



NSS **NORTHEAST**
SITE SOLUTIONS
Turnkey Wireless Development

Northeast Site Solutions
Victoria Masse
420 Main Street #2, Sturbridge, MA 01566
860-306-2326
victoria@northeastsitesolutions.com

August 3, 2022

Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification
14 Old North Road, Barkhamsted, CT 06063
Latitude: 41.914528
Longitude: -73.022222
T-Mobile Site#: CTNH416A_L600

Dear Ms. Bachman:

T-Mobile currently maintains six (6) antennas at the 125-foot level of the existing 144-foot monopole located at 14 Old North Road, Barkhamsted, CT 06063. The tower is owned by American Tower and property is owned by John N & Ethel C Lavieri. T-Mobile now intends to replace three (3) existing antenna with three (3) new 600/700 MHz antenna. The new antennas would be installed at the 125-foot level of the monopole. This modification includes B2, B5 hardware that is both 4G (LTE), and 5G capable.

T-Mobile Planned Modifications:

Remove:

(3) Smart Bias-T
(12) Coax Line

Remove and Replace:

(3) Commscope LDX-6515DS Antenna (Remove) – (3) RFS APXVAALL24 600/700 MHz Antenna (Replace)

Install New:

(3) RRU 4480 B71
(1) Hybrid Line

Existing to Remain:

(3) APX16DV-16DWV-S-E A20 1900/2100 MHz Antenna
(6) Coax Line
(3) KRY 112 71
(3) KRY 112 144/1



This facility was approved by the Connecticut Siting Council Docket No. 305 on November 3, 2005. Please see attached.

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 Donald S. Stein, First Selectman and Debra P. Brydon, Administrator Zoning & Inland/Wetlands Officer, as well as the property owner and the tower owner.

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,

Victoria Masse

Victoria Masse
Mobile: 860-306-2326
Fax: 413-521-0558
Office: 420 Main Street, Unit 2, Sturbridge MA 01566
Email: victoria@northeastsitesolutions.com



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Turnkey Wireless Development

Attachments:

cc: Donald S. Stein, First Selectman
67 Ripley Hill Rd
Barkhamsted, CT 06063

Debra P. Brydon, Administrator Zoning & Inland/Wetlands Officer
67 Ripley Hill Rd
Barkhamsted, CT 06063

John P Lavieri – as property owner
750 W Center St
West Bridgewater, MA 02379

American Tower – as tower owner

Exhibit A

Original Facility Approval

Connecticut Siting Council ^(/CSC)

[CT.gov Home](#) [\(/\)](#) [Connecticut Siting Council](#) [\(/CSC\)](#) Docket 305 Barkhamsted Decision

DOCKET NO. 305 - Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a wireless telecommunications facility located at 5 Old Farm Road or 8 Old New Hartford Road, Barkhamsted, Connecticut.	}	Connecticut
	}	Siting
	}	Council
		November 3, 2005

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Cellco Partnership d/b/a Verizon Wireless, hereinafter referred to as the Certificate Holder, for a telecommunications facility at 5 Old Farm Road, Barkhamsted, Connecticut. The Council denies certification of the proposed 8 Old New Hartford Road site in Barkhamsted, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of Verizon Wireless and New Cingular Wireless PCS, LLC and other entities, both public and private, but such tower shall not exceed a height of 145 feet above ground level. Antennas mounted on the tower shall not exceed a height of 147 feet above ground level.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Barkhamsted for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a. a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment building, access road, utility line, and landscaping; and
 - b. construction plans for site clearing, water drainage, and erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
3. Prior to submission of the D&M Plan to the Council, the Certificate Holder shall discuss the appropriateness of a stealth tree tower design at this site with the Town of Barkhamsted. The Town and Certificate Holder shall agree upon the final tower design.
4. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of electromagnetic radio frequency power density is submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

5. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
7. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Barkhamsted public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
8. If the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.
9. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
10. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.
11. Any request for extension of the time periods referred to in Conditions 8 & 9 shall be filed with the Council not later than sixty days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Barkhamsted. Any proposed modifications to this Decision and Order shall likewise be so served.
12. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction and the commencement of site operation.

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in [The Hartford Courant](#).

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

<u>Certificate Holder</u>	<u>Its Representative</u>
Cellco Partnership d/b/a Verizon Wireless	Sandy Carter, Regulatory Manager Verizon Wireless 99 East River Drive East Hartford, CT 06108 Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597

Intervenor

New Cingular Wireless PCS, LLC

Its Representative

Christopher B. Fisher, Esq.
Cuddy & Feder LLP
90 Maple Avenue
White Plains, NY 10601

Exhibit B

Property Card

CURRENT OWNER				TOPO	UTILITIES	STRT / ROAD	LOCATION	CURRENT ASSESSMENT				
LAVIERI JOHN N & ETHEL C				2	Above Street			Description	Code	Appraised	Assessed	6005
PO BOX 202				SUPPLEMENTAL DATA								BARKHAMSTED, CT
				Alt Prcl ID	29-12-1A	DV Lot #		RES LAND	1-1	70,810	49,570	
BARKHAMSTED CT 06063				B.P. Status		Solar Ener		RES EXCES	1-2	18,240	12,770	VISION
				Census Tr.		BAA		DWELLING	1-3	212,260	148,580	
				Interior		Callback		IND LAND	3-1	250,000	175,000	
				100 Yr Flo		PA490 Dat		IND IMPR	3-3	15,600	10,920	
				DV Map #	1004; 962: 789	Assoc Pid#		FOREST	6-2	456,000	19,150	
				GIS ID								
								Total		1,022,910	415,990	

RECORD OF OWNERSHIP				BK-VOL/PAGE	SALE DATE	Q/U	V/I	SALE PRICE	VC	PREVIOUS ASSESSMENTS (HISTORY)						
LAVIERI JOHN N & ETHEL C	0169	0132	07-11-2018	U	I			0	01	Year	Code	Assessed	Year	Code	Assessed	
LAVIERI JOHN N & ETHEL C	0169	0130	07-11-2018	U	I		175,000	01		2021	1-1	49,570	2020	1-1	49,570	
LAVIERI JOHN N & ETHEL C	0157	0681	09-18-2013	U	I			0	04		1-2	12,770		1-2	12,770	
LAVIERI JOHN N & ETHEL C	0061	0459	03-15-1978		V			0			1-3	148,580		1-3	148,580	
											3-1	175,000		3-1	175,000	
											3-3	10,920		3-3	10,920	
											Total	415,990	Total	415,990	Total	415,990

EXEMPTIONS				OTHER ASSESSMENTS				APPRAISED VALUE SUMMARY				
Year	Code	Description	Amount	Code	Description	Number	Amount	Comm Int	This signature acknowledges a visit by a Data Collector or Assessor			
									Appraised Bldg. Value (Card)			
Total			0.00					Appraised Xf (B) Value (Bldg)				
Total			0.00					Appraised Ob (B) Value (Bldg)				
Total			0.00					Appraised Land Value (Card)				

Nbhd	Nbhd Name	Street Index Name	Tracing	Batch
0001				

NOTES			
BOUNDARY LINE AGREEM VOL 157/681		169/130 116.853 XFER TO JOHN N LAVIERI	
		FR 15 OLD FARM RD 29/12/1-FINAL PIECE	
06-02-06 CINGULAR WIRELESS FACILITY		169/132 THEN XFER TO JOHN N & ETHEL C	
2010 = ADJUST FOR LAND LEASE TO CELL CO.		LAVIERI	
VERIZON WIRELESS/AMERICAN TOWER		SHED= 12X7	
		Total Appraised Parcel Value	
		Valuation Method	
		Total Appraised Parcel Value	

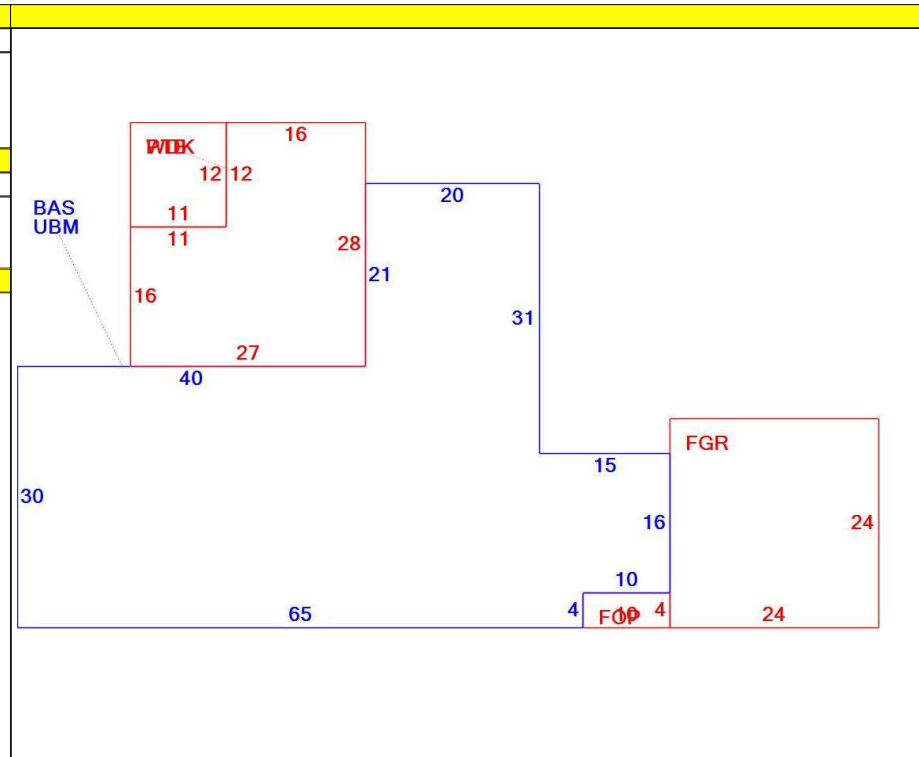
BUILDING PERMIT RECORD										VISIT / CHANGE HISTORY					
Permit Id	Issue Date	Type	Description	Amount	Insp Date	% Comp	Date Comp	Comments		Date	Id	Type	Is	Cd	Purpost/Result
21-123-E	05-11-2021	OT	Other	8,000		100	08-04-2021	tie in existing AT&T equip to ex		06-02-2021	AL	4	1	06	Phone Call/Email Verify Inf
20-350-B	11-24-2020	RW	Repl Windows	11,472		100		inst 7 repl windows, no struct c		06-28-2018	MVS			33	Datamailer sent
20-266-E	11-05-2020	OT	Other	48,500		100		AT&T mod: repl 6 antennas &		10-30-2008	JQ			50	Field Review
18-296-E	10-25-2018	GN	Generator	13,500		100	04-30-2019	inst backup generator for cell t		08-20-2008	DW	1		00	Meas. and List
14-10-69	10-15-2014	OT	Other	20,000		100		new antennas, swap radio cabi		05-01-2008	DW	1		01	Measured
13-10-65	10-23-2013	RW	Repl Windows	10,405		100		5 basement windows							
13-01-03	01-09-2013	OT	Other	25,000		100		3 new antennas etc							

LAND LINE VALUATION SECTION																
B	Use Code	Description	Zone	Land Type	Land Units	Unit Price	Size Adj	Site Index	Cond.	Nbhd.	Nbhd. Adj.	Notes	Special Use	Location Adjustment	Adj Unit Pri	Land Value
1	101	Single Family	I-2		2.000	AC 61,963.00	0.57142	5	1.00	5	1.000					70,810
1	101	Single Family	I-2		4.560	AC 4,000.00	1.00000	0	1.00		1.000					18,240
1	610	Forest	RA-2		114.000	AC 4,000.00	1.00000	0	1.00		1.000	PA490 START DATE 10/1/2018	490	240		456,000
Total Card Land Units					120.560	AC	Parcel Total Land Area			120.720	AC	Total Land Value			545,050	

CONSTRUCTION DETAIL			CONSTRUCTION DETAIL (CONTINUED)		
Element	Cd	Description	Element	Cd	Description
Style:	01	Ranch			
Model	01	Residential			
Grade:	09	C+			
Occupancy	1				
Exterior Wall 1	08	Wood			
Exterior Wall 2					
Roof Structure:	03	Gable			
Roof Cover	03	Asphalt Shingl			
Interior Wall 1	05	Drywall			
Interior Wall 2					
Interior Flr 1	12	Hardwood			
Interior Flr 2					
Heat Fuel	02	Oil	RCN		307,621
Heat Type:	05	Hot Water	Year Built		1964
AC Type:	01	none			
Total Bedrooms	03	3 Bedrooms	Depreciation Code		A
Total Bthrms:	3	3 Full	Remodel Rating		
Total Half Baths	1		Year Remodeled		
Total Rooms:	7		Depreciation %		31
Bath Style:	02	Average	Functional Obsol		
Kitchen Style:	02	Average	External Obsol		
Fireplace	1		Cost Trend Factor		1
Whirlpool Tubs			Condition		
Fin Basement	1600		Condition %		
Fin Bsmt Qual	5	Average	Percent Good		69
Bsmt. Garages			RCNLD		212,260
			Dep % Ovr		
			Dep Ovr Comment		
			Misc Imp Ovr		
			Misc Imp Ovr Comment		
			Cost to Cure Ovr		
			Cost to Cure Ovr Comment		

OB - OUTBUILDING & YARD ITEMS(L) / XF - BUILDING EXTRA FEATURES(B)												
Cod	Description	Sub	Sub Desc	L/B	Units	Unit Price	Yr Blt	Cond.	% Gd	Grade	Grd A	Appr. Valu

BUILDING SUB-AREA SUMMARY SECTION				
Code	Description	Living Area	Gross Area	
BAS	First Floor	2,480	2,480	
FGR	Garage	0	576	
FOP	Framed Open Porch	0	40	
PTB	Brick/Stone Patio	0	132	
UBM	Unfin Basement	0	2,480	
WDK	Wood Deck	0	624	
Ttl Gross Liv / Lease Area		2,480	6,332	



CURRENT OWNER				TOPO	UTILITIES	STRT / ROAD	LOCATION	CURRENT ASSESSMENT				6005 BARKHAMSTED, CT
LAVIERI JOHN N & ETHEL C				2 Above Street				Description	Code	Appraised	Assessed	
PO BOX 202								RES LAND	1-1	70,810	49,570	
BARKHAMSTED CT 06063								RES EXCES	1-2	18,240	12,770	
SUPPLEMENTAL DATA								DWELLING	1-3	212,260	148,580	
Alt Prcl ID 29-12-1A				DV Lot #				IND LAND	3-1	250,000	175,000	
B.P. Status				Solar Ener				IND IMPR	3-3	15,600	10,920	
Census Tr.				BAA				FOREST	6-2	456,000	19,150	
Interior				Callback								
100 Yr Flo				PA490 Dat								
DV Map # 1004; 962: 789				Assoc Pid#								
								Total		1,022,910	415,990	

RECORD OF OWNERSHIP								BK-VOL/PAGE	SALE DATE	Q/U	V/I	SALE PRICE	VC	PREVIOUS ASSESSMENTS (HISTORY)																			
Year		Code		Assessed		Year		Code		Assessed		Year		Code		Assessed																	
LAVIERI JOHN N & ETHEL C		0169		0132		07-11-2018		U		I		0		01		2021		1-1		49,570		2020		1-1		49,570		2019		1-1		49,570	
LAVIERI JOHN N & ETHEL C		0169		0130		07-11-2018		U		I		175,000		01				1-2		12,770				1-2		12,770		1-2		12,770			
LAVIERI JOHN N & ETHEL C		0157		0681		09-18-2013		U		I		0		04				1-3		148,580				1-3		148,580		1-3		148,580			
LAVIERI JOHN N & ETHEL C		0061		0459		03-15-1978		U		V		0						3-1		175,000				3-1		175,000		3-1		175,000			
																		3-3		10,920				3-3		10,920		3-3		10,920			
								Total				415,990				Total				415,990				Total				415,990					

EXEMPTIONS				OTHER ASSESSMENTS				This signature acknowledges a visit by a Data Collector or Assessor																				
Year	Code	Description	Amount	Code	Description	Number	Amount	Comm Int																				
			Total				0.00																					
ASSESSING NEIGHBORHOOD								APPRAISED VALUE SUMMARY																				
Nbhd	Nbhd Name	Street Index Name	Tracing	Batch																								
0001					Appraised Bldg. Value (Card)				212,260		Appraised Xf (B) Value (Bldg)				0		Appraised Ob (B) Value (Bldg)				15,600		Appraised Land Value (Card)				795,050	
								Total Appraised Parcel Value				1,022,910		Valuation Method				C										
								Total Appraised Parcel Value				1,022,910																

BUILDING PERMIT RECORD								VISIT / CHANGE HISTORY							
Permit Id	Issue Date	Type	Description	Amount	Insp Date	% Comp	Date Comp	Comments	Date	Id	Type	Is	Cd	Purpost/Result	

LAND LINE VALUATION SECTION																	
B	Use Code	Description	Zone	Land Type	Land Units	Unit Price	Size Adj	Site Index	Cond.	Nbhd.	Nbhd. Adj.	Notes	Special Use	Location Adjustment	Adj Unit Pri	Land Value	
2	350	Cell Tower	I-2		0.160	AC	0.00	1.00000	0	1.00		1.000	6,750SF LEASE		0	0.00	250,000
					Total Card Land Units	0.160	AC	Parcel Total Land Area			120.720	AC	Total Land Value			250,000	

CONSTRUCTION DETAIL			CONSTRUCTION DETAIL (CONTINUED)		
Element	Cd	Description	Element	Cd	Description
Style:	94	Outbuildings			
Model:	00	Vacant			
Grade:					
Occupancy					
Exterior Wall 1					
Exterior Wall 2					
Roof Structure:					
Roof Cover					
Interior Wall 1					
Interior Wall 2					
Interior Flr 1					
Interior Flr 2					
Heat Fuel					
Heat Type:					
AC Type:					
Total Bedrooms					
Total Bthrms:					
Total Half Baths					
Total Rooms:					
Bath Style:					
Kitchen Style:					
Fireplace					
Whirlpool Tubs					
Fin Basement					
Fin Bsmt Qual					
Bsmt. Garages					
			MIXED USE		
			Code	Description	Percentage
			350	Cell Tower	100
					0
					0
			COST / MARKET VALUATION		
			RCN		
			Year Built		
			Depreciation Code		
			Remodel Rating		
			Year Remodeled		
			Depreciation %		
			Functional Obsol		
			External Obsol		
			Cost Trend Factor		
			Condition		
			Condition %		
			Percent Good		
			RCNLD		
			Dep % Ovr		
			Dep Ovr Comment		
			Misc Imp Ovr		
			Misc Imp Ovr Comment		
			Cost to Cure Ovr		
			Cost to Cure Ovr Comment		
No Sketch					

OB - OUTBUILDING & YARD ITEMS(L) / XF - BUILDING EXTRA FEATURES(B)												
Cod	Description	Sub	Sub Desc	L/B	Units	Unit Price	Yr Blt	Cond.	% Gd	Grade	Grd A	Appr. Valu
SHD	Cell Equip	FR	Frame	L	240	26.00	2006		100		0.00	6,240
SHD	Cell Equip	FR	Frame	L	360	26.00	2006		100		0.00	9,360

BUILDING SUB-AREA SUMMARY SECTION			
Code	Description	Living Area	Gross Area
Ttl Gross Liv / Lease Area		0	0



5 OLD FARM RD

Google Directions

Zoom

View Details

Google Maps Link

Town of Barkhamsted

Property Record Card

Property

Address 5 OLD FARM RD

ID 29-12-1A

Ownership

Name LAVIERI JOHN N & ETHEL C

Address PO BOX 202
BARKHAMSTED, CT 06063

Valuation

Total \$415,990

Assessment

Land \$256,490

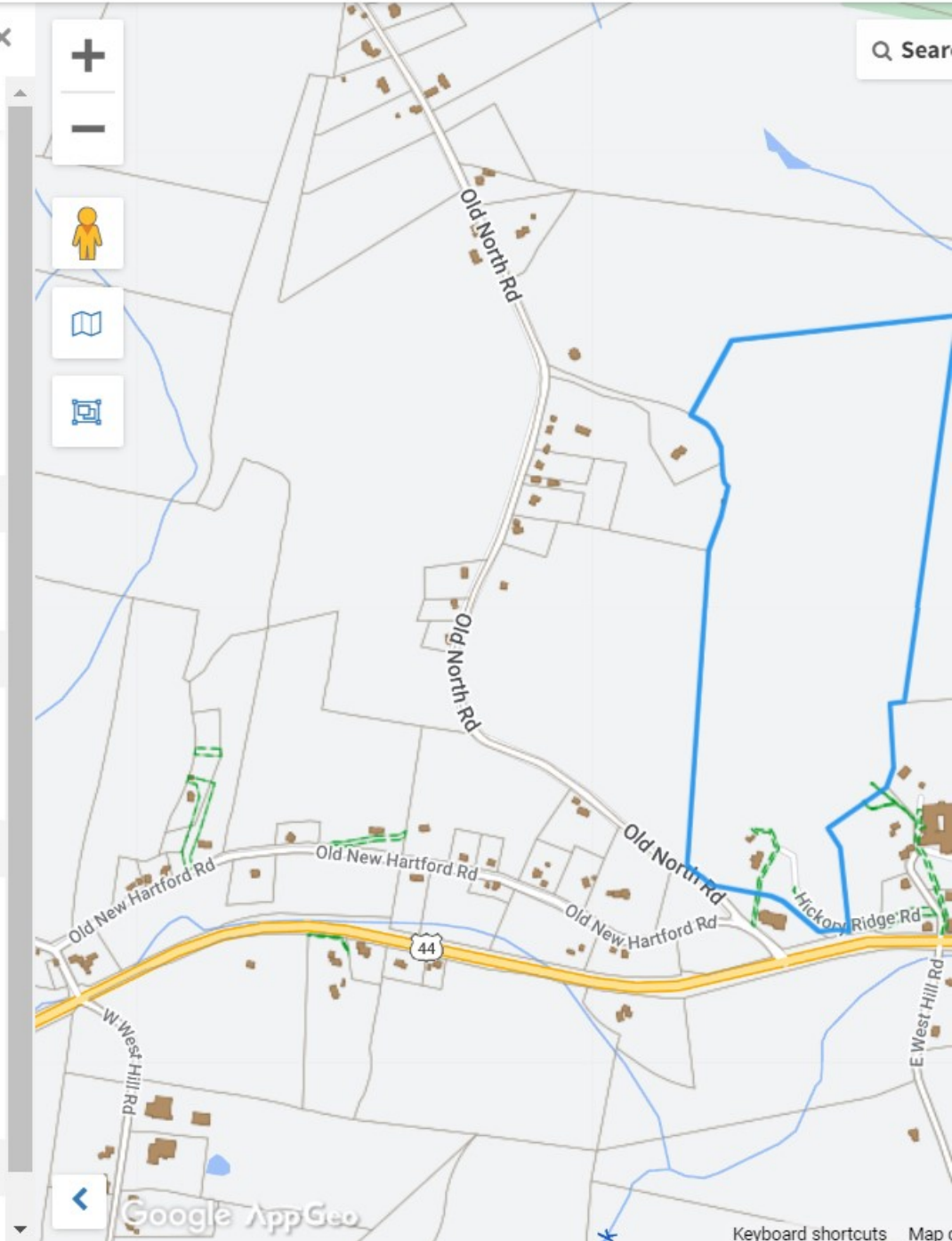
Assessment

Last Sale \$0 on 2018-07-11

Book/Page 169 / 0132

Land

Area 120.72



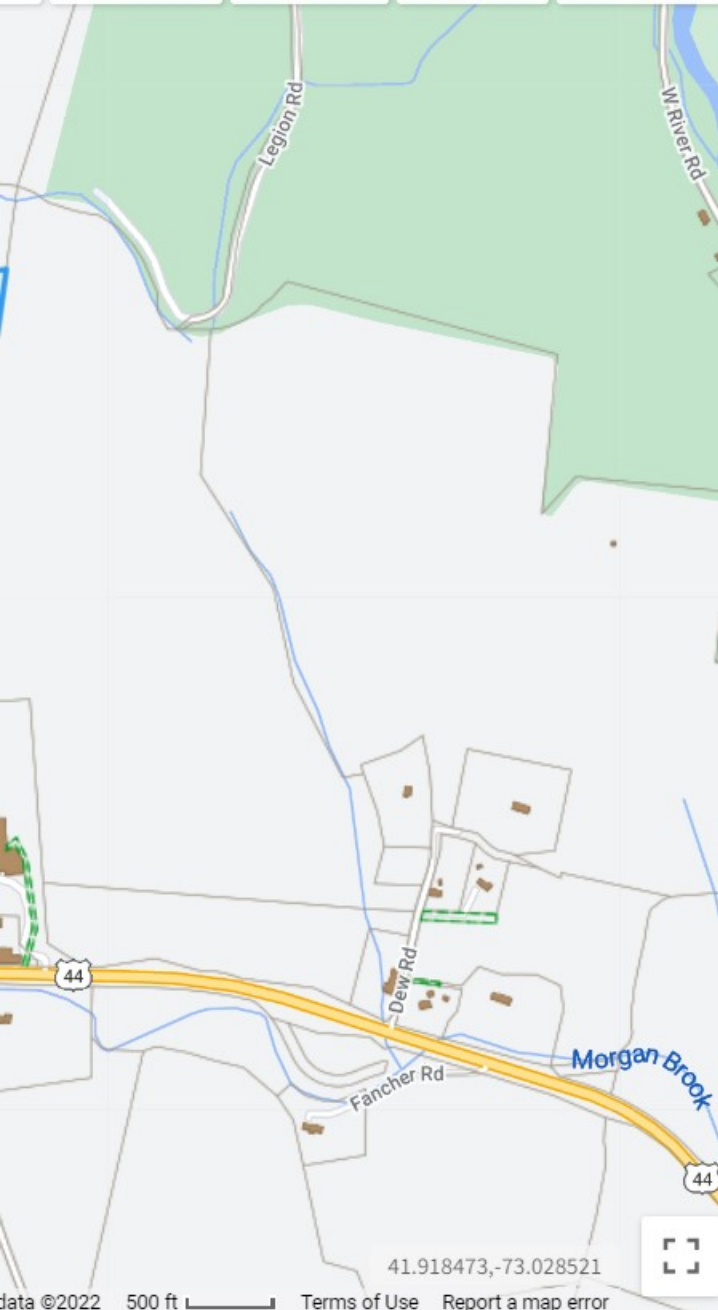
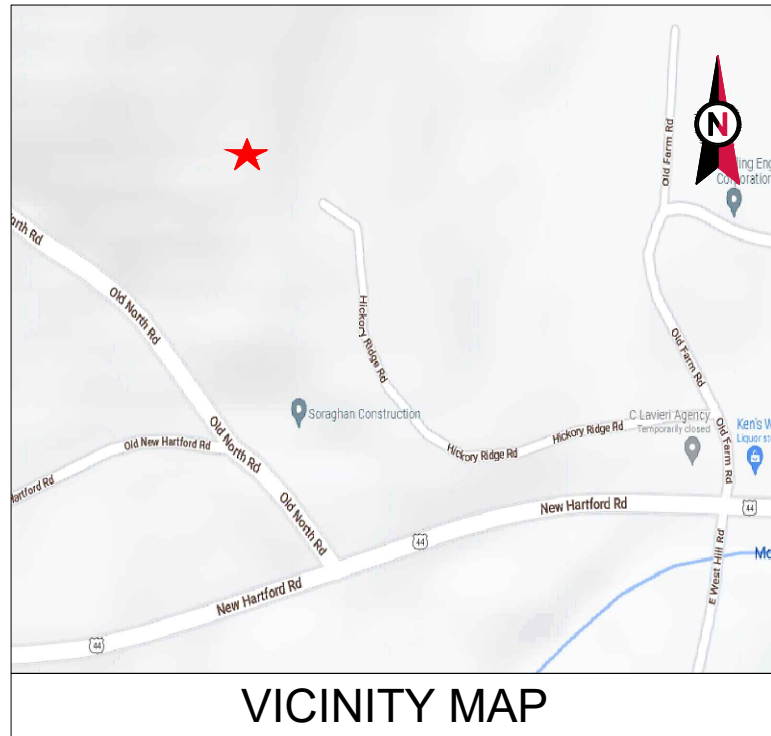


Exhibit C

Construction Drawings

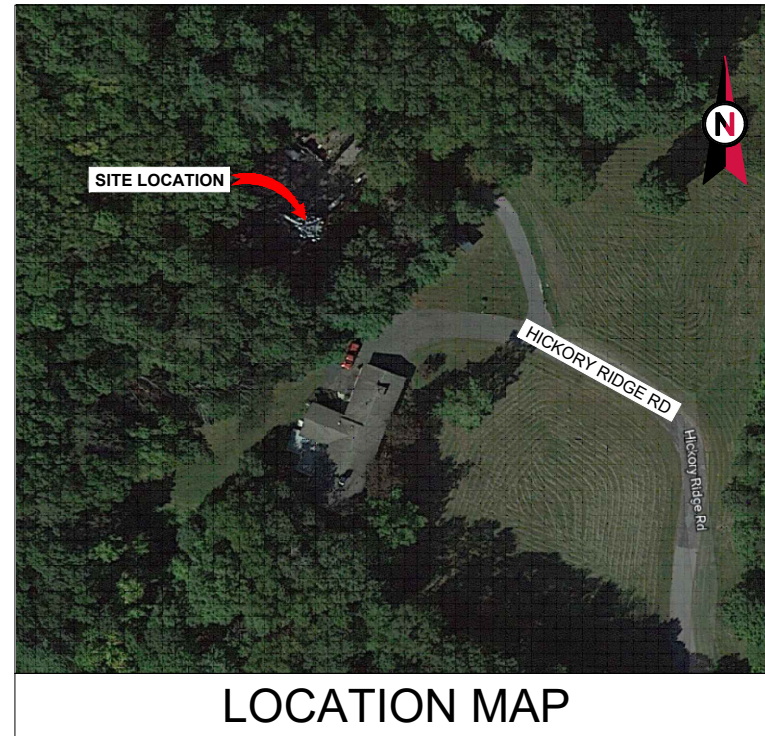


VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: BARKHAMSTEDW CT
 ATC SITE NUMBER: 411177
 T-MOBILE SITE NAME: OLD FARMS- VERIZON COLO
 T-MOBILE SITE NUMBER: CTNH416A
 SITE ADDRESS: 14 OLD NORTH ROAD
 BARKHAMSTED, CT 06063-3440



LOCATION MAP

**T-MOBILE L600 AMENDMENT PLAN
 67E04G CONFIGURATION**

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. INTERNATIONAL BUILDING CODE (IBC) 2. NATIONAL ELECTRIC CODE (NEC) 3. LOCAL BUILDING CODE 4. CITY/COUNTY ORDINANCES	<u>SITE ADDRESS:</u> 14 OLD NORTH ROAD BARKHAMSTED, CT 06063-3440 COUNTY: LITCHFIELD <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.914528 LONGITUDE: -73.022222 GROUND ELEVATION: 810' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: <u>TOWER WORK:</u> REMOVE (3) T-ARM MOUNT(S) AND (3) ANTENNA(S) INSTALL (1) PLATFORM MOUNT, (3) ANTENNA(S), (3) RRU(S) AND (1) 6X24 4AWG CABLE EXISTING (3) ANTENNA(S), (6) TMA(S) AND (6) 1 5/8" COAX CABLE(S) TO REMAIN <u>GROUND WORK:</u> INSTALL (1) PSU 4813 AND (1) BB6648 EXISTING (1) RBS 3106 AND (1) RBS 6201 TO REMAIN	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<u>PROJECT TEAM</u> <u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801 <u>ENGINEER:</u> HUDSON DESIGN GROUP, LLC. 45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845 <u>PROPERTY OWNER:</u> JOHN N LAVIERI 14 OLD NORTH ROAD BARKHAMSTED, CT 06063-3440	<u>PROJECT NOTES</u> 1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED. 6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).	G-001	TITLE SHEET	1	08/03/22	BB
			G-002	GENERAL NOTES	1	08/03/22	BB
<u>UTILITY COMPANIES</u> POWER COMPANY: UNKNOWN PHONE: UNKNOWN TELEPHONE COMPANY: UNKNOWN PHONE: UNKNOWN		<u>PROJECT LOCATION DIRECTIONS</u> FROM EAST HARTFORD I-84 WEST TO RT. 44 RT. PAST RT. 318 ON THE RIGHT. LOOK FOR STERLING ENGINEERING. TURN RIGHT IMMEDIATELY AFTER ANTIQUE STORE ONTO OLD FARM RD. THEN TURN LEFT ONTO PRIVATE DRIVE. TURN RIGHT BEFORE HOUSE ONTO STONE DRIVE. TAKE ANOTHER LEFT SITE IS AT END OF ROAD. THIS SITE HAS DIESEL RESTRICTIONS NOTED IN EMIS	C-101	DETAILED SITE PLAN	1	08/03/22	BB
			C-102	DETAILED EQUIPMENT PLAN	1	08/03/22	BB
			C-201	TOWER ELEVATION	1	08/03/22	BB
			C-401	ANTENNA INFORMATION & SCHEDULE	1	08/03/22	BB
			C-501	CONSTRUCTION DETAILS	1	08/03/22	BB
			E-501	GROUNDING DETAILS	1	08/03/22	BB
			R-601	SUPPLEMENTAL	1		
			R-602	SUPPLEMENTAL	1		
			R-603	SUPPLEMENTAL	1		
			R-604	SUPPLEMENTAL	1		
			R-605	SUPPLEMENTAL	1		

AMERICAN TOWER®

HUDSON
Design Group LLC

45 BEECHWOOD DRIVE N. ANDOVER, MA 01845 TEL: (978) 557-5553 FAX: (978) 336-5586

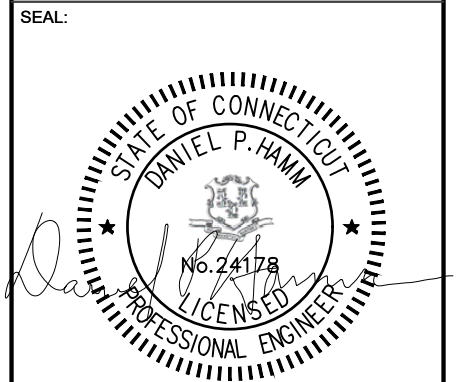
REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22
1	FINALS REVISED	BB	08/03/22

ATC SITE NUMBER:
411177

ATC SITE NAME:
BARKHAMSTEDW CT

T-MOBILE SITE NAME:
OLD FARMS- VERIZON COLO

SITE ADDRESS:
14 OLD NORTH ROAD
BARKHAMSTED, CT 06063-3440



DATE DRAWN: 06/03/22
 ATC JOB NO: 14097411_D1
 CUSTOMER ID: OLD FARMS- VERIZON COLO
 CUSTOMER #: CTNH416A

TITLE SHEET

SHEET NUMBER: **G-001** REVISION: **1**

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GENERAL CONSTRUCTION NOTES:

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

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

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
 - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
 - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
 - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
 - D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
 - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
 - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.

- B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
- C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
- D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
- E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
- F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
- G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/4" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
- H. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE REQUIRED DURING CONSTRUCTION UNTIL ALL CONNECTIONS ARE COMPLETE.
- I. ANY FIELD CHANGES OR SUBSTITUTIONS SHALL HAVE PRIOR APPROVAL FROM THE ENGINEER, AND T- MOBILE PROJECT MANAGER IN WRITING

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

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

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



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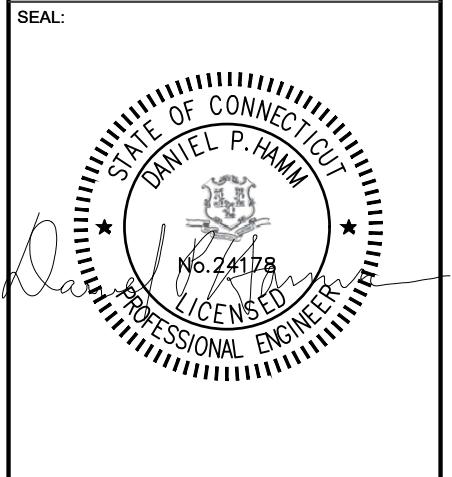
REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22
1	FINALS REVISED	BB	08/03/22

ATC SITE NUMBER:
411177

ATC SITE NAME:
BARKHAMSTEDW CT

T-MOBILE SITE NAME:
OLD FARMS- VERIZON COLO

SITE ADDRESS:
14 OLD NORTH ROAD
BARKHAMSTED, CT 06063-3440



DATE DRAWN:	06/03/22
ATC JOB NO:	14097411_D1
CUSTOMER ID:	OLD FARMS- VERIZON COLO
CUSTOMER #:	CTNH416A

GENERAL NOTES

SHEET NUMBER: G-002	REVISION: 1
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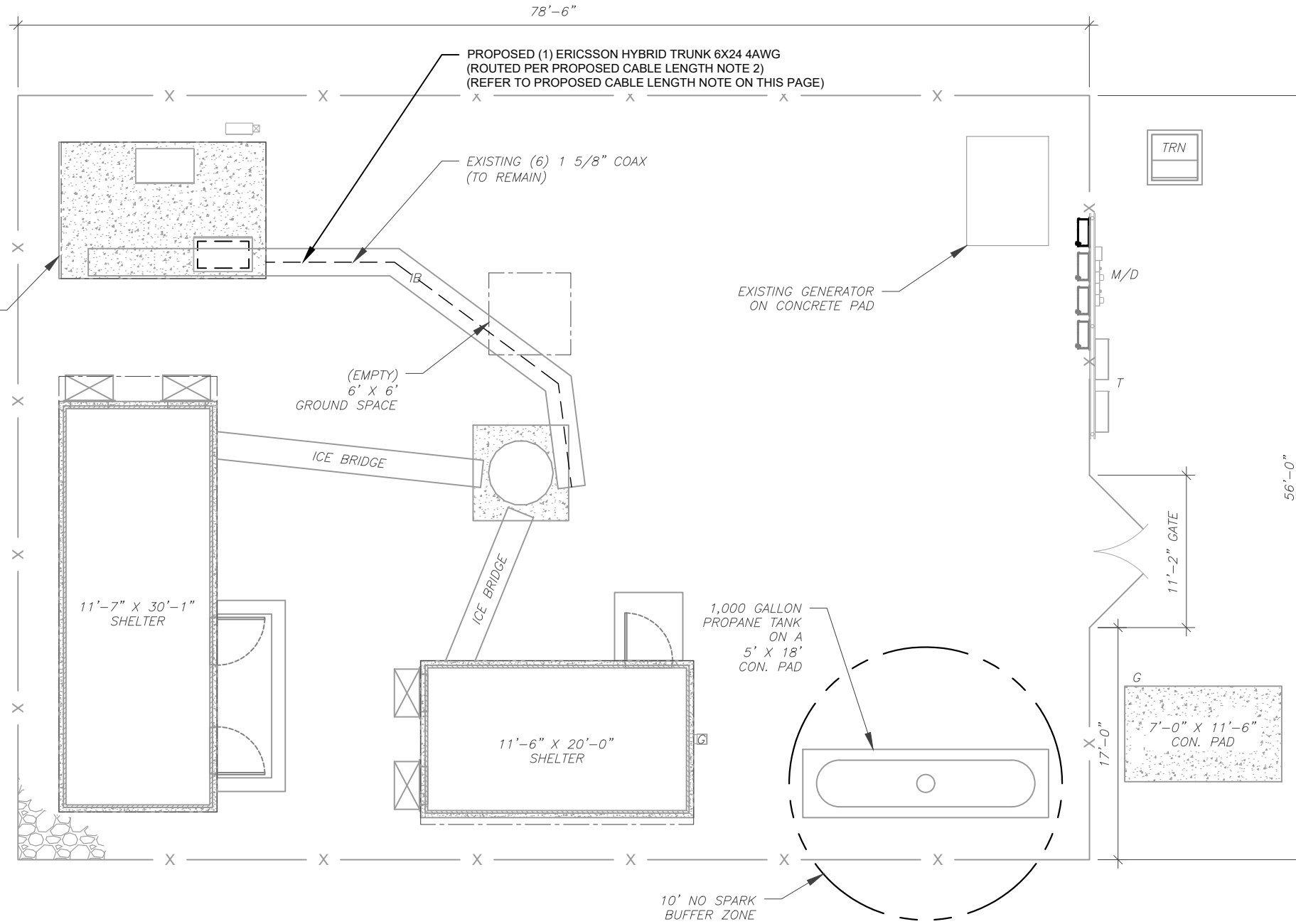
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SITE PLAN NOTES:

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



EXISTING T-MOBILE
10'-0" X 15'-0" CON. PAD W/
10'-0" X 15'-0" GROUND SPACE
(MODIFIED AS REQUIRED FOR
UPGRADE FROM 704G TO 67E04G
CONFIGURATION)



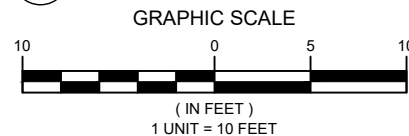
LEGEND

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

PROPOSED CABLE LENGTH:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **200'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES). CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.

1 DETAILED SITE PLAN



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REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22
1	FINALS REVISED	BB	08/03/22

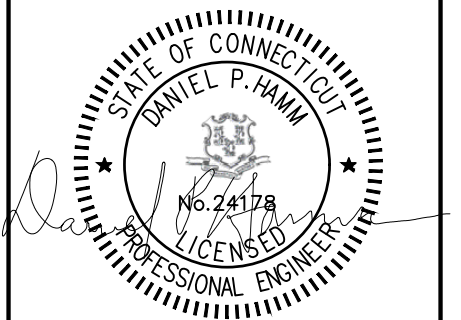
ATC SITE NUMBER:
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SEAL:



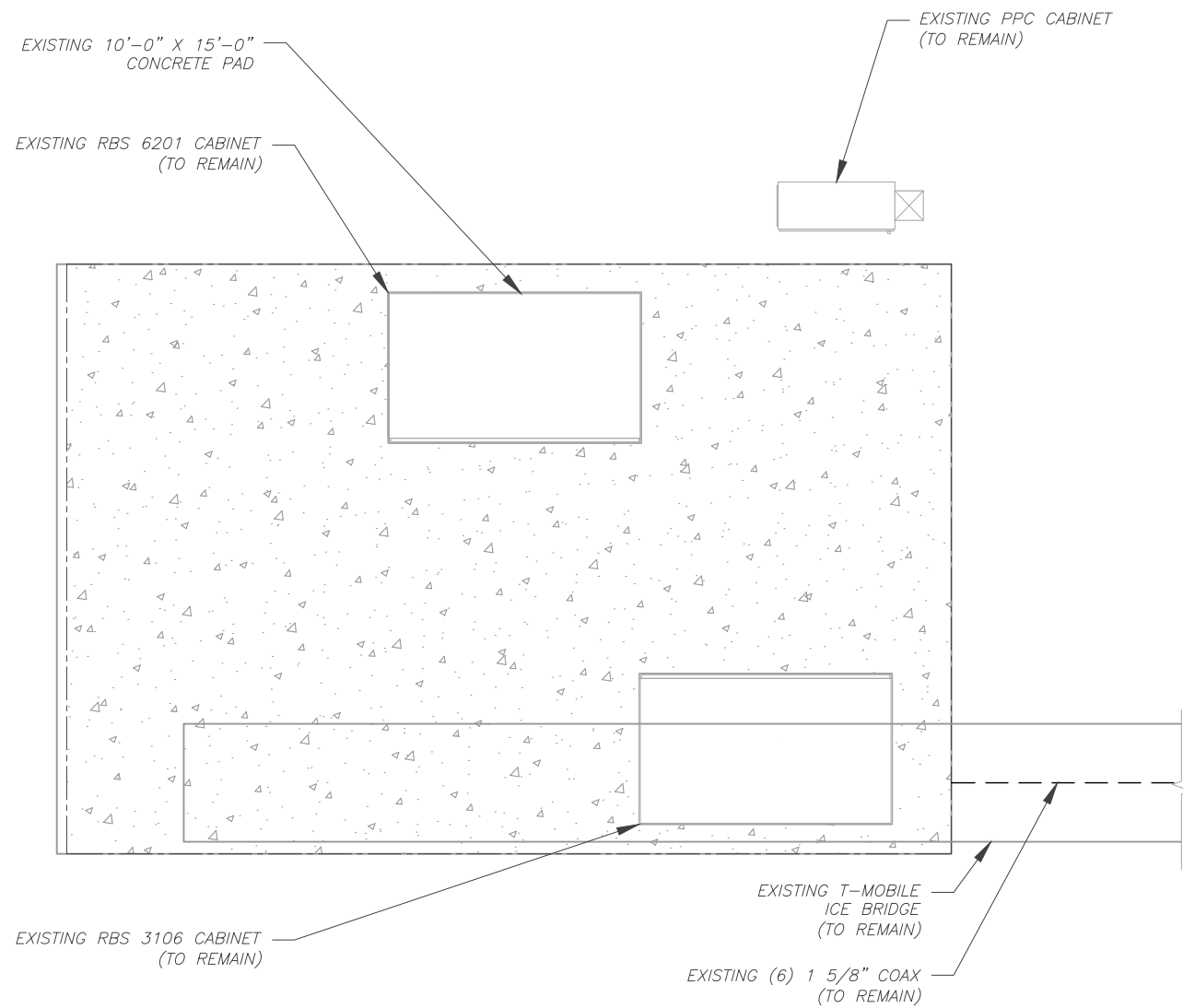
DATE DRAWN:	06/03/22
ATC JOB NO:	14097411_D1
CUSTOMER ID:	OLD FARMS- VERIZON COLO
CUSTOMER #:	CTNH416A

DETAILED SITE PLAN

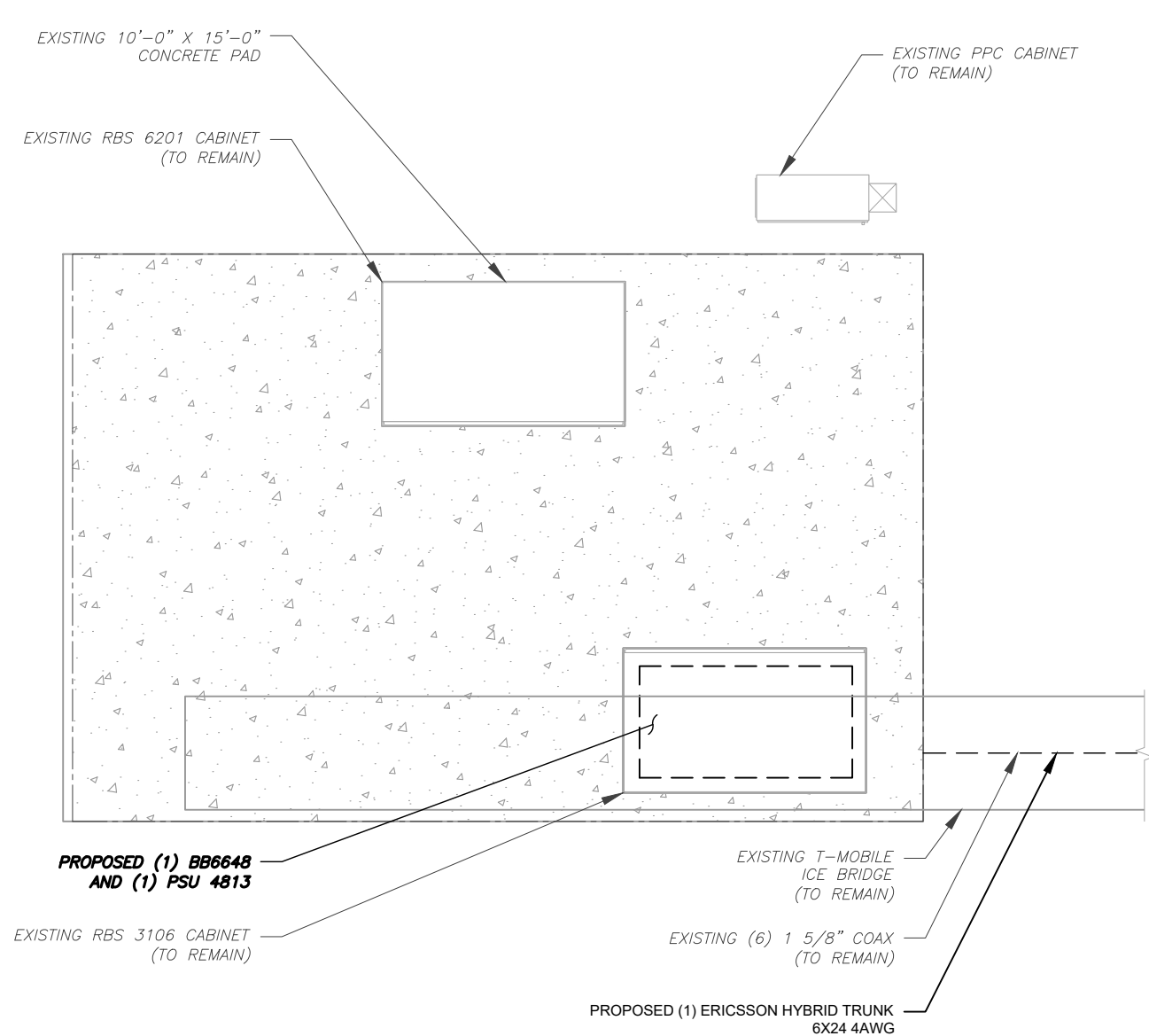
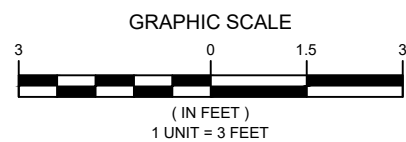
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SITE PLAN NOTES:

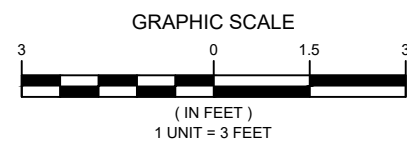
1. CONTRACTOR TO VERIFY THERE IS NO LIVE AAV FIBER RUNNING THROUGH EXISTING DEAD EQUIPMENT. IF SO, THIS WILL NEED TO BE RERUN THROUGH CONDUIT PRIOR TO REMOVING DEAD 2G (6201 CABS) EQUIPMENT.
2. ALL OPEN PORTS NEED TO BE SEALED / WEATHERPROOFED PROPERLY
3. ALL UNNEEDED / EXCESS EQUIPMENT AND GARBAGE TO BE REMOVED FROM EQUIPMENT AREA. DISPOSE OF MATERIALS PROPERLY OFF SITE.



