP-2B	Y	-.003	-.005	1.473	2.209
28	GSIP-2B	Y	-.005	-.004	2.209	2.946
29	GSIP-2B	Y	-.004	-9.918e-5	2.946	3.682
30	GSI-2A	Y	-.004	-.004	.536	2.562
31	GSI-2B	Y	-.004	-.004	0	2.027
32	SA-2	Y	-.0002076	-.005	1.556	2.282
33	SA-2	Y	-.005	-.01	2.282	3.009
34	SA-2	Y	-.01	-.009	3.009	3.735
35	SA-2	Y	-.009	-.005	3.735	4.461
36	SA-2	Y	-.005	-.0005944	4.461	5.187
37	CP-3	Y	-.0007147	-.0007147	.411	.623
38	GSIP-3A	Y	-9.919e-5	-.004	.409	1.146
39	GSIP-3A	Y	-.004	-.005	1.146	1.882
40	GSIP-3A	Y	-.005	-.003	1.882	2.618
41	GSIP-3A	Y	-.003	-.002	2.618	3.355
42	GSIP-3A	Y	-.002	-.0004123	3.355	4.091
43	GSIP-3B	Y	-.0004123	-.002	0	.736
44	GSIP-3B	Y	-.002	-.003	.736	1.473
45	GSIP-3B	Y	-.003	-.005	1.473	2.209
46	GSIP-3B	Y	-.005	-.004	2.209	2.946
47	GSIP-3B	Y	-.004	-9.919e-5	2.946	3.682
48	GSI-3A	Y	-.004	-.004	.536	2.562
49	GSI-3B	Y	-.004	-.004	0	2.027
50	SA-3	Y	-.0002076	-.005	1.556	2.282
51	SA-3	Y	-.005	-.01	2.282	3.009
52	SA-3	Y	-.01	-.009	3.009	3.735
53	SA-3	Y	-.009	-.005	3.735	4.461
54	SA-3	Y	-.005	-.0005934	4.461	5.187

Member Area Loads (BLC 1 : Dead)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	GSIP-1A	GSIP-1B	GSIP-1C	GSIP-1D	Y	Two Way	-.012
2	GSIP-2A	GSIP-2B	GSIP-2C	GSIP-2D	Y	Two Way	-.012
3	GSIP-3A	GSIP-3B	GSIP-3C	GSIP-3D	Y	Two Way	-.012

Member Area Loads (BLC 18 : Ice Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	GSIP-1A	GSIP-1B	GSIP-1C	GSIP-1D	Y	Two Way	-.007
2	GSIP-2A	GSIP-2B	GSIP-2C	GSIP-2D	Y	Two Way	-.007
3	GSIP-3A	GSIP-3B	GSIP-3C	GSIP-3D	Y	Two Way	-.007

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	SA-1	max	.908	18	2.095	45	1.352	21	-.307	6	1.148	33	2.895	43
2		min	-.908	10	.318	5	-1.353	13	-5.335	63	-1.148	9	-.172	3
3	SA-3	max	1.039	18	2.074	39	1.361	23	4.853	39	1.098	27	2.934	41
4		min	-1.04	10	.316	15	-1.361	15	.081	14	-1.098	3	.07	17
5	SA-2	max	1.547	18	2.091	34	.922	22	.706	22	1.21	22	-.273	10
6		min	-1.546	10	.304	10	-.922	14	-.475	14	-1.21	14	-5.987	34
7	Totals:	max	3.494	18	5.894	49	3.454	22						
8		min	-3.494	10	2.315	2	-3.454	14						