1 EXISTING GROUND EQUIPMENT LAYOUT



2 PROPOSED GROUND EQUIPMENT LAYOUT



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REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22
1	FINALS REVISED	BB	08/03/22

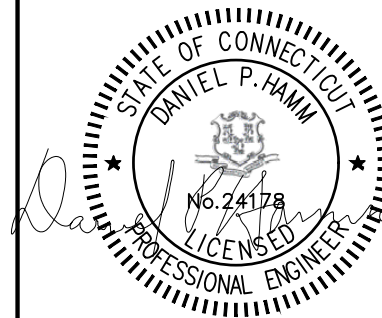
ATC SITE NUMBER:
411177

ATC SITE NAME:
BARKHAMSTEDW CT

T-MOBILE SITE NAME:
OLD FARMS- VERIZON COLO

SITE ADDRESS:
14 OLD NORTH ROAD
BARKHAMSTED, CT 06063-3440

SEAL:

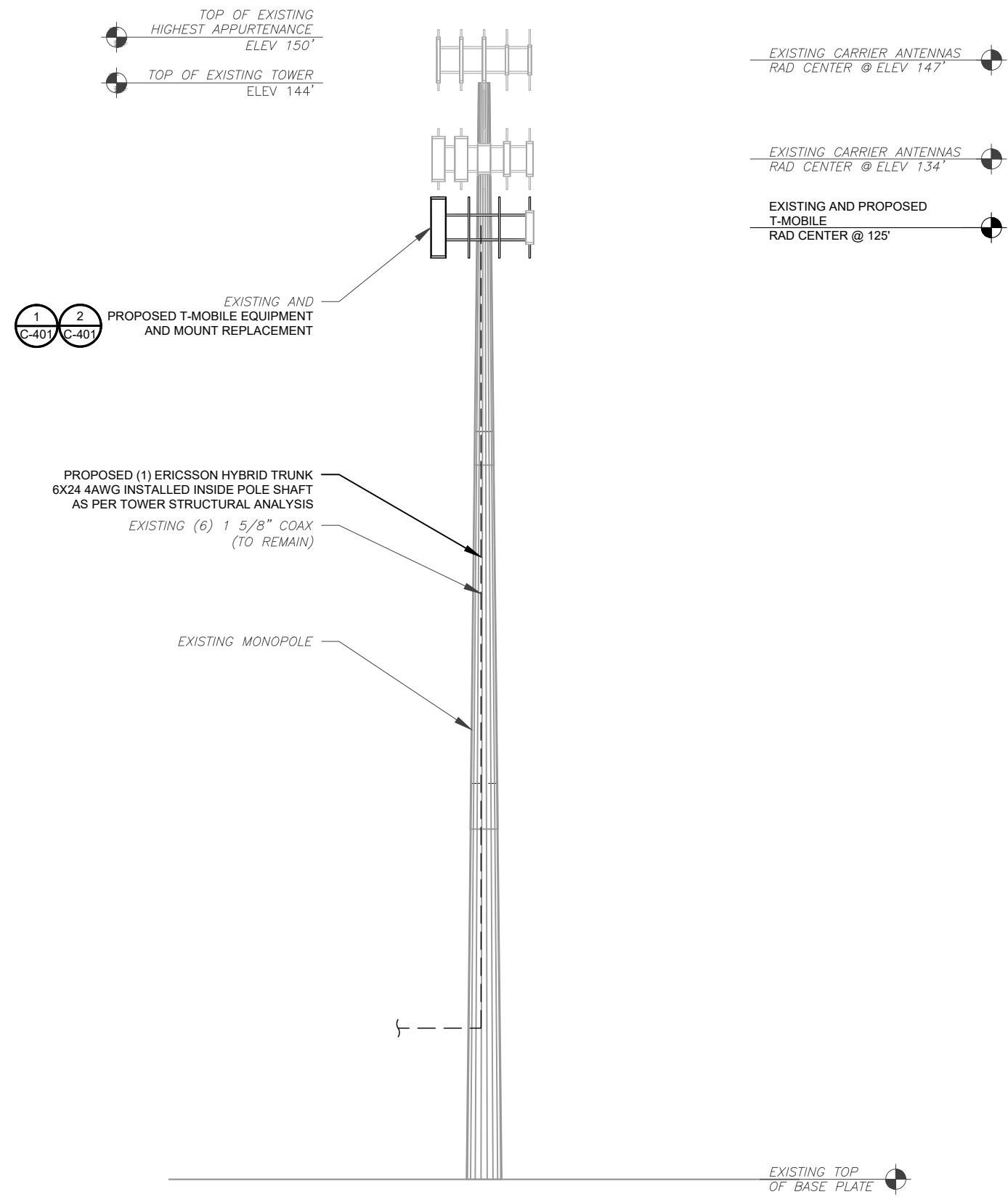


DATE DRAWN:	06/03/22
ATC JOB NO:	14097411_D1
CUSTOMER ID:	OLD FARMS- VERIZON COLO
CUSTOMER #:	CTNH416A

DETAILED EQUIPMENT PLAN

SHEET NUMBER: C-102	REVISION: 1
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PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 05/04/22, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.

1 2
C-401 C-401

PROPOSED (1) ERICSSON HYBRID TRUNK
6X24 4AWG INSTALLED INSIDE POLE SHAFT
AS PER TOWER STRUCTURAL ANALYSIS
EXISTING (6) 1 5/8" COAX
(TO REMAIN)

1 TOWER ELEVATION
SCALE: N.T.S.

TOWER NOTE:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
- ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
- TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)
- TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.



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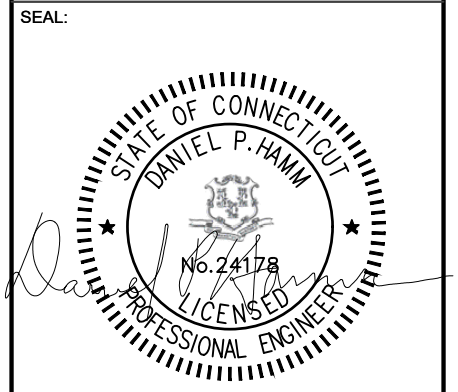
REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22
1	FINALS REVISED	BB	08/03/22

ATC SITE NUMBER:
411177

ATC SITE NAME:
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T-MOBILE SITE NAME:
OLD FARMS- VERIZON COLO

SITE ADDRESS:
14 OLD NORTH ROAD
BARKHAMSTED, CT 06063-3440

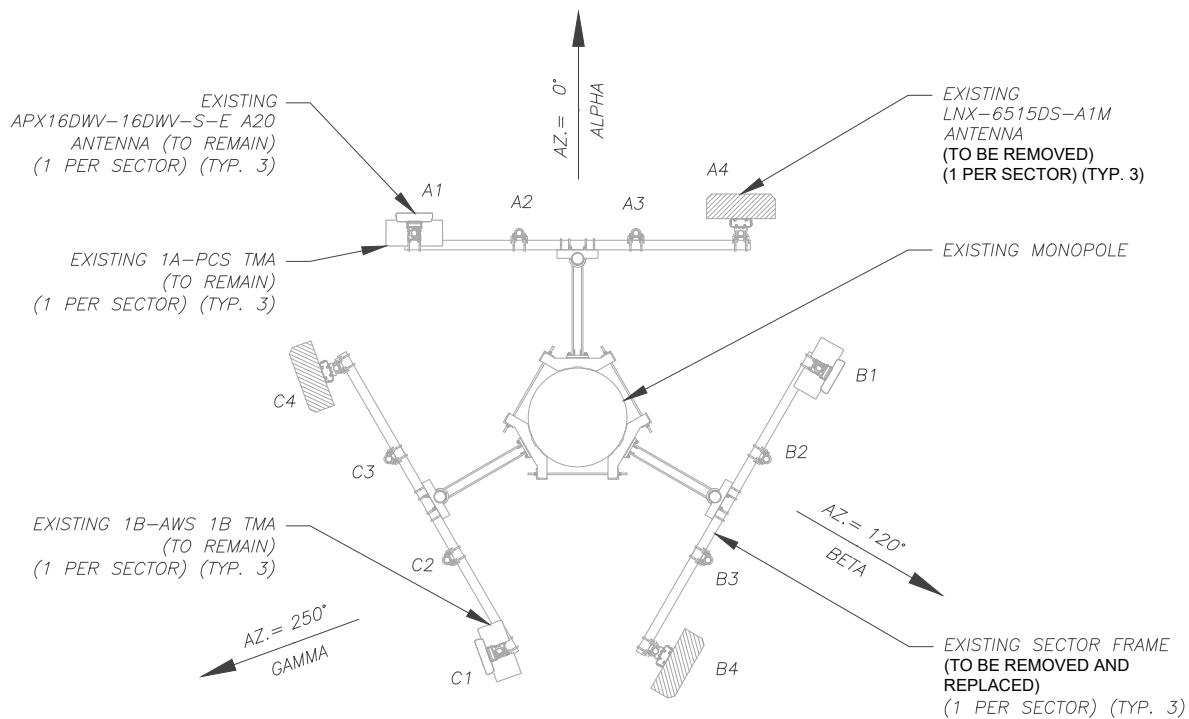


DATE DRAWN:	06/03/22
ATC JOB NO:	14097411_D1
CUSTOMER ID:	OLD FARMS- VERIZON COLO
CUSTOMER #:	CTNH416A

TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	1

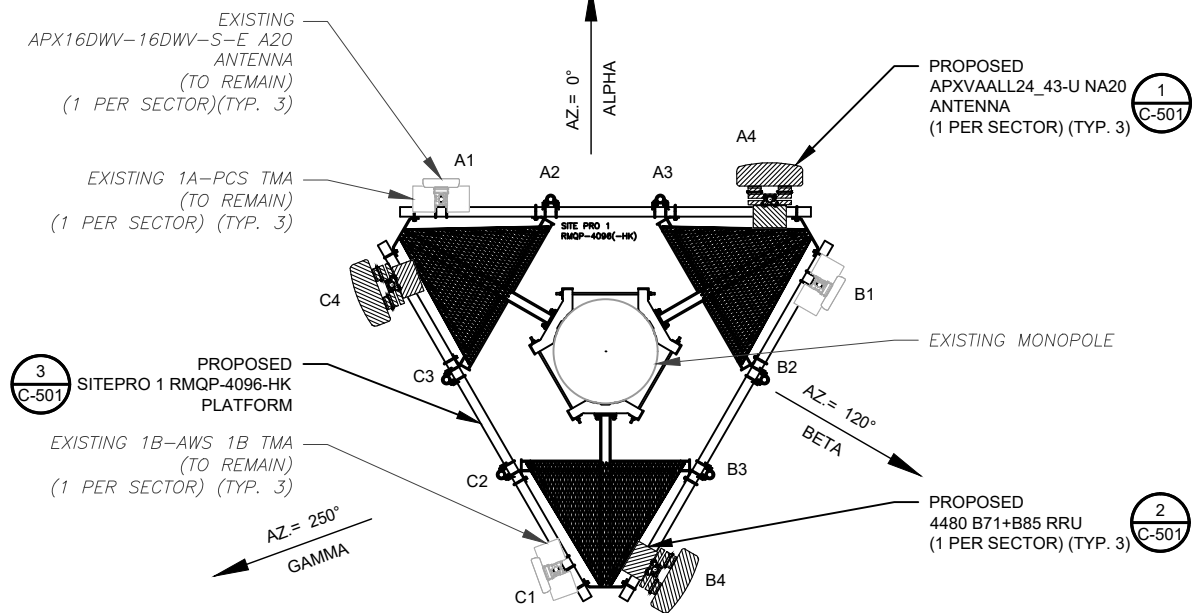
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1 EXISTING ANTENNA PLAN
SCALE: N.T.S.

CONTRACTOR SHALL RE-ORIENT ANTENNA MOUNT(S) AS NECESSARY TO ACHIEVE PROPOSED ANTENNA AZIMUTHS

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 05/04/22, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



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

EXISTING ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	125'	0°	A1	APX16DWV-16DWV-S-E A20	L1900, G1900, U2100	0/2	RMN	1A-PCS TMA 1B-AWS TMA	RMN RMN
			A2	-	-	-	-	-	-
			A3	-	-	-	-	-	-
			A4	LNX-6515DS-A1M	L700	0/2	RMV	-	-
BETA	125'	120°	B1	APX16DWV-16DWV-S-E A20	L1900, G1900, U2100	0/2	RMN	1A-PCS TMA 1B-AWS TMA	RMN RMN
			B2	-	-	-	-	-	-
			B3	-	-	-	-	-	-
			B4	LNX-6515DS-A1M	L700	0/2	RMV	-	-
GAMMA	125'	250°	C1	APX16DWV-16DWV-S-E A20	L1900, G1900, U2100	0/2	RMN	1A-PCS TMA 1B-AWS TMA	RMN RMN
			C2	-	-	-	-	-	-
			C3	-	-	-	-	-	-
			C4	LNX-6515DS-A1M	L700	0/2	RMV	-	-

NOTES

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

STATUS ABBREVIATIONS

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

CABLE LENGTHS FOR JUMPERS

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

FINAL ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	125'	0°	A1	APX16DWV-16DWV-S-E A20	L1900, G1900, U2100	-/-	RMN	1A-PCS TMA 1B-AWS TMA	RMN RMN
			A2	-	-	-	-	-	-
			A3	-	-	-	-	-	-
			A4	APXVAALL24_43-U NA20	L700, L600, N600	-/-	ADD	4480 B71+B85 RRU	ADD
BETA	125'	120°	B1	APX16DWV-16DWV-S-E A20	L1900, G1900, U2100	-/-	RMN	1A-PCS TMA 1B-AWS TMA	RMN RMN
			B2	-	-	-	-	-	-
			B3	-	-	-	-	-	-
			B4	APXVAALL24_43-U NA20	L700, L600, N600	-/-	ADD	4480 B71+B85 RRU	ADD
GAMMA	125'	250°	C1	APX16DWV-16DWV-S-E A20	L1900, G1900, U2100	-/-	RMN	1A-PCS TMA 1B-AWS TMA	RMN RMN
			C2	-	-	-	-	-	-
			C3	-	-	-	-	-	-
			C4	APXVAALL24_43-U NA20	L700, L600, N600	-/-	ADD	4480 B71+B85 RRU	ADD

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
-	-	(6) 1 5/8" COAX	RMN

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
-	-	(6) 1 5/8" COAX	RMN
-	-	(1) ERICSSON HYBRID TRUNK 6X24 4AWG	ADD



45 BEECHWOOD DRIVE
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FAX: (978) 336-5586

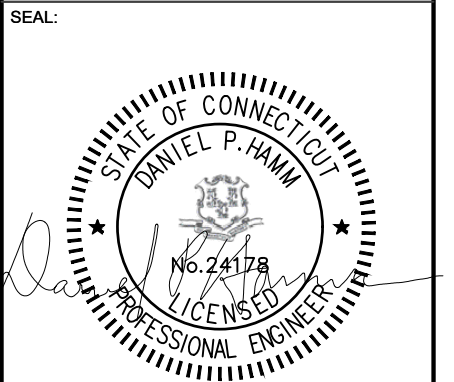
REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22
1	FINALS REVISED	BB	08/03/22

ATC SITE NUMBER:
411177

ATC SITE NAME:
BARKHAMSTEDW CT

T-MOBILE SITE NAME:
OLD FARMS- VERIZON COLO

SITE ADDRESS:
14 OLD NORTH ROAD
BARKHAMSTED, CT 06063-3440

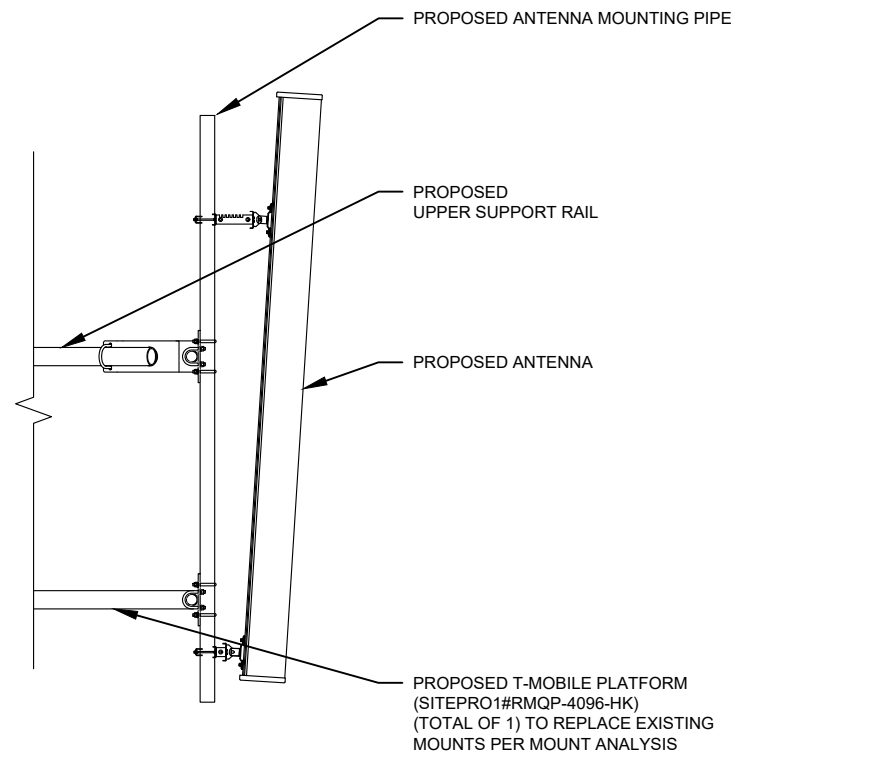


DATE DRAWN:	06/03/22
ATC JOB NO:	14097411_D1
CUSTOMER ID:	OLD FARMS- VERIZON COLO
CUSTOMER #:	CTNH416A

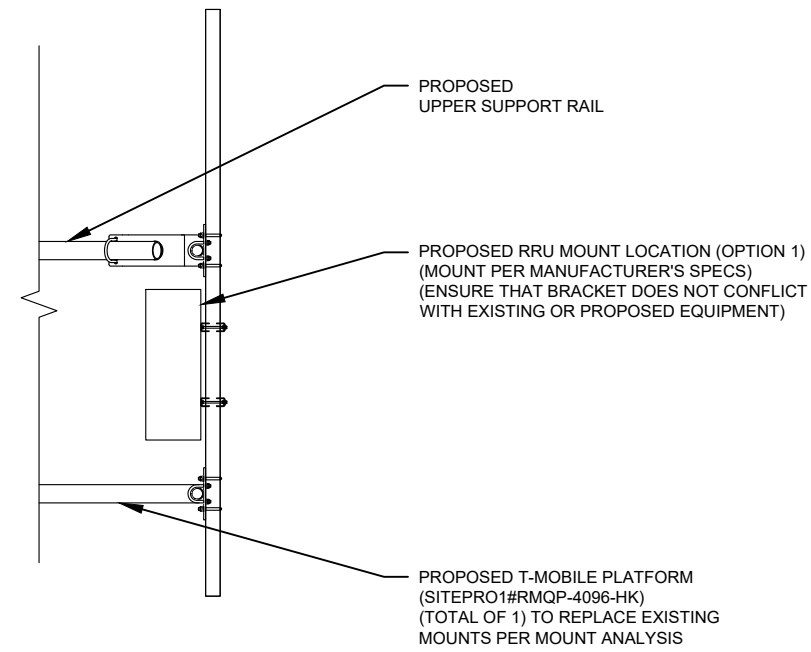
ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER: C-401	REVISION: 1
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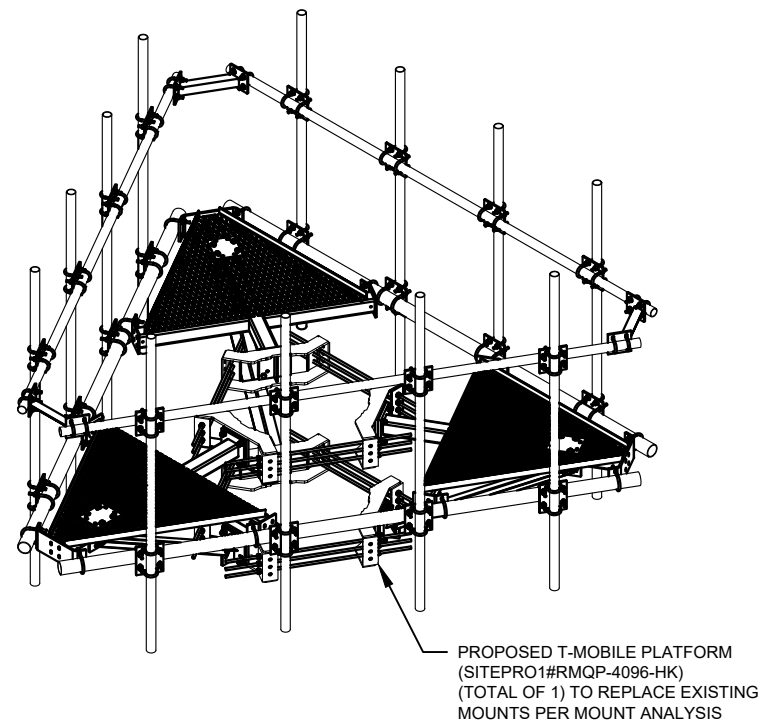
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1 PROPOSED ANTENNA MOUNTING DETAIL - TYPICAL SCALE: N.T.S.



2 PROPOSED RRU MOUNTING DETAIL - TYPICAL SCALE: N.T.S.



3 LOW PROFILE PLATFORM KIT DETAIL SCALE: N.T.S.



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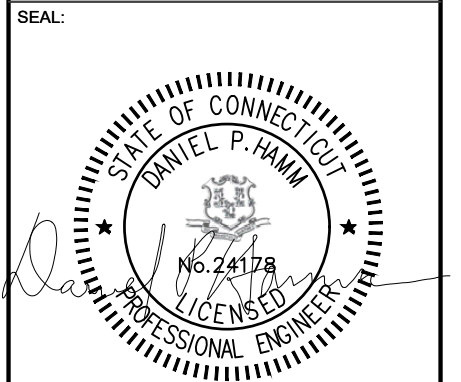
REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22
1	FINALS REVISED	BB	08/03/22

ATC SITE NUMBER:
411177

ATC SITE NAME:
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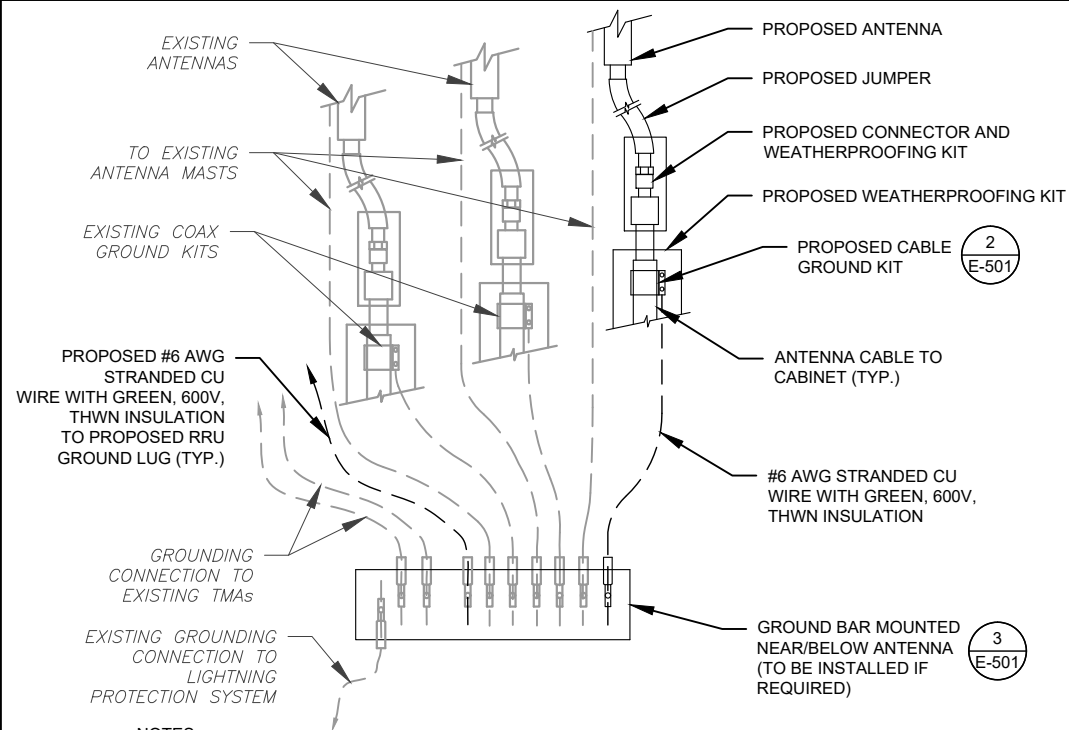
SITE ADDRESS:
14 OLD NORTH ROAD
BARKHAMSTED, CT 06063-3440



DATE DRAWN:	06/03/22
ATC JOB NO:	14097411_D1
CUSTOMER ID:	OLD FARMS- VERIZON COLO
CUSTOMER #:	CTNH416A

CONSTRUCTION DETAILS	
SHEET NUMBER:	REVISION:
C-501	1

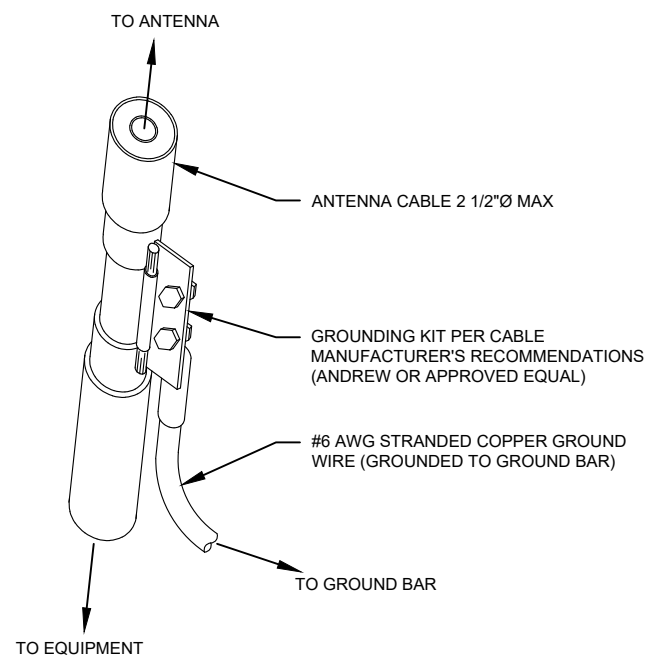
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NOTES:

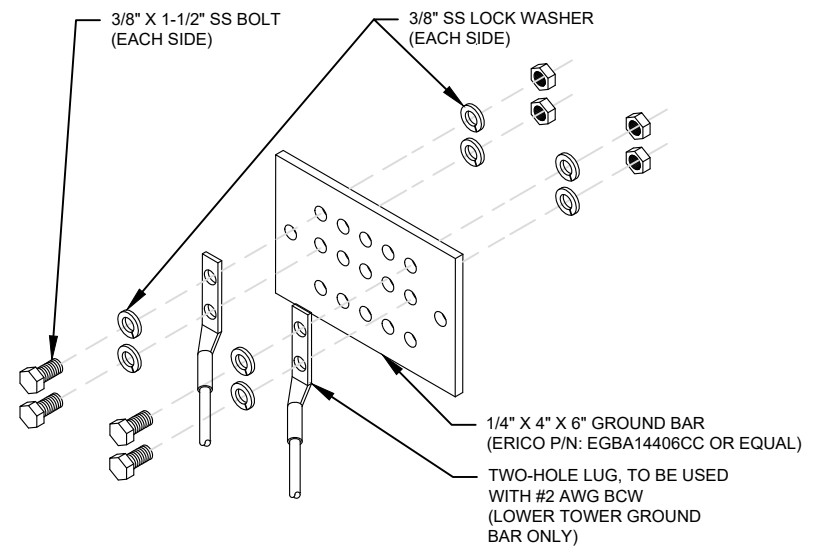
1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH T-MOBILE GROUNDING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

1 TYPICAL ANTENNA GROUNDING DIAGRAM
SCALE: N.T.S.



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

2 CABLE GROUND KIT CONNECTION DETAIL
SCALE: N.T.S.



GROUND BAR NOTES:

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

3 TOWER GROUND BAR DETAIL
SCALE: N.T.S.



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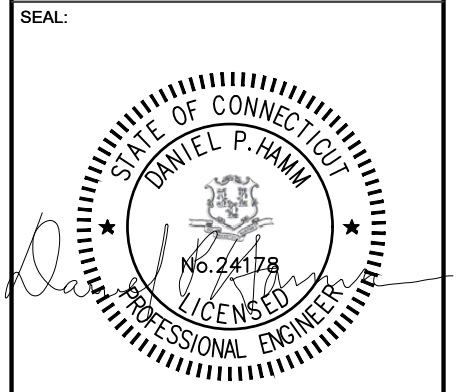
REV.	DESCRIPTION	BY	DATE
A	PRELIM	SS	06/03/22
0	FINALS	BB	06/24/22

ATC SITE NUMBER:
411177

ATC SITE NAME:
BARKHAMSTEDW CT

T-MOBILE SITE NAME:
OLD FARMS- VERIZON COLO

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BARKHAMSTED, CT 06063-3440



DATE DRAWN:	06/03/22
ATC JOB NO:	14097411_D1
CUSTOMER ID:	OLD FARMS- VERIZON COLO
CUSTOMER #:	CTNH416A

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	1

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3/10/22, 6:12 PM CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3
Print Name: Standard
PORs: L600_L600 Coverage

Section 1 - Site Information

Site ID: CTNH416A
Status: Final
Version: 3
Project Type: L600
Approved: 3/9/2022 3:7:18 PM
Approved By: Justin.Darrow@mobile.com
Last Modified: 3/9/2022 3:7:18 PM
Last Modified By: Justin.Darrow@mobile.com

Site Name: Old Farms Verizon Colo
Site Class: Monopole
Site Type: Structure Non Building
Plan Year: 2022
Market: CONNECTICUT CT
Vendor: Ericsson
Landside: Verizon Wireless

Lat/Long: 41.91490000
Longitude: -73.02160000
Address: Hickory Ridge Rd
City, State: Barkhamsted, CT
Region: NORTHEAST

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

Sector Count: 3 Antenna Count: 6 Coax Line Count: 6 TMA Count: 6 RRU Count: 3

Section 2 - Existing Template Images

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3/10/22, 6:12 PM CTNH416A_L600_3_2022-03-10

Section 4 - Siteplan Images

--- This section is intentionally blank. ---

3/10/22, 6:12 PM CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

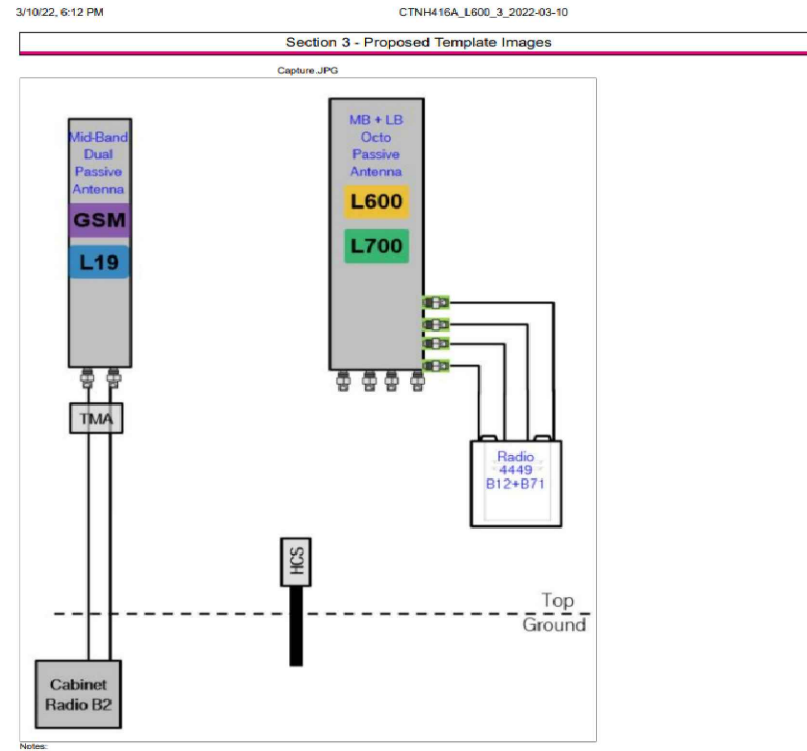
CTNH416A_L600_3
Print Name: Standard
PORs: L600_L600 Coverage

Section 6 - A&L Equipment

Existing Template: 704G
Proposed Template: 67E04G_1DP+1OP

Sector 1 (Existing) view from behind

Coverage Type	A - Outdoor Macro			
Antenna	1	2	3	4
Antenna Model	RFS-APX16DW-16DW-S-E-A20 (Quad)	Empty Antenna Mount (Empty mount)	Empty Antenna Mount (Empty mount)	Andrew-LNX-6516DS-A1M (Dual)
Azimuth	0			0
M. Tilt	0			0
Height	125			125
Ports	P1	P2		P3
Active Tech.	L1900 G1900	L2100		L700
Dark Tech.				
Restricted Tech.				
Decomm. Tech.				
E. Tilt	0	0		0
Cables	1-5/8" Coax - 150 ft.	1-5/8" Coax - 150 ft.		1-5/8" Coax - 150 ft.
TMA	Generic Twin Style 1A - PCS (Antenna)	Generic Twin Style 1B - AWS (Antenna)		
Diplexers / Combiners				
Radio				RRUS11 B12 (A Antenna)
Sector Equipment				
Unconnected Equipment:				
Scope of Work:				



3/10/22, 6:12 PM CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3
Print Name: Standard
PORs: L600_L600 Coverage

Section 5 - RAN Equipment

Template: 704G

Existing RAN Equipment

Enclosure	1	2
Enclosure Type	RBS 3100	RBS 6201
Baseband	DUGW0 (BB 5216) (L2100) L1900 L700	DUG20 (G1900)
Radio	RU901 B4 (x3) (L2100) RU901 B4 (x3)	RU902 B2 (x3) (L1900) G1900

Proposed RAN Equipment

Template: 67E04G

Enclosure	1	2
Enclosure Type	RBS 3100	RBS 6201
Baseband	DUGW0 (BB 6648) (L2100) (BB 5216) (L700) (L1900) L600 N600	DUG20 (G1900)
Hybrid Cable System	PSU 4813 vRAA (60) Ericsson Hybrid Trunk 624 4AWG 60m	
Radio	RUS11 B2 (x3) (L1900) G1900	RUS11 B2 (x3) (L700) L1900

RAN Scope of Work:

CTNH416A
Add PSU 4813
Add Radio 4449
Add BB 6648 for L600 / N600 / L700
Antenna Swap from Andrew-LNX-6516DS-A1M to RFS-APXWALL24_43-U-NA20
Existing BB 5216 with L1900 remains
Add 60 meter Hybrid 150' to cab
Add handrail kit
Move / correct azimuths to 0 / 120 / 240
Upgrade the 6201 to 125A

3/10/22, 6:12 PM CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3
Print Name: Standard
PORs: L600_L600 Coverage

Section 1 (Proposed) view from behind

Coverage Type	A - Outdoor Macro					
Antenna	1	2	3	4	5	6
Antenna Model	RFS-APX16DW-16DW-S-E-A20 (Quad)	Empty Antenna Mount (Empty mount)	Empty Antenna Mount (Empty mount)	RFS-APXWALL24_43-U-NA20 (Octo)		
Azimuth	0			0		
M. Tilt						
Height	125			125		
Ports	P1	P2		P3	P4	P5 P6
Active Tech.	L1900 G1900	L2100		L700 (L600) (N600)	L700 (L600) (N600)	
Dark Tech.						
Restricted Tech.						
Decomm. Tech.						
E. Tilt						
Cables	1-5/8" Coax - 150 ft.	1-5/8" Coax - 150 ft.		Coax Jumb (x2)	Coax Jumb (x2)	
TMA	Generic Twin Style 1A - PCS (Antenna)	Generic Twin Style 1B - AWS (Antenna)				
Diplexers / Combiners						
Radio				RAD-448 (x2) +BB (x2) S (A) +BB (x2) S (A) +BB (x2) S (A) +BB (x2) S (A) +BB (x2) S (A) +BB (x2) S (A)		
Sector Equipment						
Unconnected Equipment:						
Scope of Work:	Add PSU 4813 Add Radio 4449 Add BB 6648 for L600 / N600 / L700 Antenna Swap from Andrew-LNX-6516DS-A1M to RFS-APXWALL24_43-U-NA20 Existing BB 5216 with L1900 remains Add 40 meter (125) Hybrid					

*A dashed border indicates shared equipment. Any connected equipment is denoted with the SHARED keyword.

SUPPLEMENTAL

SHEET NUMBER:
R-601

REVISION:
1

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

3/10/22, 6:12 PM

CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3 Print Name: Standard PDRs: L600_L600 Coverage

Sector 2 (Existing) view from behind. Table with columns for Antenna, Azimuth, M. Tilt, Height, Ports, Active Tech, Dark Tech, Restricted Tech, Decomm. Tech, E. Tilt, Cables, TMAs, Diplexers / Combiners, Radio, Sector Equipment, Unconnected Equipment, and Scope of Work.

3/10/22, 6:12 PM

CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3 Print Name: Standard PDRs: L600_L600 Coverage

Sector 3 (Existing) view from behind. Table with columns for Antenna, Azimuth, M. Tilt, Height, Ports, Active Tech, Dark Tech, Restricted Tech, Decomm. Tech, E. Tilt, Cables, TMAs, Diplexers / Combiners, Radio, Sector Equipment, Unconnected Equipment, and Scope of Work.

3/10/22, 6:12 PM

CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3 Print Name: Standard PDRs: L600_L600 Coverage

Section 7 - Power Systems Equipment. Existing Power Systems Equipment and Proposed Power Systems Equipment.

3/10/22, 6:12 PM

CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3 Print Name: Standard PDRs: L600_L600 Coverage

Sector 2 (Proposed) view from behind. Table with columns for Antenna, Azimuth, M. Tilt, Height, Ports, Active Tech, Dark Tech, Restricted Tech, Decomm. Tech, E. Tilt, Cables, TMAs, Diplexers / Combiners, Radio, Sector Equipment, Unconnected Equipment, and Scope of Work.

3/10/22, 6:12 PM

CTNH416A_L600_3_2022-03-10

RAN Template: 67E04G A&L Template: 67E04G_1DP+1OP

CTNH416A_L600_3 Print Name: Standard PDRs: L600_L600 Coverage

Sector 3 (Proposed) view from behind. Table with columns for Antenna, Azimuth, M. Tilt, Height, Ports, Active Tech, Dark Tech, Restricted Tech, Decomm. Tech, E. Tilt, Cables, TMAs, Diplexers / Combiners, Radio, Sector Equipment, Unconnected Equipment, and Scope of Work.

SUPPLEMENTAL

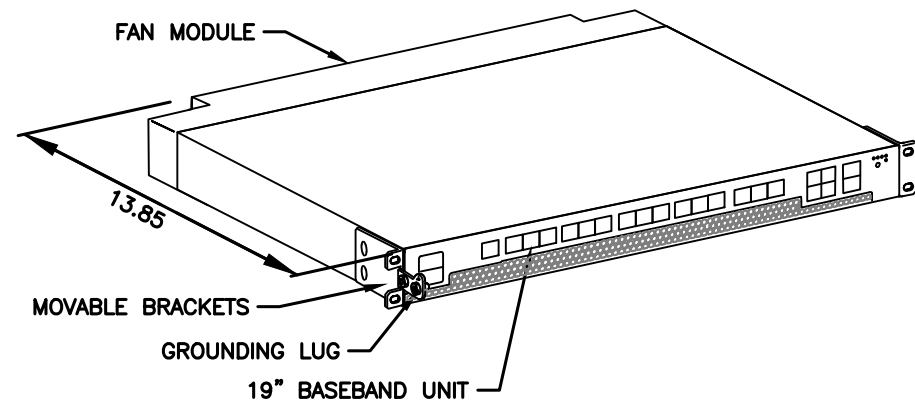
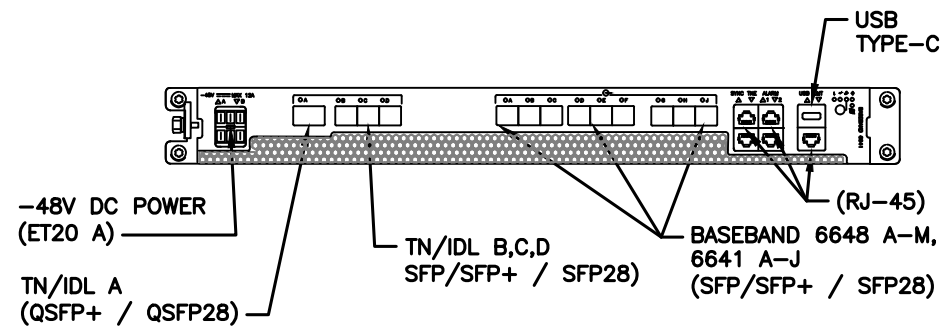
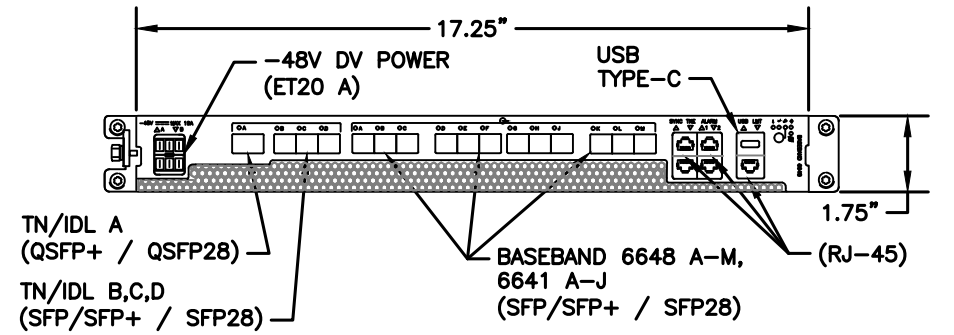
SHEET NUMBER: R-602 REVISION: 1

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

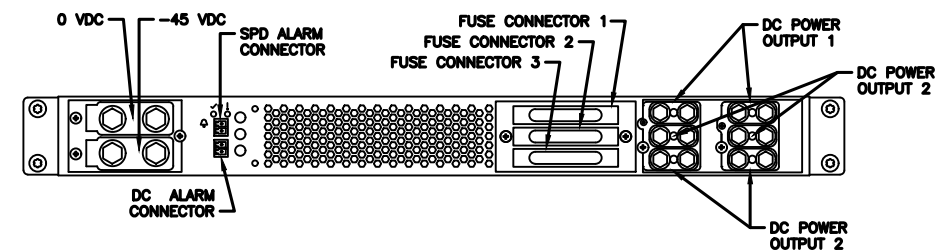
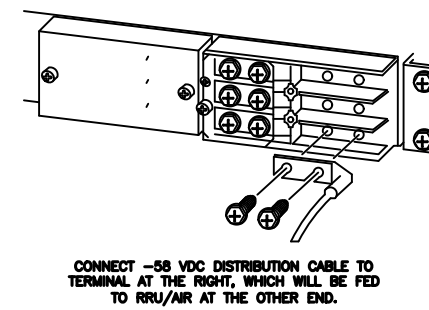
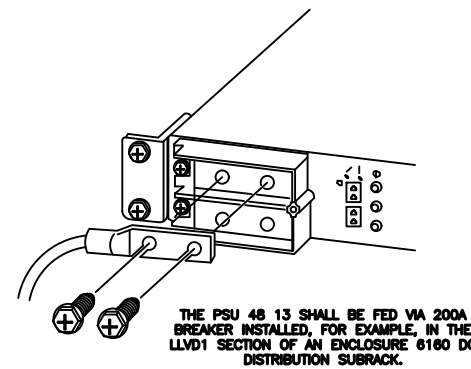
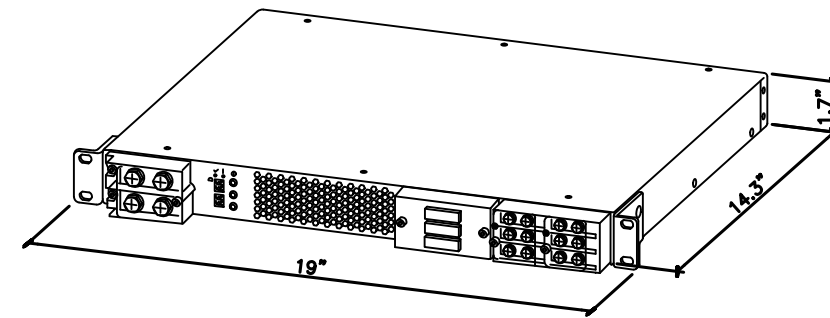
MANUFACTURER:	ERICSSON
MODEL:	BASEBAND 6648
DIMENSIONS:	1.75" x 17.25" x 13.85" (H" x W" x D")
WEIGHT:	16.54 LBS

MANUFACTURER:	ERICSSON
MODEL:	PSU 48 13
WEIGHT:	17.1 LBS
DIMENSIONS:	19"x 1.7"x 14.3"

NEEDED INSTALL KIT (PICK 1)
34133 PSU4813 INSTALL KIT FOR RBS61XX
34134 PSU4813 INSTALL KIT FOR PBC6200
34135 PSU4813 INSTALL KIT FOR 6X60/RBS6230



1 34111 - ERICSSON BASEBAND 6648 (WITH FAN)
SCALE: N.T.S.



1 SKU# 34132 - PSU 48 13
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

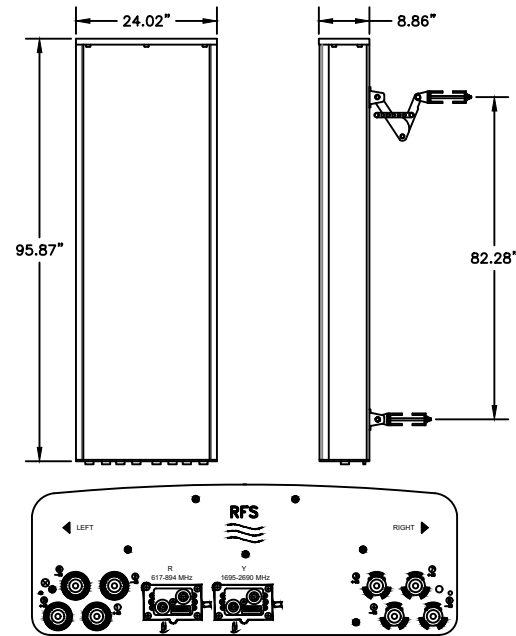
SUPPLEMENTAL

SHEET NUMBER: REVISION:

R-603

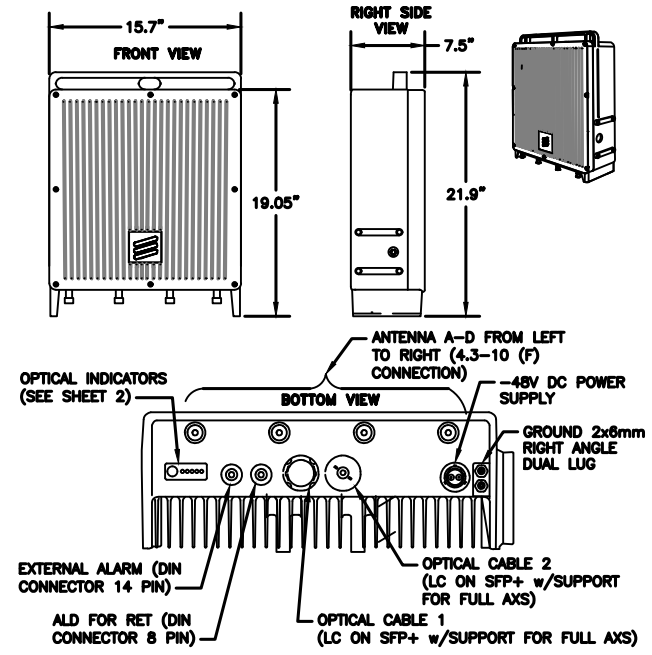
1

MANUFACTURER:	RFS
MODEL:	APXVAALL24_43-U-NA20
DIMENSIONS:	95.87" x 24.02" x 8.86"
WEIGHT:	119 LB
BAND:	QUAD BAND (8 PORT)
MOUNTING KIT & WEIGHT:	APM40-10E BEAM TILT KIT (INCLUDED) (16.53 LBS)



1 34087 - RFS APXVAALL24_43-U-NA20
SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	4480 RADIO (KRC 161 922/1)
DIMENSIONS:	21.9" x 15.7" x 7.5" (H x W x D)
MODEL BAND:	B71, B85 FOR NR AND LTE
WEIGHT:	81 LBS
BRACKET WEIGHT:	3.75 LBS (MULTI ERS #109 1973/2)



2 34372 - ERICSSON 4480 RADIO
SCALE: N.T.S.