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

	Member	Shape	Code Check	Loc[..	LC	Shear..	Loc[..	Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
1	MP-7	PIPE 2.0	.637	6	21	.046	6		21	6.196	32.13	1.872	1.872	1...	H1-1b
2	MP-4	PIPE 2.0	.618	6	31	.045	6		31	6.196	32.13	1.872	1.872	1...	H1-1b
3	MP-1	PIPE 2.0	.618	6	26	.045	6		26	6.196	32.13	1.872	1.872	1...	H1-1b
4	SA-2	HSS4X4X4	.491	0	34	.102	0	y	22	97.439	106.155	12.311	12.311	2...	H1-1b
5	SA-1	HSS4X4X4	.486	0	42	.117	0	y	66	97.439	106.155	12.311	12.311	2...	H1-1b
6	SA-3	HSS4X4X4	.462	0	42	.094	0	y	27	97.439	106.155	12.311	12.311	2...	H1-1b
7	MP-6	PIPE 2.0	.385	6	31	.021	6		31	6.196	32.13	1.872	1.872	1...	H1-1b
8	MP-3	PIPE 2.0	.385	6	26	.021	6		26	6.196	32.13	1.872	1.872	1...	H1-1b
9	MP-8	PIPE 2.0	.344	6	21	.018	6		21	6.196	32.13	1.872	1.872	1...	H1-1b
10	MP-9	PIPE 2.0	.308	6	21	.016	6		21	6.196	32.13	1.872	1.872	1...	H1-1b
11	MP-5	PIPE 2.0	.286	6	31	.014	6		31	6.196	32.13	1.872	1.872	1...	H1-1b
12	MP-2	PIPE 2.0	.286	6	26	.014	6		26	6.196	32.13	1.872	1.872	1...	H1-1b
13	SF2-TH	PIPE 3.0	.272	4.297	21	.212	4.297		21	6.489	65.205	5.749	5.749	1...	H1-1b
14	SF1-TH	PIPE 3.0	.268	4.297	31	.206	4.297		31	6.489	65.205	5.749	5.749	1...	H1-1b
15	FF-TH	PIPE 3.0	.268	4.297	26	.205	4.297		26	6.489	65.205	5.749	5.749	1...	H1-1b
16	GSI-2B	HSS4X4X4	.212	0	21	.232	2.242	z	21	104.744	106.155	12.311	12.311	1...	H3-6
17	CP-2	PL6x1/2	.207	.517	28	.562	.517	y	29	86.501	94.5	.984	11.813	1...	H1-1b
18	CP-3	PL6x1/2	.207	.517	33	.548	.517	y	18	86.501	94.5	.984	11.813	1...	H1-1b
19	CP-1	PL6x1/2	.207	.517	22	.550	.517	y	23	86.501	94.5	.984	11.813	1...	H1-1b
20	GSIP-2B	L2x2x3	.166	2.088	20	.007	0	y	30	10.065	22.743	.542	1.11	1...	H2-1
21	GSIP-3B	L2x2x3	.166	2.088	25	.007	0	z	18	10.065	22.743	.542	1.084	1...	H2-1
22	GSIP-1B	L2x2x3	.165	2.088	30	.007	0	z	24	10.065	22.743	.542	1.078	1...	H2-1
23	GSI-3A	HSS4X4X4	.161	2.562	22	.200	.32	z	29	104.744	106.155	12.311	12.311	1...	H1-1b
24	GSI-2A	HSS4X4X4	.158	2.562	32	.205	.32	z	23	104.744	106.155	12.311	12.311	1...	H1-1b

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 25679.428877
Model Name : Scoville Hill / Harwington (BU 876376)

July 10, 2020
1:36 PM
Checked By: PRS

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

	Member	Shape	Code Check	Loc[..	LC	Shear..	Loc[..	Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
25	GSI-3B	HSS4X4X4	.154	0	26	.227	2.242	z	26	104.744	106.155	12.311	12.311	1...	H1-1b
26	GSI-1A	HSS4X4X4	.153	2.562	27	.205	.32	z	18	104.744	106.155	12.311	12.311	1...	H1-1b
27	GSI-1B	HSS4X4X4	.153	0	31	.227	2.242	z	31	104.744	106.155	12.311	12.311	1...	H1-1b
28	GSIP-2A	L2x2x3	.149	2.003	32	.007	0	z	31	10.065	22.743	.542	1.11	1...	H2-1
29	GSIP-1A	L2x2x3	.148	2.003	27	.007	0	z	26	10.065	22.743	.542	1.084	1...	H2-1
30	GSIP-3A	L2x2x3	.144	2.003	22	.007	4.091	z	21	10.065	22.743	.542	1.078	1...	H2-1

Envelope None Cold Formed Steel Code Checks

Member	Shape	Code ...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	Pn[k]	Tn[k]	Mnyy[k-ft]	Mnzz[k-ft]	Cb	Cmyy	Cmzz	Eqn
No Data to Print ...																

APPENDIX D

ADDITIONAL CALCULATIONS

Job Name: Scoville Hill / Harwinton Rod (BU 876376)
Job Number: TEP No. 25679.428877
Calc: CJB Check: PRS
Date: 7/10/2020

Moment Bolt Group - Support Horizontal

Bolt Size:	0.625	in
# Bolts:	4	
Plate Width:	10	in
Plate Height:	10	in
Bolt H Gap:	7	in
Bolt V Gap:	7	in
Plate T:	0.625	in
Slip Member Ø:	-	in
Bolt Grade:	A325N	
Fu_{bolt}:	120	ksi
r:	4.9497	in
J:	98.00	in^4/in^2
$Bolt_{Area}$:	0.307	in^2
$Bolt_{Area, Net Tensile}$:	0.226	in^2
Pretension:	19	kips
Slotted Holes:	No	

Code Checks Per ANSI/TIA-222-H:

Bolt Capacity =	**26.0%**	**PASS**
Plate Capacity =	**49.9%**	**PASS**

Plate Bending

Horizontal Member height: 4 in
Horizontal Member width: 4 in
Plate Fy: 36 ksi

My =	3.1504	k - in	Z_y =	0.977	in^3	S_y =	0.651	in^3
Mz =	15.7896	k - in	Z_z =	0.977	in^3	S_z =	0.651	in^3

$ØMp_y$ (Z):	31.641	k - in
$ØMp_y$ (S):	33.750	k - in
$ØMp_z$ (Z):	31.641	k - in
$ØMp_z$ (S):	33.750	k - in

Exhibit F

Power Density/RF Emissions Report

RF EMISSIONS COMPLIANCE REPORT

Crown Castle on behalf of AT&T Mobility, LLC

Crown Castle Site Order ID: 517077
Crown Castle BU Number: 876376
Crown Castle Site Name: SCOVILLE HILL / HARWINTON ROD
AT&T Mobility, LLC Site FA Number: 10041787
AT&T Mobility, LLC Site Name: Harwinton-Campvill Hill Rd
123 Campville Hill Road
Harwinton, CT
6/12/2020

Report Status:

AT&T Mobility, LLC is Compliant

Michael Fischer, P.E.
Registered Professional Engineer (Electrical)
Connecticut License Number 33928
Expires January 31, 2021

Signed 13 June 2020

Prepared By:

Site Safe, LLC

8618 Westwood Center Drive
Suite 315

Vienna, VA 22182

Voice: 703-276-1100
Fax: 703-276-1169

Engineering Statement in Re:
Electromagnetic Energy Analysis
Crown Castle
Harwinton, CT

My signature on the cover of this document indicates:

That I am registered as a Professional Engineer in the jurisdiction indicated; and

That I have extensive professional experience in the wireless communications engineering industry; and

That I am an employee of Site Safe, LLC in Vienna, Virginia; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules") both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by Crown Castle on behalf of AT&T Mobility, LLC (see attached Site Summary and Carrier documents) and that AT&T Mobility, LLC's installation involves communications equipment, antennas and associated technical equipment at a location referred to as "SCOVILLE HILL / HARWINTON ROD" ("the site"); and

That AT&T Mobility, LLC proposes to operate at the site with transmit antennas listed in the carrier summary and with a maximum effective radiated power as specified by AT&T Mobility, LLC and shown on the worksheet and that worst-case 100% duty cycle has been assumed; and

That this analysis has been performed with the assumption that the ground immediately surrounding the tower is primarily flat or falling; and

That at this time, the FCC requires that certain licensees address specific levels of radio frequency energy to which workers or members of the public might possibly be exposed (at §1.1307(b) of the FCC Rules); and

That such consideration of possible exposure of humans to radio frequency energy must utilize the standards set by the FCC, which is the federal agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1) "uncontrolled environments," which defines situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and 2) "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment) and the limit set forth in the FCC rules for licensees of AT&T Mobility, LLC's operating frequencies as shown on the attached antenna worksheet; and

That when applying the uncontrolled environment standards, the predicted Maximum Power Density at two meters above ground level from the proposed AT&T Mobility, LLC operation is no more than 2.365% of the maximum permissible exposure limits in any accessible area on the ground; and

That it is understood per FCC Guidelines and OET 65 Appendix A, that regardless of the existent radio frequency environment, only those licensees whose contributions exceed 5% of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

That when applying the uncontrolled environment standards, the cumulative predicted energy density from the proposed operation is no more than 5.255% of the maximum in any accessible area up to two meters above the ground per OET 65; and

That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET 65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy two meters above ground level where on-axis energy refers to maximum energy two meters above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere two meters above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier(s) and frequency range(s) indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding radio frequency safety; and

In summary, it is stated here that the proposed operation at the site will not result in exposure of the public to excessive levels of radio frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307(b), and that AT&T Mobility, LLC's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals and approved contractor personnel trained in radio frequency safety and that this instant analysis addresses exposure levels at two meters above ground level and does not address exposure levels on the tower or in the immediate proximity of the antennas.