SUPPLEMENTAL

SHEET NUMBER: REVISION:

R-604

1

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.



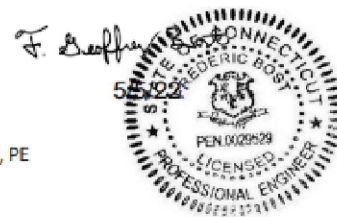
Eng. Number 14097411_C8_01
May 04, 2022
Page 1

Antenna Mount Analysis Report

ATC Site Name : BARKHAMSTEDW CT
 ATC Site Number : 411177
 Engineering Number : 14097411_C8_01
 ETS, PLLC Job Number : 22106741.STR.5264
 Mount Elevation : 125 ft
 Carrier : T-MOBILE
 Carrier Site Name : Old Farms- Verizon Colo
 Carrier Site Number : CTNH416A
 Site Location : 14 Old North Road
 Barkhamsted, CT 06063
 41.914528°, -73.022222°
 County : Litchfield
 Date : May 04, 2022
 Max Usage : 80%
 Result : Pass

Prepared By:
Kousthub Mahendra, EI
Structural Engineer III

Reviewed By:
Frederic Geoffrey Bost, PE
CTO



Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for T-Mobile at 125 ft.

Supporting Documents

Spec Sheet	SitePro 1 Document# RMQP-4096-HK, dated September 20, 2018
RFDS	RFDS, dated March 10, 2022

Analysis

This antenna mount was analyzed using RISA-3D v17.0.4 analysis software.

Basic Wind Speed:	115 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1.0" radial ice concurrent
Codes:	ANSI/TIA-222-H
Structure Class:	II
Exposure Category:	B
Topographic Procedure:	Method 2
Topographic Feature:	Flat
Crest Height:	0 ft
Crest Length:	0 ft
Spectral Response:	$S_s = 0.169, S_i = 0.054$
Site Class:	D - Default
Live Loads:	$L_m = 500 \text{ lbs}, L_v = 250 \text{ lbs}$

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed. The mount can support the equipment as described in this report. Analysis is based on new SitePro 1 RMQP-4096-HK (M2050R(2500)-4[6]) mount.

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

Exhibit D

Structural Analysis Report



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 144 ft Monopole
ATC Site Name : BARKHAMSTEDW CT, CT
ATC Site Number : 411177
Engineering Number : 14097411_C3_02
Proposed Carrier : T-MOBILE
Carrier Site Name : Old Farms- Verizon Colo
Carrier Site Number : CTNH416A
Site Location : 14 Old North Road
Barkhamsted, CT 06063-3440
41.9145, -73.0222
County : Litchfield
Date : May 6, 2022
Max Usage : 75%
Result : Pass

Prepared By:

Nathan Lyle
Structural Engineer

Reviewed By:



COA : PEC.0001553



Table of Contents

Introduction.....	3
Supporting Documents	3
Analysis	3
Conclusion	3
Existing and Reserved Equipment.....	4
Equipment to be Removed	4
Proposed Equipment	4
Structure Usages.....	5
Foundations	5
Deflection and Sway*	5
Standard Conditions	6
Calculations	Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 144 ft Monopole to reflect the change in loading by T-MOBILE.

Supporting Documents

Tower Drawings	EEl Project #13841, dated December 8, 2005
Foundation Drawing	EEl Project #13841, dated December 8, 2005
Geotechnical Report	JGI Project #05704G, dated November 30, 2005
Modifications	Centeck Project #12063.CO32 Rev. 1, dated November 29, 2012
Mount Analysis	Engineered Tower Solutions Job #22106741.STR.5264, dated May 4, 2022

Analysis

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

Basic Wind Speed:	115 mph (3-second gust)
Basic Wind Speed w/ Ice:	50 mph (3-second gust) w/ 1.00" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	$S_s = 0.17, S_i = 0.05$
Site Class:	D - Stiff Soil - Default

Conclusion

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

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

Existing and Reserved Equipment

Elev. ¹ (ft)	Qty	Equipment	Mount Type	Lines	Carrier
146.0	1	VZW Unused Reserve (7555.68 sqin)	Triangular Low Profile Platform	(9) 1 5/8" Coax (1) 2.02 (51.2mm) Hybrid	VERIZON WIRELESS
145.0	3	Samsung B2/B66A RRH-BR049			
	3	Samsung B5/B13 RRH-BR04C			
	3	Samsung MT6407-77A			
	1	RFS DB-C1-12C-24AB-OZ			
	6	Antel LPA-80080/4CF ____			
	6	Quintel QS6656-5D			
134.0	2	CCI DMP65R-BU6DA	Triangular Low Profile Platform	(2) 0.39" (10mm) Fiber Trunk (4) 0.78" (19.7mm) 8 AWG 6 (6) 1 5/8" Coax (2) 2" conduit (6) 3/8" (0.38"-9.5mm) RET Control Cable	AT&T MOBILITY
	2	CCI OPA65R-BU6D			
	1	CCI OPA65R-BU4DA-K			
	1	CCI DMP65R-BU4D			
	3	Powerwave Allgon 7770.00			
	3	Ericsson RRUS 4449 B5, B12			
	3	Ericsson RRUS 4478 B14			
	3	Powerwave Allgon LGP13519			
	6	Powerwave Allgon LGP21401			
	2	Raycap DC6-48-60-18-8F(32.8 lbs)			
125.0	3	Ericsson KRY 112 71	-	(6) 1 5/8" Coax	T-MOBILE
	3	Ericsson KRY 112 144/1			
	3	RFS APX16DWV-16DWV-S-E-ACU			

Equipment to be Removed

Elev. ¹ (ft)	Qty	Equipment	Mount Type	Lines	Carrier
125.0	3	Kathrein Scala Smart Bias Tee	T-Arm	(12) 1 5/8" Coax	T-MOBILE
	3	RFS APX16DWV-16DWV-S-E-ACU			
	3	Commscope LNX-6515DS-VTM			

Proposed Equipment

Elev. ¹ (ft)	Qty	Equipment	Mount Type	Lines	Carrier
125.0	3	Ericsson 4480 BAND 71	Triangular Platform with Handrails	(1) 1.99" (50.7mm) Hybrid	T-MOBILE
	3	RFS APXVAALL24 43-U-NA20			

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

Install proposed lines inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	45%	Pass
Shaft	65%	Pass
Base Plate	41%	Pass
Reinforcement	75%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	2530.5	3416.2	2277.0	67%
Shear (Kips)	24.2	32.7	20.5	63%

* The design reactions are factored by 1.35 per ANSI/TIA-222-H, Sec. 15.6.2

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
125.0	RFS APXVAALL24 43-U-NA20	T-MOBILE	1.247	1.260
	Ericsson 4480 BAND 71			

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

Standard Conditions

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

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

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

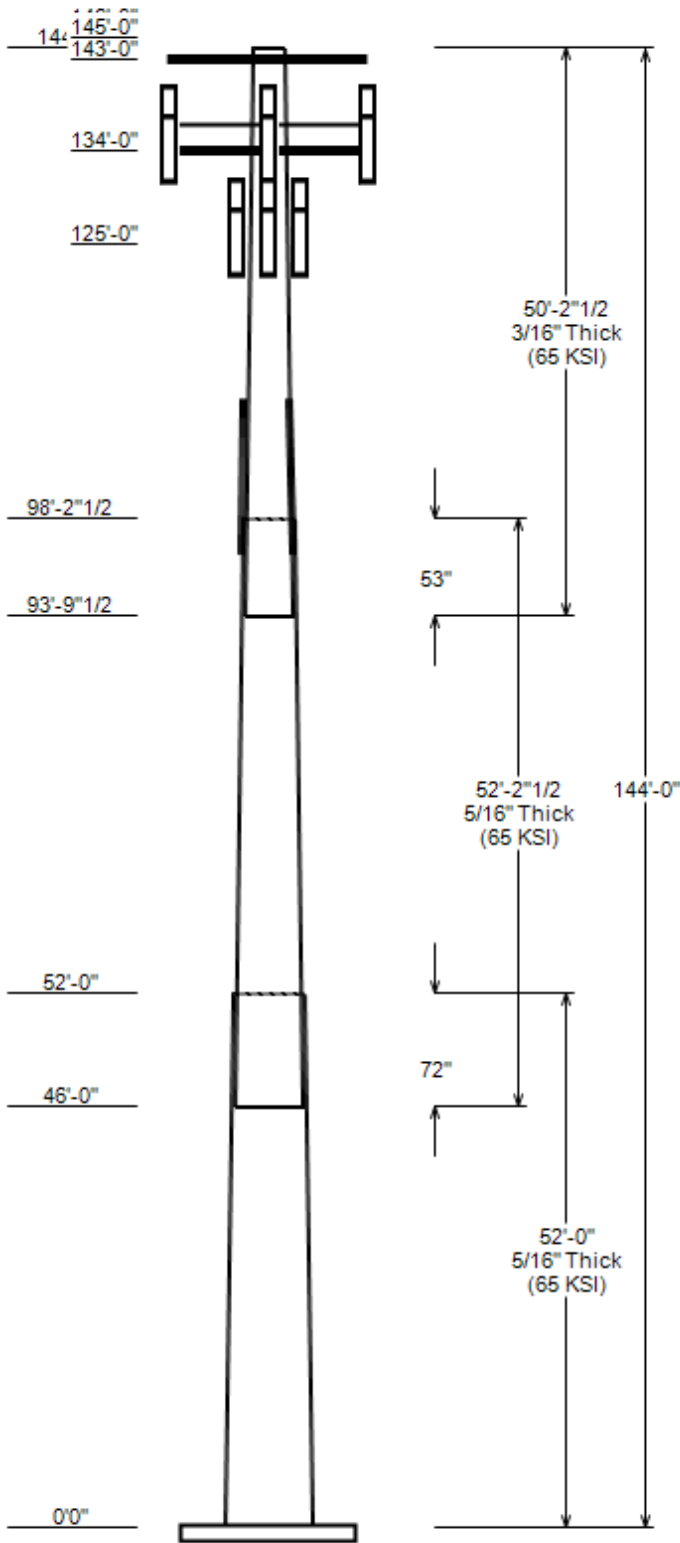
All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively “American Tower”) are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with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

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

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

Asset : 411177, BARKHAMSTEDW CT
 Client : T-MOBILE
 Code : ANSI/TIA-222-H

Height : 144 ft
 Base Width : 55
 Shape : 18 Sides



SITE PARAMETERS

Nominal Wind: 115 mph wind with no ice **Topo Category:** 1
 Ice Wind: 50 mph wind with 1" radial **Topo Method:** Method 1
 Base Elev (ft): 0.00 Taper : 0.26700 (in/ft) **Topo Feature:**
 Structure Class: II Exposure : B S_s : 0.169 S₁ : 0.054

SECTION PROPERTIES

Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Joint Type	Overlap Length (in)	Shape	Steel Grade (ksi)
		Across Flats Top	Across Flats Bottom					
1	52.000	41.10	55.00	0.312		0.000	18 Sides	65
2	52.210	29.37	43.33	0.312	Slip Joint	72.000	18 Sides	65
3	50.207	17.50	30.92	0.188	Slip Joint	53.000	18 Sides	65

DISCRETE APPURTENANCE

Attach Elev (ft)	Force Elev (ft)	Qty	Description
146.0	146.0	1	VZW Unused Reserve (7555.68 sq
145.0	145.0	3	Samsung B5/B13 RRH-BR04C
145.0	145.0	3	Samsung B2/B66A RRH-BR049
145.0	145.0	1	RFS DB-C1-12C-24AB-0Z
145.0	145.0	3	Samsung MT6407-77A
145.0	147.0	6	Antel LPA-80080/4CF ____
145.0	145.0	6	Quintel QS6656-5D
143.0	143.0	1	Generic Flat Low Profile Platf
134.0	134.0	3	Powerwave Allgon LGP13519
134.0	134.0	6	Powerwave Allgon LGP21401
134.0	137.0	2	Raycap DC6-48-60-18-8F(32.8 lb
134.0	134.0	3	Ericsson RRUS 4478 B14
134.0	134.0	3	Ericsson RRUS 4449 B5, B12
134.0	137.0	3	Powerwave Allgon 7770.00
134.0	134.0	1	CCI DMP65R-BU4D
134.0	134.0	1	CCI OPA65R-BU4DA-K
134.0	134.0	2	CCI DMP65R-BU6DA
134.0	134.0	2	CCI OPA65R-BU6D
134.0	134.0	1	Generic Flat Platform with Han
125.0	127.0	3	Ericsson KRY 112 144/1
125.0	127.0	3	Ericsson KRY 112 71
125.0	125.0	3	Ericsson 4480 BAND 71
125.0	127.0	3	RFS APX16DWV-16DWV-S-E-ACU
125.0	125.0	3	RFS APXVAALL24 43-U-NA20
125.0	125.0	1	Round Platform with Handrails

LINEAR APPURTENANCE

Elev From (ft)	Elev To (ft)	Description	Exp To Wind
0.0	145.0	2.02 (51.2mm) Hybrid	No
0.0	145.0	1 5/8" Coax	Yes
0.0	145.0	1 5/8" Coax	No
0.0	134.0	3/8" (0.38"- 9.5mm) RET Control Cable	No
0.0	134.0	3/8" (0.38"- 9.5mm) RET Control Cable	No
0.0	134.0	2" conduit	No
0.0	134.0	1 5/8" Coax	No
0.0	134.0	0.78" (19.7mm) 8 AWG 6	No
0.0	134.0	0.39" (10mm) Fiber Trunk	No
0.0	125.0	1.99" (50.7mm) Hybrid	No
0.0	125.0	1 5/8" Coax	No
94.8	109.8	Plate	Yes
94.8	109.8	Plate	Yes
94.8	109.8	Plate	Yes

JOB INFORMATION

Asset : 411177, BARKHAMSTEDW CT
 Client : T-MOBILE
 Code : ANSI/TIA-222-H

Height : 144 ft
 Base Width : 55
 Shape : 18 Sides

LOAD CASES

1.2D + 1.0W Normal	115 mph wind with no ice
0.9D + 1.0W Normal	115 mph wind with no ice
1.2D + 1.0Di + 1.0Wi Nor	50 mph wind with 1" radial ice
1.2D + 1.0Ev + 1.0Eh Nor	Seismic
0.9D - 1.0Ev + 1.0Eh Nor	Seismic (Reduced DL)
1.0D + 1.0W Service Norm	60 mph Wind with No Ice

REACTIONS

Load Case	Moment (kip-ft)	Shear (Kip)	Axial (Kip)
1.2D + 1.0W Normal	2277.01	20.53	39.24
0.9D + 1.0W Normal	2245.62	20.52	29.42
1.2D + 1.0Di + 1.0Wi Normal	611.97	5.68	54.39
1.2D + 1.0Ev + 1.0Eh Normal	124.59	0.98	39.11
0.9D - 1.0Ev + 1.0Eh Normal	122.51	0.98	27.34
1.0D + 1.0W Service Normal	550.05	5.00	32.72

DISH DEFLECTIONS

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
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ASSET: 411177, BARKHAMSTEDW CT
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
ENG NO: 14097411_C3_02

ANALYSIS PARAMETERS

Location:	Litchfield County,CT	Height:	144 ft
Type and Shape:	Taper, 18 Sides	Base Diameter:	55.00 in
Manufacturer:	Undetermined	Top Diameter:	17.50 in
K_d (non-service):	0.95	Taper:	0.2670 in/ft
K_e:	0.97	Rotation:	0.000°

ICE & WIND PARAMETERS

Exposure Category:	B	Design Wind Speed w/o Ice:	115 mph
Risk Category:	II	Design Wind Speed w/Ice:	50 mph
Topo Factor Procedure:	Method 1	Operational Wind Speed:	60 mph
Topographic Category:	1	Design Ice Thickness:	1.00 in
Crest Height:	0 ft	HMSL:	810.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):	2.56
T_L (sec):	6	P:	1
S_s:	0.169	S₁:	0.054
F_a:	1.600	F_v:	2.400
S_{ds}:	0.180	S_{dt}:	0.086
		C_s:	0.030
		C_s Max:	0.030
		C_s Min:	0.030

LOAD CASES

1.2D + 1.0W Normal	115 mph wind with no ice
0.9D + 1.0W Normal	115 mph wind with no ice
1.2D + 1.0Di + 1.0Wi Normal	50 mph wind with 1" radial ice
1.2D + 1.0Ev + 1.0Eh Normal	Seismic
0.9D - 1.0Ev + 1.0Eh Normal	Seismic (Reduced DL)
1.0D + 1.0W Service Normal	60 mph Wind with No Ice

SHAFT SECTION PROPERTIES

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint len (in)	Weight (lb)	Bottom						Top						
							Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	52.00	0.3125	65		0.00	8,378	55.00	0.000	54.24	20,495.5	29.62	176.00	41.10	52.00	40.45	8,501.4	21.78	131.51	0.2674
2-18	52.21	0.3125	65	Slip	72.00	6,350	43.33	46.000	42.66	9,972.9	23.04	138.64	29.37	98.21	28.82	3,073.7	15.16	93.98	0.2674
3-18	50.21	0.1875	65	Slip	53.00	2,443	30.92	93.793	18.29	2,183.2	27.67	164.92	17.50	144.00	10.30	390.2	15.05	93.33	0.2674
Shaft Weight						17,171													

DISCRETE APPURTENANCE PROPERTIES

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice			Ice		
					Weight (lb)	EPAA (sf)	Orientation Factor	Weight (lb)	EPAA (sf)	Orientation Factor
146.00	VZW Unused Reserve (7555.68 sq	1	0.80	0.000	326.60	52.470	0.90	477.92	76.781	0.90
145.00	RFS DB-C1-12C-24AB-0Z	1	0.80	0.000	32.00	4.056	1.00	116.53	4.964	1.00
145.00	Samsung MT6407-77A	3	0.80	0.000	81.60	4.709	0.61	149.39	5.719	0.61
145.00	Antel LPA-80080/4CF	6	0.80	2.000	12.00	5.399	0.62	95.58	3.166	0.62
145.00	Quintel QS6656-5D	6	0.80	0.000	88.00	8.133	0.74	220.51	9.987	0.74
145.00	Samsung B5/B13 RRH-BR04C	3	0.80	0.000	70.30	1.875	0.50	108.34	2.475	0.50
145.00	Samsung B2/B66A RRH-BR049	3	0.80	0.000	84.40	1.875	0.50	126.83	2.475	0.50
143.00	Generic Flat Low Profile Platf	1	1.00	0.000	1875.00	26.100	1.00	2412.87	38.780	1.00
134.00	CCI OPA65R-BU6D	2	0.75	0.000	63.20	12.871	0.72	235.58	14.716	0.72
134.00	Generic Flat Platform with Han	1	1.00	0.000	2500.00	42.400	1.00	3671.67	56.232	1.00
134.00	CCI DMP65R-BU6DA	2	0.75	0.000	79.40	12.709	0.72	249.30	14.548	0.72
134.00	CCI OPA65R-BU4DA-K	1	0.75	0.000	52.50	8.435	1.00	173.40	9.780	1.00
134.00	Powerwave Allgon 7770.00	3	0.75	3.000	35.00	5.508	0.65	109.97	6.910	0.65
134.00	Ericsson RRUS 4449 B5, B12	3	0.75	0.000	71.00	1.969	0.50	113.51	2.584	0.50
134.00	Ericsson RRUS 4478 B14	3	0.75	0.000	59.90	1.842	0.50	96.37	2.434	0.50
134.00	Raycap DC6-48-60-18-8F(32.8 lb	2	0.75	3.000	32.80	1.470	1.00	73.49	1.931	1.00
134.00	Powerwave Allgon LGP21401	6	0.75	0.000	14.10	1.104	0.50	30.56	1.575	0.50
134.00	Powerwave Allgon LGP13519	3	0.75	0.000	5.30	0.290	0.50	11.55	0.545	0.50
134.00	CCI DMP65R-BU4D	1	0.75	0.000	67.90	8.280	1.00	187.02	9.615	1.00
125.00	RFS APXVAALL24 43-U-NA20	3	0.80	0.000	122.80	20.243	0.63	377.79	22.671	0.63
125.00	RFS APX16DWV-16DWV-S-E-ACU	3	0.80	2.000	39.60	6.077	0.60	93.29	7.424	0.60
125.00	Ericsson 4480 BAND 71	3	0.80	0.000	81.00	2.878	0.67	130.83	3.613	0.67
125.00	Ericsson KRY 112 71	3	0.80	2.000	13.20	0.583	0.50	25.19	0.946	0.50
125.00	Ericsson KRY 112 144/1	3	0.80	2.000	11.00	0.351	0.50	18.04	0.617	0.50
125.00	Round Platform with Handrails	1	1.00	0.000	2670.00	27.200	1.00	3887.68	39.605	1.00
Totals	Num Loadings: 25	67			10,584.70			18,207.03		

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg) : 310.00

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Flat	Coax/ Row	Dist Between Rows(in)	Dist Between Cols(in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind	Carrier
0.00	145.00	6	1 5/8" Coax	1.98	0.82	N	6	1	1	320	1	Y	VERIZON WIREL
0.00	145.00	3	1 5/8" Coax	1.98	0.82	N	0	0	0	0	0	N	VERIZON WIREL
0.00	145.00	1	2.02 (51.2mm) Hybrid	2.02	3.04	N	0	0	0	0	0	N	VERIZON WIREL
0.00	134.00	6	1 5/8" Coax	1.98	0.82	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	134.00	4	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	134.00	3	3/8" (0.38"- 9.5mm) R	0.38	0.23	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	134.00	3	3/8" (0.38"- 9.5mm) R	0.38	0.23	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	134.00	2	2" conduit	2.38	3.65	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	134.00	2	0.39" (10mm) Fiber Tr	0.39	0.06	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	125.00	6	1 5/8" Coax	1.98	0.82	N	6	1	1	80	1	N	T-MOBILE
0.00	125.00	1	1.99" (50.7mm) Hybrid	1.99	1.9	N	0	0	0	0	0	N	T-MOBILE
94.80	109.80	1	Plate	0.75	0	Y	1	0	0	0	0	Y	
94.80	109.80	1	Plate	0.75	0	Y	1	0	0	120	0	Y	
94.80	109.80	1	Plate	0.75	0	Y	1	0	0	240	0	Y	

ADDITIONAL STEEL

Elev From	Elev To	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connectors		Spacing (in)	Len (in)	Connectors	Continuation?
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ASSET: 411177, BARKHAMSTEDW CT
CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
ENG NO: 14097411_C3_02

(ft)	(ft)									
94.75	109.75	3	PL PL 4 x 0.75"	50	0.00	AJAX M20 Class 8.8	12.00	AJAX M20 Class 8.8		N

SEGMENT PROPERTIES

(Max Len: 5.ft)

Additional Reinforcing

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)	Area (in ²)	Ix (in ⁴)	Weight (lb)
0.00		0.3125	55.000	54.241	20,495.50	29.62	176.00	66.6	734.0	0.0	0.0			
5.00		0.3125	53.663	52.915	19,028.90	28.87	171.72	67.4	698.4	0.0	911.6			
10.00		0.3125	52.326	51.589	17,634.10	28.11	167.44	68.3	663.8	0.0	889.0			
15.00		0.3125	50.990	50.264	16,309.10	27.36	163.17	69.2	630.0	0.0	866.5			
20.00		0.3125	49.653	48.938	15,052.20	26.61	158.89	70.1	597.1	0.0	843.9			
25.00		0.3125	48.316	47.612	13,861.60	25.85	154.61	71	565.1	0.0	821.3			
30.00		0.3125	46.979	46.286	12,735.50	25.10	150.33	71.9	533.9	0.0	798.8			
35.00		0.3125	45.642	44.960	11,672.10	24.34	146.06	72.8	503.7	0.0	776.2			
40.00		0.3125	44.306	43.634	10,669.60	23.59	141.78	73.7	474.3	0.0	753.7			
45.00		0.3125	42.969	42.308	9,726.20	22.83	137.50	74.5	445.8	0.0	731.1			
46.00	Bot - Section 2	0.3125	42.701	42.043	9,544.50	22.68	136.64	74.7	440.2	0.0	143.5			
50.00		0.3125	41.632	40.982	8,840.10	22.08	133.22	75.4	418.2	0.0	1,138.5			
52.00	Top - Section 1	0.3125	41.722	41.072	8,898.20	22.13	133.51	75.4	420.1	0.0	558.4			
55.00		0.3125	40.920	40.276	8,391.10	21.68	130.94	75.9	403.9	0.0	415.2			
60.00		0.3125	39.583	38.950	7,589.40	20.92	126.67	76.8	377.6	0.0	674.0			
65.00		0.3125	38.247	37.625	6,840.40	20.17	122.39	77.7	352.3	0.0	651.4			
70.00		0.3125	36.910	36.299	6,142.40	19.42	118.11	78.6	327.8	0.0	628.9			
75.00		0.3125	35.573	34.973	5,493.60	18.66	113.83	79.5	304.2	0.0	606.3			
80.00		0.3125	34.236	33.647	4,892.20	17.91	109.56	80.3	281.4	0.0	583.7			
85.00		0.3125	32.899	32.321	4,336.30	17.15	105.28	81.2	259.6	0.0	561.2			
90.00		0.3125	31.563	30.995	3,824.30	16.40	101.00	82.1	238.6	0.0	538.6			
93.79	Bot - Section 3	0.3125	30.548	29.989	3,463.90	15.83	97.75	82.6	223.3	0.0	393.6			
94.75	Reinf Bottom	0.3125	30.293	29.735	3,376.70	15.68	96.94	82.6	219.6	0.0	156.5			
95.00		0.3125	30.226	29.669	3,354.20	15.64	96.72	82.6	218.6	0.0	40.7	9.000	1,111.90	7.7
98.21	Top - Section 2	0.1875	29.743	17.588	1,941.10	26.56	158.63	70.2	128.5	0.0	514.3	9.000	1,052.20	98.3
100.00		0.1875	29.264	17.304	1,848.30	26.11	156.07	70.7	124.4	0.0	106.3	9.000	1,019.70	54.8
105.00		0.1875	27.927	16.508	1,604.90	24.85	148.95	72.2	113.2	0.0	287.6	9.000	931.40	153.1
109.75	Reinf. Top	0.1875	26.657	15.752	1,394.40	23.66	142.17	73.6	103.0	0.0	260.7	9.000	851.30	145.5
110.00		0.1875	26.590	15.712	1,383.90	23.60	141.82	73.6	102.5	0.0	13.4			
115.00		0.1875	25.254	14.917	1,184.10	22.34	134.69	75.1	92.4	0.0	260.6			
120.00		0.1875	23.917	14.121	1,004.60	21.08	127.56	76.6	82.7	0.0	247.0			
125.00		0.1875	22.580	13.326	844.20	19.82	120.43	78.1	73.6	0.0	233.5			
130.00		0.1875	21.243	12.530	701.90	18.57	113.30	79.6	65.1	0.0	220.0			
134.00		0.1875	20.174	11.894	600.30	17.56	107.59	80.7	58.6	0.0	166.2			
135.00		0.1875	19.906	11.735	576.50	17.31	106.17	81	57.0	0.0	40.2			
140.00		0.1875	18.570	10.939	467.00	16.05	99.04	82.5	49.5	0.0	192.9			
143.00		0.1875	17.768	10.462	408.50	15.30	94.76	82.6	45.3	0.0	109.2			
144.00		0.1875	17.500	10.303	390.20	15.05	93.33	82.6	43.9	0.0	35.3			

Totals: 17,169.8 459.4

Load Case: 1.2D + 1.0W Normal	115 mph wind with no ice	24 Iterations
Gust Response Factor:	1.10	
Dead load Factor:	1.20	
Wind Load Factor:	1.00	

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-39.24	-20.53	0.00	-2,277.0	0.00	2,277.01	3,249.22	951.93	4,701.78	3,663.92	0	0	0.634
5.00	-37.89	-20.23	0.00	-2,174.4	0.00	2,174.37	3,212.04	928.66	4,474.75	3,532.96	0.08	-0.15	0.628
10.00	-36.57	-19.94	0.00	-2,073.2	0.00	2,073.21	3,172.75	905.39	4,253.33	3,401.79	0.33	-0.31	0.621
15.00	-35.27	-19.66	0.00	-1,973.5	0.00	1,973.50	3,131.34	882.13	4,037.53	3,270.59	0.75	-0.48	0.615
20.00	-34.01	-19.38	0.00	-1,875.2	0.00	1,875.22	3,087.81	858.86	3,827.35	3,139.53	1.34	-0.64	0.609
25.00	-32.77	-19.10	0.00	-1,778.3	0.00	1,778.34	3,042.17	835.59	3,622.79	3,008.79	2.1	-0.82	0.602
30.00	-31.56	-18.83	0.00	-1,682.8	0.00	1,682.82	2,994.41	812.32	3,423.84	2,878.54	3.05	-0.99	0.596
35.00	-30.37	-18.55	0.00	-1,588.7	0.00	1,588.67	2,944.53	789.05	3,230.51	2,748.97	4.19	-1.18	0.589
40.00	-29.22	-18.27	0.00	-1,495.9	0.00	1,495.90	2,892.53	765.78	3,042.80	2,620.24	5.53	-1.37	0.582
45.00	-28.11	-18.08	0.00	-1,404.6	0.00	1,404.56	2,838.42	742.51	2,860.71	2,492.54	7.06	-1.56	0.574
46.00	-27.87	-17.95	0.00	-1,386.5	0.00	1,386.48	2,827.34	737.85	2,824.97	2,467.14	7.39	-1.6	0.572
50.00	-26.31	-17.74	0.00	-1,314.7	0.00	1,314.69	2,782.19	719.24	2,684.24	2,366.04	8.8	-1.76	0.566
52.00	-25.54	-17.58	0.00	-1,279.2	0.00	1,279.22	2,786.05	720.81	2,695.98	2,374.54	9.56	-1.84	0.548
55.00	-24.88	-17.34	0.00	-1,226.5	0.00	1,226.47	2,751.38	706.85	2,592.56	2,299.23	10.76	-1.97	0.543
60.00	-23.82	-17.03	0.00	-1,139.8	0.00	1,139.76	2,691.91	683.58	2,424.70	2,174.91	12.93	-2.17	0.534
65.00	-22.80	-16.72	0.00	-1,054.6	0.00	1,054.60	2,630.31	660.31	2,262.45	2,052.24	15.31	-2.38	0.523
70.00	-21.80	-16.41	0.00	-971.0	0.00	970.99	2,566.60	637.04	2,105.82	1,931.38	17.91	-2.59	0.512
75.00	-20.83	-16.11	0.00	-888.9	0.00	888.92	2,500.77	613.77	1,954.81	1,812.53	20.73	-2.8	0.499
80.00	-19.88	-15.80	0.00	-808.4	0.00	808.39	2,432.83	590.50	1,809.42	1,695.84	23.78	-3.02	0.486
85.00	-18.97	-15.50	0.00	-729.4	0.00	729.39	2,362.77	567.23	1,669.64	1,581.51	27.07	-3.25	0.470
90.00	-18.09	-15.23	0.00	-651.9	0.00	651.90	2,290.59	543.96	1,535.49	1,469.71	30.59	-3.47	0.452
93.79	-17.44	-15.07	0.00	-594.1	0.00	594.13	2,228.05	526.31	1,437.45	1,382.72	33.42	-3.65	0.438
94.75	-17.21	-15.03	0.00	-579.7	0.00	579.71	2,209.20	521.86	1,413.24	1,359.31	34.15	-3.69	0.435
95.00	-17.14	-14.94	0.00	-576.0	0.00	575.95	2,204.27	520.69	1,406.95	1,353.22	34.35	-3.71	0.326
98.21	-16.26	-14.75	0.00	-528.0	0.00	528.00	1,110.63	308.68	823.97	676.41	36.87	-3.82	0.518
100.00	-15.97	-14.57	0.00	-501.6	0.00	501.60	1,100.89	303.68	797.50	659.55	38.32	-3.88	0.502
105.00	-15.21	-14.28	0.00	-428.8	0.00	428.77	1,072.24	289.72	725.86	612.66	42.51	-4.11	0.454
109.75	-14.52	-14.11	0.00	-360.9	0.00	360.93	1,043.07	276.45	660.93	568.53	46.71	-4.32	0.406
109.75	-14.52	-14.11	0.00	-360.9	0.00	360.93	1,043.07	276.45	660.93	568.53	46.71	-4.32	0.651
110.00	-14.46	-14.00	0.00	-357.4	0.00	357.40	1,041.48	275.75	657.60	566.22	46.93	-4.33	0.648
115.00	-13.90	-13.74	0.00	-287.4	0.00	287.43	1,008.60	261.79	592.70	520.38	51.65	-4.67	0.569
120.00	-13.36	-13.47	0.00	-218.8	0.00	218.75	973.60	247.83	531.17	475.34	56.7	-4.97	0.477
125.00	-8.95	-10.19	0.00	-150.7	0.00	150.71	936.49	233.87	473.02	431.26	62.05	-5.23	0.361
130.00	-8.53	-9.91	0.00	-99.8	0.00	99.77	897.25	219.91	418.23	388.32	67.64	-5.44	0.268
134.00	-4.30	-5.66	0.00	-59.0	0.00	58.98	864.34	208.74	376.83	354.91	72.25	-5.57	0.172
135.00	-4.25	-5.48	0.00	-53.3	0.00	53.32	855.90	205.95	366.82	346.70	73.42	-5.6	0.159
140.00	-3.97	-5.23	0.00	-25.9	0.00	25.91	812.44	191.98	318.78	306.57	79.34	-5.7	0.090
143.00	-1.67	-3.90	0.00	-10.2	0.00	10.23	777.27	183.61	291.57	280.37	82.92	-5.73	0.039
144.00	0.00	-3.71	0.00	-6.3	0.00	6.33	765.45	180.81	282.77	271.87	84.12	-5.74	0.024

Load Case: 0.9D + 1.0W Normal	115 mph wind with no ice	24 Iterations
Gust Response Factor: 1.10		
Dead load Factor: 0.90		
Wind Load Factor: 1.00		

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-29.42	-20.52	0.00	-2,245.6	0.00	2,245.62	3,249.22	951.93	4,701.78	3,663.92	0	0	0.622
5.00	-28.40	-20.19	0.00	-2,143.0	0.00	2,143.04	3,212.04	928.66	4,474.75	3,532.96	0.08	-0.15	0.616
10.00	-27.39	-19.88	0.00	-2,042.1	0.00	2,042.09	3,172.75	905.39	4,253.33	3,401.79	0.33	-0.31	0.609
15.00	-26.41	-19.57	0.00	-1,942.7	0.00	1,942.71	3,131.34	882.13	4,037.53	3,270.59	0.74	-0.47	0.603
20.00	-25.45	-19.26	0.00	-1,844.9	0.00	1,844.88	3,087.81	858.86	3,827.35	3,139.53	1.32	-0.63	0.596
25.00	-24.51	-18.97	0.00	-1,748.6	0.00	1,748.57	3,042.17	835.59	3,622.79	3,008.79	2.07	-0.8	0.590
30.00	-23.59	-18.67	0.00	-1,653.7	0.00	1,653.74	2,994.41	812.32	3,423.84	2,878.54	3.01	-0.98	0.583
35.00	-22.69	-18.37	0.00	-1,560.4	0.00	1,560.38	2,944.53	789.05	3,230.51	2,748.97	4.13	-1.16	0.576
40.00	-21.81	-18.07	0.00	-1,468.5	0.00	1,468.51	2,892.53	765.78	3,042.80	2,620.24	5.44	-1.34	0.569
45.00	-20.97	-17.88	0.00	-1,378.2	0.00	1,378.16	2,838.42	742.51	2,860.71	2,492.54	6.95	-1.53	0.561
46.00	-20.78	-17.73	0.00	-1,360.3	0.00	1,360.28	2,827.34	737.85	2,824.97	2,467.14	7.28	-1.57	0.559
50.00	-19.61	-17.52	0.00	-1,289.4	0.00	1,289.37	2,782.19	719.24	2,684.24	2,366.04	8.66	-1.73	0.553
52.00	-19.02	-17.35	0.00	-1,254.3	0.00	1,254.33	2,786.05	720.81	2,695.98	2,374.54	9.4	-1.81	0.536
55.00	-18.52	-17.10	0.00	-1,202.3	0.00	1,202.28	2,751.38	706.85	2,592.56	2,299.23	10.58	-1.94	0.530
60.00	-17.72	-16.78	0.00	-1,116.8	0.00	1,116.77	2,691.91	683.58	2,424.70	2,174.91	12.72	-2.13	0.521
65.00	-16.94	-16.46	0.00	-1,032.9	0.00	1,032.89	2,630.31	660.31	2,262.45	2,052.24	15.06	-2.33	0.510
70.00	-16.18	-16.13	0.00	-950.6	0.00	950.61	2,566.60	637.04	2,105.82	1,931.38	17.61	-2.54	0.499
75.00	-15.44	-15.82	0.00	-869.9	0.00	869.94	2,500.77	613.77	1,954.81	1,812.53	20.39	-2.75	0.487
80.00	-14.73	-15.50	0.00	-790.9	0.00	790.86	2,432.83	590.50	1,809.42	1,695.84	23.38	-2.97	0.473
85.00	-14.03	-15.19	0.00	-713.4	0.00	713.35	2,362.77	567.23	1,669.64	1,581.51	26.6	-3.18	0.458
90.00	-13.36	-14.92	0.00	-637.4	0.00	637.38	2,290.59	543.96	1,535.49	1,469.71	30.06	-3.41	0.440
93.79	-12.88	-14.76	0.00	-580.8	0.00	580.79	2,228.05	526.31	1,437.45	1,382.72	32.83	-3.58	0.427
94.75	-12.70	-14.72	0.00	-566.7	0.00	566.67	2,209.20	521.86	1,413.24	1,359.31	33.55	-3.62	0.423
95.00	-12.64	-14.62	0.00	-563.0	0.00	562.99	2,204.27	520.69	1,406.95	1,353.22	33.74	-3.64	0.318
98.21	-11.99	-14.44	0.00	-516.0	0.00	516.04	1,110.63	308.68	823.97	676.41	36.23	-3.75	0.504
100.00	-11.76	-14.26	0.00	-490.2	0.00	490.19	1,100.89	303.68	797.50	659.55	37.64	-3.81	0.488
105.00	-11.19	-13.97	0.00	-418.9	0.00	418.91	1,072.24	289.72	725.86	612.66	41.75	-4.03	0.442
109.75	-10.67	-13.80	0.00	-352.6	0.00	352.57	1,043.07	276.45	660.93	568.53	45.87	-4.24	0.394
109.75	-10.67	-13.80	0.00	-352.6	0.00	352.57	1,043.07	276.45	660.93	568.53	45.87	-4.24	0.633
110.00	-10.62	-13.67	0.00	-349.1	0.00	349.12	1,041.48	275.75	657.60	566.22	46.09	-4.25	0.629
115.00	-10.18	-13.40	0.00	-280.8	0.00	280.75	1,008.60	261.79	592.70	520.38	50.71	-4.57	0.552
120.00	-9.77	-13.12	0.00	-213.7	0.00	213.73	973.60	247.83	531.17	475.34	55.66	-4.87	0.462
125.00	-6.52	-9.95	0.00	-147.4	0.00	147.39	936.49	233.87	473.02	431.26	60.9	-5.13	0.351
130.00	-6.20	-9.67	0.00	-97.7	0.00	97.67	897.25	219.91	418.23	388.32	66.38	-5.33	0.260
134.00	-3.11	-5.53	0.00	-57.8	0.00	57.83	864.34	208.74	376.83	354.91	70.9	-5.46	0.167
135.00	-3.07	-5.36	0.00	-52.3	0.00	52.30	855.90	205.95	366.82	346.70	72.05	-5.49	0.155
140.00	-2.87	-5.11	0.00	-25.5	0.00	25.51	812.44	191.98	318.78	306.57	77.84	-5.58	0.087
143.00	-1.17	-3.84	0.00	-10.2	0.00	10.17	777.27	183.61	291.57	280.37	81.36	-5.61	0.038
144.00	0.00	-3.71	0.00	-6.3	0.00	6.33	765.45	180.81	282.77	271.87	82.53	-5.62	0.024

Load Case: 1.2D + 1.0Di + 1.0Wi Normal		50 mph wind with 1" radial ice		23 Iterations
Gust Response Factor:	1.10	Ice Dead Load Factor	1.00	
Dead load Factor:	1.20			Ice Importance Factor 1.00
Wind Load Factor:	1.00			

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-54.39	-5.68	0.00	-612.0	0.00	611.97	3,249.22	951.93	4,701.78	3,663.92	0	0	0.184
5.00	-52.77	-5.59	0.00	-583.6	0.00	583.58	3,212.04	928.66	4,474.75	3,532.96	0.02	-0.04	0.182
10.00	-51.15	-5.50	0.00	-555.6	0.00	555.65	3,172.75	905.39	4,253.33	3,401.79	0.09	-0.08	0.179
15.00	-49.54	-5.41	0.00	-528.2	0.00	528.15	3,131.34	882.13	4,037.53	3,270.59	0.2	-0.13	0.177
20.00	-47.95	-5.33	0.00	-501.1	0.00	501.09	3,087.81	858.86	3,827.35	3,139.53	0.36	-0.17	0.175
25.00	-46.40	-5.24	0.00	-474.4	0.00	474.45	3,042.17	835.59	3,622.79	3,008.79	0.56	-0.22	0.173
30.00	-44.87	-5.16	0.00	-448.2	0.00	448.23	2,994.41	812.32	3,423.84	2,878.54	0.82	-0.27	0.171
35.00	-43.37	-5.08	0.00	-422.4	0.00	422.42	2,944.53	789.05	3,230.51	2,748.97	1.12	-0.31	0.168
40.00	-41.90	-4.99	0.00	-397.0	0.00	397.04	2,892.53	765.78	3,042.80	2,620.24	1.48	-0.36	0.166
45.00	-40.46	-4.93	0.00	-372.1	0.00	372.10	2,838.42	742.51	2,860.71	2,492.54	1.89	-0.42	0.164
46.00	-40.17	-4.89	0.00	-367.2	0.00	367.17	2,827.34	737.85	2,824.97	2,467.14	1.98	-0.43	0.163
50.00	-38.36	-4.82	0.00	-347.6	0.00	347.62	2,782.19	719.24	2,684.24	2,366.04	2.35	-0.47	0.161
52.00	-37.47	-4.78	0.00	-338.0	0.00	337.97	2,786.05	720.81	2,695.98	2,374.54	2.55	-0.49	0.156
55.00	-36.63	-4.70	0.00	-323.6	0.00	323.64	2,751.38	706.85	2,592.56	2,299.23	2.87	-0.52	0.154
60.00	-35.28	-4.60	0.00	-300.1	0.00	300.13	2,691.91	683.58	2,424.70	2,174.91	3.45	-0.58	0.151
65.00	-33.95	-4.51	0.00	-277.1	0.00	277.11	2,630.31	660.31	2,262.45	2,052.24	4.09	-0.63	0.148
70.00	-32.66	-4.41	0.00	-254.6	0.00	254.58	2,566.60	637.04	2,105.82	1,931.38	4.78	-0.69	0.145
75.00	-31.41	-4.31	0.00	-232.5	0.00	232.53	2,500.77	613.77	1,954.81	1,812.53	5.53	-0.74	0.141
80.00	-30.18	-4.21	0.00	-211.0	0.00	210.98	2,432.83	590.50	1,809.42	1,695.84	6.34	-0.8	0.137
85.00	-29.00	-4.12	0.00	-189.9	0.00	189.91	2,362.77	567.23	1,669.64	1,581.51	7.21	-0.86	0.132
90.00	-27.84	-4.03	0.00	-169.3	0.00	169.32	2,290.59	543.96	1,535.49	1,469.71	8.14	-0.92	0.127
93.79	-26.99	-3.98	0.00	-154.0	0.00	154.03	2,228.05	526.31	1,437.45	1,382.72	8.89	-0.96	0.124
94.75	-26.71	-3.97	0.00	-150.2	0.00	150.22	2,209.20	521.86	1,413.24	1,359.31	9.08	-0.98	0.123
95.00	-26.63	-3.94	0.00	-149.2	0.00	149.23	2,204.27	520.69	1,406.95	1,353.22	9.13	-0.98	0.092
98.21	-25.56	-3.88	0.00	-136.6	0.00	136.59	1,110.63	308.68	823.97	676.41	9.8	-1.01	0.146
100.00	-25.19	-3.82	0.00	-129.6	0.00	129.65	1,100.89	303.68	797.50	659.55	10.18	-1.02	0.142
105.00	-24.16	-3.73	0.00	-110.6	0.00	110.56	1,072.24	289.72	725.86	612.66	11.29	-1.08	0.129
109.75	-23.21	-3.67	0.00	-92.9	0.00	92.86	1,043.07	276.45	660.93	568.53	12.39	-1.14	0.116
109.75	-23.21	-3.67	0.00	-92.9	0.00	92.86	1,043.07	276.45	660.93	568.53	12.39	-1.14	0.186
110.00	-23.17	-3.64	0.00	-92.0	0.00	91.95	1,041.48	275.75	657.60	566.22	12.45	-1.14	0.185
115.00	-22.39	-3.56	0.00	-73.8	0.00	73.76	1,008.60	261.79	592.70	520.38	13.69	-1.23	0.164
120.00	-21.63	-3.48	0.00	-56.0	0.00	55.96	973.60	247.83	531.17	475.34	15.02	-1.3	0.140
125.00	-14.91	-2.62	0.00	-38.4	0.00	38.38	936.49	233.87	473.02	431.26	16.43	-1.37	0.105
130.00	-14.25	-2.54	0.00	-25.3	0.00	25.27	897.25	219.91	418.23	388.32	17.89	-1.42	0.081
134.00	-7.32	-1.45	0.00	-14.8	0.00	14.83	864.34	208.74	376.83	354.91	19.1	-1.46	0.050
135.00	-7.21	-1.41	0.00	-13.4	0.00	13.37	855.90	205.95	366.82	346.70	19.41	-1.46	0.047
140.00	-6.70	-1.34	0.00	-6.3	0.00	6.33	812.44	191.98	318.78	306.57	20.96	-1.49	0.029
143.00	-3.73	-0.95	0.00	-2.3	0.00	2.33	777.27	183.61	291.57	280.37	21.89	-1.5	0.013
144.00	0.00	-0.85	0.00	-1.4	0.00	1.38	765.45	180.81	282.77	271.87	22.21	-1.5	0.005

Load Case: 1.0D + 1.0W Service Normal	60 mph Wind with No Ice	23 Iterations
Gust Response Factor: 1.10		
Dead load Factor: 1.00		
Wind Load Factor: 1.00		