Crown Castle
SCOVILLE HILL / HARWINTON ROD
Site Summary

Carrier	Area Maximum Percentage MPE
AT&T Mobility, LLC (Proposed)	0.388 %
AT&T Mobility, LLC (Proposed)	0.327 %
AT&T Mobility, LLC (Proposed)	0.516 %
AT&T Mobility, LLC (Proposed)	0.578 %
AT&T Mobility, LLC (Proposed)	0.289 %
AT&T Mobility, LLC (Proposed)	0.267 %
Sprint	0.190 %
Sprint	0.140 %
Sprint	0.251 %
T-Mobile	0.247 %
T-Mobile	0.160 %
T-Mobile	0.215 %
Verizon Wireless	0.350 %
Verizon Wireless	0.249 %
Verizon Wireless	0.366 %
Verizon Wireless	0.722 %
Composite Site MPE:	5.255 %

AT&T Mobility, LLC (Proposed)
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	2300	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	3.87589	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.38759	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
CCI	OPA65R-BU4D	129	30	2851	3.080215	0.308022	3.854354	0.385435
CCI	OPA65R-BU4D	129	150	2851	3.080215	0.308022	3.854354	0.385435
CCI	OPA65R-BU4D	129	270	2851	3.080215	0.308022	3.854354	0.385435

AT&T Mobility, LLC (Proposed)
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	763	MHz
Maximum Permissible Exposure (MPE):	508.67	$\mu W/cm^2$
Maximum power density at ground level:	1.66178	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.32669	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
CCI	OPA65R-BU4D	129	30	1775	1.545549	0.303843	1.637582	0.321936
CCI	OPA65R-BU4D	129	150	1775	1.545549	0.303843	1.637582	0.321936
CCI	OPA65R-BU4D	129	270	1775	1.545549	0.303843	1.637582	0.321936

AT&T Mobility, LLC (Proposed)
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	2100	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	5.1553	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.51553	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
CCI Antennas	DMP65R-BU4D	129	30	4066	3.694540	0.369454	5.080235	0.508023
CCI Antennas	DMP65R-BU4D	129	150	4066	3.694540	0.369454	5.080235	0.508023
CCI Antennas	DMP65R-BU4D	129	270	4066	3.694540	0.369454	5.080235	0.508023

AT&T Mobility, LLC (Proposed)
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	5.77996	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.57800	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
CCI Antennas	DMP65R-BU4D	129	30	3541	4.411913	0.441191	5.709010	0.570901
CCI Antennas	DMP65R-BU4D	129	150	3541	4.411913	0.441191	5.709010	0.570901
CCI Antennas	DMP65R-BU4D	129	270	3541	4.411913	0.441191	5.709010	0.570901

AT&T Mobility, LLC (Proposed)
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	850	MHz
Maximum Permissible Exposure (MPE):	566.67	$\mu W/cm^2$
Maximum power density at ground level:	1.63953	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.28933	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
CCI Antennas	DMP65R-BU4D	129	30	1695	1.237784	0.218433	1.305744	0.230425
Powerwave	7770	129	30	547	0.319773	0.056430	0.494609	0.087284
CCI Antennas	DMP65R-BU4D	129	150	1695	1.237784	0.218433	1.305744	0.230425
Powerwave	7770	129	150	547	0.319773	0.056430	0.494609	0.087284
CCI Antennas	DMP65R-BU4D	129	270	1695	1.237784	0.218433	1.305744	0.230425
Powerwave	7770	129	270	547	0.319773	0.056430	0.494609	0.087284

AT&T Mobility, LLC (Proposed)
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	737	MHz
Maximum Permissible Exposure (MPE):	491.33	$\mu W/cm^2$
Maximum power density at ground level:	1.31158	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.26694	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
CCI Antennas	DMP65R-BU4D	129	30	1582	1.226413	0.249609	1.296523	0.263879
CCI Antennas	DMP65R-BU4D	129	150	1582	1.226413	0.249609	1.296523	0.263879
CCI Antennas	DMP65R-BU4D	129	270	1582	1.226413	0.249609	1.296523	0.263879

Sprint
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	1.90329	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.19033	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
RFS	APXVSPP18-C-A20	177	20	3804	0.600065	0.060007	1.070736	0.107074
RFS	APXVSPP18-C-A20	177	180	3804	0.600065	0.060007	1.070736	0.107074
RFS	APXVSPP18-C-A20	177	300	3804	0.600065	0.060007	1.070736	0.107074