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-32.72	-5.00	0.00	-550.0	0.00	550.05	3,249.22	951.93	4,701.78	3,663.92	0	0	0.160
5.00	-31.64	-4.92	0.00	-525.1	0.00	525.06	3,212.04	928.66	4,474.75	3,532.96	0.02	-0.04	0.158
10.00	-30.58	-4.85	0.00	-500.5	0.00	500.46	3,172.75	905.39	4,253.33	3,401.79	0.08	-0.08	0.157
15.00	-29.54	-4.77	0.00	-476.2	0.00	476.23	3,131.34	882.13	4,037.53	3,270.59	0.18	-0.12	0.155
20.00	-28.53	-4.70	0.00	-452.4	0.00	452.37	3,087.81	858.86	3,827.35	3,139.53	0.32	-0.16	0.153
25.00	-27.54	-4.63	0.00	-428.9	0.00	428.87	3,042.17	835.59	3,622.79	3,008.79	0.51	-0.2	0.152
30.00	-26.57	-4.56	0.00	-405.7	0.00	405.71	2,994.41	812.32	3,423.84	2,878.54	0.74	-0.24	0.150
35.00	-25.62	-4.49	0.00	-382.9	0.00	382.91	2,944.53	789.05	3,230.51	2,748.97	1.01	-0.28	0.148
40.00	-24.70	-4.42	0.00	-360.5	0.00	360.46	2,892.53	765.78	3,042.80	2,620.24	1.33	-0.33	0.146
45.00	-23.80	-4.37	0.00	-338.4	0.00	338.37	2,838.42	742.51	2,860.71	2,492.54	1.7	-0.38	0.144
46.00	-23.62	-4.34	0.00	-334.0	0.00	334.00	2,827.34	737.85	2,824.97	2,467.14	1.78	-0.39	0.144
50.00	-22.35	-4.29	0.00	-316.6	0.00	316.65	2,782.19	719.24	2,684.24	2,366.04	2.12	-0.42	0.142
52.00	-21.72	-4.25	0.00	-308.1	0.00	308.08	2,786.05	720.81	2,695.98	2,374.54	2.31	-0.44	0.138
55.00	-21.21	-4.19	0.00	-295.3	0.00	295.34	2,751.38	706.85	2,592.56	2,299.23	2.6	-0.47	0.136
60.00	-20.36	-4.11	0.00	-274.4	0.00	274.41	2,691.91	683.58	2,424.70	2,174.91	3.12	-0.52	0.134
65.00	-19.54	-4.03	0.00	-253.9	0.00	253.86	2,630.31	660.31	2,262.45	2,052.24	3.69	-0.57	0.131
70.00	-18.74	-3.96	0.00	-233.7	0.00	233.70	2,566.60	637.04	2,105.82	1,931.38	4.32	-0.62	0.128
75.00	-17.97	-3.88	0.00	-213.9	0.00	213.92	2,500.77	613.77	1,954.81	1,812.53	5	-0.68	0.125
80.00	-17.22	-3.80	0.00	-194.5	0.00	194.52	2,432.83	590.50	1,809.42	1,695.84	5.74	-0.73	0.122
85.00	-16.49	-3.73	0.00	-175.5	0.00	175.50	2,362.77	567.23	1,669.64	1,581.51	6.53	-0.78	0.118
90.00	-15.78	-3.66	0.00	-156.8	0.00	156.85	2,290.59	543.96	1,535.49	1,469.71	7.38	-0.84	0.114
93.79	-15.26	-3.63	0.00	-143.0	0.00	142.95	2,228.05	526.31	1,437.45	1,382.72	8.06	-0.88	0.110
94.75	-15.07	-3.62	0.00	-139.5	0.00	139.48	2,209.20	521.86	1,413.24	1,359.31	8.24	-0.89	0.109
95.00	-15.01	-3.59	0.00	-138.6	0.00	138.57	2,204.27	520.69	1,406.95	1,353.22	8.28	-0.89	0.082
98.21	-14.29	-3.55	0.00	-127.0	0.00	127.04	1,110.63	308.68	823.97	676.41	8.89	-0.92	0.130
100.00	-14.07	-3.50	0.00	-120.7	0.00	120.68	1,100.89	303.68	797.50	659.55	9.24	-0.94	0.126
105.00	-13.46	-3.44	0.00	-103.2	0.00	103.16	1,072.24	289.72	725.86	612.66	10.25	-0.99	0.115
109.75	-12.89	-3.39	0.00	-86.8	0.00	86.84	1,043.07	276.45	660.93	568.53	11.26	-1.04	0.103
109.75	-12.89	-3.39	0.00	-86.8	0.00	86.84	1,043.07	276.45	660.93	568.53	11.26	-1.04	0.165
110.00	-12.87	-3.37	0.00	-86.0	0.00	85.99	1,041.48	275.75	657.60	566.22	11.32	-1.04	0.164
115.00	-12.44	-3.30	0.00	-69.2	0.00	69.17	1,008.60	261.79	592.70	520.38	12.45	-1.12	0.145
120.00	-12.02	-3.24	0.00	-52.7	0.00	52.66	973.60	247.83	531.17	475.34	13.67	-1.2	0.123
125.00	-8.17	-2.45	0.00	-36.3	0.00	36.31	936.49	233.87	473.02	431.26	14.96	-1.26	0.093
130.00	-7.81	-2.38	0.00	-24.0	0.00	24.05	897.25	219.91	418.23	388.32	16.31	-1.31	0.071
134.00	-3.99	-1.36	0.00	-14.2	0.00	14.23	864.34	208.74	376.83	354.91	17.42	-1.34	0.045
135.00	-3.94	-1.32	0.00	-12.9	0.00	12.87	855.90	205.95	366.82	346.70	17.71	-1.35	0.042
140.00	-3.70	-1.26	0.00	-6.3	0.00	6.27	812.44	191.98	318.78	306.57	19.13	-1.37	0.025
143.00	-1.69	-0.94	0.00	-2.5	0.00	2.49	777.27	183.61	291.57	280.37	20	-1.38	0.011
144.00	0.00	-0.90	0.00	-1.5	0.00	1.54	765.45	180.81	282.77	271.87	20.29	-1.38	0.006

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

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

Spectral Response Acceleration for Short Period (S_S):	0.169
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.054
Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_a):	1.000
Site Coefficient F_a :	1.600
Site Coefficient F_v :	2.400
Response Modification Coefficient (R):	1.500
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.180
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.086
Seismic Response Coefficient (C_s):	0.030
Upper Limit C_s :	0.030
Lower Limit C_s :	0.030
Period based on Rayleigh Method (sec):	2.560
Redundancy Factor (ρ):	1.000
Seismic Force Distribution Exponent (k):	2.000
Total Unfactored Dead Load:	32.720 k
Seismic Base Shear (E):	0.980 k

1.2D + 1.0Ev + 1.0Eh Normal Seismic

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
37	143.5	46	942	0.003	3	57
36	141.5	140	2,813	0.010	9	174
35	137.5	245	4,632	0.016	15	303
34	134.5	51	916	0.003	3	63
33	132	272	4,743	0.016	16	336
32	127.5	352	5,730	0.019	19	436
31	122.5	400	6,004	0.020	20	495
30	117.5	414	5,711	0.019	19	511
29	112.5	427	5,406	0.018	18	528
28	109.875	22	262	0.001	1	27
27	107.375	564	6,508	0.022	21	698
26	102.5	607	6,381	0.022	21	751
25	99.105	221	2,168	0.007	7	273
24	96.605	720	6,716	0.023	22	889
23	94.875	57	510	0.002	2	70
22	94.2717	188	1,674	0.006	6	233
21	91.8967	520	4,391	0.015	14	643
20	87.5	705	5,399	0.018	18	872
19	82.5	728	4,953	0.017	16	900
18	77.5	750	4,507	0.015	15	927
17	72.5	773	4,063	0.014	13	955
16	67.5	795	3,624	0.012	12	983
15	62.5	818	3,195	0.011	11	1,011
14	57.5	841	2,779	0.009	9	1,039
13	53.5	515	1,475	0.005	5	637
12	51	625	1,626	0.006	5	773
11	48	1,272	2,930	0.010	10	1,572
10	45.5	177	366	0.001	1	219
9	42.5	898	1,621	0.006	5	1,110
8	37.5	920	1,294	0.004	4	1,137
7	32.5	943	996	0.003	3	1,165
6	27.5	965	730	0.002	2	1,193
5	22.5	988	500	0.002	2	1,221
4	17.5	1,010	309	0.001	1	1,249

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
3	12.5	1,033	161	0.000	1	1,277
2	7.5	1,056	59	0.000	0	1,305
1	2.5	1,078	7	0.000	0	1,333
VZW Unused Reserve (7555.68 sqin)	144	327	6,772	0.023	22	404
Samsung B5/B13 RRH-BR04C	144	211	4,373	0.015	14	261
Samsung B2/B66A RRH-BR049	144	253	5,250	0.018	17	313
RFS DB-C1-12C-24AB-0Z	144	32	664	0.002	2	40
Samsung MT6407-77A	144	245	5,076	0.017	17	303
Antel LPA-80080/4CF ____	144	72	1,493	0.005	5	89
Quintel QS6656-5D	144	528	10,949	0.037	36	653
Generic Flat Low Profile Platform	143	1,875	38,342	0.129	127	2,318
Powerwave Allgon LGP13519	134	16	286	0.001	1	20
Powerwave Allgon LGP21401	134	85	1,519	0.005	5	105
Raycap DC6-48-60-18-8F(32.8 lbs)	134	66	1,178	0.004	4	81
Ericsson RRUS 4478 B14	134	180	3,227	0.011	11	222
Ericsson RRUS 4449 B5, B12	134	213	3,825	0.013	13	263
Powerwave Allgon 7770.00	134	105	1,885	0.006	6	130
CCI DMP65R-BU4D	134	68	1,219	0.004	4	84
CCI OPA65R-BU4DA-K	134	52	943	0.003	3	65
CCI DMP65R-BU6DA	134	159	2,851	0.010	9	196
CCI OPA65R-BU6D	134	126	2,270	0.008	7	156
Generic Flat Platform with Handrails	134	2,500	44,890	0.151	148	3,090
Ericsson KRY 112 144/1	125	33	516	0.002	2	41
Ericsson KRY 112 71	125	40	619	0.002	2	49
Ericsson 4480 BAND 71	125	243	3,797	0.013	13	300
RFS APX16DWV-16DWV-S-E-ACU	125	119	1,856	0.006	6	147
RFS APXVAALL24 43-U-NA20	125	368	5,756	0.019	19	455
Round Platform with Handrails	125	2,670	41,719	0.140	138	3,300
		32,722	297,376	1.001	982	40,446

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

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
37	143.5	46	942	0.003	3	40
36	141.5	140	2,813	0.010	9	121
35	137.5	245	4,632	0.016	15	212
34	134.5	51	916	0.003	3	44
33	132	272	4,743	0.016	16	235
32	127.5	352	5,730	0.019	19	305
31	122.5	400	6,004	0.020	20	346
30	117.5	414	5,711	0.019	19	357
29	112.5	427	5,406	0.018	18	369
28	109.875	22	262	0.001	1	19
27	107.375	564	6,508	0.022	21	488
26	102.5	607	6,381	0.022	21	525
25	99.105	221	2,168	0.007	7	191
24	96.605	720	6,716	0.023	22	622
23	94.875	57	510	0.002	2	49
22	94.2717	188	1,674	0.006	6	163
21	91.8967	520	4,391	0.015	14	449
20	87.5	705	5,399	0.018	18	609
19	82.5	728	4,953	0.017	16	629
18	77.5	750	4,507	0.015	15	648
17	72.5	773	4,063	0.014	13	668
16	67.5	795	3,624	0.012	12	687
15	62.5	818	3,195	0.011	11	707
14	57.5	841	2,779	0.009	9	726
13	53.5	515	1,475	0.005	5	445
12	51	625	1,626	0.006	5	540
11	48	1,272	2,930	0.010	10	1,099
10	45.5	177	366	0.001	1	153
9	42.5	898	1,621	0.006	5	776

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
8	37.5	920	1,294	0.004	4	795
7	32.5	943	996	0.003	3	815
6	27.5	965	730	0.002	2	834
5	22.5	988	500	0.002	2	854
4	17.5	1,010	309	0.001	1	873
3	12.5	1,033	161	0.000	1	893
2	7.5	1,056	59	0.000	0	912
1	2.5	1,078	7	0.000	0	931
VZW Unused Reserve (7555.68 sqin)	144	327	6,772	0.023	22	282
Samsung B5/B13 RRH-BR04C	144	211	4,373	0.015	14	182
Samsung B2/B66A RRH-BR049	144	253	5,250	0.018	17	219
RFS DB-C1-12C-24AB-0Z	144	32	664	0.002	2	28
Samsung MT6407-77A	144	245	5,076	0.017	17	211
Antel LPA-80080/4CF ____	144	72	1,493	0.005	5	62
Quintel QS6656-5D	144	528	10,949	0.037	36	456
Generic Flat Low Profile Platform	143	1,875	38,342	0.129	127	1,620
Powerwave Allgon LGP13519	134	16	286	0.001	1	14
Powerwave Allgon LGP21401	134	85	1,519	0.005	5	73
Raycap DC6-48-60-18-8F(32.8 lbs)	134	66	1,178	0.004	4	57
Ericsson RRUS 4478 B14	134	180	3,227	0.011	11	155
Ericsson RRUS 4449 B5, B12	134	213	3,825	0.013	13	184
Powerwave Allgon 7770.00	134	105	1,885	0.006	6	91
CCI DMP65R-BU4D	134	68	1,219	0.004	4	59
CCI OPA65R-BU4DA-K	134	52	943	0.003	3	45
CCI DMP65R-BU6DA	134	159	2,851	0.010	9	137
CCI OPA65R-BU6D	134	126	2,270	0.008	7	109
Generic Flat Platform with Handrails	134	2,500	44,890	0.151	148	2,160
Ericsson KRY 112 144/1	125	33	516	0.002	2	29
Ericsson KRY 112 71	125	40	619	0.002	2	34
Ericsson 4480 BAND 71	125	243	3,797	0.013	13	210
RFS APX16DWV-16DWV-S-E-ACU	125	119	1,856	0.006	6	103
RFS APXVAALL24 43-U-NA20	125	368	5,756	0.019	19	318
Round Platform with Handrails	125	2,670	41,719	0.140	138	2,307
		32,722	297,376	1.001	982	28,270

1.2D + 1.0Ev + 1.0Eh Normal Seismic

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-39.11	-0.98	0.00	-124.59	0.00	124.59	3,249.22	951.93	4,702	3,663.92	0.00	0.00	0.05
5.00	-37.81	-0.99	0.00	-119.67	0.00	119.67	3,212.04	928.66	4,475	3,532.96	0.00	-0.01	0.05
10.00	-36.53	-0.99	0.00	-114.73	0.00	114.73	3,172.75	905.39	4,253	3,401.79	0.02	-0.02	0.05
15.00	-35.28	-1.00	0.00	-109.76	0.00	109.76	3,131.34	882.13	4,038	3,270.59	0.04	-0.03	0.05
20.00	-34.06	-1.00	0.00	-104.76	0.00	104.76	3,087.81	858.86	3,827	3,139.53	0.07	-0.04	0.04
25.00	-32.87	-1.00	0.00	-99.76	0.00	99.76	3,042.17	835.59	3,623	3,008.79	0.12	-0.05	0.04
30.00	-31.70	-1.01	0.00	-94.73	0.00	94.73	2,994.41	812.32	3,424	2,878.54	0.17	-0.06	0.04
35.00	-30.56	-1.01	0.00	-89.71	0.00	89.71	2,944.53	789.05	3,231	2,748.97	0.23	-0.07	0.04
40.00	-29.45	-1.00	0.00	-84.68	0.00	84.68	2,892.53	765.78	3,043	2,620.24	0.31	-0.08	0.04
45.00	-29.24	-1.01	0.00	-79.66	0.00	79.66	2,838.42	742.51	2,861	2,492.54	0.39	-0.09	0.04
46.00	-27.66	-1.00	0.00	-78.65	0.00	78.65	2,827.34	737.85	2,825	2,467.14	0.41	-0.09	0.04
50.00	-26.89	-0.99	0.00	-74.66	0.00	74.66	2,782.19	719.24	2,684	2,366.04	0.49	-0.10	0.04
52.00	-26.25	-0.99	0.00	-72.68	0.00	72.68	2,786.05	720.81	2,696	2,374.54	0.53	-0.10	0.04
55.00	-25.21	-0.98	0.00	-69.71	0.00	69.71	2,751.38	706.85	2,593	2,299.23	0.60	-0.11	0.04
60.00	-24.20	-0.98	0.00	-64.79	0.00	64.79	2,691.91	683.58	2,425	2,174.91	0.72	-0.12	0.04
65.00	-23.22	-0.97	0.00	-59.91	0.00	59.91	2,630.31	660.31	2,262	2,052.24	0.86	-0.13	0.04
70.00	-22.26	-0.96	0.00	-55.08	0.00	55.08	2,566.60	637.04	2,106	1,931.38	1.00	-0.15	0.04
75.00	-21.34	-0.94	0.00	-50.31	0.00	50.31	2,500.77	613.77	1,955	1,812.53	1.16	-0.16	0.04
80.00	-20.44	-0.93	0.00	-45.60	0.00	45.60	2,432.83	590.50	1,809	1,695.84	1.33	-0.17	0.04
85.00	-19.57	-0.91	0.00	-40.96	0.00	40.96	2,362.77	567.23	1,670	1,581.51	1.52	-0.18	0.03
90.00	-18.92	-0.90	0.00	-36.40	0.00	36.40	2,290.59	543.96	1,535	1,469.71	1.72	-0.20	0.03
93.79	-18.69	-0.89	0.00	-32.99	0.00	32.99	2,228.05	526.31	1,437	1,382.72	1.88	-0.21	0.03
94.75	-18.62	-0.89	0.00	-32.13	0.00	32.13	2,209.20	521.86	1,413	1,359.31	1.92	-0.21	0.03
95.00	-17.73	-0.87	0.00	-31.91	0.00	31.91	2,204.27	520.69	1,407	1,353.22	1.93	-0.21	0.02

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
98.21	-17.46	-0.86	0.00	-29.12	0.00	29.12	1,110.63	308.68	824	676.41	2.07	-0.21	0.04
100.00	-16.71	-0.84	0.00	-27.58	0.00	27.58	1,100.89	303.68	798	659.55	2.15	-0.22	0.04
105.00	-16.01	-0.82	0.00	-23.37	0.00	23.37	1,072.24	289.72	726	612.66	2.39	-0.23	0.03
109.75	-15.98	-0.82	0.00	-19.48	0.00	19.48	1,043.07	276.45	661	568.53	2.62	-0.24	0.03
109.75	-15.98	-0.82	0.00	-19.48	0.00	19.48	1,043.07	276.45	661	568.53	2.62	-0.24	0.05
110.00	-15.45	-0.80	0.00	-19.27	0.00	19.27	1,041.48	275.75	658	566.22	2.64	-0.24	0.05
115.00	-14.94	-0.79	0.00	-15.26	0.00	15.26	1,008.60	261.79	593	520.38	2.90	-0.26	0.04
120.00	-14.45	-0.77	0.00	-11.33	0.00	11.33	973.60	247.83	531	475.34	3.18	-0.28	0.04
125.00	-9.72	-0.55	0.00	-7.49	0.00	7.49	936.49	233.87	473	431.26	3.48	-0.29	0.03
130.00	-9.38	-0.53	0.00	-4.74	0.00	4.74	897.25	219.91	418	388.32	3.79	-0.30	0.02
134.00	-4.91	-0.29	0.00	-2.61	0.00	2.61	864.34	208.74	377	354.91	4.04	-0.31	0.01
135.00	-4.61	-0.28	0.00	-2.32	0.00	2.32	855.90	205.95	367	346.70	4.11	-0.31	0.01
140.00	-4.43	-0.27	0.00	-0.93	0.00	0.93	812.44	191.98	319	306.57	4.43	-0.31	0.01
143.00	-2.06	-0.13	0.00	-0.13	0.00	0.13	777.27	183.61	292	280.37	4.63	-0.31	0.00
144.00	0.00	-0.11	0.00	0.00	0.00	0.00	765.45	180.81	283	271.87	4.69	-0.31	0.00

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

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-27.34	-0.98	0.00	-122.51	0.00	122.51	3,249.22	951.93	4,702	3,663.92	0.00	0.00	0.04
5.00	-26.43	-0.99	0.00	-117.59	0.00	117.59	3,212.04	928.66	4,475	3,532.96	0.00	-0.01	0.04
10.00	-25.53	-0.99	0.00	-112.66	0.00	112.66	3,172.75	905.39	4,253	3,401.79	0.02	-0.02	0.04
15.00	-24.66	-0.99	0.00	-107.71	0.00	107.71	3,131.34	882.13	4,038	3,270.59	0.04	-0.03	0.04
20.00	-23.81	-0.99	0.00	-102.74	0.00	102.74	3,087.81	858.86	3,827	3,139.53	0.07	-0.04	0.04
25.00	-22.97	-1.00	0.00	-97.77	0.00	97.77	3,042.17	835.59	3,623	3,008.79	0.11	-0.04	0.04
30.00	-22.16	-0.99	0.00	-92.80	0.00	92.80	2,994.41	812.32	3,424	2,878.54	0.17	-0.05	0.04
35.00	-21.36	-0.99	0.00	-87.82	0.00	87.82	2,944.53	789.05	3,231	2,748.97	0.23	-0.06	0.04
40.00	-20.59	-0.99	0.00	-82.86	0.00	82.86	2,892.53	765.78	3,043	2,620.24	0.30	-0.07	0.04
45.00	-20.43	-0.99	0.00	-77.90	0.00	77.90	2,838.42	742.51	2,861	2,492.54	0.39	-0.09	0.04
46.00	-19.33	-0.98	0.00	-76.91	0.00	76.91	2,827.34	737.85	2,825	2,467.14	0.40	-0.09	0.04
50.00	-18.79	-0.98	0.00	-72.98	0.00	72.98	2,782.19	719.24	2,684	2,366.04	0.48	-0.10	0.04
52.00	-18.35	-0.97	0.00	-71.02	0.00	71.02	2,786.05	720.81	2,696	2,374.54	0.52	-0.10	0.04
55.00	-17.62	-0.97	0.00	-68.09	0.00	68.09	2,751.38	706.85	2,593	2,299.23	0.59	-0.11	0.04
60.00	-16.92	-0.96	0.00	-63.26	0.00	63.26	2,691.91	683.58	2,425	2,174.91	0.71	-0.12	0.04
65.00	-16.23	-0.95	0.00	-58.47	0.00	58.47	2,630.31	660.31	2,262	2,052.24	0.84	-0.13	0.04
70.00	-15.56	-0.94	0.00	-53.72	0.00	53.72	2,566.60	637.04	2,106	1,931.38	0.98	-0.14	0.03
75.00	-14.91	-0.92	0.00	-49.04	0.00	49.04	2,500.77	613.77	1,955	1,812.53	1.14	-0.15	0.03
80.00	-14.28	-0.91	0.00	-44.43	0.00	44.43	2,432.83	590.50	1,809	1,695.84	1.31	-0.17	0.03
85.00	-13.67	-0.89	0.00	-39.89	0.00	39.89	2,362.77	567.23	1,670	1,581.51	1.49	-0.18	0.03
90.00	-13.22	-0.88	0.00	-35.43	0.00	35.43	2,290.59	543.96	1,535	1,469.71	1.68	-0.19	0.03
93.79	-13.06	-0.87	0.00	-32.10	0.00	32.10	2,228.05	526.31	1,437	1,382.72	1.84	-0.20	0.03
94.75	-13.01	-0.87	0.00	-31.26	0.00	31.26	2,209.20	521.86	1,413	1,359.31	1.88	-0.20	0.03
95.00	-12.39	-0.85	0.00	-31.05	0.00	31.05	2,204.27	520.69	1,407	1,353.22	1.89	-0.20	0.02
98.21	-12.20	-0.84	0.00	-28.32	0.00	28.32	1,110.63	308.68	824	676.41	2.03	-0.21	0.03
100.00	-11.68	-0.82	0.00	-26.82	0.00	26.82	1,100.89	303.68	798	659.55	2.11	-0.21	0.03
105.00	-11.19	-0.80	0.00	-22.72	0.00	22.72	1,072.24	289.72	726	612.66	2.34	-0.23	0.03
109.75	-11.17	-0.80	0.00	-18.92	0.00	18.92	1,043.07	276.45	661	568.53	2.57	-0.24	0.03
109.75	-11.17	-0.80	0.00	-18.92	0.00	18.92	1,043.07	276.45	661	568.53	2.57	-0.24	0.04
110.00	-10.80	-0.78	0.00	-18.72	0.00	18.72	1,041.48	275.75	658	566.22	2.58	-0.24	0.04
115.00	-10.44	-0.76	0.00	-14.82	0.00	14.82	1,008.60	261.79	593	520.38	2.84	-0.25	0.04
120.00	-10.10	-0.75	0.00	-10.99	0.00	10.99	973.60	247.83	531	475.34	3.11	-0.27	0.03
125.00	-6.79	-0.53	0.00	-7.27	0.00	7.27	936.49	233.87	473	431.26	3.40	-0.28	0.02
130.00	-6.56	-0.52	0.00	-4.61	0.00	4.61	897.25	219.91	418	388.32	3.70	-0.29	0.02
134.00	-3.43	-0.29	0.00	-2.54	0.00	2.54	864.34	208.74	377	354.91	3.95	-0.30	0.01
135.00	-3.22	-0.27	0.00	-2.25	0.00	2.25	855.90	205.95	367	346.70	4.01	-0.30	0.01
140.00	-3.10	-0.26	0.00	-0.90	0.00	0.90	812.44	191.98	319	306.57	4.33	-0.30	0.01
143.00	-1.44	-0.12	0.00	-0.12	0.00	0.12	777.27	183.61	292	280.37	4.52	-0.30	0.00
144.00	0.00	-0.11	0.00	0.00	0.00	0.00	765.45	180.81	283	271.87	4.59	-0.30	0.00

ANALYSIS SUMMARY

Load Case	Reactions						Max Usage	
	Shear FX	Shear FZ	Axial FY	Moment MX	Moment MY	Moment MZ	Elev (ft)	Interaction Ratio
	(kips)	(kips)	(kips)	(ft-kips)	(ft-kips)	(ft-kips)		
1.2D + 1.0W Normal	20.53	0.00	39.24	0.00	0.00	2277.01	109.75	0.65
0.9D + 1.0W Normal	20.52	0.00	29.42	0.00	0.00	2245.62	109.75	0.63
1.2D + 1.0Di + 1.0Wi Normal	5.68	0.00	54.39	0.00	0.00	611.97	109.75	0.19
1.2D + 1.0Ev + 1.0Eh Normal	1.01	0.00	39.11	0.00	0.00	124.59	109.75	0.05
0.9D - 1.0Ev + 1.0Eh Normal	1.00	0.00	27.34	0.00	0.00	122.51	109.75	0.04
1.0D + 1.0W Service Normal	5.00	0.00	32.72	0.00	0.00	550.05	109.75	0.17

ADDITIONAL STEEL SUMMARY

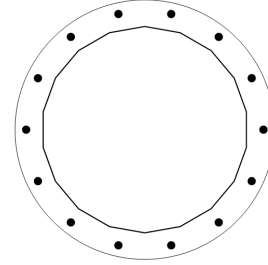
Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Max member			
			VQ/I	Shear Applied (kips)	Shear (phiVn) (kips)	Ratio	Pu (kip)	PhiPn (kip)	Ratio
94.75	109.75	PL PL 4 x 0.75"	258.3	3.1	38.3	0.081	96.3	127.6	0.7546

Elev From (ft)	Elev To (ft)	Member	Upper Termination Connectors				Lower Termination Connectors					
			MQ/I	phiVn (kips)	Num Reqd	Num Actual	Ratio	MQ/I (kips)	phiVn (kip)	Num Reqd	Num Actual	Ratio
94.75	109.75	PL PL 4 x 0.75"	79.2889	38.27	3	9	0.2302	72.9594	38.27	2	9	0.2118

BASE PLATE ANALYSIS @ 0 FT

PLATE PARAMETERS (ID# 12175)

Diameter:	70	in
Shape:	Round	
Thickness:	1.75	in
Grade:	A572-60	
Yield Strength:	60	ksi
Tensile Strength:	75	ksi
Rod Detail Type:	d	
Clear Distance	3	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	90	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	Fy (ksi)	Fu (ksi)	Spacing (in)	Offset (°)
Original [ID# 7992]	Radial	14	2.25	64	A615-75	75	100	-	-

ANCHOR ROD GEOMETRY AND APPLIED LOADS --- ORIGINAL (14) 2.25"Ø [ID 7992]

Position	Radians	X (in)	Y (in)	Moment Arm (in)	Inertia (in ⁴)	Axial Load (k)	Shear Load (k)
1	0.449	28.83	13.88	-27.648	2483.498	-93.46	0.99
2	0.898	19.95	25.02	-19.133	1189.769	-93.46	1.79
3	1.346	7.12	31.20	-6.829	152.279	-93.46	2.23
4	1.795	-7.12	31.20	6.829	152.279	104.67	2.23
5	2.244	-19.95	25.02	19.133	1189.770	104.67	1.79
6	2.693	-28.83	13.88	27.648	2483.499	104.67	0.99
7	3.142	-32.00	0.00	30.688	3059.262	104.67	0.00
8	3.590	-28.83	-13.88	27.648	2483.498	104.67	0.99
9	4.039	-19.95	-25.02	19.133	1189.768	104.67	1.79
10	4.488	-7.12	-31.20	6.829	152.278	104.67	2.23
11	4.937	7.12	-31.20	-6.829	152.278	-93.46	2.23
12	5.386	19.95	-25.02	-19.133	1189.768	-93.46	1.79
13	5.834	28.83	-13.88	-27.648	2483.498	-93.46	0.99
14	6.283	32.00	0.00	-30.688	3059.262	-93.46	0.00

REACTION DISTRIBUTION

Component	ID	Moment Mu (k-ft)	Axial Load Pu (k)	Shear Vu (k)	Moment Factor
Pole	55"Ø x 0.3125" (18 Sides)	2277.0	39.24	20.53	1.000
Bolt Group	Original (14) 2.25"Ø	2277.0	-	20.53	1.000
TOTALS		2277.01	39.24	20.53	

ASSET: 411177, BARKHAMSTEDW CT
 CUSTOMER: T-MOBILE

CODE: ANSI/TIA-222-H
 ENG NO: 14097411

COMPONENT PROPERTIES

Component	ID	Gross Area (in ²)	Net Area (in ²)	Individual Inertia (in ⁴)	Moment of Inertia (in ⁴)	Threads/in
Pole	55"ø x 0.3125" (18 Sides)	53.4172	-	-	19971.23	-
Bolt Group	Original (14) 2.25"ø	3.9761	3.2477	0.8393	21420.71	4.5

EXTERNAL BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES

Flat-to-Flat Diameter: 55.12 in
 Point-to-Point Diameter: 55.98 in
 Flat Width: 9.720 in
 Flat Radians: 0.349 rad

PLATE PROPERTIES

Neutral Axis: 90 °
 Bend Line Lower Limit: 2.409 rad
 Bend Line Upper Limit: 3.874 rad

Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in ³)	Applied Moment Mu (k-in)	Moment Capacity φMn (k-in)	Ratio
Flat	38.764	0.00	29.679	426.2	1602.6	0.266
Corner	37.526	0.00	28.731	350.8	1551.4	0.226
Circumferential	58.316	0.00	44.648	984.4	2411.0	0.408

PLASTIC ANCHOR ROD ANALYSIS

Class	Group Quantity	Rod Diameter (in)	Applied Axial Load Pu (k)	Applied Shear Load Vu (k)	Compressive Capacity φPn (k)	Ratio
Original	14	2.25	104.7	2.2	243.6	0.448

Exhibit E

Mount Analysis



AMERICAN TOWER®
CORPORATION

This report was prepared for American Tower Corporation by



Antenna Mount Analysis Report

ATC Site Name : BARKHAMSTEDW CT
ATC Site Number : 411177
Engineering Number : 14097411_C8_01
ETS, PLLC Job Number : 22106741.STR.5264
Mount Elevation : 125 ft
Carrier : T-MOBILE
Carrier Site Name : Old Farms- Verizon Colo
Carrier Site Number : CTNH416A
Site Location : 14 Old North Road
Barkhamsted, CT 06063
41.914528°, -73.022222°
County : Litchfield
Date : May 04, 2022
Max Usage : 80%
Result : Pass

Prepared By:
Kousthub Mahendra, EI
Structural Engineer III

Reviewed By:
Frederic Geoffrey Bost, PE
CTO





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Antenna Loading..... 2

Structure Usages..... 2

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Calculations..... Attached

Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for T-Mobile at 125 ft.

Supporting Documents

Spec Sheet	SitePro 1 Document# RMQP-4096-HK, dated September 20, 2018
RFDS	RFDS, dated March 10, 2022

Analysis

This antenna mount was analyzed using RISA-3D v17.0.4 analysis software.

Basic Wind Speed:	115 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1.0" radial ice concurrent
Codes:	ANSI/TIA-222-H
Structure Class:	II
Exposure Category:	B
Topographic Procedure:	Method 2
Topographic Feature:	Flat
Crest Height:	0 ft
Crest Length:	0 ft
Spectral Response:	$S_s = 0.169$, $S_1 = 0.054$
Site Class:	D - Default
Live Loads:	$L_m = 500$ lbs, $L_v = 250$ lbs

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed. The mount can support the equipment as described in this report. Analysis is based on new SitePro 1 RMQP-4096-HK (M2050R(2500)-4[6]) mount.

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

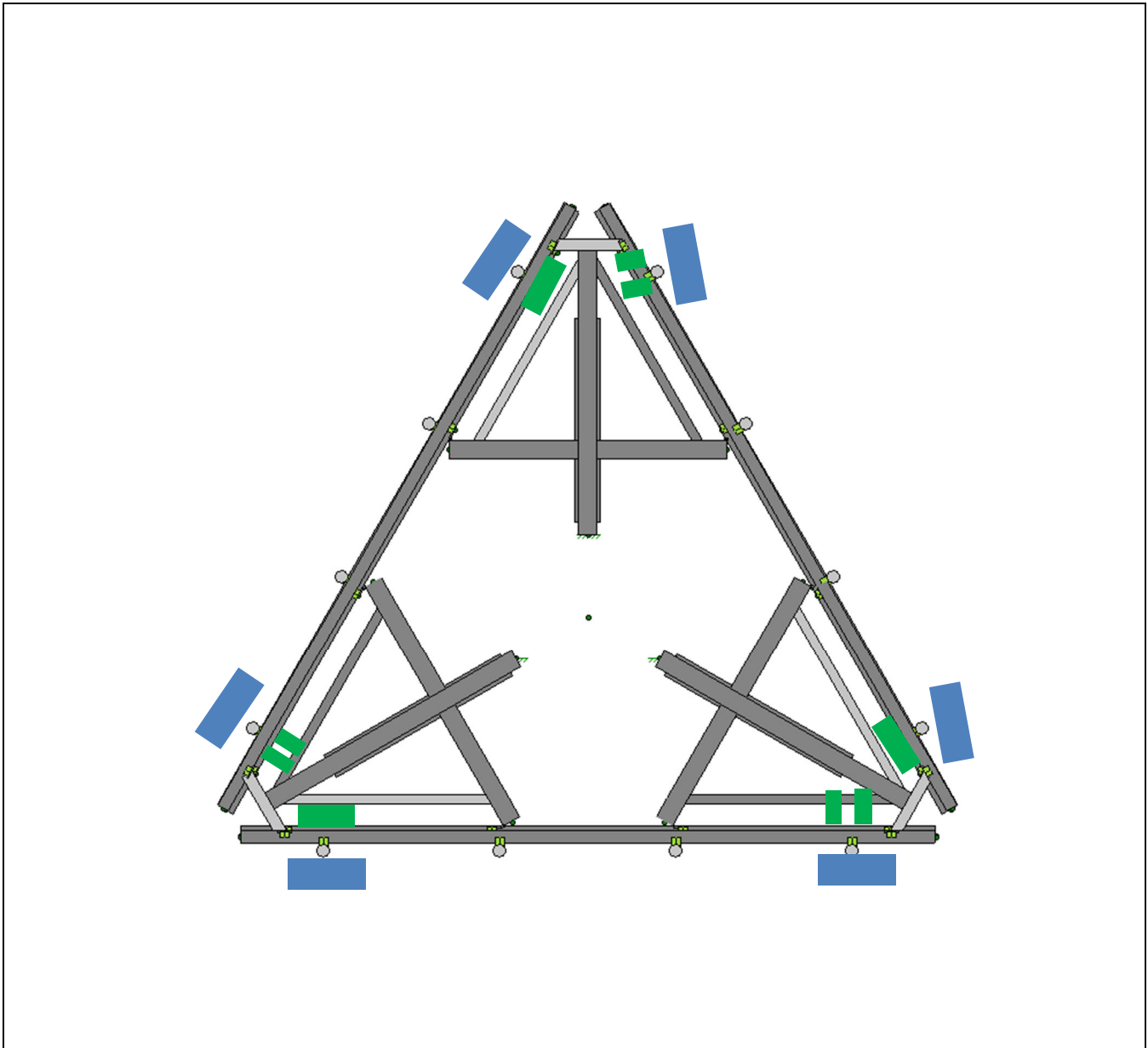
Antenna Loading

Mount Centerline (ft)	Antenna Centerline (ft)	Qty	Antenna Model
125.0	125.0	3	RFS APXVAALL24 43-U-NA20
		3	RFS APX16DWV-16DWV-S-E-ACU
		3	Ericsson KRY 112 144/1
		3	Ericsson KRY 112 71
		3	Ericsson 4480 BAND 71

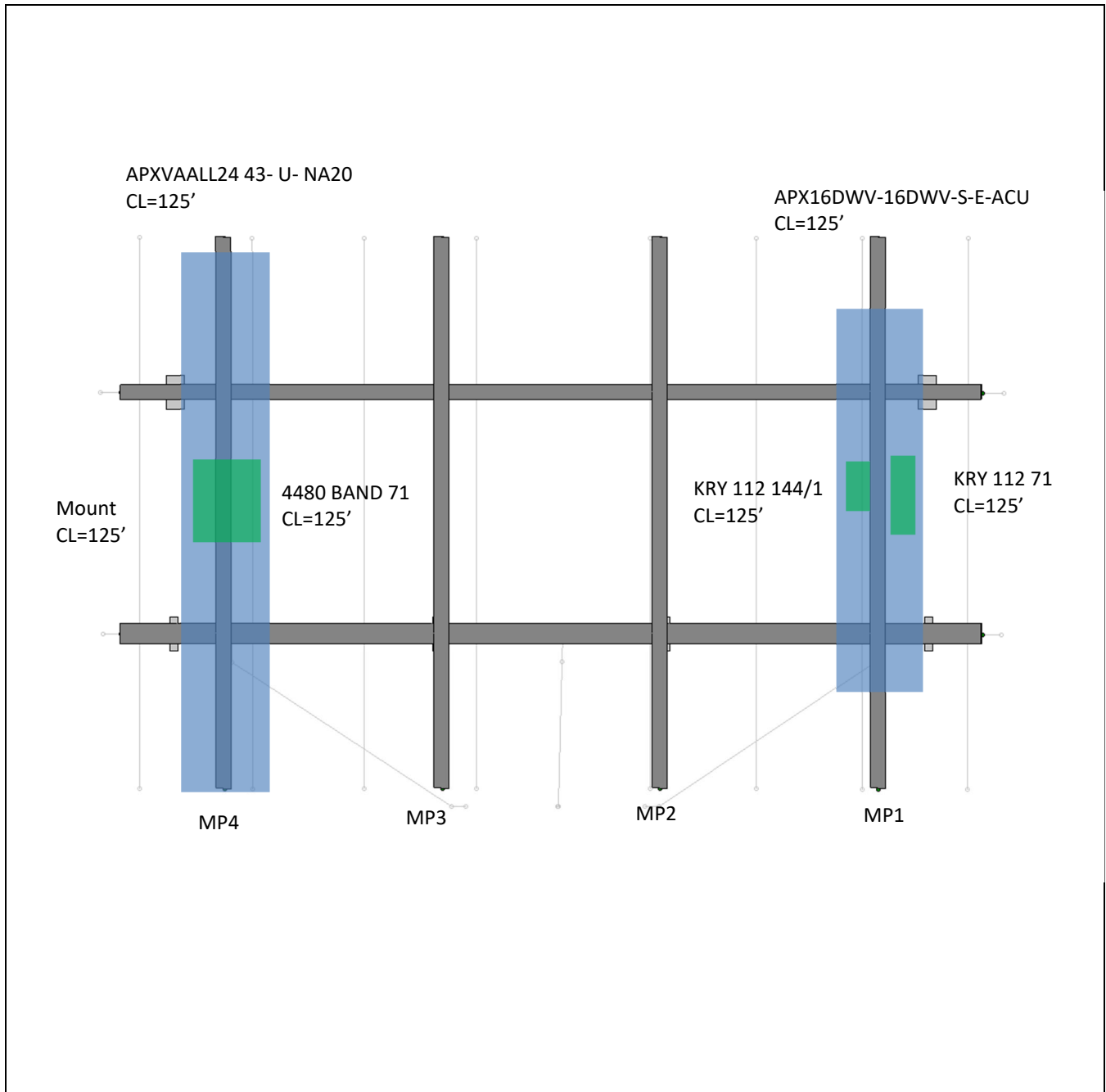
Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Horizontals	80%	Pass
Mount Pipes	30%	Pass
Support Rails	26%	Pass
Tower to Mount Connection	10%	Pass

Mount Layout



Equipment Layout



Standard Conditions

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

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

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

American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

All connections are to be verified for condition and tightness by the installation contractor preceding any changes to the appurtenance mounting system and/or equipment attached to it.

Steel grades have been assumed as follows, unless noted otherwise:

Channel, Solid Round, Angle, Plate, Threaded Rod	ASTM A36 (Gr. 36)
HSS (Rectangular)	ASTM A500 (Gr. B-46)
HSS (Round)	ASTM A500 (Gr. B-42)
Pipe	ASTM A53 (Gr. 35)
Connection Bolts	ASTM A325
U-Bolt	SAE J429 (Gr. 2)

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

Installation of all equipment and steel should be confirmed not to cause tower conflicts nor impede the tower climbing pegs.

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

Site Inputs	
Mount Support (Tower, or Building Support)?	Tower
Risk Category (TIA Table 2-1)	II
Exposure Category	B
Basic Wind Speed without Ice, V	115 mph
Basic Wind Speed with Ice, V _i	50 mph
Design of Ice, δ _{ice}	56 pcf
Design Ice Thickness, t _i	1.00 in
Basic Wind Speed (Maintenance)	30 mph
Maintenance Load, L _m	500 lb
Maintenance Load, L _v	250 lb
Height of Structure, h	144.0 ft
Mount Centerline, h _m	125.0 ft
Topographic Factor, K _{zt}	1.00
Rooftop Wind Speed-Up Factor, K _r	1.00
Mean Elevation of base of structure above sea level, z _s	809 ft
Ground Elevation Factor, K _e	0.97
Wind Direction Probability Factor, K _d	0.95
Gust Response Factor, G _s	1.00
Shielding Factor for Appurtenances, K _s	0.90

TIA-222-H Mount Load Generator

Seismic Design Input/Output	
0.169	Spectral response acceleration at short periods, S _s
0.054	Spectral response acceleration at a period of 1 second, S ₁
D	Soil Site Class
1.600	Short-period site coefficient, F _s
2.400	Long-period site coefficient, F _l
0.180	Design spectral response acceleration at short periods, S _{DS}
0.086	Design spectral response acceleration at a period of 1 second, S _{DS1}
2.00	Response modification coefficient, R
1.00	Earthquake amplification factor, A _s
1.00	Importance Factor
0.0901	Seismic Response Coefficient, C _s
Eh = 0.090 W	Total Seismic Shear Force, E _s = ρ Q _s (Q _s = ρ C _s W A _s & ρ = 1.0)
Ev = 0.036 D	Vertical Seismic Load Effect, E _v = 0.2 S _{DS} D A _s



Output File Name: 411177_14097411_T-Mobile

Mount Pipe Information							Mount Pipe Forces					
Mount Pipe	Mount Location	Vertical Offset	Length	Diameter	Weight	Shape	Front Design Wind Force, F _w	Side Design Wind Force, F _{wA}	Design Ice Thickness, t _{ice}	Ice Weight	Front Design Wind Force on Ice, F _{wA}	Side Design Wind Force on Ice, F _{wA}
P 2 SCH 40 x 96	MP1	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	23.33 lb	62.51 lb	1.142 in	39.28 lb	9.11 lb	22.02 lb
P 2 SCH 40 x 96	MP2	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	62.51 lb	62.51 lb	1.142 in	39.28 lb	22.02 lb	22.02 lb
P 2 SCH 40 x 96	MP3	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	62.51 lb	62.51 lb	1.142 in	39.28 lb	22.02 lb	22.02 lb
P 2 SCH 40 x 96	MP4	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	0.05 lb	62.51 lb	1.142 in	39.28 lb	0.48 lb	22.02 lb
P 2 SCH 40 x 96	MP5	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	23.33 lb	62.51 lb	1.142 in	39.28 lb	9.11 lb	22.02 lb
P 2 SCH 40 x 96	MP6	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	62.51 lb	62.51 lb	1.142 in	39.28 lb	22.02 lb	22.02 lb
P 2 SCH 40 x 96	MP7	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	62.51 lb	62.51 lb	1.142 in	39.28 lb	22.02 lb	22.02 lb
P 2 SCH 40 x 96	MP8	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	0.05 lb	62.51 lb	1.142 in	39.28 lb	0.48 lb	22.02 lb
P 2 SCH 40 x 96	MP9	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	23.33 lb	62.51 lb	1.142 in	39.28 lb	9.11 lb	22.02 lb
P 2 SCH 40 x 96	MP10	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	62.51 lb	62.51 lb	1.142 in	39.28 lb	22.02 lb	22.02 lb
P 2 SCH 40 x 96	MP11	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	62.51 lb	62.51 lb	1.142 in	39.28 lb	22.02 lb	22.02 lb
P 2 SCH 40 x 96	MP12	0.00 ft	96.00 in	2.38 in	29.25 lb	Round	0.05 lb	62.51 lb	1.142 in	39.28 lb	0.48 lb	22.02 lb

Appurtenance Information - MP1							Appurtenance Forces - MP1					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{ice}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
RFS/CELWAVE / APX16DWV-16DWV-S-E-ACU	1	0.00 ft	53.00 in	13.00 in	3.10 in	39.60 lb	199.93 lb	65.19 lb	1.142 in	89.43 lb	41.14 lb	15.73 lb
ERICSSON / KRY 112 144/1_T-MOBILE	1	0.00 ft	6.90 in	2.70 in	6.10 in	11.00 lb	5.12 lb	0.00 lb	1.142 in	6.27 lb	1.60 lb	1.06 lb
ERICSSON / KRY 112 71	1	0.00 ft	12.50 in	3.70 in	5.60 in	13.20 lb	13.09 lb	19.19 lb	1.142 in	11.42 lb	3.42 lb	5.04 lb

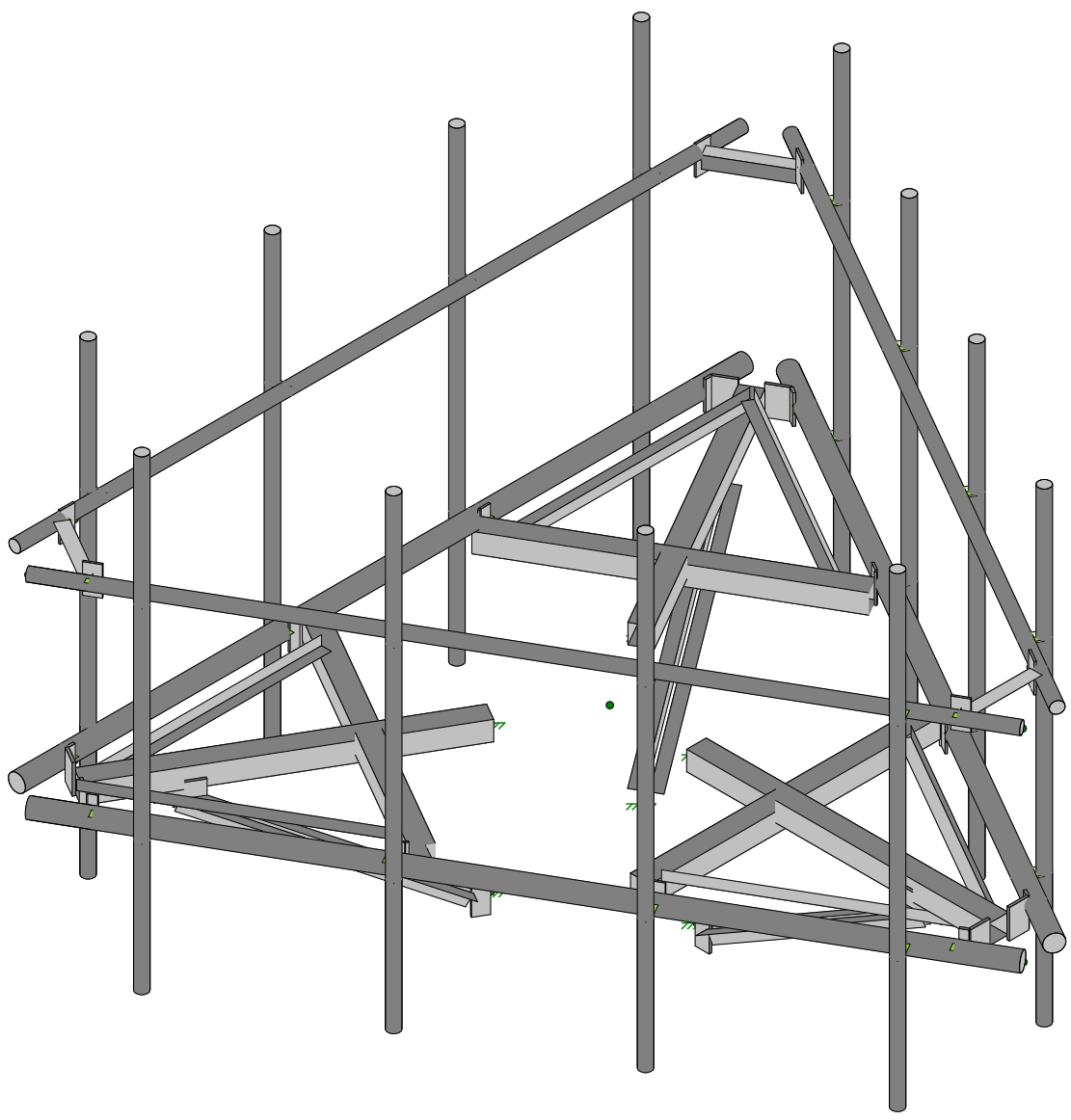
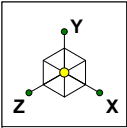
Appurtenance Information - MP4							Appurtenance Forces - MP4					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{ice}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
RFS/CELWAVE / APXVAALL24_43-U-NA20_TMO	1	0.00 ft	95.90 in	24.00 in	8.50 in	122.80 lb	665.97 lb	287.31 lb	1.142 in	296.75 lb	131.79 lb	60.67 lb
ERICSSON / RRU 4480	1	0.00 ft	22.00 in	15.70 in	7.50 in	81.00 lb	94.70 lb	45.96 lb	1.142 in	47.45 lb	19.58 lb	10.75 lb

Appurtenance Information - MP5							Appurtenance Forces - MP5					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{ice}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
RFS/CELWAVE / APX16DWV-16DWV-S-E-ACU	1	0.00 ft	53.00 in	13.00 in	3.10 in	39.60 lb	199.93 lb	65.19 lb	1.142 in	89.43 lb	41.14 lb	15.73 lb
ERICSSON / KRY 112 144/1_T-MOBILE	1	0.00 ft	6.90 in	2.70 in	6.10 in	11.00 lb	5.12 lb	0.00 lb	1.142 in	6.27 lb	1.60 lb	1.06 lb
ERICSSON / KRY 112 71	1	0.00 ft	12.50 in	3.70 in	5.60 in	13.20 lb	13.09 lb	19.19 lb	1.142 in	11.42 lb	3.42 lb	5.04 lb

Appurtenance Information - MP8							Appurtenance Forces - MP8					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{ice}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
RFS/CELWAVE / APXVAALL24_43-U-NA20_TMO	1	0.00 ft	95.90 in	24.00 in	8.50 in	122.80 lb	665.97 lb	287.31 lb	1.142 in	296.75 lb	131.79 lb	60.67 lb
ERICSSON / RRU 4480	1	0.00 ft	22.00 in	15.70 in	7.50 in	81.00 lb	94.70 lb	45.96 lb	1.142 in	47.45 lb	19.58 lb	10.75 lb

Appurtenance Information - MP9							Appurtenance Forces - MP9					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{ice}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
RFS/CELWAVE / APX16DWV-16DWV-S-E-ACU	1	0.00 ft	53.00 in	13.00 in	3.10 in	39.60 lb	199.93 lb	65.19 lb	1.142 in	89.43 lb	41.14 lb	15.73 lb
ERICSSON / KRY 112 144/1_T-MOBILE	1	0.00 ft	6.90 in	2.70 in	6.10 in	11.00 lb	5.12 lb	0.00 lb	1.142 in	6.27 lb	1.60 lb	1.06 lb
ERICSSON / KRY 112 71	1	0.00 ft	12.50 in	3.70 in	5.60 in	13.20 lb	13.09 lb	19.19 lb	1.142 in	11.42 lb	3.42 lb	5.04 lb

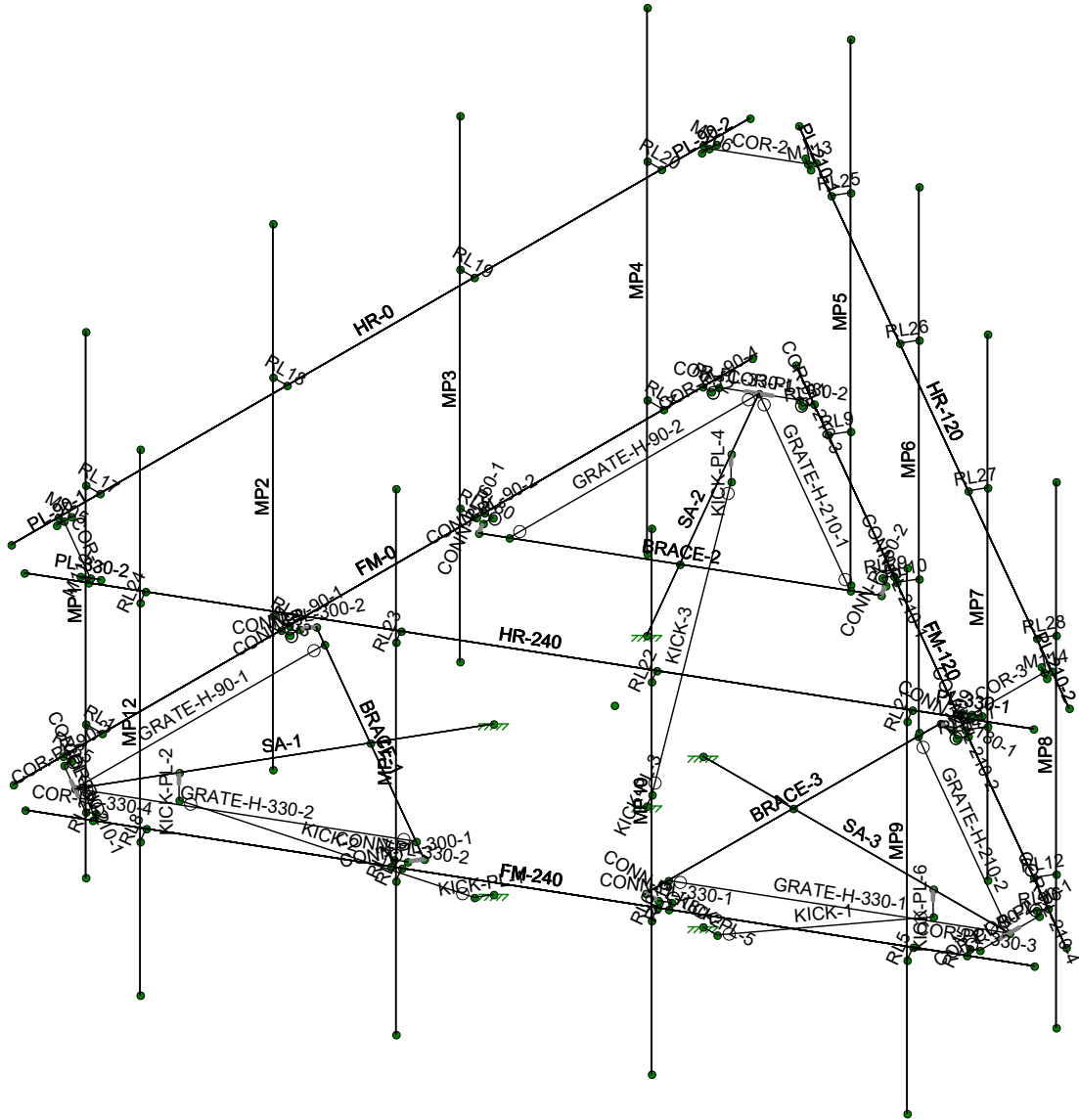
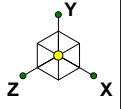
Appurtenance Information - MP12							Appurtenance Forces - MP12					
Appurtenance	Quantity	Vertical Offset	Length	Width	Depth	Weight	Front Design Wind Force, F_A	Side Design Wind Force, F_A	Design Ice Thickness, t_{ice}	Ice Weight	Front Design Wind Force on Ice, F_A	Side Design Wind Force on Ice, F_A
RFS/CELWAVE / APXVAALL24_43-U-NA20_TMO	1	0.00 ft	95.90 in	24.00 in	8.50 in	122.80 lb	665.97 lb	287.31 lb	1.142 in	296.75 lb	131.79 lb	60.67 lb
ERICSSON / RRU 4480	1	0.00 ft	22.00 in	15.70 in	7.50 in	81.00 lb	94.70 lb	45.96 lb	1.142 in	47.45 lb	19.58 lb	10.75 lb



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KM
ETS#22106741.STR.5264

BARKHAMSTEDW CT

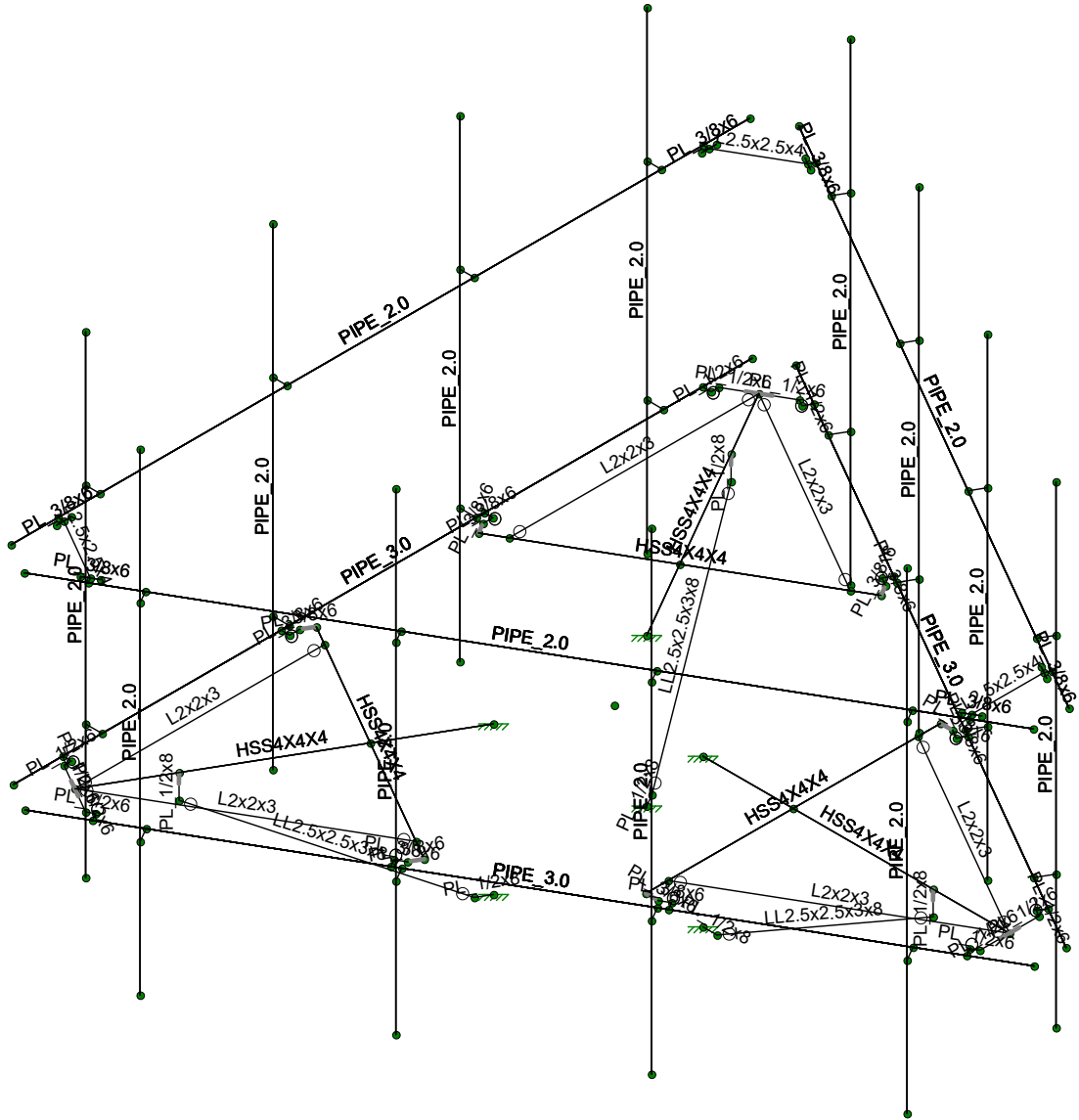
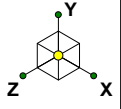
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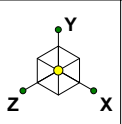
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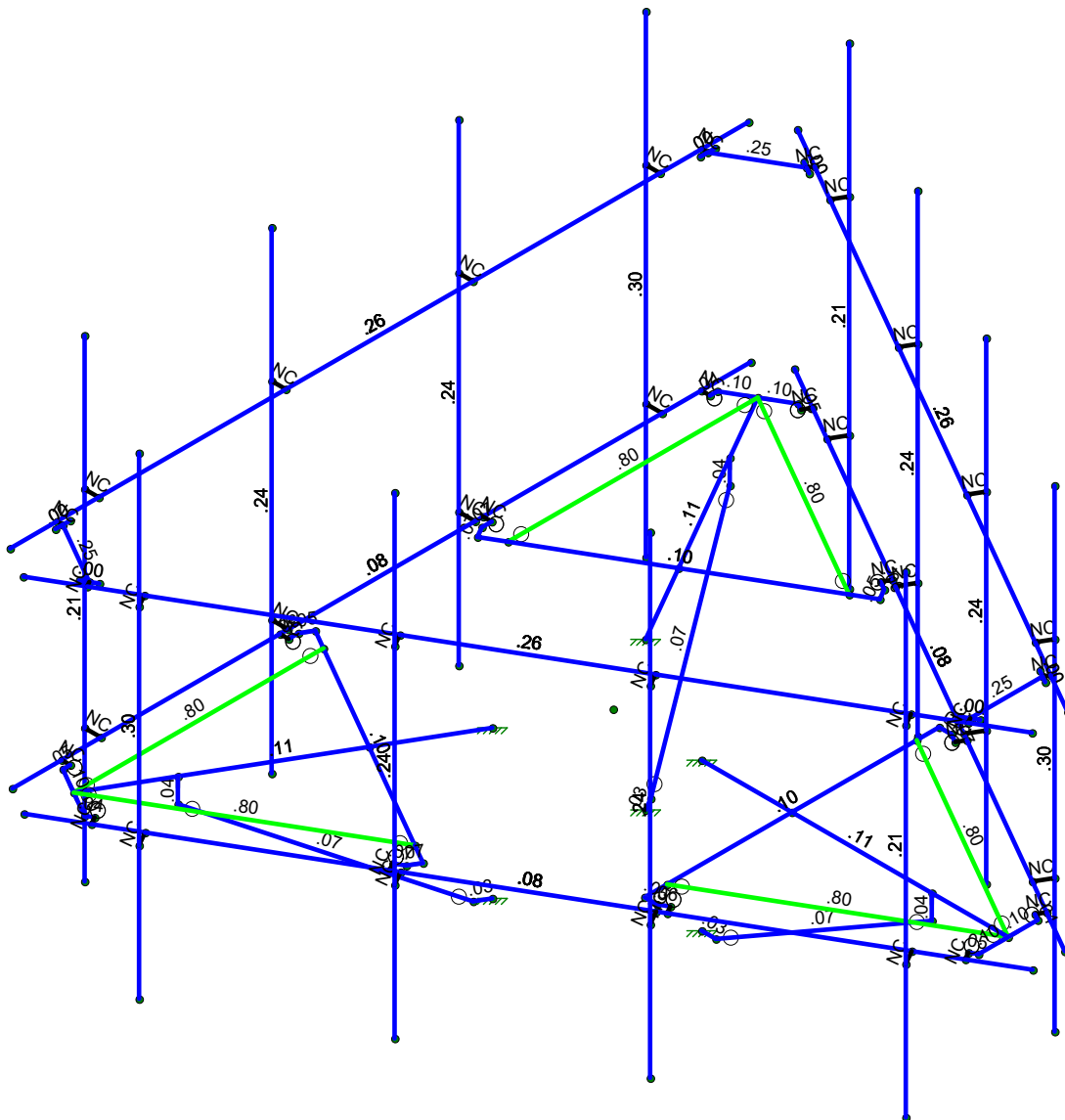
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Code Check
(Env)

- No Calc
- > 1.0
- .90-1.0
- .75-.90
- .50-.75
- 0.-.50



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.4D

ETS, PLLC

KM

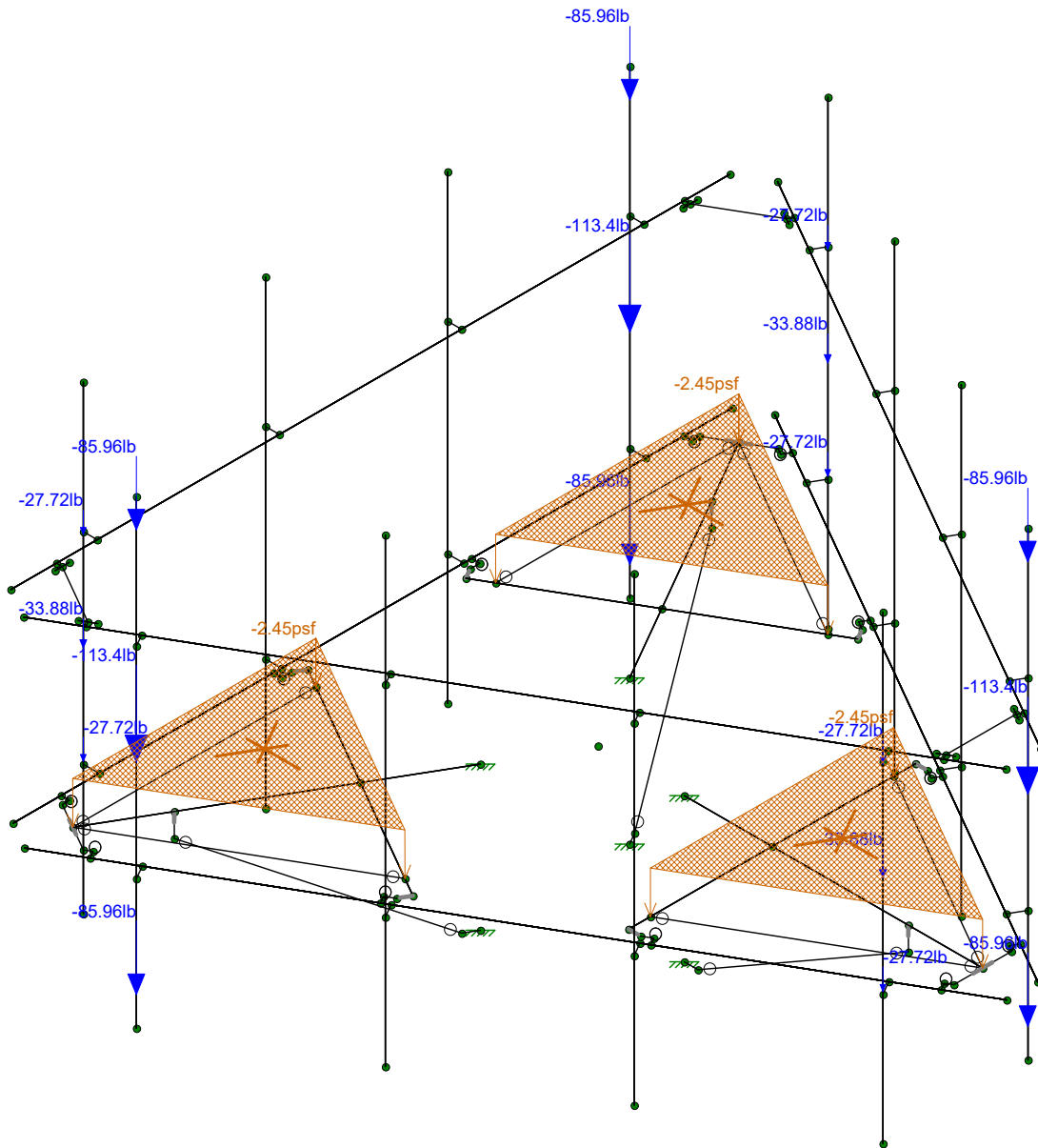
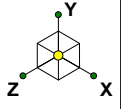
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BARKHAMSTEDW CT

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Loads: LC 1, 1.4D

ETS, PLLC
KM
ETS#22106741.STR.5264

BARKHAMSTEDW CT

SK - 6
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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	N10	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N108						
3	N110	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N114	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N130						
6	N132	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
7	N136	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N152						
9	N154	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Joint Coordinates and Temperatures

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
1	N1	-47.054047	0	75.	0	
2	N2	-47.054047	0	-75.	0	
3	N3	88.478929	0	-3.25	0	
4	N4	-41.424881	0	-78.25	0	
5	N5	80.215319	0	6.000274	0	
6	N6	80.215319	0	-6.000274	0	
7	N7	88.478929	0	3.25	0	
8	N8	-41.424881	0	78.25	0	
9	N9	36.293219	0	-25.358864	0	
10	N10	17.965319	0	-0.	0	
11	N11	36.293219	0	29.915332	0	
12	N12	36.293219	0	-29.915763	0	
13	N13	80.215319	0	-0.	0	
14	N14	36.293219	0	25.358433	0	
15	N15	0.	0	-0.	0	
16	N16	-47.054047	0	57.	0	
17	N17	-50.369047	0	57.	0	
18	N18	-50.369047	69	57.	0	
19	N19	-50.369047	-27	57.	0	
20	N20	36.293219	0	-0.	0	
21	N21	64.715319	-4.875	-0.	0	
22	N22	-47.054047	0	19.	0	
23	N23	-50.369047	0	19.	0	
24	N24	-50.369047	69	19.	0	
25	N25	-50.369047	-27	19.	0	
26	N26	-47.054047	0	-19.	0	
27	N27	-50.369047	0	-19.	0	
28	N28	-50.369047	69	-19.	0	
29	N29	-50.369047	-27	-19.	0	
30	N30	-47.054047	0	-57.	0	
31	N31	-50.369047	0	-57.	0	
32	N32	-50.369047	69	-57.	0	
33	N33	-50.369047	-27	-57.	0	
34	N34	72.890472	0	12.25	0	
35	N35	74.547972	0	15.120874	0	
36	N36	74.547972	69	15.120874	0	
37	N37	74.547972	-27	15.120874	0	
38	N38	39.981507	0	31.25	0	
39	N39	41.639007	0	34.120874	0	
40	N40	41.639007	69	34.120874	0	
41	N41	41.639007	-27	34.120874	0	
42	N42	7.072541	0	50.25	0	



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

May 4, 2022
 2:40 PM
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Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
43	N43	8.730041	0	53.120874	0	
44	N44	8.730041	69	53.120874	0	
45	N45	8.730041	-27	53.120874	0	
46	N46	-25.836424	0	69.25	0	
47	N47	-24.178924	0	72.120874	0	
48	N48	-24.178924	69	72.120874	0	
49	N49	-24.178924	-27	72.120874	0	
50	N50	-25.836424	0	-69.25	0	
51	N51	-24.178924	0	-72.120874	0	
52	N52	-24.178924	69	-72.120874	0	
53	N53	-24.178924	-27	-72.120874	0	
54	N54	7.072541	0	-50.25	0	
55	N55	8.730041	0	-53.120874	0	
56	N56	8.730041	69	-53.120874	0	
57	N57	8.730041	-27	-53.120874	0	
58	N58	39.981507	0	-31.25	0	
59	N59	41.639007	0	-34.120874	0	
60	N60	41.639007	69	-34.120874	0	
61	N61	41.639007	-27	-34.120874	0	
62	N62	72.890472	0	-12.25	0	
63	N63	74.547972	0	-15.120874	0	
64	N64	74.547972	69	-15.120874	0	
65	N65	74.547972	-27	-15.120874	0	
66	N66	38.793219	0	29.915332	0	
67	N67	40.52527	0	28.915332	0	
68	N68	41.40027	0	30.430876	0	
69	N69	38.793219	0	-29.915763	0	
70	N70	40.52527	0	-28.915763	0	
71	N71	41.40027	0	-30.431307	0	
72	N72	78.915967	0	6.750455	0	
73	N73	79.790967	0	8.266	0	
74	N74	78.915967	0	-6.750456	0	
75	N75	79.790967	0	-8.266001	0	
76	N76	-47.489047	42	75.	0	
77	N77	-47.489047	42	-75.	0	
78	N78	-47.489047	42	57.	0	
79	N79	-50.369047	42	57.	0	
80	N80	-47.489047	42	19.	0	
81	N81	-50.369047	42	19.	0	
82	N82	-47.489047	42	-19.	0	
83	N83	-50.369047	42	-19.	0	
84	N84	-47.489047	42	-57.	0	
85	N85	-50.369047	42	-57.	0	
86	N86	88.696429	42	3.626721	0	
87	N87	-41.207381	42	78.626721	0	
88	N88	80.465789	42	8.378683	0	
89	N89	80.465789	42	-8.378683	0	
90	N90	73.107972	42	12.626721	0	
91	N91	74.547972	42	15.120874	0	
92	N92	40.199007	42	31.626721	0	
93	N93	41.639007	42	34.120874	0	
94	N94	7.290041	42	50.626721	0	
95	N95	8.730041	42	53.120874	0	
96	N96	-25.618924	42	69.626721	0	
97	N97	-24.178924	42	72.120874	0	
98	N98	-41.207381	42	-78.626721	0	
99	N99	88.696429	42	-3.626721	0	



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
100	N100	-25.618924	42	-69.626721	0	
101	N101	-24.178924	42	-72.120874	0	
102	N102	7.290041	42	-50.626721	0	
103	N103	8.730041	42	-53.120874	0	
104	N104	40.199007	42	-31.626721	0	
105	N105	41.639007	42	-34.120874	0	
106	N106	73.107972	42	-12.626721	0	
107	N107	74.547972	42	-15.120874	0	
108	N108	20.840319	-30	-0.	0	
109	N109	64.715319	0	-0.	0	
110	N110	17.965319	-30	-0.	0	
111	N111	-34.911504	0	-72.469048	0	
112	N112	-45.304284	0	-66.468774	0	
113	N113	-40.108264	0	-18.751825	0	
114	N114	-8.982894	0	-15.55883	0	
115	N115	7.760593	0	-46.388923	0	
116	N116	-44.054654	0	-16.473376	0	
117	N117	-40.107894	0	-69.468911	0	
118	N118	3.814204	0	-44.110474	0	
119	N119	-32.357894	-4.875	-56.045518	0	
120	N120	6.510593	0	-48.553987	0	
121	N121	4.778543	0	-49.553987	0	
122	N122	5.653543	0	-51.069531	0	
123	N123	-45.304654	0	-18.638439	0	
124	N124	-45.304654	0	-20.638439	0	
125	N125	-47.054654	0	-20.638439	0	
126	N126	-33.612152	0	-71.718867	0	
127	N127	-32.737152	0	-73.234411	0	
128	N128	-45.304284	0	-64.968411	0	
129	N129	-47.054284	0	-64.968411	0	
130	N130	-10.420394	-30	-18.048653	0	
131	N131	-32.357894	0	-56.045518	0	
132	N132	-8.982894	-30	-15.55883	0	
133	N133	-45.304049	0	66.468367	0	
134	N134	-34.911269	0	72.468641	0	
135	N135	3.814811	0	44.110281	0	
136	N136	-8.982659	0	15.558422	0	
137	N137	-44.054047	0	16.473183	0	
138	N138	7.761201	0	46.388731	0	
139	N139	-40.107659	0	69.468504	0	
140	N140	-40.107657	0	18.751633	0	
141	N141	-32.357659	-4.875	56.04511	0	
142	N142	-45.304047	0	18.638247	0	
143	N143	-45.304047	0	20.638247	0	
144	N144	-47.054047	0	20.638247	0	
145	N145	6.511201	0	48.553794	0	
146	N146	4.779151	0	49.553794	0	
147	N147	5.654151	0	51.069338	0	
148	N148	-45.304049	0	64.968004	0	
149	N149	-47.054049	0	64.968004	0	
150	N150	-33.611916	0	71.718459	0	
151	N151	-32.736916	0	73.234004	0	
152	N152	-10.420159	-30	18.048245	0	
153	N153	-32.357659	0	56.04511	0	
154	N154	-8.982659	-30	15.558422	0	
155	N155	-32.976742	42	-73.874759	0	
156	N156	-47.489047	42	-65.496076	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
157	N157	-47.489047	42	65.496076	0	
158	N158	-32.976742	42	73.874759	0	
159	N160	-18.146844	0	-31.431257	0	
160	N162	-18.146609	0	31.430849	0	
161	N161	-46.299047	42	-65.496076	0	
162	N162A	-46.299047	42	65.496076	0	
163	N163	-46.299047	42	-63.996076	0	
164	N164	-46.299047	42	66.996076	0	
165	N165	-46.299047	42	-66.996076	0	
166	N166	-46.299047	42	63.996076	0	
167	N169	-33.571743	42	72.844189	0	
168	N170	79.870789	42	7.348113	0	
169	N171	-32.272704	42	72.094189	0	
170	N172	81.169827	42	6.598113	0	
171	N173	-34.870781	42	73.594189	0	
172	N174	78.57175	42	8.098113	0	
173	N177	79.870789	42	-7.348112	0	
174	N178	-33.571742	42	-72.844188	0	
175	N179	78.571751	42	-8.098112	0	
176	N180	-34.87078	42	-73.594188	0	
177	N181	81.169827	42	-6.598112	0	
178	N182	-32.272704	42	-72.094188	0	

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design ...	Material	Design Rules
1	BRACE-1	N137	N138			HSS4X4X4	Beam	SquareT...	Q235	Typical
2	BRACE-2	N115	N116			HSS4X4X4	Beam	SquareT...	Q235	Typical
3	BRACE-3	N11	N12			HSS4X4X4	Beam	SquareT...	Q235	Typical
4	CONN-PL-60-1	N116	N123			PL 3/8x6	Beam	BAR	Q235	DR1
5	CONN-PL-60-2	N115	N120			PL 3/8x6	Beam	BAR	Q235	DR1
6	CONN-PL-90-1	N142	N143			PL 3/8x6	Beam	BAR	Q235	Typical
7	CONN-PL-90-2	N123	N124			PL 3/8x6	Beam	BAR	Q235	Typical
8	CONN-PL-180-1	N12	N69			PL 3/8x6	Beam	BAR	Q235	DR1
9	CONN-PL-180-2	N11	N66			PL 3/8x6	Beam	BAR	Q235	DR1
10	CONN-PL-210-1	N120	N121			PL 3/8x6	Beam	BAR	Q235	Typical
11	CONN-PL-210-2	N69	N70			PL 3/8x6	Beam	BAR	Q235	Typical
12	CONN-PL-300-1	N138	N145			PL 3/8x6	Beam	BAR	Q235	DR1
13	CONN-PL-300-2	N137	N142			PL 3/8x6	Beam	BAR	Q235	DR1
14	CONN-PL-330-1	N66	N67			PL 3/8x6	Beam	BAR	Q235	Typical
15	CONN-PL-330-2	N145	N146			PL 3/8x6	Beam	BAR	Q235	Typical
16	COR-1	N162A	N169		90	L2.5x2.5x4	Beam	Single A...	Q235	Typical
17	COR-2	N178	N161		90	L2.5x2.5x4	Beam	Single A...	Q235	Typical
18	COR-3	N170	N177		90	L2.5x2.5x4	Beam	Single A...	Q235	Typical
19	COR-PL-90-1	N13	N6			PL 1/2x6	Beam	BAR	Q235	Typical
20	COR-PL-90-2	N13	N5			PL 1/2x6	Beam	BAR	Q235	Typical
21	COR-PL-90-3	N133	N148			PL 1/2x6	Beam	BAR	Q235	Typical
22	COR-PL-90-4	N112	N128			PL 1/2x6	Beam	BAR	Q235	Typical
23	COR-PL-210-1	N139	N134			PL 1/2x6	Beam	BAR	Q235	Typical
24	COR-PL-210-2	N139	N133			PL 1/2x6	Beam	BAR	Q235	Typical
25	COR-PL-210-3	N111	N126			PL 1/2x6	Beam	BAR	Q235	Typical
26	COR-PL-210-4	N6	N74			PL 1/2x6	Beam	BAR	Q235	Typical
27	COR-PL-330-1	N117	N112			PL 1/2x6	Beam	BAR	Q235	Typical
28	COR-PL-330-2	N117	N111			PL 1/2x6	Beam	BAR	Q235	Typical
29	COR-PL-330-3	N5	N72			PL 1/2x6	Beam	BAR	Q235	Typical
30	COR-PL-330-4	N134	N150			PL 1/2x6	Beam	BAR	Q235	Typical



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design ...	Material	Design Rules
31	FM-0	N1	N2			PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical
32	FM-120	N3	N4			PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical
33	FM-240	N7	N8			PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical
34	GRATE-H-90-1	N139	N140			L2x2x3	Beam	Single A...	Q235	Typical
35	GRATE-H-90-2	N117	N113		270	L2x2x3	Beam	Single A...	Q235	Typical
36	GRATE-H-210-1	N117	N118			L2x2x3	Beam	Single A...	Q235	Typical
37	GRATE-H-210-2	N13	N9		270	L2x2x3	Beam	Single A...	Q235	Typical
38	GRATE-H-330-1	N13	N14			L2x2x3	Beam	Single A...	Q235	Typical
39	GRATE-H-330-2	N139	N135		270	L2x2x3	Beam	Single A...	Q235	Typical
40	HR-0	N76	N77			PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical
41	HR-120	N98	N99			PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical
42	HR-240	N86	N87			PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical
43	KICK-1	N108	N21			LL2.5x2.5x3x8	Beam	Double ...	Q235	Typical
44	KICK-2	N152	N141			LL2.5x2.5x3x8	Beam	Double ...	Q235	Typical
45	KICK-3	N130	N119			LL2.5x2.5x3x8	Beam	Double ...	Q235	Typical
46	KICK-PL-1	N154	N152			PL 1/2x8	Beam	BAR	Q235	Typical
47	KICK-PL-2	N141	N153		60	PL 1/2x8	Beam	BAR	Q235	Typical
48	KICK-PL-3	N132	N130			PL 1/2x8	Beam	BAR	Q235	Typical
49	KICK-PL-4	N119	N131		300	PL 1/2x8	Beam	BAR	Q235	Typical
50	KICK-PL-5	N110	N108			PL 1/2x8	Beam	BAR	Q235	Typical
51	KICK-PL-6	N21	N109			PL 1/2x8	Beam	BAR	Q235	Typical
52	MP1	N19	N18			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
53	MP2	N25	N24			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
54	MP3	N29	N28			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
55	MP4	N33	N32			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
56	MP5	N53	N52			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
57	MP6	N57	N56			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
58	MP7	N61	N60			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
59	MP8	N65	N64			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
60	MP9	N37	N36			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
61	MP10	N41	N40			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
62	MP11	N45	N44			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
63	MP12	N49	N48			PIPE 2.0	Colu...	Pipe	A53 Gr.B	Typical
64	RL1	N16	N17			RIGID	None	None	RIGID	Typical
65	RL2	N22	N23			RIGID	None	None	RIGID	Typical
66	RL3	N26	N27			RIGID	None	None	RIGID	Typical
67	RL4	N30	N31			RIGID	None	None	RIGID	Typical
68	RL5	N34	N35			RIGID	None	None	RIGID	Typical
69	RL6	N38	N39			RIGID	None	None	RIGID	Typical
70	RL7	N42	N43			RIGID	None	None	RIGID	Typical
71	RL8	N46	N47			RIGID	None	None	RIGID	Typical
72	RL9	N50	N51			RIGID	None	None	RIGID	Typical
73	RL10	N54	N55			RIGID	None	None	RIGID	Typical
74	RL11	N58	N59			RIGID	None	None	RIGID	Typical
75	RL12	N62	N63			RIGID	None	None	RIGID	Typical
76	RL13	N67	N68			RIGID	None	None	RIGID	Typical
77	RL14	N70	N71			RIGID	None	None	RIGID	Typical
78	RL15	N72	N73			RIGID	None	None	RIGID	Typical
79	RL16	N74	N75			RIGID	None	None	RIGID	Typical
80	RL17	N78	N79			RIGID	None	None	RIGID	Typical
81	RL18	N80	N81			RIGID	None	None	RIGID	Typical
82	RL19	N82	N83			RIGID	None	None	RIGID	Typical
83	RL20	N84	N85			RIGID	None	None	RIGID	Typical
84	RL21	N90	N91			RIGID	None	None	RIGID	Typical
85	RL22	N92	N93			RIGID	None	None	RIGID	Typical
86	RL23	N94	N95			RIGID	None	None	RIGID	Typical
87	RL24	N96	N97			RIGID	None	None	RIGID	Typical



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design ...	Material	Design Rules
88	RL25	N100	N101			RIGID	None	None	RIGID	Typical
89	RL26	N102	N103			RIGID	None	None	RIGID	Typical
90	RL27	N104	N105			RIGID	None	None	RIGID	Typical
91	RL28	N106	N107			RIGID	None	None	RIGID	Typical
92	RL29	N121	N122			RIGID	None	None	RIGID	Typical
93	RL30	N124	N125			RIGID	None	None	RIGID	Typical
94	RL31	N126	N127			RIGID	None	None	RIGID	Typical
95	RL32	N128	N129			RIGID	None	None	RIGID	Typical
96	RL33	N143	N144			RIGID	None	None	RIGID	Typical
97	RL34	N146	N147			RIGID	None	None	RIGID	Typical
98	RL35	N148	N149			RIGID	None	None	RIGID	Typical
99	RL36	N150	N151			RIGID	None	None	RIGID	Typical
100	SA-1	N139	N136			HSS4X4X4	Beam	SquareT...	Q235	Typical
101	SA-2	N117	N114			HSS4X4X4	Beam	SquareT...	Q235	Typical
102	SA-3	N13	N10			HSS4X4X4	Beam	SquareT...	Q235	Typical
103	PL-90-1	N164	N166			PL 3/8x6	Beam	None	A36 Gr.36	Typical
104	PL-90-2	N163	N165			PL 3/8x6	Beam	None	A36 Gr.36	Typical
105	M105	N157	N162A			RIGID	None	None	RIGID	Typical
106	M106	N156	N161			RIGID	None	None	RIGID	Typical
107	PL-330-1	N172	N174			PL 3/8x6	Beam	None	A36 Gr.36	Typical
108	PL-330-2	N171	N173			PL 3/8x6	Beam	None	A36 Gr.36	Typical
109	M109	N88	N170			RIGID	None	None	RIGID	Typical
110	M110	N158	N169			RIGID	None	None	RIGID	Typical
111	PL-210-1	N180	N182			PL 3/8x6	Beam	None	A36 Gr.36	Typical
112	PL-210-2	N179	N181			PL 3/8x6	Beam	None	A36 Gr.36	Typical
113	M113	N155	N178			RIGID	None	None	RIGID	Typical
114	M114	N89	N177			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical Defl Ra...	Analysis Offset[in]	Inactive	Seismi...
1	BRACE-1						Yes			None
2	BRACE-2						Yes			None
3	BRACE-3						Yes			None
4	CONN-PL...				2		Yes			None
5	CONN-PL...				2		Yes			None
6	CONN-PL...						Yes			None
7	CONN-PL...						Yes			None
8	CONN-PL...				2		Yes			None
9	CONN-PL...				2		Yes			None
10	CONN-PL...						Yes			None
11	CONN-PL...						Yes			None
12	CONN-PL...				2		Yes			None
13	CONN-PL...				2		Yes			None
14	CONN-PL...						Yes			None
15	CONN-PL...						Yes			None
16	COR-1						Yes	Default		None
17	COR-2						Yes	Default		None
18	COR-3						Yes	Default		None
19	COR-PL-9...				2		Yes			None
20	COR-PL-9...				2		Yes			None
21	COR-PL-9...						Yes			None
22	COR-PL-9...						Yes			None
23	COR-PL-2...				2		Yes			None
24	COR-PL-2...				2		Yes			None
25	COR-PL-2...						Yes			None



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Advanced Data (Continued)

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra...	Analysis	Offset[in]	Inactive	Seismi...
26	COR-PL-2...					Yes					None
27	COR-PL-3...			2		Yes					None
28	COR-PL-3...			2		Yes					None
29	COR-PL-3...					Yes					None
30	COR-PL-3...					Yes					None
31	FM-0					Yes					None
32	FM-120					Yes					None
33	FM-240					Yes					None
34	GRATE-H...	BenPIN	BenPIN			Yes	Default				None
35	GRATE-H...	BenPIN	BenPIN			Yes	Default				None
36	GRATE-H...	BenPIN	BenPIN			Yes	Default				None
37	GRATE-H...	BenPIN	BenPIN			Yes	Default				None
38	GRATE-H...	BenPIN	BenPIN			Yes	Default				None
39	GRATE-H...	BenPIN	BenPIN			Yes	Default				None
40	HR-0					Yes					None
41	HR-120					Yes					None
42	HR-240					Yes					None
43	KICK-1	BenPIN	BenPIN			Yes					None
44	KICK-2	BenPIN	BenPIN			Yes					None
45	KICK-3	BenPIN	BenPIN			Yes					None
46	KICK-PL-1					Yes					None
47	KICK-PL-2				2	Yes					None
48	KICK-PL-3					Yes					None
49	KICK-PL-4				2	Yes					None
50	KICK-PL-5					Yes					None
51	KICK-PL-6				2	Yes					None
52	MP1					Yes	** NA **				None
53	MP2					Yes	** NA **				None
54	MP3					Yes	** NA **				None
55	MP4					Yes	** NA **				None
56	MP5					Yes	** NA **				None
57	MP6					Yes	** NA **				None
58	MP7					Yes	** NA **				None
59	MP8					Yes	** NA **				None
60	MP9					Yes	** NA **				None
61	MP10					Yes	** NA **				None
62	MP11					Yes	** NA **				None
63	MP12					Yes	** NA **				None
64	RL1					Yes	** NA **				None
65	RL2					Yes	** NA **				None
66	RL3					Yes	** NA **				None
67	RL4					Yes	** NA **				None
68	RL5					Yes	** NA **				None
69	RL6					Yes	** NA **				None
70	RL7					Yes	** NA **				None
71	RL8					Yes	** NA **				None
72	RL9					Yes	** NA **				None
73	RL10					Yes	** NA **				None
74	RL11					Yes	** NA **				None
75	RL12					Yes	** NA **				None
76	RL13		000X00			Yes	** NA **				None
77	RL14		000X00			Yes	** NA **				None
78	RL15		000X00			Yes	** NA **				None
79	RL16		000X00			Yes	** NA **				None
80	RL17					Yes	** NA **				None
81	RL18					Yes	** NA **				None
82	RL19					Yes	** NA **				None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra...	Analysis Offset[in]	Inactive	Seismi...
83	RL20						Yes	** NA **			None
84	RL21						Yes	** NA **			None
85	RL22						Yes	** NA **			None
86	RL23						Yes	** NA **			None
87	RL24						Yes	** NA **			None
88	RL25						Yes	** NA **			None
89	RL26						Yes	** NA **			None
90	RL27						Yes	** NA **			None
91	RL28						Yes	** NA **			None
92	RL29		000X00				Yes	** NA **			None
93	RL30		000X00				Yes	** NA **			None
94	RL31		000X00				Yes	** NA **			None
95	RL32		000X00				Yes	** NA **			None
96	RL33		000X00				Yes	** NA **			None
97	RL34		000X00				Yes	** NA **			None
98	RL35		000X00				Yes	** NA **			None
99	RL36		000X00				Yes	** NA **			None
100	SA-1						Yes				None
101	SA-2						Yes				None
102	SA-3						Yes				None
103	PL-90-1						Yes				None
104	PL-90-2						Yes				None
105	M105						Yes	** NA **			None
106	M106						Yes	** NA **			None
107	PL-330-1						Yes				None
108	PL-330-2						Yes				None
109	M109						Yes	** NA **			None
110	M110						Yes	** NA **			None
111	PL-210-1						Yes				None
112	PL-210-2						Yes				None
113	M113						Yes	** NA **			None
114	M114						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Lengt...	Lbyy[in]	Lbzz[in]	Lcomp t...	Lcomp b...	L-tor...	Kyy	Kzz	Cb	Func...
1	BRACE-1	HSS4X4X4	59.831	23.4	25.9							Late...
2	BRACE-2	HSS4X4X4	59.831	23.4	25.9							Late...
3	BRACE-3	HSS4X4X4	59.831	23.4	25.9							Late...
4	CONN-PL-60-1	PL 3/8x6	2.5									Late...
5	CONN-PL-60-2	PL 3/8x6	2.5									Late...
6	CONN-PL-90-1	PL 3/8x6	2									Late...
7	CONN-PL-90-2	PL 3/8x6	2									Late...
8	CONN-PL-180-1	PL 3/8x6	2.5									Late...
9	CONN-PL-180-2	PL 3/8x6	2.5									Late...
10	CONN-PL-210-1	PL 3/8x6	2									Late...
11	CONN-PL-210-2	PL 3/8x6	2									Late...
12	CONN-PL-300-1	PL 3/8x6	2.5									Late...
13	CONN-PL-300-2	PL 3/8x6	2.5									Late...
14	CONN-PL-330-1	PL 3/8x6	2									Late...
15	CONN-PL-330-2	PL 3/8x6	2									Late...
16	COR-1	L2.5x2.5x4	14.696									Late...
17	COR-2	L2.5x2.5x4	14.696									Late...
18	COR-3	L2.5x2.5x4	14.696									Late...
19	COR-PL-90-1	PL 1/2x6	6									Late...
20	COR-PL-90-2	PL 1/2x6	6									Late...



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
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Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Lengt...	Lbyy[in]	Lbzz[in]	Lcomp t...	Lcomp b...	L-tor...	Kyy	Kzz	Cb	Func...
21	COR-PL-90-3	PL 1/2x6	1.5									Late...
22	COR-PL-90-4	PL 1/2x6	1.5									Late...
23	COR-PL-210-1	PL 1/2x6	6									Late...
24	COR-PL-210-2	PL 1/2x6	6									Late...
25	COR-PL-210-3	PL 1/2x6	1.5									Late...
26	COR-PL-210-4	PL 1/2x6	1.5									Late...
27	COR-PL-330-1	PL 1/2x6	6									Late...
28	COR-PL-330-2	PL 1/2x6	6									Late...
29	COR-PL-330-3	PL 1/2x6	1.5									Late...
30	COR-PL-330-4	PL 1/2x6	1.5									Late...
31	FM-0	PIPE 3.0	150	49.4	49.4							Late...
32	FM-120	PIPE 3.0	150	49.4	49.4							Late...
33	FM-240	PIPE 3.0	150	49.4	49.4							Late...
34	GRATE-H-90-1	L2x2x3	50.717									Late...
35	GRATE-H-90-2	L2x2x3	50.717									Late...
36	GRATE-H-210-1	L2x2x3	50.717									Late...
37	GRATE-H-210-2	L2x2x3	50.717									Late...
38	GRATE-H-330-1	L2x2x3	50.717									Late...
39	GRATE-H-330-2	L2x2x3	50.717									Late...
40	HR-0	PIPE 2.0	150		38							Late...
41	HR-120	PIPE 2.0	150		38							Late...
42	HR-240	PIPE 2.0	150		38							Late...
43	KICK-1	LL2.5x2.5x3x8	50.56									Late...
44	KICK-2	LL2.5x2.5x3x8	50.56									Late...
45	KICK-3	LL2.5x2.5x3x8	50.56									Late...
46	KICK-PL-1	PL 1/2x8	2.875									Late...
47	KICK-PL-2	PL 1/2x8	4.875									Late...
48	KICK-PL-3	PL 1/2x8	2.875									Late...
49	KICK-PL-4	PL 1/2x8	4.875									Late...
50	KICK-PL-5	PL 1/2x8	2.875									Late...
51	KICK-PL-6	PL 1/2x8	4.875									Late...
52	MP1	PIPE 2.0	96									Late...
53	MP2	PIPE 2.0	96									Late...
54	MP3	PIPE 2.0	96									Late...
55	MP4	PIPE 2.0	96									Late...
56	MP5	PIPE 2.0	96									Late...
57	MP6	PIPE 2.0	96									Late...
58	MP7	PIPE 2.0	96									Late...
59	MP8	PIPE 2.0	96									Late...
60	MP9	PIPE 2.0	96									Late...
61	MP10	PIPE 2.0	96									Late...
62	MP11	PIPE 2.0	96									Late...
63	MP12	PIPE 2.0	96									Late...
64	SA-1	HSS4X4X4	62.25	41.9	46.75							Late...
65	SA-2	HSS4X4X4	62.25	41.9	46.75							Late...
66	SA-3	HSS4X4X4	62.25	41.9	46.75							Late...
67	PL-90-1	PL 3/8x6	3				Lbyy					Late...
68	PL-90-2	PL 3/8x6	3				Lbyy					Late...
69	PL-330-1	PL 3/8x6	3				Lbyy					Late...
70	PL-330-2	PL 3/8x6	3				Lbyy					Late...
71	PL-210-1	PL 3/8x6	3				Lbyy					Late...
72	PL-210-2	PL 3/8x6	3				Lbyy					Late...