Sprint
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	850	MHz
Maximum Permissible Exposure (MPE):	566.67	$\mu W/cm^2$
Maximum power density at ground level:	0.79469	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.14024	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
RFS	APXVSPP18-C-A20	177	20	2168	0.486865	0.085917	0.499138	0.088083
RFS	APXVSPP18-C-A20	177	180	2168	0.486865	0.085917	0.499138	0.088083
RFS	APXVSPP18-C-A20	177	300	2168	0.486865	0.085917	0.499138	0.088083

Sprint
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	2500	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	2.51418	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.25142	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
RFS	APXVTM14-C-I20	177	20	6168	0.710833	0.071083	1.329677	0.132968
RFS	APXVTM14-C-I20	177	180	6168	0.710833	0.071083	1.329677	0.132968
RFS	APXVTM14-C-I20	177	300	6168	0.710833	0.071083	1.329677	0.132968

T-Mobile
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	700	MHz
Maximum Permissible Exposure (MPE):	466.67	$\mu W/cm^2$
Maximum power density at ground level:	1.15350	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.24718	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
ANDREW	LNX-6515DS-VTM	167	40	4572	0.942422	0.201948	0.959017	0.205504
ANDREW	LNX-6515DS-VTM	167	160	4572	0.942422	0.201948	0.959017	0.205504
ANDREW	LNX-6515DS-VTM	167	280	4572	0.942422	0.201948	0.959017	0.205504

T-Mobile
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	2100	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	1.60430	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.16043	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
RFS	APXV18-206516S-C	167	40	6825	1.165847	0.116585	1.372381	0.137238
RFS	APXV18-206516S-C	167	160	6825	1.165847	0.116585	1.372381	0.137238
RFS	APXV18-206516S-C	167	280	6825	1.165847	0.116585	1.372381	0.137238

T-Mobile
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	2.14889	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.21489	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
RFS	APXV18-206516S-C	167	40	6825	1.108269	0.110827	1.945445	0.194545
RFS	APXV18-206516S-C	167	160	6825	1.108269	0.110827	1.945445	0.194545
RFS	APXV18-206516S-C	167	280	6825	1.108269	0.110827	1.945445	0.194545

Verizon Wireless
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	2100	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	3.50451	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.35045	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
Antel	BXA-171085/8BF_2	156	60	4845	1.040272	0.104027	2.241995	0.224199
Antel	BXA-171085/8BF_2	156	180	4845	1.040272	0.104027	2.241995	0.224199
Antel	BXA-171063/8BF_2	156	300	6099	1.281557	0.128156	1.786851	0.178685

Verizon Wireless
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	1900	MHz
Maximum Permissible Exposure (MPE):	1000	$\mu W/cm^2$
Maximum power density at ground level:	2.48686	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.24869	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
Antel	BXA-171085/8BF_2	156	60	3928	0.742596	0.074260	1.583074	0.158307
Antel	BXA-171085/8BF_2	156	180	3928	0.742596	0.074260	1.583074	0.158307
Antel	BXA-171063/8BF_2	156	300	4945	1.127075	0.112707	1.625001	0.162500

Verizon Wireless
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	700	MHz
Maximum Permissible Exposure (MPE):	466.67	$\mu W/cm^2$
Maximum power density at ground level:	1.70808	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.36602	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
Antel	BXA-70063/6CF_2	156	60	4019	1.374296	0.294492	1.621071	0.347372
Antel	BXA-70063/6CF_2	156	180	4019	1.374296	0.294492	1.621071	0.347372
Antel	BXA-70063/6CF_2	156	300	4019	1.374296	0.294492	1.621071	0.347372

Verizon Wireless
SCOVILLE HILL / HARWINTON ROD
Carrier Summary

Frequency:	850	MHz
Maximum Permissible Exposure (MPE):	566.67	$\mu W/cm^2$
Maximum power density at ground level:	4.09411	$\mu W/cm^2$
Highest percentage of Maximum Permissible Exposure:	0.72249	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**	**Max Power Density ($\mu W/cm^2$)**	**Percent of MPE**
Antel	LPA-80080/6CF	156	60	4019	1.076807	0.190025	1.686881	0.297685
Antel	LPA-80080/6CF	156	60	4019	1.076807	0.190025	1.686881	0.297685
Antel	LPA-80080/6CF	156	180	4019	1.076807	0.190025	1.686881	0.297685
Antel	LPA-80080/6CF	156	180	4019	1.076807	0.190025	1.686881	0.297685
Antel	LPA-80063/6CF	156	300	4509	1.236955	0.218286	1.288050	0.227303
Antel	LPA-80063/6CF	156	300	4509	1.236955	0.218286	1.288050	0.227303