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...)	Density[k/ft^3]	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 R...	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
8	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

Member Point Loads (BLC 1 : Dead Load)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	Y	0	%50
2	MP2	Y	0	%50
3	MP3	Y	0	%50
4	MP4	Y	0	%50
5	MP5	Y	0	%50
6	MP6	Y	0	%50
7	MP7	Y	0	%50
8	MP8	Y	0	%50
9	MP9	Y	0	%50
10	MP10	Y	0	%50
11	MP11	Y	0	%50
12	MP12	Y	0	%50
13	MP1	Y	-11	%50
14	MP1	Y	-13.2	%50
15	MP4	Y	-81	%50
16	MP5	Y	-11	%50
17	MP5	Y	-13.2	%50
18	MP8	Y	-81	%50
19	MP9	Y	-11	%50
20	MP9	Y	-13.2	%50
21	MP12	Y	-81	%50

Member Point Loads (BLC 2 : Wind Load (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	21	%50
2	MP2	X	56.3	%50
3	MP3	X	56.3	%50
4	MP4	X	0	%50
5	MP5	X	47.4	%50
6	MP6	X	56.3	%50
7	MP7	X	56.3	%50
8	MP8	X	42.2	%50
9	MP9	X	47.4	%50
10	MP10	X	56.3	%50
11	MP11	X	56.3	%50
12	MP12	X	42.2	%50
13	MP1	X	4.6	%50
14	MP1	X	11.8	%50
15	MP4	X	85.2	%50
16	MP5	X	1.2	%50
17	MP5	X	15.9	%50
18	MP8	X	52.3	%50
19	MP9	X	1.2	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
20	MP9	X	15.9	%50
21	MP12	X	52.3	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	0	%50
35	MP1	Z	0	%50
36	MP4	Z	0	%50
37	MP5	Z	0	%50
38	MP5	Z	0	%50
39	MP8	Z	0	%50
40	MP9	Z	0	%50
41	MP9	Z	0	%50
42	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	25.8	%50
2	MP2	X	48.7	%50
3	MP3	X	48.7	%50
4	MP4	X	12.2	%50
5	MP5	X	48.7	%50
6	MP6	X	48.7	%50
7	MP7	X	48.7	%50
8	MP8	X	48.7	%50
9	MP9	X	25.8	%50
10	MP10	X	48.7	%50
11	MP11	X	48.7	%50
12	MP12	X	12.2	%50
13	MP1	X	3	%50
14	MP1	X	11.4	%50
15	MP4	X	64.3	%50
16	MP5	X	0	%50
17	MP5	X	15	%50
18	MP8	X	35.8	%50
19	MP9	X	3	%50
20	MP9	X	11.4	%50
21	MP12	X	64.3	%50
22	MP1	Z	14.9	%50
23	MP2	Z	28.1	%50
24	MP3	Z	28.1	%50
25	MP4	Z	7.1	%50
26	MP5	Z	28.1	%50
27	MP6	Z	28.1	%50
28	MP7	Z	28.1	%50
29	MP8	Z	28.1	%50
30	MP9	Z	14.9	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
31	MP10	Z	28.1	%50
32	MP11	Z	28.1	%50
33	MP12	Z	7.1	%50
34	MP1	Z	1.7	%50
35	MP1	Z	6.6	%50
36	MP4	Z	37.1	%50
37	MP5	Z	0	%50
38	MP5	Z	8.6	%50
39	MP8	Z	20.7	%50
40	MP9	Z	1.7	%50
41	MP9	Z	6.6	%50
42	MP12	Z	37.1	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	23.7	%50
2	MP2	X	28.1	%50
3	MP3	X	28.1	%50
4	MP4	X	21.1	%50
5	MP5	X	23.7	%50
6	MP6	X	28.1	%50
7	MP7	X	28.1	%50
8	MP8	X	21.1	%50
9	MP9	X	10.5	%50
10	MP10	X	28.1	%50
11	MP11	X	28.1	%50
12	MP12	X	0	%50
13	MP1	X	.6	%50
14	MP1	X	7.9	%50
15	MP4	X	26.2	%50
16	MP5	X	.6	%50
17	MP5	X	7.9	%50
18	MP8	X	26.2	%50
19	MP9	X	2.3	%50
20	MP9	X	5.9	%50
21	MP12	X	42.6	%50
22	MP1	Z	41.1	%50
23	MP2	Z	48.7	%50
24	MP3	Z	48.7	%50
25	MP4	Z	36.6	%50
26	MP5	Z	41.1	%50
27	MP6	Z	48.7	%50
28	MP7	Z	48.7	%50
29	MP8	Z	36.6	%50
30	MP9	Z	18.2	%50
31	MP10	Z	48.7	%50
32	MP11	Z	48.7	%50
33	MP12	Z	0	%50
34	MP1	Z	1	%50
35	MP1	Z	13.8	%50
36	MP4	Z	45.3	%50
37	MP5	Z	1	%50
38	MP5	Z	13.8	%50
39	MP8	Z	45.3	%50
40	MP9	Z	4	%50
41	MP9	Z	10.2	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
42	MP12	Z	73.8	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	0	%50
14	MP1	X	0	%50
15	MP4	X	0	%50
16	MP5	X	0	%50
17	MP5	X	0	%50
18	MP8	X	0	%50
19	MP9	X	0	%50
20	MP9	X	0	%50
21	MP12	X	0	%50
22	MP1	Z	56.3	%50
23	MP2	Z	56.3	%50
24	MP3	Z	56.3	%50
25	MP4	Z	56.3	%50
26	MP5	Z	29.8	%50
27	MP6	Z	56.3	%50
28	MP7	Z	56.3	%50
29	MP8	Z	14.1	%50
30	MP9	Z	29.8	%50
31	MP10	Z	56.3	%50
32	MP11	Z	56.3	%50
33	MP12	Z	14.1	%50
34	MP1	Z	0	%50
35	MP1	Z	17.3	%50
36	MP4	Z	41.4	%50
37	MP5	Z	3.5	%50
38	MP5	Z	13.2	%50
39	MP8	Z	74.3	%50
40	MP9	Z	3.5	%50
41	MP9	Z	13.2	%50
42	MP12	Z	74.3	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-23.7	%50
2	MP2	X	-28.1	%50
3	MP3	X	-28.1	%50
4	MP4	X	-21.1	%50
5	MP5	X	-10.5	%50
6	MP6	X	-28.1	%50
7	MP7	X	-28.1	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
8	MP8	X	0	%50
9	MP9	X	-23.7	%50
10	MP10	X	-28.1	%50
11	MP11	X	-28.1	%50
12	MP12	X	-21.1	%50
13	MP1	X	-6	%50
14	MP1	X	-7.9	%50
15	MP4	X	-26.2	%50
16	MP5	X	-2.3	%50
17	MP5	X	-5.9	%50
18	MP8	X	-42.6	%50
19	MP9	X	-6	%50
20	MP9	X	-7.9	%50
21	MP12	X	-26.2	%50
22	MP1	Z	41.1	%50
23	MP2	Z	48.7	%50
24	MP3	Z	48.7	%50
25	MP4	Z	36.6	%50
26	MP5	Z	18.2	%50
27	MP6	Z	48.7	%50
28	MP7	Z	48.7	%50
29	MP8	Z	0	%50
30	MP9	Z	41.1	%50
31	MP10	Z	48.7	%50
32	MP11	Z	48.7	%50
33	MP12	Z	36.6	%50
34	MP1	Z	1	%50
35	MP1	Z	13.8	%50
36	MP4	Z	45.3	%50
37	MP5	Z	4	%50
38	MP5	Z	10.2	%50
39	MP8	Z	73.8	%50
40	MP9	Z	1	%50
41	MP9	Z	13.8	%50
42	MP12	Z	45.3	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-25.8	%50
2	MP2	X	-48.7	%50
3	MP3	X	-48.7	%50
4	MP4	X	-12.2	%50
5	MP5	X	-25.8	%50
6	MP6	X	-48.7	%50
7	MP7	X	-48.7	%50
8	MP8	X	-12.2	%50
9	MP9	X	-48.7	%50
10	MP10	X	-48.7	%50
11	MP11	X	-48.7	%50
12	MP12	X	-48.7	%50
13	MP1	X	-3	%50
14	MP1	X	-11.4	%50
15	MP4	X	-64.3	%50
16	MP5	X	-3	%50
17	MP5	X	-11.4	%50
18	MP8	X	-64.3	%50



Company : ETS, PLLC
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Member Point Loads (BLC 7 : Wind Load (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
19	MP9	X	0	%50
20	MP9	X	-15	%50
21	MP12	X	-35.8	%50
22	MP1	Z	14.9	%50
23	MP2	Z	28.1	%50
24	MP3	Z	28.1	%50
25	MP4	Z	7.1	%50
26	MP5	Z	14.9	%50
27	MP6	Z	28.1	%50
28	MP7	Z	28.1	%50
29	MP8	Z	7.1	%50
30	MP9	Z	28.1	%50
31	MP10	Z	28.1	%50
32	MP11	Z	28.1	%50
33	MP12	Z	28.1	%50
34	MP1	Z	1.7	%50
35	MP1	Z	6.6	%50
36	MP4	Z	37.1	%50
37	MP5	Z	1.7	%50
38	MP5	Z	6.6	%50
39	MP8	Z	37.1	%50
40	MP9	Z	0	%50
41	MP9	Z	8.6	%50
42	MP12	Z	20.7	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	-21	%50
2	MP2	X	-56.3	%50
3	MP3	X	-56.3	%50
4	MP4	X	0	%50
5	MP5	X	-47.4	%50
6	MP6	X	-56.3	%50
7	MP7	X	-56.3	%50
8	MP8	X	-42.2	%50
9	MP9	X	-47.4	%50
10	MP10	X	-56.3	%50
11	MP11	X	-56.3	%50
12	MP12	X	-42.2	%50
13	MP1	X	-4.6	%50
14	MP1	X	-11.8	%50
15	MP4	X	-85.2	%50
16	MP5	X	-1.2	%50
17	MP5	X	-15.9	%50
18	MP8	X	-52.3	%50
19	MP9	X	-1.2	%50
20	MP9	X	-15.9	%50
21	MP12	X	-52.3	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	0	%50
35	MP1	Z	0	%50
36	MP4	Z	0	%50
37	MP5	Z	0	%50
38	MP5	Z	0	%50
39	MP8	Z	0	%50
40	MP9	Z	0	%50
41	MP9	Z	0	%50
42	MP12	Z	0	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-25.8	%50
2	MP2	X	-48.7	%50
3	MP3	X	-48.7	%50
4	MP4	X	-12.2	%50
5	MP5	X	-48.7	%50
6	MP6	X	-48.7	%50
7	MP7	X	-48.7	%50
8	MP8	X	-48.7	%50
9	MP9	X	-25.8	%50
10	MP10	X	-48.7	%50
11	MP11	X	-48.7	%50
12	MP12	X	-12.2	%50
13	MP1	X	-3	%50
14	MP1	X	-11.4	%50
15	MP4	X	-64.3	%50
16	MP5	X	0	%50
17	MP5	X	-15	%50
18	MP8	X	-35.8	%50
19	MP9	X	-3	%50
20	MP9	X	-11.4	%50
21	MP12	X	-64.3	%50
22	MP1	Z	-14.9	%50
23	MP2	Z	-28.1	%50
24	MP3	Z	-28.1	%50
25	MP4	Z	-7.1	%50
26	MP5	Z	-28.1	%50
27	MP6	Z	-28.1	%50
28	MP7	Z	-28.1	%50
29	MP8	Z	-28.1	%50
30	MP9	Z	-14.9	%50
31	MP10	Z	-28.1	%50
32	MP11	Z	-28.1	%50
33	MP12	Z	-7.1	%50
34	MP1	Z	-1.7	%50
35	MP1	Z	-6.6	%50
36	MP4	Z	-37.1	%50
37	MP5	Z	0	%50
38	MP5	Z	-8.6	%50
39	MP8	Z	-20.7	%50
40	MP9	Z	-1.7	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
41	MP9	Z	-6.6	%50
42	MP12	Z	-37.1	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-23.7	%50
2	MP2	X	-28.1	%50
3	MP3	X	-28.1	%50
4	MP4	X	-21.1	%50
5	MP5	X	-23.7	%50
6	MP6	X	-28.1	%50
7	MP7	X	-28.1	%50
8	MP8	X	-21.1	%50
9	MP9	X	-10.5	%50
10	MP10	X	-28.1	%50
11	MP11	X	-28.1	%50
12	MP12	X	0	%50
13	MP1	X	-6	%50
14	MP1	X	-7.9	%50
15	MP4	X	-26.2	%50
16	MP5	X	-6	%50
17	MP5	X	-7.9	%50
18	MP8	X	-26.2	%50
19	MP9	X	-2.3	%50
20	MP9	X	-5.9	%50
21	MP12	X	-42.6	%50
22	MP1	Z	-41.1	%50
23	MP2	Z	-48.7	%50
24	MP3	Z	-48.7	%50
25	MP4	Z	-36.6	%50
26	MP5	Z	-41.1	%50
27	MP6	Z	-48.7	%50
28	MP7	Z	-48.7	%50
29	MP8	Z	-36.6	%50
30	MP9	Z	-18.2	%50
31	MP10	Z	-48.7	%50
32	MP11	Z	-48.7	%50
33	MP12	Z	0	%50
34	MP1	Z	-1	%50
35	MP1	Z	-13.8	%50
36	MP4	Z	-45.3	%50
37	MP5	Z	-1	%50
38	MP5	Z	-13.8	%50
39	MP8	Z	-45.3	%50
40	MP9	Z	-4	%50
41	MP9	Z	-10.2	%50
42	MP12	Z	-73.8	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	0	%50
14	MP1	X	0	%50
15	MP4	X	0	%50
16	MP5	X	0	%50
17	MP5	X	0	%50
18	MP8	X	0	%50
19	MP9	X	0	%50
20	MP9	X	0	%50
21	MP12	X	0	%50
22	MP1	Z	-56.3	%50
23	MP2	Z	-56.3	%50
24	MP3	Z	-56.3	%50
25	MP4	Z	-56.3	%50
26	MP5	Z	-29.8	%50
27	MP6	Z	-56.3	%50
28	MP7	Z	-56.3	%50
29	MP8	Z	-14.1	%50
30	MP9	Z	-29.8	%50
31	MP10	Z	-56.3	%50
32	MP11	Z	-56.3	%50
33	MP12	Z	-14.1	%50
34	MP1	Z	0	%50
35	MP1	Z	-17.3	%50
36	MP4	Z	-41.4	%50
37	MP5	Z	-3.5	%50
38	MP5	Z	-13.2	%50
39	MP8	Z	-74.3	%50
40	MP9	Z	-3.5	%50
41	MP9	Z	-13.2	%50
42	MP12	Z	-74.3	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	23.7	%50
2	MP2	X	28.1	%50
3	MP3	X	28.1	%50
4	MP4	X	21.1	%50
5	MP5	X	10.5	%50
6	MP6	X	28.1	%50
7	MP7	X	28.1	%50
8	MP8	X	0	%50
9	MP9	X	23.7	%50
10	MP10	X	28.1	%50
11	MP11	X	28.1	%50
12	MP12	X	21.1	%50
13	MP1	X	.6	%50
14	MP1	X	7.9	%50
15	MP4	X	26.2	%50
16	MP5	X	2.3	%50
17	MP5	X	5.9	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
18	MP8	X	42.6	%50
19	MP9	X	.6	%50
20	MP9	X	7.9	%50
21	MP12	X	26.2	%50
22	MP1	Z	-41.1	%50
23	MP2	Z	-48.7	%50
24	MP3	Z	-48.7	%50
25	MP4	Z	-36.6	%50
26	MP5	Z	-18.2	%50
27	MP6	Z	-48.7	%50
28	MP7	Z	-48.7	%50
29	MP8	Z	0	%50
30	MP9	Z	-41.1	%50
31	MP10	Z	-48.7	%50
32	MP11	Z	-48.7	%50
33	MP12	Z	-36.6	%50
34	MP1	Z	-1	%50
35	MP1	Z	-13.8	%50
36	MP4	Z	-45.3	%50
37	MP5	Z	-4	%50
38	MP5	Z	-10.2	%50
39	MP8	Z	-73.8	%50
40	MP9	Z	-1	%50
41	MP9	Z	-13.8	%50
42	MP12	Z	-45.3	%50

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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	25.8	%50
2	MP2	X	48.7	%50
3	MP3	X	48.7	%50
4	MP4	X	12.2	%50
5	MP5	X	25.8	%50
6	MP6	X	48.7	%50
7	MP7	X	48.7	%50
8	MP8	X	12.2	%50
9	MP9	X	48.7	%50
10	MP10	X	48.7	%50
11	MP11	X	48.7	%50
12	MP12	X	48.7	%50
13	MP1	X	3	%50
14	MP1	X	11.4	%50
15	MP4	X	64.3	%50
16	MP5	X	3	%50
17	MP5	X	11.4	%50
18	MP8	X	64.3	%50
19	MP9	X	0	%50
20	MP9	X	15	%50
21	MP12	X	35.8	%50
22	MP1	Z	-14.9	%50
23	MP2	Z	-28.1	%50
24	MP3	Z	-28.1	%50
25	MP4	Z	-7.1	%50
26	MP5	Z	-14.9	%50
27	MP6	Z	-28.1	%50
28	MP7	Z	-28.1	%50



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

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
29	MP8	Z	-7.1	%50
30	MP9	Z	-28.1	%50
31	MP10	Z	-28.1	%50
32	MP11	Z	-28.1	%50
33	MP12	Z	-28.1	%50
34	MP1	Z	-1.7	%50
35	MP1	Z	-6.6	%50
36	MP4	Z	-37.1	%50
37	MP5	Z	-1.7	%50
38	MP5	Z	-6.6	%50
39	MP8	Z	-37.1	%50
40	MP9	Z	0	%50
41	MP9	Z	-8.6	%50
42	MP12	Z	-20.7	%50

Member Point Loads (BLC 14 : Ice Load)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	Y	-39.3	%50
2	MP2	Y	-39.3	%50
3	MP3	Y	-39.3	%50
4	MP4	Y	-39.3	%50
5	MP5	Y	-39.3	%50
6	MP6	Y	-39.3	%50
7	MP7	Y	-39.3	%50
8	MP8	Y	-39.3	%50
9	MP9	Y	-39.3	%50
10	MP10	Y	-39.3	%50
11	MP11	Y	-39.3	%50
12	MP12	Y	-39.3	%50
13	MP1	Y	-6.3	%50
14	MP1	Y	-11.4	%50
15	MP4	Y	-47.4	%50
16	MP5	Y	-6.3	%50
17	MP5	Y	-11.4	%50
18	MP8	Y	-47.4	%50
19	MP9	Y	-6.3	%50
20	MP9	Y	-11.4	%50
21	MP12	Y	-47.4	%50

Member Point Loads (BLC 15 : Wind on Ice (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	8.2	%50
2	MP2	X	19.8	%50
3	MP3	X	19.8	%50
4	MP4	X	.4	%50
5	MP5	X	16.9	%50
6	MP6	X	19.8	%50
7	MP7	X	19.8	%50
8	MP8	X	15	%50
9	MP9	X	16.9	%50
10	MP10	X	19.8	%50
11	MP11	X	19.8	%50
12	MP12	X	15	%50
13	MP1	X	1.4	%50
14	MP1	X	3.1	%50
15	MP4	X	17.6	%50



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Point Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
16	MP5	X	1.1	%50
17	MP5	X	4.2	%50
18	MP8	X	11.7	%50
19	MP9	X	1.1	%50
20	MP9	X	4.2	%50
21	MP12	X	11.7	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	0	%50
35	MP1	Z	0	%50
36	MP4	Z	0	%50
37	MP5	Z	0	%50
38	MP5	Z	0	%50
39	MP8	Z	0	%50
40	MP9	Z	0	%50
41	MP9	Z	0	%50
42	MP12	Z	0	%50

Member Point Loads (BLC 16 : Wind on Ice (30 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	9.6	%50
2	MP2	X	17.2	%50
3	MP3	X	17.2	%50
4	MP4	X	4.6	%50
5	MP5	X	17.2	%50
6	MP6	X	17.2	%50
7	MP7	X	17.2	%50
8	MP8	X	17.2	%50
9	MP9	X	9.6	%50
10	MP10	X	17.2	%50
11	MP11	X	17.2	%50
12	MP12	X	4.6	%50
13	MP1	X	1.1	%50
14	MP1	X	3	%50
15	MP4	X	13.5	%50
16	MP5	X	.8	%50
17	MP5	X	3.9	%50
18	MP8	X	8.4	%50
19	MP9	X	1.1	%50
20	MP9	X	3	%50
21	MP12	X	13.5	%50
22	MP1	Z	5.6	%50
23	MP2	Z	9.9	%50
24	MP3	Z	9.9	%50
25	MP4	Z	2.6	%50
26	MP5	Z	9.9	%50



Member Point Loads (BLC 16 : Wind on Ice (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
27	MP6	Z	9.9	%50
28	MP7	Z	9.9	%50
29	MP8	Z	9.9	%50
30	MP9	Z	5.6	%50
31	MP10	Z	9.9	%50
32	MP11	Z	9.9	%50
33	MP12	Z	2.6	%50
34	MP1	Z	.7	%50
35	MP1	Z	1.7	%50
36	MP4	Z	7.8	%50
37	MP5	Z	.5	%50
38	MP5	Z	2.3	%50
39	MP8	Z	4.8	%50
40	MP9	Z	.7	%50
41	MP9	Z	1.7	%50
42	MP12	Z	7.8	%50

Member Point Loads (BLC 17 : Wind on Ice (60 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	8.5	%50
2	MP2	X	9.9	%50
3	MP3	X	9.9	%50
4	MP4	X	7.5	%50
5	MP5	X	8.5	%50
6	MP6	X	9.9	%50
7	MP7	X	9.9	%50
8	MP8	X	7.5	%50
9	MP9	X	4.1	%50
10	MP10	X	9.9	%50
11	MP11	X	9.9	%50
12	MP12	X	.2	%50
13	MP1	X	.5	%50
14	MP1	X	2.1	%50
15	MP4	X	5.8	%50
16	MP5	X	.5	%50
17	MP5	X	2.1	%50
18	MP8	X	5.8	%50
19	MP9	X	.7	%50
20	MP9	X	1.5	%50
21	MP12	X	8.8	%50
22	MP1	Z	14.6	%50
23	MP2	Z	17.2	%50
24	MP3	Z	17.2	%50
25	MP4	Z	13	%50
26	MP5	Z	14.6	%50
27	MP6	Z	17.2	%50
28	MP7	Z	17.2	%50
29	MP8	Z	13	%50
30	MP9	Z	7.1	%50
31	MP10	Z	17.2	%50
32	MP11	Z	17.2	%50
33	MP12	Z	.4	%50
34	MP1	Z	.9	%50
35	MP1	Z	3.6	%50
36	MP4	Z	10.1	%50
37	MP5	Z	.9	%50



Member Point Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
38	MP5	Z	3.6	%50
39	MP8	Z	10.1	%50
40	MP9	Z	1.2	%50
41	MP9	Z	2.7	%50
42	MP12	Z	15.3	%50

Member Point Loads (BLC 18 : Wind on Ice (90 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	0	%50
14	MP1	X	0	%50
15	MP4	X	0	%50
16	MP5	X	0	%50
17	MP5	X	0	%50
18	MP8	X	0	%50
19	MP9	X	0	%50
20	MP9	X	0	%50
21	MP12	X	0	%50
22	MP1	Z	19.8	%50
23	MP2	Z	19.8	%50
24	MP3	Z	19.8	%50
25	MP4	Z	19.8	%50
26	MP5	Z	11.1	%50
27	MP6	Z	19.8	%50
28	MP7	Z	19.8	%50
29	MP8	Z	5.3	%50
30	MP9	Z	11.1	%50
31	MP10	Z	19.8	%50
32	MP11	Z	19.8	%50
33	MP12	Z	5.3	%50
34	MP1	Z	1	%50
35	MP1	Z	4.5	%50
36	MP4	Z	9.7	%50
37	MP5	Z	1.3	%50
38	MP5	Z	3.4	%50
39	MP8	Z	15.6	%50
40	MP9	Z	1.3	%50
41	MP9	Z	3.4	%50
42	MP12	Z	15.6	%50

Member Point Loads (BLC 19 : Wind on Ice (120 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-8.5	%50
2	MP2	X	-9.9	%50
3	MP3	X	-9.9	%50



Member Point Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
4	MP4	X	-7.5	%50
5	MP5	X	-4.1	%50
6	MP6	X	-9.9	%50
7	MP7	X	-9.9	%50
8	MP8	X	-.2	%50
9	MP9	X	-8.5	%50
10	MP10	X	-9.9	%50
11	MP11	X	-9.9	%50
12	MP12	X	-7.5	%50
13	MP1	X	-.5	%50
14	MP1	X	-2.1	%50
15	MP4	X	-5.8	%50
16	MP5	X	-.7	%50
17	MP5	X	-1.5	%50
18	MP8	X	-8.8	%50
19	MP9	X	-.5	%50
20	MP9	X	-2.1	%50
21	MP12	X	-5.8	%50
22	MP1	Z	14.6	%50
23	MP2	Z	17.2	%50
24	MP3	Z	17.2	%50
25	MP4	Z	13	%50
26	MP5	Z	7.1	%50
27	MP6	Z	17.2	%50
28	MP7	Z	17.2	%50
29	MP8	Z	.4	%50
30	MP9	Z	14.6	%50
31	MP10	Z	17.2	%50
32	MP11	Z	17.2	%50
33	MP12	Z	13	%50
34	MP1	Z	.9	%50
35	MP1	Z	3.6	%50
36	MP4	Z	10.1	%50
37	MP5	Z	1.2	%50
38	MP5	Z	2.7	%50
39	MP8	Z	15.3	%50
40	MP9	Z	.9	%50
41	MP9	Z	3.6	%50
42	MP12	Z	10.1	%50

Member Point Loads (BLC 20 : Wind on Ice (150 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	-9.6	%50
2	MP2	X	-17.2	%50
3	MP3	X	-17.2	%50
4	MP4	X	-4.6	%50
5	MP5	X	-9.6	%50
6	MP6	X	-17.2	%50
7	MP7	X	-17.2	%50
8	MP8	X	-4.6	%50
9	MP9	X	-17.2	%50
10	MP10	X	-17.2	%50
11	MP11	X	-17.2	%50
12	MP12	X	-17.2	%50
13	MP1	X	-1.1	%50
14	MP1	X	-3	%50



Member Point Loads (BLC 20 : Wind on Ice (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
15	MP4	X	-13.5	%50
16	MP5	X	-1.1	%50
17	MP5	X	-3	%50
18	MP8	X	-13.5	%50
19	MP9	X	-.8	%50
20	MP9	X	-3.9	%50
21	MP12	X	-8.4	%50
22	MP1	Z	5.6	%50
23	MP2	Z	9.9	%50
24	MP3	Z	9.9	%50
25	MP4	Z	2.6	%50
26	MP5	Z	5.6	%50
27	MP6	Z	9.9	%50
28	MP7	Z	9.9	%50
29	MP8	Z	2.6	%50
30	MP9	Z	9.9	%50
31	MP10	Z	9.9	%50
32	MP11	Z	9.9	%50
33	MP12	Z	9.9	%50
34	MP1	Z	.7	%50
35	MP1	Z	1.7	%50
36	MP4	Z	7.8	%50
37	MP5	Z	.7	%50
38	MP5	Z	1.7	%50
39	MP8	Z	7.8	%50
40	MP9	Z	.5	%50
41	MP9	Z	2.3	%50
42	MP12	Z	4.8	%50

Member Point Loads (BLC 21 : Wind on Ice (180 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-8.2	%50
2	MP2	X	-19.8	%50
3	MP3	X	-19.8	%50
4	MP4	X	-.4	%50
5	MP5	X	-16.9	%50
6	MP6	X	-19.8	%50
7	MP7	X	-19.8	%50
8	MP8	X	-15	%50
9	MP9	X	-16.9	%50
10	MP10	X	-19.8	%50
11	MP11	X	-19.8	%50
12	MP12	X	-15	%50
13	MP1	X	-1.4	%50
14	MP1	X	-3.1	%50
15	MP4	X	-17.6	%50
16	MP5	X	-1.1	%50
17	MP5	X	-4.2	%50
18	MP8	X	-11.7	%50
19	MP9	X	-1.1	%50
20	MP9	X	-4.2	%50
21	MP12	X	-11.7	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50



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Member Point Loads (BLC 21 : Wind on Ice (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	0	%50
35	MP1	Z	0	%50
36	MP4	Z	0	%50
37	MP5	Z	0	%50
38	MP5	Z	0	%50
39	MP8	Z	0	%50
40	MP9	Z	0	%50
41	MP9	Z	0	%50
42	MP12	Z	0	%50

Member Point Loads (BLC 22 : Wind on Ice (210 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-9.6	%50
2	MP2	X	-17.2	%50
3	MP3	X	-17.2	%50
4	MP4	X	-4.6	%50
5	MP5	X	-17.2	%50
6	MP6	X	-17.2	%50
7	MP7	X	-17.2	%50
8	MP8	X	-17.2	%50
9	MP9	X	-9.6	%50
10	MP10	X	-17.2	%50
11	MP11	X	-17.2	%50
12	MP12	X	-4.6	%50
13	MP1	X	-1.1	%50
14	MP1	X	-3	%50
15	MP4	X	-13.5	%50
16	MP5	X	-8	%50
17	MP5	X	-3.9	%50
18	MP8	X	-8.4	%50
19	MP9	X	-1.1	%50
20	MP9	X	-3	%50
21	MP12	X	-13.5	%50
22	MP1	Z	-5.6	%50
23	MP2	Z	-9.9	%50
24	MP3	Z	-9.9	%50
25	MP4	Z	-2.6	%50
26	MP5	Z	-9.9	%50
27	MP6	Z	-9.9	%50
28	MP7	Z	-9.9	%50
29	MP8	Z	-9.9	%50
30	MP9	Z	-5.6	%50
31	MP10	Z	-9.9	%50
32	MP11	Z	-9.9	%50
33	MP12	Z	-2.6	%50
34	MP1	Z	-7	%50
35	MP1	Z	-1.7	%50
36	MP4	Z	-7.8	%50



Member Point Loads (BLC 22 : Wind on Ice (210 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
37	MP5	Z	-5	%50
38	MP5	Z	-2.3	%50
39	MP8	Z	-4.8	%50
40	MP9	Z	-.7	%50
41	MP9	Z	-1.7	%50
42	MP12	Z	-7.8	%50

Member Point Loads (BLC 23 : Wind on Ice (240 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-8.5	%50
2	MP2	X	-9.9	%50
3	MP3	X	-9.9	%50
4	MP4	X	-7.5	%50
5	MP5	X	-8.5	%50
6	MP6	X	-9.9	%50
7	MP7	X	-9.9	%50
8	MP8	X	-7.5	%50
9	MP9	X	-4.1	%50
10	MP10	X	-9.9	%50
11	MP11	X	-9.9	%50
12	MP12	X	-2	%50
13	MP1	X	-5	%50
14	MP1	X	-2.1	%50
15	MP4	X	-5.8	%50
16	MP5	X	-5	%50
17	MP5	X	-2.1	%50
18	MP8	X	-5.8	%50
19	MP9	X	-.7	%50
20	MP9	X	-1.5	%50
21	MP12	X	-8.8	%50
22	MP1	Z	-14.6	%50
23	MP2	Z	-17.2	%50
24	MP3	Z	-17.2	%50
25	MP4	Z	-13	%50
26	MP5	Z	-14.6	%50
27	MP6	Z	-17.2	%50
28	MP7	Z	-17.2	%50
29	MP8	Z	-13	%50
30	MP9	Z	-7.1	%50
31	MP10	Z	-17.2	%50
32	MP11	Z	-17.2	%50
33	MP12	Z	-4	%50
34	MP1	Z	-9	%50
35	MP1	Z	-3.6	%50
36	MP4	Z	-10.1	%50
37	MP5	Z	-9	%50
38	MP5	Z	-3.6	%50
39	MP8	Z	-10.1	%50
40	MP9	Z	-1.2	%50
41	MP9	Z	-2.7	%50
42	MP12	Z	-15.3	%50

Member Point Loads (BLC 24 : Wind on Ice (270 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50

Member Point Loads (BLC 24 : Wind on Ice (270 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	0	%50
14	MP1	X	0	%50
15	MP4	X	0	%50
16	MP5	X	0	%50
17	MP5	X	0	%50
18	MP8	X	0	%50
19	MP9	X	0	%50
20	MP9	X	0	%50
21	MP12	X	0	%50
22	MP1	Z	-19.8	%50
23	MP2	Z	-19.8	%50
24	MP3	Z	-19.8	%50
25	MP4	Z	-19.8	%50
26	MP5	Z	-11.1	%50
27	MP6	Z	-19.8	%50
28	MP7	Z	-19.8	%50
29	MP8	Z	-5.3	%50
30	MP9	Z	-11.1	%50
31	MP10	Z	-19.8	%50
32	MP11	Z	-19.8	%50
33	MP12	Z	-5.3	%50
34	MP1	Z	-1	%50
35	MP1	Z	-4.5	%50
36	MP4	Z	-9.7	%50
37	MP5	Z	-1.3	%50
38	MP5	Z	-3.4	%50
39	MP8	Z	-15.6	%50
40	MP9	Z	-1.3	%50
41	MP9	Z	-3.4	%50
42	MP12	Z	-15.6	%50

Member Point Loads (BLC 25 : Wind on Ice (300 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	8.5	%50
2	MP2	X	9.9	%50
3	MP3	X	9.9	%50
4	MP4	X	7.5	%50
5	MP5	X	4.1	%50
6	MP6	X	9.9	%50
7	MP7	X	9.9	%50
8	MP8	X	.2	%50
9	MP9	X	8.5	%50
10	MP10	X	9.9	%50
11	MP11	X	9.9	%50
12	MP12	X	7.5	%50
13	MP1	X	.5	%50



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Member Point Loads (BLC 25 : Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
14	MP1	X	2.1	%50
15	MP4	X	5.8	%50
16	MP5	X	.7	%50
17	MP5	X	1.5	%50
18	MP8	X	8.8	%50
19	MP9	X	.5	%50
20	MP9	X	2.1	%50
21	MP12	X	5.8	%50
22	MP1	Z	-14.6	%50
23	MP2	Z	-17.2	%50
24	MP3	Z	-17.2	%50
25	MP4	Z	-13	%50
26	MP5	Z	-7.1	%50
27	MP6	Z	-17.2	%50
28	MP7	Z	-17.2	%50
29	MP8	Z	-4	%50
30	MP9	Z	-14.6	%50
31	MP10	Z	-17.2	%50
32	MP11	Z	-17.2	%50
33	MP12	Z	-13	%50
34	MP1	Z	-9	%50
35	MP1	Z	-3.6	%50
36	MP4	Z	-10.1	%50
37	MP5	Z	-1.2	%50
38	MP5	Z	-2.7	%50
39	MP8	Z	-15.3	%50
40	MP9	Z	-9	%50
41	MP9	Z	-3.6	%50
42	MP12	Z	-10.1	%50

Member Point Loads (BLC 26 : Wind on Ice (330 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	9.6	%50
2	MP2	X	17.2	%50
3	MP3	X	17.2	%50
4	MP4	X	4.6	%50
5	MP5	X	9.6	%50
6	MP6	X	17.2	%50
7	MP7	X	17.2	%50
8	MP8	X	4.6	%50
9	MP9	X	17.2	%50
10	MP10	X	17.2	%50
11	MP11	X	17.2	%50
12	MP12	X	17.2	%50
13	MP1	X	1.1	%50
14	MP1	X	3	%50
15	MP4	X	13.5	%50
16	MP5	X	1.1	%50
17	MP5	X	3	%50
18	MP8	X	13.5	%50
19	MP9	X	.8	%50
20	MP9	X	3.9	%50
21	MP12	X	8.4	%50
22	MP1	Z	-5.6	%50
23	MP2	Z	-9.9	%50
24	MP3	Z	-9.9	%50



Member Point Loads (BLC 26 : Wind on Ice (330 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
25	MP4	Z	-2.6	%50
26	MP5	Z	-5.6	%50
27	MP6	Z	-9.9	%50
28	MP7	Z	-9.9	%50
29	MP8	Z	-2.6	%50
30	MP9	Z	-9.9	%50
31	MP10	Z	-9.9	%50
32	MP11	Z	-9.9	%50
33	MP12	Z	-9.9	%50
34	MP1	Z	-0.7	%50
35	MP1	Z	-1.7	%50
36	MP4	Z	-7.8	%50
37	MP5	Z	-0.7	%50
38	MP5	Z	-1.7	%50
39	MP8	Z	-7.8	%50
40	MP9	Z	-0.5	%50
41	MP9	Z	-2.3	%50
42	MP12	Z	-4.8	%50

Member Point Loads (BLC 27 : Horizontal Seismic, Eh (0))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	11	%50
14	MP1	X	13.2	%50
15	MP4	X	81	%50
16	MP5	X	11	%50
17	MP5	X	13.2	%50
18	MP8	X	81	%50
19	MP9	X	11	%50
20	MP9	X	13.2	%50
21	MP12	X	81	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	0	%50
35	MP1	Z	0	%50



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Member Point Loads (BLC 27 : Horizontal Seismic, Eh (0)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
36	MP4	Z	0	%50
37	MP5	Z	0	%50
38	MP5	Z	0	%50
39	MP8	Z	0	%50
40	MP9	Z	0	%50
41	MP9	Z	0	%50
42	MP12	Z	0	%50

Member Point Loads (BLC 28 : Horizontal Seismic, Eh (30))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	9.5	%50
14	MP1	X	11.4	%50
15	MP4	X	70.1	%50
16	MP5	X	9.5	%50
17	MP5	X	11.4	%50
18	MP8	X	70.1	%50
19	MP9	X	9.5	%50
20	MP9	X	11.4	%50
21	MP12	X	70.1	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	5.5	%50
35	MP1	Z	6.6	%50
36	MP4	Z	40.5	%50
37	MP5	Z	5.5	%50
38	MP5	Z	6.6	%50
39	MP8	Z	40.5	%50
40	MP9	Z	5.5	%50
41	MP9	Z	6.6	%50
42	MP12	Z	40.5	%50

Member Point Loads (BLC 29 : Horizontal Seismic, Eh (60))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50



Member Point Loads (BLC 29 : Horizontal Seismic, Eh (60)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	5.5	%50
14	MP1	X	6.6	%50
15	MP4	X	40.5	%50
16	MP5	X	5.5	%50
17	MP5	X	6.6	%50
18	MP8	X	40.5	%50
19	MP9	X	5.5	%50
20	MP9	X	6.6	%50
21	MP12	X	40.5	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	9.5	%50
35	MP1	Z	11.4	%50
36	MP4	Z	70.1	%50
37	MP5	Z	9.5	%50
38	MP5	Z	11.4	%50
39	MP8	Z	70.1	%50
40	MP9	Z	9.5	%50
41	MP9	Z	11.4	%50
42	MP12	Z	70.1	%50

Member Point Loads (BLC 30 : Horizontal Seismic, Eh (90))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50

Member Point Loads (BLC 30 : Horizontal Seismic, Eh (90)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
13	MP1	X	0	%50
14	MP1	X	0	%50
15	MP4	X	0	%50
16	MP5	X	0	%50
17	MP5	X	0	%50
18	MP8	X	0	%50
19	MP9	X	0	%50
20	MP9	X	0	%50
21	MP12	X	0	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	11	%50
35	MP1	Z	13.2	%50
36	MP4	Z	81	%50
37	MP5	Z	11	%50
38	MP5	Z	13.2	%50
39	MP8	Z	81	%50
40	MP9	Z	11	%50
41	MP9	Z	13.2	%50
42	MP12	Z	81	%50

Member Point Loads (BLC 31 : Horizontal Seismic, Eh (120))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	-5.5	%50
14	MP1	X	-6.6	%50
15	MP4	X	-40.5	%50
16	MP5	X	-5.5	%50
17	MP5	X	-6.6	%50
18	MP8	X	-40.5	%50
19	MP9	X	-5.5	%50
20	MP9	X	-6.6	%50
21	MP12	X	-40.5	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50



Member Point Loads (BLC 31 : Horizontal Seismic, Eh (120)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	9.5	%50
35	MP1	Z	11.4	%50
36	MP4	Z	70.1	%50
37	MP5	Z	9.5	%50
38	MP5	Z	11.4	%50
39	MP8	Z	70.1	%50
40	MP9	Z	9.5	%50
41	MP9	Z	11.4	%50
42	MP12	Z	70.1	%50

Member Point Loads (BLC 32 : Horizontal Seismic, Eh (150))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	-9.5	%50
14	MP1	X	-11.4	%50
15	MP4	X	-70.1	%50
16	MP5	X	-9.5	%50
17	MP5	X	-11.4	%50
18	MP8	X	-70.1	%50
19	MP9	X	-9.5	%50
20	MP9	X	-11.4	%50
21	MP12	X	-70.1	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	5.5	%50



Member Point Loads (BLC 32 : Horizontal Seismic, Eh (150)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
35	MP1	Z	6.6	%50
36	MP4	Z	40.5	%50
37	MP5	Z	5.5	%50
38	MP5	Z	6.6	%50
39	MP8	Z	40.5	%50
40	MP9	Z	5.5	%50
41	MP9	Z	6.6	%50
42	MP12	Z	40.5	%50

Member Point Loads (BLC 33 : Horizontal Seismic, Eh (180))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	-11	%50
14	MP1	X	-13.2	%50
15	MP4	X	-81	%50
16	MP5	X	-11	%50
17	MP5	X	-13.2	%50
18	MP8	X	-81	%50
19	MP9	X	-11	%50
20	MP9	X	-13.2	%50
21	MP12	X	-81	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	0	%50
35	MP1	Z	0	%50
36	MP4	Z	0	%50
37	MP5	Z	0	%50
38	MP5	Z	0	%50
39	MP8	Z	0	%50
40	MP9	Z	0	%50
41	MP9	Z	0	%50
42	MP12	Z	0	%50

Member Point Loads (BLC 34 : Horizontal Seismic, Eh (210))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
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Member Point Loads (BLC 34 : Horizontal Seismic, Eh (210)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	-9.5	%50
14	MP1	X	-11.4	%50
15	MP4	X	-70.1	%50
16	MP5	X	-9.5	%50
17	MP5	X	-11.4	%50
18	MP8	X	-70.1	%50
19	MP9	X	-9.5	%50
20	MP9	X	-11.4	%50
21	MP12	X	-70.1	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	-5.5	%50
35	MP1	Z	-6.6	%50
36	MP4	Z	-40.5	%50
37	MP5	Z	-5.5	%50
38	MP5	Z	-6.6	%50
39	MP8	Z	-40.5	%50
40	MP9	Z	-5.5	%50
41	MP9	Z	-6.6	%50
42	MP12	Z	-40.5	%50

Member Point Loads (BLC 35 : Horizontal Seismic, Eh (240))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50



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Member Point Loads (BLC 35 : Horizontal Seismic, Eh (240)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
12	MP12	X	0	%50
13	MP1	X	-5.5	%50
14	MP1	X	-6.6	%50
15	MP4	X	-40.5	%50
16	MP5	X	-5.5	%50
17	MP5	X	-6.6	%50
18	MP8	X	-40.5	%50
19	MP9	X	-5.5	%50
20	MP9	X	-6.6	%50
21	MP12	X	-40.5	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	-9.5	%50
35	MP1	Z	-11.4	%50
36	MP4	Z	-70.1	%50
37	MP5	Z	-9.5	%50
38	MP5	Z	-11.4	%50
39	MP8	Z	-70.1	%50
40	MP9	Z	-9.5	%50
41	MP9	Z	-11.4	%50
42	MP12	Z	-70.1	%50

Member Point Loads (BLC 36 : Horizontal Seismic, Eh (270))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	0	%50
14	MP1	X	0	%50
15	MP4	X	0	%50
16	MP5	X	0	%50
17	MP5	X	0	%50
18	MP8	X	0	%50
19	MP9	X	0	%50
20	MP9	X	0	%50
21	MP12	X	0	%50
22	MP1	Z	0	%50



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Member Point Loads (BLC 36 : Horizontal Seismic, Eh (270)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	-11	%50
35	MP1	Z	-13.2	%50
36	MP4	Z	-81	%50
37	MP5	Z	-11	%50
38	MP5	Z	-13.2	%50
39	MP8	Z	-81	%50
40	MP9	Z	-11	%50
41	MP9	Z	-13.2	%50
42	MP12	Z	-81	%50

Member Point Loads (BLC 37 : Horizontal Seismic, Eh (300))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	5.5	%50
14	MP1	X	6.6	%50
15	MP4	X	40.5	%50
16	MP5	X	5.5	%50
17	MP5	X	6.6	%50
18	MP8	X	40.5	%50
19	MP9	X	5.5	%50
20	MP9	X	6.6	%50
21	MP12	X	40.5	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50



Member Point Loads (BLC 37 : Horizontal Seismic, Eh (300)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
34	MP1	Z	-9.5	%50
35	MP1	Z	-11.4	%50
36	MP4	Z	-70.1	%50
37	MP5	Z	-9.5	%50
38	MP5	Z	-11.4	%50
39	MP8	Z	-70.1	%50
40	MP9	Z	-9.5	%50
41	MP9	Z	-11.4	%50
42	MP12	Z	-70.1	%50

Member Point Loads (BLC 38 : Horizontal Seismic, Eh (330))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP1	X	0	%50
2	MP2	X	0	%50
3	MP3	X	0	%50
4	MP4	X	0	%50
5	MP5	X	0	%50
6	MP6	X	0	%50
7	MP7	X	0	%50
8	MP8	X	0	%50
9	MP9	X	0	%50
10	MP10	X	0	%50
11	MP11	X	0	%50
12	MP12	X	0	%50
13	MP1	X	9.5	%50
14	MP1	X	11.4	%50
15	MP4	X	70.1	%50
16	MP5	X	9.5	%50
17	MP5	X	11.4	%50
18	MP8	X	70.1	%50
19	MP9	X	9.5	%50
20	MP9	X	11.4	%50
21	MP12	X	70.1	%50
22	MP1	Z	0	%50
23	MP2	Z	0	%50
24	MP3	Z	0	%50
25	MP4	Z	0	%50
26	MP5	Z	0	%50
27	MP6	Z	0	%50
28	MP7	Z	0	%50
29	MP8	Z	0	%50
30	MP9	Z	0	%50
31	MP10	Z	0	%50
32	MP11	Z	0	%50
33	MP12	Z	0	%50
34	MP1	Z	-5.5	%50
35	MP1	Z	-6.6	%50
36	MP4	Z	-40.5	%50
37	MP5	Z	-5.5	%50
38	MP5	Z	-6.6	%50
39	MP8	Z	-40.5	%50
40	MP9	Z	-5.5	%50
41	MP9	Z	-6.6	%50
42	MP12	Z	-40.5	%50



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Member Point Loads (BLC 39 : Maintenance Load, Lm (MP1))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	Y	-500	%50

Member Point Loads (BLC 40 : Maintenance Load, Lm (MP2))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP2	Y	-500	%50

Member Point Loads (BLC 41 : Maintenance Load, Lm (MP3))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP3	Y	-500	%50

Member Point Loads (BLC 42 : Maintenance Load, Lm (MP4))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP4	Y	-500	%50

Member Point Loads (BLC 43 : Maintenance Load, Lm (MP5))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP5	Y	-500	%50

Member Point Loads (BLC 44 : Maintenance Load, Lm (MP6))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP6	Y	-500	%50

Member Point Loads (BLC 45 : Maintenance Load, Lm (MP7))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP7	Y	-500	%50

Member Point Loads (BLC 46 : Maintenance Load, Lm (MP8))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP8	Y	-500	%50

Member Point Loads (BLC 47 : Maintenance Load, Lm (MP9))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP9	Y	-500	%50

Member Point Loads (BLC 48 : Maintenance Load, Lm (MP10))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP10	Y	-500	%50

Member Point Loads (BLC 49 : Maintenance Load, Lm (MP11))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP11	Y	-500	%50

Member Point Loads (BLC 50 : Maintenance Load, Lm (MP12))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP12	Y	-500	%50

Member Point Loads (BLC 75 : Maintenance Load, Lv (Pos. 1))

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



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Member Point Loads (BLC 76 : Maintenance Load, Lv (Pos. 2))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-0	Y	-250	%50

Member Point Loads (BLC 77 : Maintenance Load, Lv (Pos. 3))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-0	Y	-250	%100

Member Point Loads (BLC 78 : Maintenance Load, Lv (Pos. 4))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-120	Y	-250	0

Member Point Loads (BLC 79 : Maintenance Load, Lv (Pos. 5))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-120	Y	-250	%50

Member Point Loads (BLC 80 : Maintenance Load, Lv (Pos. 6))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-120	Y	-250	%100

Member Point Loads (BLC 81 : Maintenance Load, Lv (Pos. 7))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-240	Y	-250	0

Member Point Loads (BLC 82 : Maintenance Load, Lv (Pos. 8))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-240	Y	-250	%50

Member Point Loads (BLC 83 : Maintenance Load, Lv (Pos. 9))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	FM-240	Y	-250	%100

Member Point Loads (BLC 84 : Maintenance Load, Lv (Pos. 10))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	GRATE-H-90-1	Y	-250	%50

Member Point Loads (BLC 85 : Maintenance Load, Lv (Pos. 11))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	GRATE-H-90-2	Y	-250	%50

Member Point Loads (BLC 86 : Maintenance Load, Lv (Pos. 12))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	GRATE-H-210-1	Y	-250	%50

Member Point Loads (BLC 87 : Maintenance Load, Lv (Pos. 13))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	GRATE-H-210-2	Y	-250	%50

Member Point Loads (BLC 88 : Maintenance Load, Lv (Pos. 14))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	GRATE-H-330-1	Y	-250	%50



Member Point Loads (BLC 89 : Maintenance Load, Lv (Pos. 15))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	GRATE-H-330-2	Y	-250	%50

Member Point Loads (BLC 90 : Maintenance Load, Lv (Pos. 16))

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

Member Point Loads (BLC 91 : Maintenance Load, Lv (Pos. 17))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-0	Y	-250	%50

Member Point Loads (BLC 92 : Maintenance Load, Lv (Pos. 18))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-0	Y	-250	%100

Member Point Loads (BLC 93 : Maintenance Load, Lv (Pos. 19))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-120	Y	-250	0

Member Point Loads (BLC 94 : Maintenance Load, Lv (Pos. 20))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-120	Y	-250	%50

Member Point Loads (BLC 95 : Maintenance Load, Lv (Pos. 21))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-120	Y	-250	%100

Member Point Loads (BLC 96 : Maintenance Load, Lv (Pos. 22))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-240	Y	-250	0

Member Point Loads (BLC 97 : Maintenance Load, Lv (Pos. 23))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-240	Y	-250	%50

Member Point Loads (BLC 98 : Maintenance Load, Lv (Pos. 24))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	HR-240	Y	-250	%100

Member Point Loads (BLC 175 : Antenna Dead Load)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	Y	-19.8	%28.646
2	MP1	Y	-19.8	%71.354
3	MP4	Y	-61.4	%6.302
4	MP4	Y	-61.4	%93.698
5	MP5	Y	-19.8	%28.646
6	MP5	Y	-19.8	%71.354
7	MP8	Y	-61.4	%6.302
8	MP8	Y	-61.4	%93.698
9	MP9	Y	-19.8	%28.646
10	MP9	Y	-19.8	%71.354
11	MP12	Y	-61.4	%6.302
12	MP12	Y	-61.4	%93.698



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Member Point Loads (BLC 176 : Antenna Wind Load (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	90	%28.646
2	MP1	X	90	%71.354
3	MP4	X	299.7	%6.302
4	MP4	X	299.7	%93.698
5	MP5	X	44.5	%28.646
6	MP5	X	44.5	%71.354
7	MP8	X	171.9	%6.302
8	MP8	X	171.9	%93.698
9	MP9	X	44.5	%28.646
10	MP9	X	44.5	%71.354
11	MP12	X	171.9	%6.302
12	MP12	X	171.9	%93.698
13	MP1	Z	0	0
14	MP1	Z	0	0
15	MP4	Z	0	0
16	MP4	Z	0	0
17	MP5	Z	0	0
18	MP5	Z	0	0
19	MP8	Z	0	0
20	MP8	Z	0	0
21	MP9	Z	0	0
22	MP9	Z	0	0
23	MP12	Z	0	0
24	MP12	Z	0	0

Member Point Loads (BLC 177 : Antenna Wind Load (30 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	64.8	%28.646
2	MP1	X	64.8	%71.354
3	MP4	X	222.6	%6.302
4	MP4	X	222.6	%93.698
5	MP5	X	25.4	%28.646
6	MP5	X	25.4	%71.354
7	MP8	X	112	%6.302
8	MP8	X	112	%93.698
9	MP9	X	64.8	%28.646
10	MP9	X	64.8	%71.354
11	MP12	X	222.6	%6.302
12	MP12	X	222.6	%93.698
13	MP1	Z	37.4	%28.646
14	MP1	Z	37.4	%71.354
15	MP4	Z	128.5	%6.302
16	MP4	Z	128.5	%93.698
17	MP5	Z	14.7	%28.646
18	MP5	Z	14.7	%71.354
19	MP8	Z	64.6	%6.302
20	MP8	Z	64.6	%93.698
21	MP9	Z	37.4	%28.646
22	MP9	Z	37.4	%71.354
23	MP12	Z	128.5	%6.302
24	MP12	Z	128.5	%93.698

Member Point Loads (BLC 178 : Antenna Wind Load (60 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	22.2	%28.646
2	MP1	X	22.2	%71.354

Member Point Loads (BLC 178 : Antenna Wind Load (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
3	MP4	X	85.9	%6.302
4	MP4	X	85.9	%93.698
5	MP5	X	22.2	%28.646
6	MP5	X	22.2	%71.354
7	MP8	X	85.9	%6.302
8	MP8	X	85.9	%93.698
9	MP9	X	45	%28.646
10	MP9	X	45	%71.354
11	MP12	X	149.8	%6.302
12	MP12	X	149.8	%93.698
13	MP1	Z	38.5	%28.646
14	MP1	Z	38.5	%71.354
15	MP4	Z	148.9	%6.302
16	MP4	Z	148.9	%93.698
17	MP5	Z	38.5	%28.646
18	MP5	Z	38.5	%71.354
19	MP8	Z	148.9	%6.302
20	MP8	Z	148.9	%93.698
21	MP9	Z	77.9	%28.646
22	MP9	Z	77.9	%71.354
23	MP12	Z	259.5	%6.302
24	MP12	Z	259.5	%93.698

Member Point Loads (BLC 179 : Antenna Wind Load (90 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP4	X	0	0
4	MP4	X	0	0
5	MP5	X	0	0
6	MP5	X	0	0
7	MP8	X	0	0
8	MP8	X	0	0
9	MP9	X	0	0
10	MP9	X	0	0
11	MP12	X	0	0
12	MP12	X	0	0
13	MP1	Z	29.3	%28.646
14	MP1	Z	29.3	%71.354
15	MP4	Z	129.3	%6.302
16	MP4	Z	129.3	%93.698
17	MP5	Z	74.8	%28.646
18	MP5	Z	74.8	%71.354
19	MP8	Z	257.1	%6.302
20	MP8	Z	257.1	%93.698
21	MP9	Z	74.8	%28.646
22	MP9	Z	74.8	%71.354
23	MP12	Z	257.1	%6.302
24	MP12	Z	257.1	%93.698

Member Point Loads (BLC 180 : Antenna Wind Load (120 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-22.2	%28.646
2	MP1	X	-22.2	%71.354
3	MP4	X	-85.9	%6.302
4	MP4	X	-85.9	%93.698



Member Point Loads (BLC 180 : Antenna Wind Load (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
5	MP5	X	-45	%28.646
6	MP5	X	-45	%71.354
7	MP8	X	-149.8	%6.302
8	MP8	X	-149.8	%93.698
9	MP9	X	-22.2	%28.646
10	MP9	X	-22.2	%71.354
11	MP12	X	-85.9	%6.302
12	MP12	X	-85.9	%93.698
13	MP1	Z	38.5	%28.646
14	MP1	Z	38.5	%71.354
15	MP4	Z	148.9	%6.302
16	MP4	Z	148.9	%93.698
17	MP5	Z	77.9	%28.646
18	MP5	Z	77.9	%71.354
19	MP8	Z	259.5	%6.302
20	MP8	Z	259.5	%93.698
21	MP9	Z	38.5	%28.646
22	MP9	Z	38.5	%71.354
23	MP12	Z	148.9	%6.302
24	MP12	Z	148.9	%93.698

Member Point Loads (BLC 181 : Antenna Wind Load (150 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-64.8	%28.646
2	MP1	X	-64.8	%71.354
3	MP4	X	-222.6	%6.302
4	MP4	X	-222.6	%93.698
5	MP5	X	-64.8	%28.646
6	MP5	X	-64.8	%71.354
7	MP8	X	-222.6	%6.302
8	MP8	X	-222.6	%93.698
9	MP9	X	-25.4	%28.646
10	MP9	X	-25.4	%71.354
11	MP12	X	-112	%6.302
12	MP12	X	-112	%93.698
13	MP1	Z	37.4	%28.646
14	MP1	Z	37.4	%71.354
15	MP4	Z	128.5	%6.302
16	MP4	Z	128.5	%93.698
17	MP5	Z	37.4	%28.646
18	MP5	Z	37.4	%71.354
19	MP8	Z	128.5	%6.302
20	MP8	Z	128.5	%93.698
21	MP9	Z	14.7	%28.646
22	MP9	Z	14.7	%71.354
23	MP12	Z	64.6	%6.302
24	MP12	Z	64.6	%93.698

Member Point Loads (BLC 182 : Antenna Wind Load (180 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-90	%28.646
2	MP1	X	-90	%71.354
3	MP4	X	-299.7	%6.302
4	MP4	X	-299.7	%93.698
5	MP5	X	-44.5	%28.646
6	MP5	X	-44.5	%71.354



Member Point Loads (BLC 182 : Antenna Wind Load (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
7	MP8	X	-171.9	%6.302
8	MP8	X	-171.9	%93.698
9	MP9	X	-44.5	%28.646
10	MP9	X	-44.5	%71.354
11	MP12	X	-171.9	%6.302
12	MP12	X	-171.9	%93.698
13	MP1	Z	0	0
14	MP1	Z	0	0
15	MP4	Z	0	0
16	MP4	Z	0	0
17	MP5	Z	0	0
18	MP5	Z	0	0
19	MP8	Z	0	0
20	MP8	Z	0	0
21	MP9	Z	0	0
22	MP9	Z	0	0
23	MP12	Z	0	0
24	MP12	Z	0	0

Member Point Loads (BLC 183 : Antenna Wind Load (210 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-64.8	%28.646
2	MP1	X	-64.8	%71.354
3	MP4	X	-222.6	%6.302
4	MP4	X	-222.6	%93.698
5	MP5	X	-25.4	%28.646
6	MP5	X	-25.4	%71.354
7	MP8	X	-112	%6.302
8	MP8	X	-112	%93.698
9	MP9	X	-64.8	%28.646
10	MP9	X	-64.8	%71.354
11	MP12	X	-222.6	%6.302
12	MP12	X	-222.6	%93.698
13	MP1	Z	-37.4	%28.646
14	MP1	Z	-37.4	%71.354
15	MP4	Z	-128.5	%6.302
16	MP4	Z	-128.5	%93.698
17	MP5	Z	-14.7	%28.646
18	MP5	Z	-14.7	%71.354
19	MP8	Z	-64.6	%6.302
20	MP8	Z	-64.6	%93.698
21	MP9	Z	-37.4	%28.646
22	MP9	Z	-37.4	%71.354
23	MP12	Z	-128.5	%6.302
24	MP12	Z	-128.5	%93.698

Member Point Loads (BLC 184 : Antenna Wind Load (240 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-22.2	%28.646
2	MP1	X	-22.2	%71.354
3	MP4	X	-85.9	%6.302
4	MP4	X	-85.9	%93.698
5	MP5	X	-22.2	%28.646
6	MP5	X	-22.2	%71.354
7	MP8	X	-85.9	%6.302
8	MP8	X	-85.9	%93.698



Member Point Loads (BLC 184 : Antenna Wind Load (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
9	MP9	X	-45	%28.646
10	MP9	X	-45	%71.354
11	MP12	X	-149.8	%6.302
12	MP12	X	-149.8	%93.698
13	MP1	Z	-38.5	%28.646
14	MP1	Z	-38.5	%71.354
15	MP4	Z	-148.9	%6.302
16	MP4	Z	-148.9	%93.698
17	MP5	Z	-38.5	%28.646
18	MP5	Z	-38.5	%71.354
19	MP8	Z	-148.9	%6.302
20	MP8	Z	-148.9	%93.698
21	MP9	Z	-77.9	%28.646
22	MP9	Z	-77.9	%71.354
23	MP12	Z	-259.5	%6.302
24	MP12	Z	-259.5	%93.698

Member Point Loads (BLC 185 : Antenna Wind Load (270 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP4	X	0	0
4	MP4	X	0	0
5	MP5	X	0	0
6	MP5	X	0	0
7	MP8	X	0	0
8	MP8	X	0	0
9	MP9	X	0	0
10	MP9	X	0	0
11	MP12	X	0	0
12	MP12	X	0	0
13	MP1	Z	-29.3	%28.646
14	MP1	Z	-29.3	%71.354
15	MP4	Z	-129.3	%6.302
16	MP4	Z	-129.3	%93.698
17	MP5	Z	-74.8	%28.646
18	MP5	Z	-74.8	%71.354
19	MP8	Z	-257.1	%6.302
20	MP8	Z	-257.1	%93.698
21	MP9	Z	-74.8	%28.646
22	MP9	Z	-74.8	%71.354
23	MP12	Z	-257.1	%6.302
24	MP12	Z	-257.1	%93.698

Member Point Loads (BLC 186 : Antenna Wind Load (300 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	22.2	%28.646
2	MP1	X	22.2	%71.354
3	MP4	X	85.9	%6.302
4	MP4	X	85.9	%93.698
5	MP5	X	45	%28.646
6	MP5	X	45	%71.354
7	MP8	X	149.8	%6.302
8	MP8	X	149.8	%93.698
9	MP9	X	22.2	%28.646
10	MP9	X	22.2	%71.354



Member Point Loads (BLC 186 : Antenna Wind Load (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
11	MP12	X	85.9	%6.302
12	MP12	X	85.9	%93.698
13	MP1	Z	-38.5	%28.646
14	MP1	Z	-38.5	%71.354
15	MP4	Z	-148.9	%6.302
16	MP4	Z	-148.9	%93.698
17	MP5	Z	-77.9	%28.646
18	MP5	Z	-77.9	%71.354
19	MP8	Z	-259.5	%6.302
20	MP8	Z	-259.5	%93.698
21	MP9	Z	-38.5	%28.646
22	MP9	Z	-38.5	%71.354
23	MP12	Z	-148.9	%6.302
24	MP12	Z	-148.9	%93.698

Member Point Loads (BLC 187 : Antenna Wind Load (330 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	64.8	%28.646
2	MP1	X	64.8	%71.354
3	MP4	X	222.6	%6.302
4	MP4	X	222.6	%93.698
5	MP5	X	64.8	%28.646
6	MP5	X	64.8	%71.354
7	MP8	X	222.6	%6.302
8	MP8	X	222.6	%93.698
9	MP9	X	25.4	%28.646
10	MP9	X	25.4	%71.354
11	MP12	X	112	%6.302
12	MP12	X	112	%93.698
13	MP1	Z	-37.4	%28.646
14	MP1	Z	-37.4	%71.354
15	MP4	Z	-128.5	%6.302
16	MP4	Z	-128.5	%93.698
17	MP5	Z	-37.4	%28.646
18	MP5	Z	-37.4	%71.354
19	MP8	Z	-128.5	%6.302
20	MP8	Z	-128.5	%93.698
21	MP9	Z	-14.7	%28.646
22	MP9	Z	-14.7	%71.354
23	MP12	Z	-64.6	%6.302
24	MP12	Z	-64.6	%93.698

Member Point Loads (BLC 188 : Antenna Ice Load)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	Y	-44.7	%28.646
2	MP1	Y	-44.7	%71.354
3	MP4	Y	-148.4	%6.302
4	MP4	Y	-148.4	%93.698
5	MP5	Y	-44.7	%28.646
6	MP5	Y	-44.7	%71.354
7	MP8	Y	-148.4	%6.302
8	MP8	Y	-148.4	%93.698
9	MP9	Y	-44.7	%28.646
10	MP9	Y	-44.7	%71.354
11	MP12	Y	-148.4	%6.302
12	MP12	Y	-148.4	%93.698



Member Point Loads (BLC 189 : Antenna Wind on Ice (0 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	18.5	%28.646
2	MP1	X	18.5	%71.354
3	MP4	X	59.3	%6.302
4	MP4	X	59.3	%93.698
5	MP5	X	9.9	%28.646
6	MP5	X	9.9	%71.354
7	MP8	X	35.3	%6.302
8	MP8	X	35.3	%93.698
9	MP9	X	9.9	%28.646
10	MP9	X	9.9	%71.354
11	MP12	X	35.3	%6.302
12	MP12	X	35.3	%93.698
13	MP1	Z	0	0
14	MP1	Z	0	0
15	MP4	Z	0	0
16	MP4	Z	0	0
17	MP5	Z	0	0
18	MP5	Z	0	0
19	MP8	Z	0	0
20	MP8	Z	0	0
21	MP9	Z	0	0
22	MP9	Z	0	0
23	MP12	Z	0	0
24	MP12	Z	0	0

Member Point Loads (BLC 190 : Antenna Wind on Ice (30 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	13.6	%28.646
2	MP1	X	13.6	%71.354
3	MP4	X	44.4	%6.302
4	MP4	X	44.4	%93.698
5	MP5	X	6.1	%28.646
6	MP5	X	6.1	%71.354
7	MP8	X	23.6	%6.302
8	MP8	X	23.6	%93.698
9	MP9	X	13.6	%28.646
10	MP9	X	13.6	%71.354
11	MP12	X	44.4	%6.302
12	MP12	X	44.4	%93.698
13	MP1	Z	7.8	%28.646
14	MP1	Z	7.8	%71.354
15	MP4	Z	25.7	%6.302
16	MP4	Z	25.7	%93.698
17	MP5	Z	3.5	%28.646
18	MP5	Z	3.5	%71.354
19	MP8	Z	13.7	%6.302
20	MP8	Z	13.7	%93.698
21	MP9	Z	7.8	%28.646
22	MP9	Z	7.8	%71.354
23	MP12	Z	25.7	%6.302
24	MP12	Z	25.7	%93.698

Member Point Loads (BLC 191 : Antenna Wind on Ice (60 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	5	%28.646
2	MP1	X	5	%71.354



Member Point Loads (BLC 191 : Antenna Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
3	MP4	X	17.7	%6.302
4	MP4	X	17.7	%93.698
5	MP5	X	5	%28.646
6	MP5	X	5	%71.354
7	MP8	X	17.7	%6.302
8	MP8	X	17.7	%93.698
9	MP9	X	9.3	%28.646
10	MP9	X	9.3	%71.354
11	MP12	X	29.7	%6.302
12	MP12	X	29.7	%93.698
13	MP1	Z	8.6	%28.646
14	MP1	Z	8.6	%71.354
15	MP4	Z	30.6	%6.302
16	MP4	Z	30.6	%93.698
17	MP5	Z	8.6	%28.646
18	MP5	Z	8.6	%71.354
19	MP8	Z	30.6	%6.302
20	MP8	Z	30.6	%93.698
21	MP9	Z	16	%28.646
22	MP9	Z	16	%71.354
23	MP12	Z	51.4	%6.302
24	MP12	Z	51.4	%93.698

Member Point Loads (BLC 192 : Antenna Wind on Ice (90 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP4	X	0	0
4	MP4	X	0	0
5	MP5	X	0	0
6	MP5	X	0	0
7	MP8	X	0	0
8	MP8	X	0	0
9	MP9	X	0	0
10	MP9	X	0	0
11	MP12	X	0	0
12	MP12	X	0	0
13	MP1	Z	7.1	%28.646
14	MP1	Z	7.1	%71.354
15	MP4	Z	27.3	%6.302
16	MP4	Z	27.3	%93.698
17	MP5	Z	15.7	%28.646
18	MP5	Z	15.7	%71.354
19	MP8	Z	51.3	%6.302
20	MP8	Z	51.3	%93.698
21	MP9	Z	15.7	%28.646
22	MP9	Z	15.7	%71.354
23	MP12	Z	51.3	%6.302
24	MP12	Z	51.3	%93.698

Member Point Loads (BLC 193 : Antenna Wind on Ice (120 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	-5	%28.646
2	MP1	X	-5	%71.354
3	MP4	X	-17.7	%6.302
4	MP4	X	-17.7	%93.698



Member Point Loads (BLC 193 : Antenna Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
5	MP5	X	-9.3	%28.646
6	MP5	X	-9.3	%71.354
7	MP8	X	-29.7	%6.302
8	MP8	X	-29.7	%93.698
9	MP9	X	-5	%28.646
10	MP9	X	-5	%71.354
11	MP12	X	-17.7	%6.302
12	MP12	X	-17.7	%93.698
13	MP1	Z	8.6	%28.646
14	MP1	Z	8.6	%71.354
15	MP4	Z	30.6	%6.302
16	MP4	Z	30.6	%93.698
17	MP5	Z	16	%28.646
18	MP5	Z	16	%71.354
19	MP8	Z	51.4	%6.302
20	MP8	Z	51.4	%93.698
21	MP9	Z	8.6	%28.646
22	MP9	Z	8.6	%71.354
23	MP12	Z	30.6	%6.302
24	MP12	Z	30.6	%93.698

Member Point Loads (BLC 194 : Antenna Wind on Ice (150 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-13.6	%28.646
2	MP1	X	-13.6	%71.354
3	MP4	X	-44.4	%6.302
4	MP4	X	-44.4	%93.698
5	MP5	X	-13.6	%28.646
6	MP5	X	-13.6	%71.354
7	MP8	X	-44.4	%6.302
8	MP8	X	-44.4	%93.698
9	MP9	X	-6.1	%28.646
10	MP9	X	-6.1	%71.354
11	MP12	X	-23.6	%6.302
12	MP12	X	-23.6	%93.698
13	MP1	Z	7.8	%28.646
14	MP1	Z	7.8	%71.354
15	MP4	Z	25.7	%6.302
16	MP4	Z	25.7	%93.698
17	MP5	Z	7.8	%28.646
18	MP5	Z	7.8	%71.354
19	MP8	Z	25.7	%6.302
20	MP8	Z	25.7	%93.698
21	MP9	Z	3.5	%28.646
22	MP9	Z	3.5	%71.354
23	MP12	Z	13.7	%6.302
24	MP12	Z	13.7	%93.698

Member Point Loads (BLC 195 : Antenna Wind on Ice (180 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP1	X	-18.5	%28.646
2	MP1	X	-18.5	%71.354
3	MP4	X	-59.3	%6.302
4	MP4	X	-59.3	%93.698
5	MP5	X	-9.9	%28.646
6	MP5	X	-9.9	%71.354



Member Point Loads (BLC 195 : Antenna Wind on Ice (180 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
7	MP8	X	-35.3	%6.302
8	MP8	X	-35.3	%93.698
9	MP9	X	-9.9	%28.646
10	MP9	X	-9.9	%71.354
11	MP12	X	-35.3	%6.302
12	MP12	X	-35.3	%93.698
13	MP1	Z	0	0
14	MP1	Z	0	0
15	MP4	Z	0	0
16	MP4	Z	0	0
17	MP5	Z	0	0
18	MP5	Z	0	0
19	MP8	Z	0	0
20	MP8	Z	0	0
21	MP9	Z	0	0
22	MP9	Z	0	0
23	MP12	Z	0	0
24	MP12	Z	0	0

Member Point Loads (BLC 196 : Antenna Wind on Ice (210 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-13.6	%28.646
2	MP1	X	-13.6	%71.354
3	MP4	X	-44.4	%6.302
4	MP4	X	-44.4	%93.698
5	MP5	X	-6.1	%28.646
6	MP5	X	-6.1	%71.354
7	MP8	X	-23.6	%6.302
8	MP8	X	-23.6	%93.698
9	MP9	X	-13.6	%28.646
10	MP9	X	-13.6	%71.354
11	MP12	X	-44.4	%6.302
12	MP12	X	-44.4	%93.698
13	MP1	Z	-7.8	%28.646
14	MP1	Z	-7.8	%71.354
15	MP4	Z	-25.7	%6.302
16	MP4	Z	-25.7	%93.698
17	MP5	Z	-3.5	%28.646
18	MP5	Z	-3.5	%71.354
19	MP8	Z	-13.7	%6.302
20	MP8	Z	-13.7	%93.698
21	MP9	Z	-7.8	%28.646
22	MP9	Z	-7.8	%71.354
23	MP12	Z	-25.7	%6.302
24	MP12	Z	-25.7	%93.698

Member Point Loads (BLC 197 : Antenna Wind on Ice (240 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-5	%28.646
2	MP1	X	-5	%71.354
3	MP4	X	-17.7	%6.302
4	MP4	X	-17.7	%93.698
5	MP5	X	-5	%28.646
6	MP5	X	-5	%71.354
7	MP8	X	-17.7	%6.302
8	MP8	X	-17.7	%93.698



Member Point Loads (BLC 197 : Antenna Wind on Ice (240 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
9	MP9	X	-9.3	%28.646
10	MP9	X	-9.3	%71.354
11	MP12	X	-29.7	%6.302
12	MP12	X	-29.7	%93.698
13	MP1	Z	-8.6	%28.646
14	MP1	Z	-8.6	%71.354
15	MP4	Z	-30.6	%6.302
16	MP4	Z	-30.6	%93.698
17	MP5	Z	-8.6	%28.646
18	MP5	Z	-8.6	%71.354
19	MP8	Z	-30.6	%6.302
20	MP8	Z	-30.6	%93.698
21	MP9	Z	-16	%28.646
22	MP9	Z	-16	%71.354
23	MP12	Z	-51.4	%6.302
24	MP12	Z	-51.4	%93.698

Member Point Loads (BLC 198 : Antenna Wind on Ice (270 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP4	X	0	0
4	MP4	X	0	0
5	MP5	X	0	0
6	MP5	X	0	0
7	MP8	X	0	0
8	MP8	X	0	0
9	MP9	X	0	0
10	MP9	X	0	0
11	MP12	X	0	0
12	MP12	X	0	0
13	MP1	Z	-7.1	%28.646
14	MP1	Z	-7.1	%71.354
15	MP4	Z	-27.3	%6.302
16	MP4	Z	-27.3	%93.698
17	MP5	Z	-15.7	%28.646
18	MP5	Z	-15.7	%71.354
19	MP8	Z	-51.3	%6.302
20	MP8	Z	-51.3	%93.698
21	MP9	Z	-15.7	%28.646
22	MP9	Z	-15.7	%71.354
23	MP12	Z	-51.3	%6.302
24	MP12	Z	-51.3	%93.698

Member Point Loads (BLC 199 : Antenna Wind on Ice (300 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	5	%28.646
2	MP1	X	5	%71.354
3	MP4	X	17.7	%6.302
4	MP4	X	17.7	%93.698
5	MP5	X	9.3	%28.646
6	MP5	X	9.3	%71.354
7	MP8	X	29.7	%6.302
8	MP8	X	29.7	%93.698
9	MP9	X	5	%28.646
10	MP9	X	5	%71.354



Member Point Loads (BLC 199 : Antenna Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
11	MP12	X	17.7	%6.302
12	MP12	X	17.7	%93.698
13	MP1	Z	-8.6	%28.646
14	MP1	Z	-8.6	%71.354
15	MP4	Z	-30.6	%6.302
16	MP4	Z	-30.6	%93.698
17	MP5	Z	-16	%28.646
18	MP5	Z	-16	%71.354
19	MP8	Z	-51.4	%6.302
20	MP8	Z	-51.4	%93.698
21	MP9	Z	-8.6	%28.646
22	MP9	Z	-8.6	%71.354
23	MP12	Z	-30.6	%6.302
24	MP12	Z	-30.6	%93.698

Member Point Loads (BLC 200 : Antenna Wind on Ice (330 deg))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	13.6	%28.646
2	MP1	X	13.6	%71.354
3	MP4	X	44.4	%6.302
4	MP4	X	44.4	%93.698
5	MP5	X	13.6	%28.646
6	MP5	X	13.6	%71.354
7	MP8	X	44.4	%6.302
8	MP8	X	44.4	%93.698
9	MP9	X	6.1	%28.646
10	MP9	X	6.1	%71.354
11	MP12	X	23.6	%6.302
12	MP12	X	23.6	%93.698
13	MP1	Z	-7.8	%28.646
14	MP1	Z	-7.8	%71.354
15	MP4	Z	-25.7	%6.302
16	MP4	Z	-25.7	%93.698
17	MP5	Z	-7.8	%28.646
18	MP5	Z	-7.8	%71.354
19	MP8	Z	-25.7	%6.302
20	MP8	Z	-25.7	%93.698
21	MP9	Z	-3.5	%28.646
22	MP9	Z	-3.5	%71.354
23	MP12	Z	-13.7	%6.302
24	MP12	Z	-13.7	%93.698

Member Point Loads (BLC 201 : Ant. Horiz. Seismic, Eh (0))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	19.8	%28.646
2	MP1	X	19.8	%71.354
3	MP4	X	61.4	%6.302
4	MP4	X	61.4	%93.698
5	MP5	X	19.8	%28.646
6	MP5	X	19.8	%71.354
7	MP8	X	61.4	%6.302
8	MP8	X	61.4	%93.698
9	MP9	X	19.8	%28.646
10	MP9	X	19.8	%71.354
11	MP12	X	61.4	%6.302
12	MP12	X	61.4	%93.698



Member Point Loads (BLC 201 : Ant. Horiz. Seismic, Eh (0)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
13	MP1	Z	0	0
14	MP1	Z	0	0
15	MP4	Z	0	0
16	MP4	Z	0	0
17	MP5	Z	0	0
18	MP5	Z	0	0
19	MP8	Z	0	0
20	MP8	Z	0	0
21	MP9	Z	0	0
22	MP9	Z	0	0
23	MP12	Z	0	0
24	MP12	Z	0	0

Member Point Loads (BLC 202 : Ant. Horiz. Seismic, Eh (30))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	17.1	%28.646
2	MP1	X	17.1	%71.354
3	MP4	X	53.2	%6.302
4	MP4	X	53.2	%93.698
5	MP5	X	17.1	%28.646
6	MP5	X	17.1	%71.354
7	MP8	X	53.2	%6.302
8	MP8	X	53.2	%93.698
9	MP9	X	17.1	%28.646
10	MP9	X	17.1	%71.354
11	MP12	X	53.2	%6.302
12	MP12	X	53.2	%93.698
13	MP1	Z	9.9	%28.646
14	MP1	Z	9.9	%71.354
15	MP4	Z	30.7	%6.302
16	MP4	Z	30.7	%93.698
17	MP5	Z	9.9	%28.646
18	MP5	Z	9.9	%71.354
19	MP8	Z	30.7	%6.302
20	MP8	Z	30.7	%93.698
21	MP9	Z	9.9	%28.646
22	MP9	Z	9.9	%71.354
23	MP12	Z	30.7	%6.302
24	MP12	Z	30.7	%93.698

Member Point Loads (BLC 203 : Ant. Horiz. Seismic, Eh (60))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	9.9	%28.646
2	MP1	X	9.9	%71.354
3	MP4	X	30.7	%6.302
4	MP4	X	30.7	%93.698
5	MP5	X	9.9	%28.646
6	MP5	X	9.9	%71.354
7	MP8	X	30.7	%6.302
8	MP8	X	30.7	%93.698
9	MP9	X	9.9	%28.646
10	MP9	X	9.9	%71.354
11	MP12	X	30.7	%6.302
12	MP12	X	30.7	%93.698
13	MP1	Z	17.1	%28.646
14	MP1	Z	17.1	%71.354



Member Point Loads (BLC 203 : Ant. Horiz. Seismic, Eh (60)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
15	MP4	Z	53.2	%6.302
16	MP4	Z	53.2	%93.698
17	MP5	Z	17.1	%28.646
18	MP5	Z	17.1	%71.354
19	MP8	Z	53.2	%6.302
20	MP8	Z	53.2	%93.698
21	MP9	Z	17.1	%28.646
22	MP9	Z	17.1	%71.354
23	MP12	Z	53.2	%6.302
24	MP12	Z	53.2	%93.698

Member Point Loads (BLC 204 : Ant. Horiz. Seismic, Eh (90))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP4	X	0	0
4	MP4	X	0	0
5	MP5	X	0	0
6	MP5	X	0	0
7	MP8	X	0	0
8	MP8	X	0	0
9	MP9	X	0	0
10	MP9	X	0	0
11	MP12	X	0	0
12	MP12	X	0	0
13	MP1	Z	19.8	%28.646
14	MP1	Z	19.8	%71.354
15	MP4	Z	61.4	%6.302
16	MP4	Z	61.4	%93.698
17	MP5	Z	19.8	%28.646
18	MP5	Z	19.8	%71.354
19	MP8	Z	61.4	%6.302
20	MP8	Z	61.4	%93.698
21	MP9	Z	19.8	%28.646
22	MP9	Z	19.8	%71.354
23	MP12	Z	61.4	%6.302
24	MP12	Z	61.4	%93.698

Member Point Loads (BLC 205 : Ant. Horiz. Seismic, Eh (120))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-9.9	%28.646
2	MP1	X	-9.9	%71.354
3	MP4	X	-30.7	%6.302
4	MP4	X	-30.7	%93.698
5	MP5	X	-9.9	%28.646
6	MP5	X	-9.9	%71.354
7	MP8	X	-30.7	%6.302
8	MP8	X	-30.7	%93.698
9	MP9	X	-9.9	%28.646
10	MP9	X	-9.9	%71.354
11	MP12	X	-30.7	%6.302
12	MP12	X	-30.7	%93.698
13	MP1	Z	17.1	%28.646
14	MP1	Z	17.1	%71.354
15	MP4	Z	53.2	%6.302
16	MP4	Z	53.2	%93.698



Member Point Loads (BLC 205 : Ant. Horiz. Seismic, Eh (120)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
17	MP5	Z	17.1	%28.646
18	MP5	Z	17.1	%71.354
19	MP8	Z	53.2	%6.302
20	MP8	Z	53.2	%93.698
21	MP9	Z	17.1	%28.646
22	MP9	Z	17.1	%71.354
23	MP12	Z	53.2	%6.302
24	MP12	Z	53.2	%93.698

Member Point Loads (BLC 206 : Ant. Horiz. Seismic, Eh (150))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-17.1	%28.646
2	MP1	X	-17.1	%71.354
3	MP4	X	-53.2	%6.302
4	MP4	X	-53.2	%93.698
5	MP5	X	-17.1	%28.646
6	MP5	X	-17.1	%71.354
7	MP8	X	-53.2	%6.302
8	MP8	X	-53.2	%93.698
9	MP9	X	-17.1	%28.646
10	MP9	X	-17.1	%71.354
11	MP12	X	-53.2	%6.302
12	MP12	X	-53.2	%93.698
13	MP1	Z	9.9	%28.646
14	MP1	Z	9.9	%71.354
15	MP4	Z	30.7	%6.302
16	MP4	Z	30.7	%93.698
17	MP5	Z	9.9	%28.646
18	MP5	Z	9.9	%71.354
19	MP8	Z	30.7	%6.302
20	MP8	Z	30.7	%93.698
21	MP9	Z	9.9	%28.646
22	MP9	Z	9.9	%71.354
23	MP12	Z	30.7	%6.302
24	MP12	Z	30.7	%93.698

Member Point Loads (BLC 207 : Ant. Horiz. Seismic, Eh (180))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-19.8	%28.646
2	MP1	X	-19.8	%71.354
3	MP4	X	-61.4	%6.302
4	MP4	X	-61.4	%93.698
5	MP5	X	-19.8	%28.646
6	MP5	X	-19.8	%71.354
7	MP8	X	-61.4	%6.302
8	MP8	X	-61.4	%93.698
9	MP9	X	-19.8	%28.646
10	MP9	X	-19.8	%71.354
11	MP12	X	-61.4	%6.302
12	MP12	X	-61.4	%93.698
13	MP1	Z	0	0
14	MP1	Z	0	0
15	MP4	Z	0	0
16	MP4	Z	0	0
17	MP5	Z	0	0
18	MP5	Z	0	0



Member Point Loads (BLC 207 : Ant. Horiz. Seismic, Eh (180)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
19	MP8	Z	0	0
20	MP8	Z	0	0
21	MP9	Z	0	0
22	MP9	Z	0	0
23	MP12	Z	0	0
24	MP12	Z	0	0

Member Point Loads (BLC 208 : Ant. Horiz. Seismic, Eh (210))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-17.1	%28.646
2	MP1	X	-17.1	%71.354
3	MP4	X	-53.2	%6.302
4	MP4	X	-53.2	%93.698
5	MP5	X	-17.1	%28.646
6	MP5	X	-17.1	%71.354
7	MP8	X	-53.2	%6.302
8	MP8	X	-53.2	%93.698
9	MP9	X	-17.1	%28.646
10	MP9	X	-17.1	%71.354
11	MP12	X	-53.2	%6.302
12	MP12	X	-53.2	%93.698
13	MP1	Z	-9.9	%28.646
14	MP1	Z	-9.9	%71.354
15	MP4	Z	-30.7	%6.302
16	MP4	Z	-30.7	%93.698
17	MP5	Z	-9.9	%28.646
18	MP5	Z	-9.9	%71.354
19	MP8	Z	-30.7	%6.302
20	MP8	Z	-30.7	%93.698
21	MP9	Z	-9.9	%28.646
22	MP9	Z	-9.9	%71.354
23	MP12	Z	-30.7	%6.302
24	MP12	Z	-30.7	%93.698

Member Point Loads (BLC 209 : Ant. Horiz. Seismic, Eh (240))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP1	X	-9.9	%28.646
2	MP1	X	-9.9	%71.354
3	MP4	X	-30.7	%6.302
4	MP4	X	-30.7	%93.698
5	MP5	X	-9.9	%28.646
6	MP5	X	-9.9	%71.354
7	MP8	X	-30.7	%6.302
8	MP8	X	-30.7	%93.698
9	MP9	X	-9.9	%28.646
10	MP9	X	-9.9	%71.354
11	MP12	X	-30.7	%6.302
12	MP12	X	-30.7	%93.698
13	MP1	Z	-17.1	%28.646
14	MP1	Z	-17.1	%71.354
15	MP4	Z	-53.2	%6.302
16	MP4	Z	-53.2	%93.698
17	MP5	Z	-17.1	%28.646
18	MP5	Z	-17.1	%71.354
19	MP8	Z	-53.2	%6.302
20	MP8	Z	-53.2	%93.698



Member Point Loads (BLC 209 : Ant. Horiz. Seismic, Eh (240)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
21	MP9	Z	-17.1	%28.646
22	MP9	Z	-17.1	%71.354
23	MP12	Z	-53.2	%6.302
24	MP12	Z	-53.2	%93.698

Member Point Loads (BLC 210 : Ant. Horiz. Seismic, Eh (270))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	0	0
2	MP1	X	0	0
3	MP4	X	0	0
4	MP4	X	0	0
5	MP5	X	0	0
6	MP5	X	0	0
7	MP8	X	0	0
8	MP8	X	0	0
9	MP9	X	0	0
10	MP9	X	0	0
11	MP12	X	0	0
12	MP12	X	0	0
13	MP1	Z	-19.8	%28.646
14	MP1	Z	-19.8	%71.354
15	MP4	Z	-61.4	%6.302
16	MP4	Z	-61.4	%93.698
17	MP5	Z	-19.8	%28.646
18	MP5	Z	-19.8	%71.354
19	MP8	Z	-61.4	%6.302
20	MP8	Z	-61.4	%93.698
21	MP9	Z	-19.8	%28.646
22	MP9	Z	-19.8	%71.354
23	MP12	Z	-61.4	%6.302
24	MP12	Z	-61.4	%93.698

Member Point Loads (BLC 211 : Ant. Horiz. Seismic, Eh (300))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	9.9	%28.646
2	MP1	X	9.9	%71.354
3	MP4	X	30.7	%6.302
4	MP4	X	30.7	%93.698
5	MP5	X	9.9	%28.646
6	MP5	X	9.9	%71.354
7	MP8	X	30.7	%6.302
8	MP8	X	30.7	%93.698
9	MP9	X	9.9	%28.646
10	MP9	X	9.9	%71.354
11	MP12	X	30.7	%6.302
12	MP12	X	30.7	%93.698
13	MP1	Z	-17.1	%28.646
14	MP1	Z	-17.1	%71.354
15	MP4	Z	-53.2	%6.302
16	MP4	Z	-53.2	%93.698
17	MP5	Z	-17.1	%28.646
18	MP5	Z	-17.1	%71.354
19	MP8	Z	-53.2	%6.302
20	MP8	Z	-53.2	%93.698
21	MP9	Z	-17.1	%28.646
22	MP9	Z	-17.1	%71.354

Member Point Loads (BLC 211 : Ant. Horiz. Seismic, Eh (300)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
23	MP12	Z	-53.2	%6.302
24	MP12	Z	-53.2	%93.698

Member Point Loads (BLC 212 : Ant. Horiz. Seismic, Eh (330))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in, %]
1	MP1	X	17.1	%28.646
2	MP1	X	17.1	%71.354
3	MP4	X	53.2	%6.302
4	MP4	X	53.2	%93.698
5	MP5	X	17.1	%28.646
6	MP5	X	17.1	%71.354
7	MP8	X	53.2	%6.302
8	MP8	X	53.2	%93.698
9	MP9	X	17.1	%28.646
10	MP9	X	17.1	%71.354
11	MP12	X	53.2	%6.302
12	MP12	X	53.2	%93.698
13	MP1	Z	-9.9	%28.646
14	MP1	Z	-9.9	%71.354
15	MP4	Z	-30.7	%6.302
16	MP4	Z	-30.7	%93.698
17	MP5	Z	-9.9	%28.646
18	MP5	Z	-9.9	%71.354
19	MP8	Z	-30.7	%6.302
20	MP8	Z	-30.7	%93.698
21	MP9	Z	-9.9	%28.646
22	MP9	Z	-9.9	%71.354
23	MP12	Z	-30.7	%6.302
24	MP12	Z	-30.7	%93.698

Member Distributed Loads (BLC 2 : Wind Load (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	5.2	5.2	0	0
2	BRACE-2	X	5.2	5.2	0	0
3	BRACE-3	X	10.4	10.4	0	0
4	CONN-PL-60-1	X	15.4	15.4	0	0
5	CONN-PL-60-2	X	15.4	15.4	0	0
6	CONN-PL-90-1	X	17.8	17.8	0	0
7	CONN-PL-90-2	X	17.8	17.8	0	0
8	CONN-PL-180-1	X	0	0	0	0
9	CONN-PL-180-2	X	0	0	0	0
10	CONN-PL-210-1	X	8.9	8.9	0	0
11	CONN-PL-210-2	X	8.9	8.9	0	0
12	CONN-PL-300-1	X	15.4	15.4	0	0
13	CONN-PL-300-2	X	15.4	15.4	0	0
14	CONN-PL-330-1	X	8.9	8.9	0	0
15	CONN-PL-330-2	X	8.9	8.9	0	0
16	COR-1	X	4.1	4.1	0	0
17	COR-2	X	4.1	4.1	0	0
18	COR-3	X	8.1	8.1	0	0
19	COR-PL-90-1	X	17.8	17.8	0	0
20	COR-PL-90-2	X	17.8	17.8	0	0
21	COR-PL-90-3	X	17.8	17.8	0	0
22	COR-PL-90-4	X	17.8	17.8	0	0
23	COR-PL-210-1	X	8.9	8.9	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 2 : Wind Load (0 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
24	COR-PL-210-2	X	8.9	8.9	0	0
25	COR-PL-210-3	X	8.9	8.9	0	0
26	COR-PL-210-4	X	8.9	8.9	0	0
27	COR-PL-330-1	X	8.9	8.9	0	0
28	COR-PL-330-2	X	8.9	8.9	0	0
29	COR-PL-330-3	X	8.9	8.9	0	0
30	COR-PL-330-4	X	8.9	8.9	0	0
31	FM-0	X	10.4	10.4	0	0
32	FM-120	X	5.2	5.2	0	0
33	FM-240	X	5.2	5.2	0	0
34	GRATE-H-90-1	X	9.9	9.9	0	0
35	GRATE-H-90-2	X	9.9	9.9	0	0
36	GRATE-H-210-1	X	4.9	4.9	0	0
37	GRATE-H-210-2	X	4.9	4.9	0	0
38	GRATE-H-330-1	X	4.9	4.9	0	0
39	GRATE-H-330-2	X	4.9	4.9	0	0
40	HR-0	X	7	7	0	0
41	HR-120	X	3.5	3.5	0	0
42	HR-240	X	3.5	3.5	0	0
43	KICK-1	X	20.2	20.2	0	0
44	KICK-2	X	20.2	20.2	0	0
45	KICK-3	X	20.2	20.2	0	0
46	KICK-PL-1	X	20.5	20.5	0	0
47	KICK-PL-2	X	23.7	23.7	0	0
48	KICK-PL-3	X	20.5	20.5	0	0
49	KICK-PL-4	X	23.7	23.7	0	0
50	KICK-PL-5	X	0	0	0	0
51	KICK-PL-6	X	23.7	23.7	0	0
52	SA-1	X	9.1	9.1	0	0
53	SA-2	X	9.1	9.1	0	0
54	SA-3	X	0	0	0	0
55	PL-90-1	X	17.8	17.8	0	0
56	PL-90-2	X	17.8	17.8	0	0
57	PL-330-1	X	8.9	8.9	0	0
58	PL-330-2	X	8.9	8.9	0	0
59	PL-210-1	X	8.9	8.9	0	0
60	PL-210-2	X	8.9	8.9	0	0
61	BRACE-1	Z	0	0	0	0
62	BRACE-2	Z	0	0	0	0
63	BRACE-3	Z	0	0	0	0
64	CONN-PL-60-1	Z	0	0	0	0
65	CONN-PL-60-2	Z	0	0	0	0
66	CONN-PL-90-1	Z	0	0	0	0
67	CONN-PL-90-2	Z	0	0	0	0
68	CONN-PL-180-1	Z	0	0	0	0
69	CONN-PL-180-2	Z	0	0	0	0
70	CONN-PL-210-1	Z	0	0	0	0
71	CONN-PL-210-2	Z	0	0	0	0
72	CONN-PL-300-1	Z	0	0	0	0
73	CONN-PL-300-2	Z	0	0	0	0
74	CONN-PL-330-1	Z	0	0	0	0
75	CONN-PL-330-2	Z	0	0	0	0
76	COR-1	Z	0	0	0	0
77	COR-2	Z	0	0	0	0
78	COR-3	Z	0	0	0	0
79	COR-PL-90-1	Z	0	0	0	0
80	COR-PL-90-2	Z	0	0	0	0



Member Distributed Loads (BLC 2 : Wind Load (0 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in. %]	End Location[in. %]
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	0	0	0
84	COR-PL-210-2	Z	0	0	0
85	COR-PL-210-3	Z	0	0	0
86	COR-PL-210-4	Z	0	0	0
87	COR-PL-330-1	Z	0	0	0
88	COR-PL-330-2	Z	0	0	0
89	COR-PL-330-3	Z	0	0	0
90	COR-PL-330-4	Z	0	0	0
91	FM-0	Z	0	0	0
92	FM-120	Z	0	0	0
93	FM-240	Z	0	0	0
94	GRATE-H-90-1	Z	0	0	0
95	GRATE-H-90-2	Z	0	0	0
96	GRATE-H-210-1	Z	0	0	0
97	GRATE-H-210-2	Z	0	0	0
98	GRATE-H-330-1	Z	0	0	0
99	GRATE-H-330-2	Z	0	0	0
100	HR-0	Z	0	0	0
101	HR-120	Z	0	0	0
102	HR-240	Z	0	0	0
103	KICK-1	Z	0	0	0
104	KICK-2	Z	0	0	0
105	KICK-3	Z	0	0	0
106	KICK-PL-1	Z	0	0	0
107	KICK-PL-2	Z	0	0	0
108	KICK-PL-3	Z	0	0	0
109	KICK-PL-4	Z	0	0	0
110	KICK-PL-5	Z	0	0	0
111	KICK-PL-6	Z	0	0	0
112	SA-1	Z	0	0	0
113	SA-2	Z	0	0	0
114	SA-3	Z	0	0	0
115	PL-90-1	Z	0	0	0
116	PL-90-2	Z	0	0	0
117	PL-330-1	Z	0	0	0
118	PL-330-2	Z	0	0	0
119	PL-210-1	Z	0	0	0
120	PL-210-2	Z	0	0	0

Member Distributed Loads (BLC 3 : Wind Load (30 deg))

Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in. %]	End Location[in. %]
1	BRACE-1	X	0	0	0
2	BRACE-2	X	7.8	0	0
3	BRACE-3	X	7.8	0	0
4	CONN-PL-60-1	X	7.7	0	0
5	CONN-PL-60-2	X	7.7	0	0
6	CONN-PL-90-1	X	13.3	0	0
7	CONN-PL-90-2	X	13.3	0	0
8	CONN-PL-180-1	X	7.7	0	0
9	CONN-PL-180-2	X	7.7	0	0
10	CONN-PL-210-1	X	0	0	0
11	CONN-PL-210-2	X	0	0	0
12	CONN-PL-300-1	X	15.4	0	0
13	CONN-PL-300-2	X	15.4	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 3 : Wind Load (30 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
14	CONN-PL-330-1	X	13.3	13.3	0	0
15	CONN-PL-330-2	X	13.3	13.3	0	0
16	COR-1	X	0	0	0	0
17	COR-2	X	6.1	6.1	0	0
18	COR-3	X	6.1	6.1	0	0
19	COR-PL-90-1	X	13.3	13.3	0	0
20	COR-PL-90-2	X	13.3	13.3	0	0
21	COR-PL-90-3	X	13.3	13.3	0	0
22	COR-PL-90-4	X	13.3	13.3	0	0
23	COR-PL-210-1	X	0	0	0	0
24	COR-PL-210-2	X	0	0	0	0
25	COR-PL-210-3	X	0	0	0	0
26	COR-PL-210-4	X	0	0	0	0
27	COR-PL-330-1	X	13.3	13.3	0	0
28	COR-PL-330-2	X	13.3	13.3	0	0
29	COR-PL-330-3	X	13.3	13.3	0	0
30	COR-PL-330-4	X	13.3	13.3	0	0
31	FM-0	X	7.8	7.8	0	0
32	FM-120	X	0	0	0	0
33	FM-240	X	7.8	7.8	0	0
34	GRATE-H-90-1	X	7.4	7.4	0	0
35	GRATE-H-90-2	X	7.4	7.4	0	0
36	GRATE-H-210-1	X	0	0	0	0
37	GRATE-H-210-2	X	0	0	0	0
38	GRATE-H-330-1	X	7.4	7.4	0	0
39	GRATE-H-330-2	X	7.4	7.4	0	0
40	HR-0	X	5.3	5.3	0	0
41	HR-120	X	0	0	0	0
42	HR-240	X	5.3	5.3	0	0
43	KICK-1	X	17.5	17.5	0	0
44	KICK-2	X	17.5	17.5	0	0
45	KICK-3	X	17.5	17.5	0	0
46	KICK-PL-1	X	20.5	20.5	0	0
47	KICK-PL-2	X	20.5	20.5	0	0
48	KICK-PL-3	X	10.3	10.3	0	0
49	KICK-PL-4	X	20.5	20.5	0	0
50	KICK-PL-5	X	10.3	10.3	0	0
51	KICK-PL-6	X	20.5	20.5	0	0
52	SA-1	X	9.1	9.1	0	0
53	SA-2	X	4.6	4.6	0	0
54	SA-3	X	4.6	4.6	0	0
55	PL-90-1	X	13.3	13.3	0	0
56	PL-90-2	X	13.3	13.3	0	0
57	PL-330-1	X	13.3	13.3	0	0
58	PL-330-2	X	13.3	13.3	0	0
59	PL-210-1	X	0	0	0	0
60	PL-210-2	X	0	0	0	0
61	BRACE-1	Z	0	0	0	0
62	BRACE-2	Z	4.5	4.5	0	0
63	BRACE-3	Z	4.5	4.5	0	0
64	CONN-PL-60-1	Z	4.4	4.4	0	0
65	CONN-PL-60-2	Z	4.4	4.4	0	0
66	CONN-PL-90-1	Z	7.7	7.7	0	0
67	CONN-PL-90-2	Z	7.7	7.7	0	0
68	CONN-PL-180-1	Z	4.4	4.4	0	0
69	CONN-PL-180-2	Z	4.4	4.4	0	0
70	CONN-PL-210-1	Z	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 3 : Wind Load (30 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
71	CONN-PL-210-2	Z	0	0	0
72	CONN-PL-300-1	Z	8.9	8.9	0
73	CONN-PL-300-2	Z	8.9	8.9	0
74	CONN-PL-330-1	Z	7.7	7.7	0
75	CONN-PL-330-2	Z	7.7	7.7	0
76	COR-1	Z	0	0	0
77	COR-2	Z	3.5	3.5	0
78	COR-3	Z	3.5	3.5	0
79	COR-PL-90-1	Z	7.7	7.7	0
80	COR-PL-90-2	Z	7.7	7.7	0
81	COR-PL-90-3	Z	7.7	7.7	0
82	COR-PL-90-4	Z	7.7	7.7	0
83	COR-PL-210-1	Z	0	0	0
84	COR-PL-210-2	Z	0	0	0
85	COR-PL-210-3	Z	0	0	0
86	COR-PL-210-4	Z	0	0	0
87	COR-PL-330-1	Z	7.7	7.7	0
88	COR-PL-330-2	Z	7.7	7.7	0
89	COR-PL-330-3	Z	7.7	7.7	0
90	COR-PL-330-4	Z	7.7	7.7	0
91	FM-0	Z	4.5	4.5	0
92	FM-120	Z	0	0	0
93	FM-240	Z	4.5	4.5	0
94	GRATE-H-90-1	Z	4.3	4.3	0
95	GRATE-H-90-2	Z	4.3	4.3	0
96	GRATE-H-210-1	Z	0	0	0
97	GRATE-H-210-2	Z	0	0	0
98	GRATE-H-330-1	Z	4.3	4.3	0
99	GRATE-H-330-2	Z	4.3	4.3	0
100	HR-0	Z	3.1	3.1	0
101	HR-120	Z	0	0	0
102	HR-240	Z	3.1	3.1	0
103	KICK-1	Z	10.1	10.1	0
104	KICK-2	Z	10.1	10.1	0
105	KICK-3	Z	10.1	10.1	0
106	KICK-PL-1	Z	11.8	11.8	0
107	KICK-PL-2	Z	11.8	11.8	0
108	KICK-PL-3	Z	5.9	5.9	0
109	KICK-PL-4	Z	11.8	11.8	0
110	KICK-PL-5	Z	5.9	5.9	0
111	KICK-PL-6	Z	11.8	11.8	0
112	SA-1	Z	5.3	5.3	0
113	SA-2	Z	2.6	2.6	0
114	SA-3	Z	2.6	2.6	0
115	PL-90-1	Z	7.7	7.7	0
116	PL-90-2	Z	7.7	7.7	0
117	PL-330-1	Z	7.7	7.7	0
118	PL-330-2	Z	7.7	7.7	0
119	PL-210-1	Z	0	0	0
120	PL-210-2	Z	0	0	0

Member Distributed Loads (BLC 4 : Wind Load (60 deg))

Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	2.6	2.6	0
2	BRACE-2	X	5.2	5.2	0
3	BRACE-3	X	2.6	2.6	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 4 : Wind Load (60 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
4	CONN-PL-60-1	X	0	0	0
5	CONN-PL-60-2	X	0	0	0
6	CONN-PL-90-1	X	4.4	4.4	0
7	CONN-PL-90-2	X	4.4	4.4	0
8	CONN-PL-180-1	X	7.7	7.7	0
9	CONN-PL-180-2	X	7.7	7.7	0
10	CONN-PL-210-1	X	4.4	4.4	0
11	CONN-PL-210-2	X	4.4	4.4	0
12	CONN-PL-300-1	X	7.7	7.7	0
13	CONN-PL-300-2	X	7.7	7.7	0
14	CONN-PL-330-1	X	8.9	8.9	0
15	CONN-PL-330-2	X	8.9	8.9	0
16	COR-1	X	2	2	0
17	COR-2	X	4.1	4.1	0
18	COR-3	X	2	2	0
19	COR-PL-90-1	X	4.4	4.4	0
20	COR-PL-90-2	X	4.4	4.4	0
21	COR-PL-90-3	X	4.4	4.4	0
22	COR-PL-90-4	X	4.4	4.4	0
23	COR-PL-210-1	X	4.4	4.4	0
24	COR-PL-210-2	X	4.4	4.4	0
25	COR-PL-210-3	X	4.4	4.4	0
26	COR-PL-210-4	X	4.4	4.4	0
27	COR-PL-330-1	X	8.9	8.9	0
28	COR-PL-330-2	X	8.9	8.9	0
29	COR-PL-330-3	X	8.9	8.9	0
30	COR-PL-330-4	X	8.9	8.9	0
31	FM-0	X	2.6	2.6	0
32	FM-120	X	2.6	2.6	0
33	FM-240	X	5.2	5.2	0
34	GRATE-H-90-1	X	2.5	2.5	0
35	GRATE-H-90-2	X	2.5	2.5	0
36	GRATE-H-210-1	X	2.5	2.5	0
37	GRATE-H-210-2	X	2.5	2.5	0
38	GRATE-H-330-1	X	4.9	4.9	0
39	GRATE-H-330-2	X	4.9	4.9	0
40	HR-0	X	1.8	1.8	0
41	HR-120	X	1.8	1.8	0
42	HR-240	X	3.5	3.5	0
43	KICK-1	X	10.1	10.1	0
44	KICK-2	X	10.1	10.1	0
45	KICK-3	X	10.1	10.1	0
46	KICK-PL-1	X	10.3	10.3	0
47	KICK-PL-2	X	11.8	11.8	0
48	KICK-PL-3	X	0	0	0
49	KICK-PL-4	X	11.8	11.8	0
50	KICK-PL-5	X	10.3	10.3	0
51	KICK-PL-6	X	11.8	11.8	0
52	SA-1	X	4.6	4.6	0
53	SA-2	X	0	0	0
54	SA-3	X	4.6	4.6	0
55	PL-90-1	X	4.4	4.4	0
56	PL-90-2	X	4.4	4.4	0
57	PL-330-1	X	8.9	8.9	0
58	PL-330-2	X	8.9	8.9	0
59	PL-210-1	X	4.4	4.4	0
60	PL-210-2	X	4.4	4.4	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 4 : Wind Load (60 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
61	BRACE-1	Z	4.5	4.5	0	0
62	BRACE-2	Z	9	9	0	0
63	BRACE-3	Z	4.5	4.5	0	0
64	CONN-PL-60-1	Z	0	0	0	0
65	CONN-PL-60-2	Z	0	0	0	0
66	CONN-PL-90-1	Z	7.7	7.7	0	0
67	CONN-PL-90-2	Z	7.7	7.7	0	0
68	CONN-PL-180-1	Z	13.3	13.3	0	0
69	CONN-PL-180-2	Z	13.3	13.3	0	0
70	CONN-PL-210-1	Z	7.7	7.7	0	0
71	CONN-PL-210-2	Z	7.7	7.7	0	0
72	CONN-PL-300-1	Z	13.3	13.3	0	0
73	CONN-PL-300-2	Z	13.3	13.3	0	0
74	CONN-PL-330-1	Z	15.4	15.4	0	0
75	CONN-PL-330-2	Z	15.4	15.4	0	0
76	COR-1	Z	3.5	3.5	0	0
77	COR-2	Z	7.1	7.1	0	0
78	COR-3	Z	3.5	3.5	0	0
79	COR-PL-90-1	Z	7.7	7.7	0	0
80	COR-PL-90-2	Z	7.7	7.7	0	0
81	COR-PL-90-3	Z	7.7	7.7	0	0
82	COR-PL-90-4	Z	7.7	7.7	0	0
83	COR-PL-210-1	Z	7.7	7.7	0	0
84	COR-PL-210-2	Z	7.7	7.7	0	0
85	COR-PL-210-3	Z	7.7	7.7	0	0
86	COR-PL-210-4	Z	7.7	7.7	0	0
87	COR-PL-330-1	Z	15.4	15.4	0	0
88	COR-PL-330-2	Z	15.4	15.4	0	0
89	COR-PL-330-3	Z	15.4	15.4	0	0
90	COR-PL-330-4	Z	15.4	15.4	0	0
91	FM-0	Z	4.5	4.5	0	0
92	FM-120	Z	4.5	4.5	0	0
93	FM-240	Z	9	9	0	0
94	GRATE-H-90-1	Z	4.3	4.3	0	0
95	GRATE-H-90-2	Z	4.3	4.3	0	0
96	GRATE-H-210-1	Z	4.3	4.3	0	0
97	GRATE-H-210-2	Z	4.3	4.3	0	0
98	GRATE-H-330-1	Z	8.5	8.5	0	0
99	GRATE-H-330-2	Z	8.5	8.5	0	0
100	HR-0	Z	3.1	3.1	0	0
101	HR-120	Z	3.1	3.1	0	0
102	HR-240	Z	6.1	6.1	0	0
103	KICK-1	Z	17.5	17.5	0	0
104	KICK-2	Z	17.5	17.5	0	0
105	KICK-3	Z	17.5	17.5	0	0
106	KICK-PL-1	Z	17.8	17.8	0	0
107	KICK-PL-2	Z	20.5	20.5	0	0
108	KICK-PL-3	Z	0	0	0	0
109	KICK-PL-4	Z	20.5	20.5	0	0
110	KICK-PL-5	Z	17.8	17.8	0	0
111	KICK-PL-6	Z	20.5	20.5	0	0
112	SA-1	Z	7.9	7.9	0	0
113	SA-2	Z	0	0	0	0
114	SA-3	Z	7.9	7.9	0	0
115	PL-90-1	Z	7.7	7.7	0	0
116	PL-90-2	Z	7.7	7.7	0	0
117	PL-330-1	Z	15.4	15.4	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 4 : Wind Load (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in,%]	End Location[in,%]
118	PL-330-2	Z	15.4	15.4	0	0
119	PL-210-1	Z	7.7	7.7	0	0
120	PL-210-2	Z	7.7	7.7	0	0

Member Distributed Loads (BLC 5 : Wind Load (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CONN-PL-60-1	X	0	0	0	0
5	CONN-PL-60-2	X	0	0	0	0
6	CONN-PL-90-1	X	0	0	0	0
7	CONN-PL-90-2	X	0	0	0	0
8	CONN-PL-180-1	X	0	0	0	0
9	CONN-PL-180-2	X	0	0	0	0
10	CONN-PL-210-1	X	0	0	0	0
11	CONN-PL-210-2	X	0	0	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	0	0	0	0
17	COR-2	X	0	0	0	0
18	COR-3	X	0	0	0	0
19	COR-PL-90-1	X	0	0	0	0
20	COR-PL-90-2	X	0	0	0	0
21	COR-PL-90-3	X	0	0	0	0
22	COR-PL-90-4	X	0	0	0	0
23	COR-PL-210-1	X	0	0	0	0
24	COR-PL-210-2	X	0	0	0	0
25	COR-PL-210-3	X	0	0	0	0
26	COR-PL-210-4	X	0	0	0	0
27	COR-PL-330-1	X	0	0	0	0
28	COR-PL-330-2	X	0	0	0	0
29	COR-PL-330-3	X	0	0	0	0
30	COR-PL-330-4	X	0	0	0	0
31	FM-0	X	0	0	0	0
32	FM-120	X	0	0	0	0
33	FM-240	X	0	0	0	0
34	GRATE-H-90-1	X	0	0	0	0
35	GRATE-H-90-2	X	0	0	0	0
36	GRATE-H-210-1	X	0	0	0	0
37	GRATE-H-210-2	X	0	0	0	0
38	GRATE-H-330-1	X	0	0	0	0
39	GRATE-H-330-2	X	0	0	0	0
40	HR-0	X	0	0	0	0
41	HR-120	X	0	0	0	0
42	HR-240	X	0	0	0	0
43	KICK-1	X	0	0	0	0
44	KICK-2	X	0	0	0	0
45	KICK-3	X	0	0	0	0
46	KICK-PL-1	X	0	0	0	0
47	KICK-PL-2	X	0	0	0	0
48	KICK-PL-3	X	0	0	0	0
49	KICK-PL-4	X	0	0	0	0
50	KICK-PL-5	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 5 : Wind Load (90 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
51	KICK-PL-6	X	0	0	0
52	SA-1	X	0	0	0
53	SA-2	X	0	0	0
54	SA-3	X	0	0	0
55	PL-90-1	X	0	0	0
56	PL-90-2	X	0	0	0
57	PL-330-1	X	0	0	0
58	PL-330-2	X	0	0	0
59	PL-210-1	X	0	0	0
60	PL-210-2	X	0	0	0
61	BRACE-1	Z	9	9	0
62	BRACE-2	Z	9	9	0
63	BRACE-3	Z	0	0	0
64	CONN-PL-60-1	Z	8.9	8.9	0
65	CONN-PL-60-2	Z	8.9	8.9	0
66	CONN-PL-90-1	Z	0	0	0
67	CONN-PL-90-2	Z	0	0	0
68	CONN-PL-180-1	Z	17.8	17.8	0
69	CONN-PL-180-2	Z	17.8	17.8	0
70	CONN-PL-210-1	Z	15.4	15.4	0
71	CONN-PL-210-2	Z	15.4	15.4	0
72	CONN-PL-300-1	Z	8.9	8.9	0
73	CONN-PL-300-2	Z	8.9	8.9	0
74	CONN-PL-330-1	Z	15.4	15.4	0
75	CONN-PL-330-2	Z	15.4	15.4	0
76	COR-1	Z	7.1	7.1	0
77	COR-2	Z	7.1	7.1	0
78	COR-3	Z	0	0	0
79	COR-PL-90-1	Z	0	0	0
80	COR-PL-90-2	Z	0	0	0
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	15.4	15.4	0
84	COR-PL-210-2	Z	15.4	15.4	0
85	COR-PL-210-3	Z	15.4	15.4	0
86	COR-PL-210-4	Z	15.4	15.4	0
87	COR-PL-330-1	Z	15.4	15.4	0
88	COR-PL-330-2	Z	15.4	15.4	0
89	COR-PL-330-3	Z	15.4	15.4	0
90	COR-PL-330-4	Z	15.4	15.4	0
91	FM-0	Z	0	0	0
92	FM-120	Z	9	9	0
93	FM-240	Z	9	9	0
94	GRATE-H-90-1	Z	0	0	0
95	GRATE-H-90-2	Z	0	0	0
96	GRATE-H-210-1	Z	8.5	8.5	0
97	GRATE-H-210-2	Z	8.5	8.5	0
98	GRATE-H-330-1	Z	8.5	8.5	0
99	GRATE-H-330-2	Z	8.5	8.5	0
100	HR-0	Z	0	0	0
101	HR-120	Z	6.1	6.1	0
102	HR-240	Z	6.1	6.1	0
103	KICK-1	Z	20.2	20.2	0
104	KICK-2	Z	20.2	20.2	0
105	KICK-3	Z	20.2	20.2	0
106	KICK-PL-1	Z	11.8	11.8	0
107	KICK-PL-2	Z	23.7	23.7	0

Member Distributed Loads (BLC 5 : Wind Load (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in,%]	End Location[in,%]
108	KICK-PL-3	Z	11.8	11.8	0	0
109	KICK-PL-4	Z	23.7	23.7	0	0
110	KICK-PL-5	Z	23.7	23.7	0	0
111	KICK-PL-6	Z	23.7	23.7	0	0
112	SA-1	Z	5.3	5.3	0	0
113	SA-2	Z	5.3	5.3	0	0
114	SA-3	Z	10.5	10.5	0	0
115	PL-90-1	Z	0	0	0	0
116	PL-90-2	Z	0	0	0	0
117	PL-330-1	Z	15.4	15.4	0	0
118	PL-330-2	Z	15.4	15.4	0	0
119	PL-210-1	Z	15.4	15.4	0	0
120	PL-210-2	Z	15.4	15.4	0	0

Member Distributed Loads (BLC 6 : Wind Load (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	-5.2	-5.2	0	0
2	BRACE-2	X	-2.6	-2.6	0	0
3	BRACE-3	X	-2.6	-2.6	0	0
4	CONN-PL-60-1	X	-7.7	-7.7	0	0
5	CONN-PL-60-2	X	-7.7	-7.7	0	0
6	CONN-PL-90-1	X	-4.4	-4.4	0	0
7	CONN-PL-90-2	X	-4.4	-4.4	0	0
8	CONN-PL-180-1	X	-7.7	-7.7	0	0
9	CONN-PL-180-2	X	-7.7	-7.7	0	0
10	CONN-PL-210-1	X	-8.9	-8.9	0	0
11	CONN-PL-210-2	X	-8.9	-8.9	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	-4.4	-4.4	0	0
15	CONN-PL-330-2	X	-4.4	-4.4	0	0
16	COR-1	X	-4.1	-4.1	0	0
17	COR-2	X	-2	-2	0	0
18	COR-3	X	-2	-2	0	0
19	COR-PL-90-1	X	-4.4	-4.4	0	0
20	COR-PL-90-2	X	-4.4	-4.4	0	0
21	COR-PL-90-3	X	-4.4	-4.4	0	0
22	COR-PL-90-4	X	-4.4	-4.4	0	0
23	COR-PL-210-1	X	-8.9	-8.9	0	0
24	COR-PL-210-2	X	-8.9	-8.9	0	0
25	COR-PL-210-3	X	-8.9	-8.9	0	0
26	COR-PL-210-4	X	-8.9	-8.9	0	0
27	COR-PL-330-1	X	-4.4	-4.4	0	0
28	COR-PL-330-2	X	-4.4	-4.4	0	0
29	COR-PL-330-3	X	-4.4	-4.4	0	0
30	COR-PL-330-4	X	-4.4	-4.4	0	0
31	FM-0	X	-2.6	-2.6	0	0
32	FM-120	X	-5.2	-5.2	0	0
33	FM-240	X	-2.6	-2.6	0	0
34	GRATE-H-90-1	X	-2.5	-2.5	0	0
35	GRATE-H-90-2	X	-2.5	-2.5	0	0
36	GRATE-H-210-1	X	-4.9	-4.9	0	0
37	GRATE-H-210-2	X	-4.9	-4.9	0	0
38	GRATE-H-330-1	X	-2.5	-2.5	0	0
39	GRATE-H-330-2	X	-2.5	-2.5	0	0
40	HR-0	X	-1.8	-1.8	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 6 : Wind Load (120 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
41	HR-120	X	-3.5	-3.5	0	0
42	HR-240	X	-1.8	-1.8	0	0
43	KICK-1	X	-10.1	-10.1	0	0
44	KICK-2	X	-10.1	-10.1	0	0
45	KICK-3	X	-10.1	-10.1	0	0
46	KICK-PL-1	X	0	0	0	0
47	KICK-PL-2	X	-11.8	-11.8	0	0
48	KICK-PL-3	X	-10.3	-10.3	0	0
49	KICK-PL-4	X	-11.8	-11.8	0	0
50	KICK-PL-5	X	-10.3	-10.3	0	0
51	KICK-PL-6	X	-11.8	-11.8	0	0
52	SA-1	X	0	0	0	0
53	SA-2	X	-4.6	-4.6	0	0
54	SA-3	X	-4.6	-4.6	0	0
55	PL-90-1	X	-4.4	-4.4	0	0
56	PL-90-2	X	-4.4	-4.4	0	0
57	PL-330-1	X	-4.4	-4.4	0	0
58	PL-330-2	X	-4.4	-4.4	0	0
59	PL-210-1	X	-8.9	-8.9	0	0
60	PL-210-2	X	-8.9	-8.9	0	0
61	BRACE-1	Z	9	9	0	0
62	BRACE-2	Z	4.5	4.5	0	0
63	BRACE-3	Z	4.5	4.5	0	0
64	CONN-PL-60-1	Z	13.3	13.3	0	0
65	CONN-PL-60-2	Z	13.3	13.3	0	0
66	CONN-PL-90-1	Z	7.7	7.7	0	0
67	CONN-PL-90-2	Z	7.7	7.7	0	0
68	CONN-PL-180-1	Z	13.3	13.3	0	0
69	CONN-PL-180-2	Z	13.3	13.3	0	0
70	CONN-PL-210-1	Z	15.4	15.4	0	0
71	CONN-PL-210-2	Z	15.4	15.4	0	0
72	CONN-PL-300-1	Z	0	0	0	0
73	CONN-PL-300-2	Z	0	0	0	0
74	CONN-PL-330-1	Z	7.7	7.7	0	0
75	CONN-PL-330-2	Z	7.7	7.7	0	0
76	COR-1	Z	7.1	7.1	0	0
77	COR-2	Z	3.5	3.5	0	0
78	COR-3	Z	3.5	3.5	0	0
79	COR-PL-90-1	Z	7.7	7.7	0	0
80	COR-PL-90-2	Z	7.7	7.7	0	0
81	COR-PL-90-3	Z	7.7	7.7	0	0
82	COR-PL-90-4	Z	7.7	7.7	0	0
83	COR-PL-210-1	Z	15.4	15.4	0	0
84	COR-PL-210-2	Z	15.4	15.4	0	0
85	COR-PL-210-3	Z	15.4	15.4	0	0
86	COR-PL-210-4	Z	15.4	15.4	0	0
87	COR-PL-330-1	Z	7.7	7.7	0	0
88	COR-PL-330-2	Z	7.7	7.7	0	0
89	COR-PL-330-3	Z	7.7	7.7	0	0
90	COR-PL-330-4	Z	7.7	7.7	0	0
91	FM-0	Z	4.5	4.5	0	0
92	FM-120	Z	9	9	0	0
93	FM-240	Z	4.5	4.5	0	0
94	GRATE-H-90-1	Z	4.3	4.3	0	0
95	GRATE-H-90-2	Z	4.3	4.3	0	0
96	GRATE-H-210-1	Z	8.5	8.5	0	0
97	GRATE-H-210-2	Z	8.5	8.5	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 6 : Wind Load (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
98	GRATE-H-330-1	Z	4.3	4.3	0	0
99	GRATE-H-330-2	Z	4.3	4.3	0	0
100	HR-0	Z	3.1	3.1	0	0
101	HR-120	Z	6.1	6.1	0	0
102	HR-240	Z	3.1	3.1	0	0
103	KICK-1	Z	17.5	17.5	0	0
104	KICK-2	Z	17.5	17.5	0	0
105	KICK-3	Z	17.5	17.5	0	0
106	KICK-PL-1	Z	0	0	0	0
107	KICK-PL-2	Z	20.5	20.5	0	0
108	KICK-PL-3	Z	17.8	17.8	0	0
109	KICK-PL-4	Z	20.5	20.5	0	0
110	KICK-PL-5	Z	17.8	17.8	0	0
111	KICK-PL-6	Z	20.5	20.5	0	0
112	SA-1	Z	0	0	0	0
113	SA-2	Z	7.9	7.9	0	0
114	SA-3	Z	7.9	7.9	0	0
115	PL-90-1	Z	7.7	7.7	0	0
116	PL-90-2	Z	7.7	7.7	0	0
117	PL-330-1	Z	7.7	7.7	0	0
118	PL-330-2	Z	7.7	7.7	0	0
119	PL-210-1	Z	15.4	15.4	0	0
120	PL-210-2	Z	15.4	15.4	0	0

Member Distributed Loads (BLC 7 : Wind Load (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	-7.8	-7.8	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	-7.8	-7.8	0	0
4	CONN-PL-60-1	X	-15.4	-15.4	0	0
5	CONN-PL-60-2	X	-15.4	-15.4	0	0
6	CONN-PL-90-1	X	-13.3	-13.3	0	0
7	CONN-PL-90-2	X	-13.3	-13.3	0	0
8	CONN-PL-180-1	X	-7.7	-7.7	0	0
9	CONN-PL-180-2	X	-7.7	-7.7	0	0
10	CONN-PL-210-1	X	-13.3	-13.3	0	0
11	CONN-PL-210-2	X	-13.3	-13.3	0	0
12	CONN-PL-300-1	X	-7.7	-7.7	0	0
13	CONN-PL-300-2	X	-7.7	-7.7	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	-6.1	-6.1	0	0
17	COR-2	X	0	0	0	0
18	COR-3	X	-6.1	-6.1	0	0
19	COR-PL-90-1	X	-13.3	-13.3	0	0
20	COR-PL-90-2	X	-13.3	-13.3	0	0
21	COR-PL-90-3	X	-13.3	-13.3	0	0
22	COR-PL-90-4	X	-13.3	-13.3	0	0
23	COR-PL-210-1	X	-13.3	-13.3	0	0
24	COR-PL-210-2	X	-13.3	-13.3	0	0
25	COR-PL-210-3	X	-13.3	-13.3	0	0
26	COR-PL-210-4	X	-13.3	-13.3	0	0
27	COR-PL-330-1	X	0	0	0	0
28	COR-PL-330-2	X	0	0	0	0
29	COR-PL-330-3	X	0	0	0	0
30	COR-PL-330-4	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 7 : Wind Load (150 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
31	FM-0	X	-7.8	-7.8	0	0
32	FM-120	X	-7.8	-7.8	0	0
33	FM-240	X	0	0	0	0
34	GRATE-H-90-1	X	-7.4	-7.4	0	0
35	GRATE-H-90-2	X	-7.4	-7.4	0	0
36	GRATE-H-210-1	X	-7.4	-7.4	0	0
37	GRATE-H-210-2	X	-7.4	-7.4	0	0
38	GRATE-H-330-1	X	0	0	0	0
39	GRATE-H-330-2	X	0	0	0	0
40	HR-0	X	-5.3	-5.3	0	0
41	HR-120	X	-5.3	-5.3	0	0
42	HR-240	X	0	0	0	0
43	KICK-1	X	-17.5	-17.5	0	0
44	KICK-2	X	-17.5	-17.5	0	0
45	KICK-3	X	-17.5	-17.5	0	0
46	KICK-PL-1	X	-10.3	-10.3	0	0
47	KICK-PL-2	X	-20.5	-20.5	0	0
48	KICK-PL-3	X	-20.5	-20.5	0	0
49	KICK-PL-4	X	-20.5	-20.5	0	0
50	KICK-PL-5	X	-10.3	-10.3	0	0
51	KICK-PL-6	X	-20.5	-20.5	0	0
52	SA-1	X	-4.6	-4.6	0	0
53	SA-2	X	-9.1	-9.1	0	0
54	SA-3	X	-4.6	-4.6	0	0
55	PL-90-1	X	-13.3	-13.3	0	0
56	PL-90-2	X	-13.3	-13.3	0	0
57	PL-330-1	X	0	0	0	0
58	PL-330-2	X	0	0	0	0
59	PL-210-1	X	-13.3	-13.3	0	0
60	PL-210-2	X	-13.3	-13.3	0	0
61	BRACE-1	Z	4.5	4.5	0	0
62	BRACE-2	Z	0	0	0	0
63	BRACE-3	Z	4.5	4.5	0	0
64	CONN-PL-60-1	Z	8.9	8.9	0	0
65	CONN-PL-60-2	Z	8.9	8.9	0	0
66	CONN-PL-90-1	Z	7.7	7.7	0	0
67	CONN-PL-90-2	Z	7.7	7.7	0	0
68	CONN-PL-180-1	Z	4.4	4.4	0	0
69	CONN-PL-180-2	Z	4.4	4.4	0	0
70	CONN-PL-210-1	Z	7.7	7.7	0	0
71	CONN-PL-210-2	Z	7.7	7.7	0	0
72	CONN-PL-300-1	Z	4.4	4.4	0	0
73	CONN-PL-300-2	Z	4.4	4.4	0	0
74	CONN-PL-330-1	Z	0	0	0	0
75	CONN-PL-330-2	Z	0	0	0	0
76	COR-1	Z	3.5	3.5	0	0
77	COR-2	Z	0	0	0	0
78	COR-3	Z	3.5	3.5	0	0
79	COR-PL-90-1	Z	7.7	7.7	0	0
80	COR-PL-90-2	Z	7.7	7.7	0	0
81	COR-PL-90-3	Z	7.7	7.7	0	0
82	COR-PL-90-4	Z	7.7	7.7	0	0
83	COR-PL-210-1	Z	7.7	7.7	0	0
84	COR-PL-210-2	Z	7.7	7.7	0	0
85	COR-PL-210-3	Z	7.7	7.7	0	0
86	COR-PL-210-4	Z	7.7	7.7	0	0
87	COR-PL-330-1	Z	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 7 : Wind Load (150 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
88	COR-PL-330-2	Z	0	0	0
89	COR-PL-330-3	Z	0	0	0
90	COR-PL-330-4	Z	0	0	0
91	FM-0	Z	4.5	4.5	0
92	FM-120	Z	4.5	4.5	0
93	FM-240	Z	0	0	0
94	GRATE-H-90-1	Z	4.3	4.3	0
95	GRATE-H-90-2	Z	4.3	4.3	0
96	GRATE-H-210-1	Z	4.3	4.3	0
97	GRATE-H-210-2	Z	4.3	4.3	0
98	GRATE-H-330-1	Z	0	0	0
99	GRATE-H-330-2	Z	0	0	0
100	HR-0	Z	3.1	3.1	0
101	HR-120	Z	3.1	3.1	0
102	HR-240	Z	0	0	0
103	KICK-1	Z	10.1	10.1	0
104	KICK-2	Z	10.1	10.1	0
105	KICK-3	Z	10.1	10.1	0
106	KICK-PL-1	Z	5.9	5.9	0
107	KICK-PL-2	Z	11.8	11.8	0
108	KICK-PL-3	Z	11.8	11.8	0
109	KICK-PL-4	Z	11.8	11.8	0
110	KICK-PL-5	Z	5.9	5.9	0
111	KICK-PL-6	Z	11.8	11.8	0
112	SA-1	Z	2.6	2.6	0
113	SA-2	Z	5.3	5.3	0
114	SA-3	Z	2.6	2.6	0
115	PL-90-1	Z	7.7	7.7	0
116	PL-90-2	Z	7.7	7.7	0
117	PL-330-1	Z	0	0	0
118	PL-330-2	Z	0	0	0
119	PL-210-1	Z	7.7	7.7	0
120	PL-210-2	Z	7.7	7.7	0

Member Distributed Loads (BLC 8 : Wind Load (180 deg))

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	-5.2	-5.2	0
2	BRACE-2	X	-5.2	-5.2	0
3	BRACE-3	X	-10.4	-10.4	0
4	CONN-PL-60-1	X	-15.4	-15.4	0
5	CONN-PL-60-2	X	-15.4	-15.4	0
6	CONN-PL-90-1	X	-17.8	-17.8	0
7	CONN-PL-90-2	X	-17.8	-17.8	0
8	CONN-PL-180-1	X	0	0	0
9	CONN-PL-180-2	X	0	0	0
10	CONN-PL-210-1	X	-8.9	-8.9	0
11	CONN-PL-210-2	X	-8.9	-8.9	0
12	CONN-PL-300-1	X	-15.4	-15.4	0
13	CONN-PL-300-2	X	-15.4	-15.4	0
14	CONN-PL-330-1	X	-8.9	-8.9	0
15	CONN-PL-330-2	X	-8.9	-8.9	0
16	COR-1	X	-4.1	-4.1	0
17	COR-2	X	-4.1	-4.1	0
18	COR-3	X	-8.1	-8.1	0
19	COR-PL-90-1	X	-17.8	-17.8	0
20	COR-PL-90-2	X	-17.8	-17.8	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 8 : Wind Load (180 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
21	COR-PL-90-3	X	-17.8	-17.8	0	0
22	COR-PL-90-4	X	-17.8	-17.8	0	0
23	COR-PL-210-1	X	-8.9	-8.9	0	0
24	COR-PL-210-2	X	-8.9	-8.9	0	0
25	COR-PL-210-3	X	-8.9	-8.9	0	0
26	COR-PL-210-4	X	-8.9	-8.9	0	0
27	COR-PL-330-1	X	-8.9	-8.9	0	0
28	COR-PL-330-2	X	-8.9	-8.9	0	0
29	COR-PL-330-3	X	-8.9	-8.9	0	0
30	COR-PL-330-4	X	-8.9	-8.9	0	0
31	FM-0	X	-10.4	-10.4	0	0
32	FM-120	X	-5.2	-5.2	0	0
33	FM-240	X	-5.2	-5.2	0	0
34	GRATE-H-90-1	X	-9.9	-9.9	0	0
35	GRATE-H-90-2	X	-9.9	-9.9	0	0
36	GRATE-H-210-1	X	-4.9	-4.9	0	0
37	GRATE-H-210-2	X	-4.9	-4.9	0	0
38	GRATE-H-330-1	X	-4.9	-4.9	0	0
39	GRATE-H-330-2	X	-4.9	-4.9	0	0
40	HR-0	X	-7	-7	0	0
41	HR-120	X	-3.5	-3.5	0	0
42	HR-240	X	-3.5	-3.5	0	0
43	KICK-1	X	-20.2	-20.2	0	0
44	KICK-2	X	-20.2	-20.2	0	0
45	KICK-3	X	-20.2	-20.2	0	0
46	KICK-PL-1	X	-20.5	-20.5	0	0
47	KICK-PL-2	X	-23.7	-23.7	0	0
48	KICK-PL-3	X	-20.5	-20.5	0	0
49	KICK-PL-4	X	-23.7	-23.7	0	0
50	KICK-PL-5	X	0	0	0	0
51	KICK-PL-6	X	-23.7	-23.7	0	0
52	SA-1	X	-9.1	-9.1	0	0
53	SA-2	X	-9.1	-9.1	0	0
54	SA-3	X	0	0	0	0
55	PL-90-1	X	-17.8	-17.8	0	0
56	PL-90-2	X	-17.8	-17.8	0	0
57	PL-330-1	X	-8.9	-8.9	0	0
58	PL-330-2	X	-8.9	-8.9	0	0
59	PL-210-1	X	-8.9	-8.9	0	0
60	PL-210-2	X	-8.9	-8.9	0	0
61	BRACE-1	Z	0	0	0	0
62	BRACE-2	Z	0	0	0	0
63	BRACE-3	Z	0	0	0	0
64	CONN-PL-60-1	Z	0	0	0	0
65	CONN-PL-60-2	Z	0	0	0	0
66	CONN-PL-90-1	Z	0	0	0	0
67	CONN-PL-90-2	Z	0	0	0	0
68	CONN-PL-180-1	Z	0	0	0	0
69	CONN-PL-180-2	Z	0	0	0	0
70	CONN-PL-210-1	Z	0	0	0	0
71	CONN-PL-210-2	Z	0	0	0	0
72	CONN-PL-300-1	Z	0	0	0	0
73	CONN-PL-300-2	Z	0	0	0	0
74	CONN-PL-330-1	Z	0	0	0	0
75	CONN-PL-330-2	Z	0	0	0	0
76	COR-1	Z	0	0	0	0
77	COR-2	Z	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 8 : Wind Load (180 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in,%]	End Location[in,%]
78	COR-3	Z	0	0	0
79	COR-PL-90-1	Z	0	0	0
80	COR-PL-90-2	Z	0	0	0
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	0	0	0
84	COR-PL-210-2	Z	0	0	0
85	COR-PL-210-3	Z	0	0	0
86	COR-PL-210-4	Z	0	0	0
87	COR-PL-330-1	Z	0	0	0
88	COR-PL-330-2	Z	0	0	0
89	COR-PL-330-3	Z	0	0	0
90	COR-PL-330-4	Z	0	0	0
91	FM-0	Z	0	0	0
92	FM-120	Z	0	0	0
93	FM-240	Z	0	0	0
94	GRATE-H-90-1	Z	0	0	0
95	GRATE-H-90-2	Z	0	0	0
96	GRATE-H-210-1	Z	0	0	0
97	GRATE-H-210-2	Z	0	0	0
98	GRATE-H-330-1	Z	0	0	0
99	GRATE-H-330-2	Z	0	0	0
100	HR-0	Z	0	0	0
101	HR-120	Z	0	0	0
102	HR-240	Z	0	0	0
103	KICK-1	Z	0	0	0
104	KICK-2	Z	0	0	0
105	KICK-3	Z	0	0	0
106	KICK-PL-1	Z	0	0	0
107	KICK-PL-2	Z	0	0	0
108	KICK-PL-3	Z	0	0	0
109	KICK-PL-4	Z	0	0	0
110	KICK-PL-5	Z	0	0	0
111	KICK-PL-6	Z	0	0	0
112	SA-1	Z	0	0	0
113	SA-2	Z	0	0	0
114	SA-3	Z	0	0	0
115	PL-90-1	Z	0	0	0
116	PL-90-2	Z	0	0	0
117	PL-330-1	Z	0	0	0
118	PL-330-2	Z	0	0	0
119	PL-210-1	Z	0	0	0
120	PL-210-2	Z	0	0	0

Member Distributed Loads (BLC 9 : Wind Load (210 deg))

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in,%]	End Location[in,%]
1	BRACE-1	X	0	0	0
2	BRACE-2	X	-7.8	-7.8	0
3	BRACE-3	X	-7.8	-7.8	0
4	CONN-PL-60-1	X	-7.7	-7.7	0
5	CONN-PL-60-2	X	-7.7	-7.7	0
6	CONN-PL-90-1	X	-13.3	-13.3	0
7	CONN-PL-90-2	X	-13.3	-13.3	0
8	CONN-PL-180-1	X	-7.7	-7.7	0
9	CONN-PL-180-2	X	-7.7	-7.7	0
10	CONN-PL-210-1	X	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 9 : Wind Load (210 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
11	CONN-PL-210-2	X	0	0	0
12	CONN-PL-300-1	X	-15.4	-15.4	0
13	CONN-PL-300-2	X	-15.4	-15.4	0
14	CONN-PL-330-1	X	-13.3	-13.3	0
15	CONN-PL-330-2	X	-13.3	-13.3	0
16	COR-1	X	0	0	0
17	COR-2	X	-6.1	-6.1	0
18	COR-3	X	-6.1	-6.1	0
19	COR-PL-90-1	X	-13.3	-13.3	0
20	COR-PL-90-2	X	-13.3	-13.3	0
21	COR-PL-90-3	X	-13.3	-13.3	0
22	COR-PL-90-4	X	-13.3	-13.3	0
23	COR-PL-210-1	X	0	0	0
24	COR-PL-210-2	X	0	0	0
25	COR-PL-210-3	X	0	0	0
26	COR-PL-210-4	X	0	0	0
27	COR-PL-330-1	X	-13.3	-13.3	0
28	COR-PL-330-2	X	-13.3	-13.3	0
29	COR-PL-330-3	X	-13.3	-13.3	0
30	COR-PL-330-4	X	-13.3	-13.3	0
31	FM-0	X	-7.8	-7.8	0
32	FM-120	X	0	0	0
33	FM-240	X	-7.8	-7.8	0
34	GRATE-H-90-1	X	-7.4	-7.4	0
35	GRATE-H-90-2	X	-7.4	-7.4	0
36	GRATE-H-210-1	X	0	0	0
37	GRATE-H-210-2	X	0	0	0
38	GRATE-H-330-1	X	-7.4	-7.4	0
39	GRATE-H-330-2	X	-7.4	-7.4	0
40	HR-0	X	-5.3	-5.3	0
41	HR-120	X	0	0	0
42	HR-240	X	-5.3	-5.3	0
43	KICK-1	X	-17.5	-17.5	0
44	KICK-2	X	-17.5	-17.5	0
45	KICK-3	X	-17.5	-17.5	0
46	KICK-PL-1	X	-20.5	-20.5	0
47	KICK-PL-2	X	-20.5	-20.5	0
48	KICK-PL-3	X	-10.3	-10.3	0
49	KICK-PL-4	X	-20.5	-20.5	0
50	KICK-PL-5	X	-10.3	-10.3	0
51	KICK-PL-6	X	-20.5	-20.5	0
52	SA-1	X	-9.1	-9.1	0
53	SA-2	X	-4.6	-4.6	0
54	SA-3	X	-4.6	-4.6	0
55	PL-90-1	X	-13.3	-13.3	0
56	PL-90-2	X	-13.3	-13.3	0
57	PL-330-1	X	-13.3	-13.3	0
58	PL-330-2	X	-13.3	-13.3	0
59	PL-210-1	X	0	0	0
60	PL-210-2	X	0	0	0
61	BRACE-1	Z	0	0	0
62	BRACE-2	Z	-4.5	-4.5	0
63	BRACE-3	Z	-4.5	-4.5	0
64	CONN-PL-60-1	Z	-4.4	-4.4	0
65	CONN-PL-60-2	Z	-4.4	-4.4	0
66	CONN-PL-90-1	Z	-7.7	-7.7	0
67	CONN-PL-90-2	Z	-7.7	-7.7	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 9 : Wind Load (210 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
68	CONN-PL-180-1	Z	-4.4	-4.4	0	0
69	CONN-PL-180-2	Z	-4.4	-4.4	0	0
70	CONN-PL-210-1	Z	0	0	0	0
71	CONN-PL-210-2	Z	0	0	0	0
72	CONN-PL-300-1	Z	-8.9	-8.9	0	0
73	CONN-PL-300-2	Z	-8.9	-8.9	0	0
74	CONN-PL-330-1	Z	-7.7	-7.7	0	0
75	CONN-PL-330-2	Z	-7.7	-7.7	0	0
76	COR-1	Z	0	0	0	0
77	COR-2	Z	-3.5	-3.5	0	0
78	COR-3	Z	-3.5	-3.5	0	0
79	COR-PL-90-1	Z	-7.7	-7.7	0	0
80	COR-PL-90-2	Z	-7.7	-7.7	0	0
81	COR-PL-90-3	Z	-7.7	-7.7	0	0
82	COR-PL-90-4	Z	-7.7	-7.7	0	0
83	COR-PL-210-1	Z	0	0	0	0
84	COR-PL-210-2	Z	0	0	0	0
85	COR-PL-210-3	Z	0	0	0	0
86	COR-PL-210-4	Z	0	0	0	0
87	COR-PL-330-1	Z	-7.7	-7.7	0	0
88	COR-PL-330-2	Z	-7.7	-7.7	0	0
89	COR-PL-330-3	Z	-7.7	-7.7	0	0
90	COR-PL-330-4	Z	-7.7	-7.7	0	0
91	FM-0	Z	-4.5	-4.5	0	0
92	FM-120	Z	0	0	0	0
93	FM-240	Z	-4.5	-4.5	0	0
94	GRATE-H-90-1	Z	-4.3	-4.3	0	0
95	GRATE-H-90-2	Z	-4.3	-4.3	0	0
96	GRATE-H-210-1	Z	0	0	0	0
97	GRATE-H-210-2	Z	0	0	0	0
98	GRATE-H-330-1	Z	-4.3	-4.3	0	0
99	GRATE-H-330-2	Z	-4.3	-4.3	0	0
100	HR-0	Z	-3.1	-3.1	0	0
101	HR-120	Z	0	0	0	0
102	HR-240	Z	-3.1	-3.1	0	0
103	KICK-1	Z	-10.1	-10.1	0	0
104	KICK-2	Z	-10.1	-10.1	0	0
105	KICK-3	Z	-10.1	-10.1	0	0
106	KICK-PL-1	Z	-11.8	-11.8	0	0
107	KICK-PL-2	Z	-11.8	-11.8	0	0
108	KICK-PL-3	Z	-5.9	-5.9	0	0
109	KICK-PL-4	Z	-11.8	-11.8	0	0
110	KICK-PL-5	Z	-5.9	-5.9	0	0
111	KICK-PL-6	Z	-11.8	-11.8	0	0
112	SA-1	Z	-5.3	-5.3	0	0
113	SA-2	Z	-2.6	-2.6	0	0
114	SA-3	Z	-2.6	-2.6	0	0
115	PL-90-1	Z	-7.7	-7.7	0	0
116	PL-90-2	Z	-7.7	-7.7	0	0
117	PL-330-1	Z	-7.7	-7.7	0	0
118	PL-330-2	Z	-7.7	-7.7	0	0
119	PL-210-1	Z	0	0	0	0
120	PL-210-2	Z	0	0	0	0

Member Distributed Loads (BLC 10 : Wind Load (240 deg))

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
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Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 10 : Wind Load (240 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1 BRACE-1	X	-2.6	-2.6	0	0
2 BRACE-2	X	-5.2	-5.2	0	0
3 BRACE-3	X	-2.6	-2.6	0	0
4 CONN-PL-60-1	X	0	0	0	0
5 CONN-PL-60-2	X	0	0	0	0
6 CONN-PL-90-1	X	-4.4	-4.4	0	0
7 CONN-PL-90-2	X	-4.4	-4.4	0	0
8 CONN-PL-180-1	X	-7.7	-7.7	0	0
9 CONN-PL-180-2	X	-7.7	-7.7	0	0
10 CONN-PL-210-1	X	-4.4	-4.4	0	0
11 CONN-PL-210-2	X	-4.4	-4.4	0	0
12 CONN-PL-300-1	X	-7.7	-7.7	0	0
13 CONN-PL-300-2	X	-7.7	-7.7	0	0
14 CONN-PL-330-1	X	-8.9	-8.9	0	0
15 CONN-PL-330-2	X	-8.9	-8.9	0	0
16 COR-1	X	-2	-2	0	0
17 COR-2	X	-4.1	-4.1	0	0
18 COR-3	X	-2	-2	0	0
19 COR-PL-90-1	X	-4.4	-4.4	0	0
20 COR-PL-90-2	X	-4.4	-4.4	0	0
21 COR-PL-90-3	X	-4.4	-4.4	0	0
22 COR-PL-90-4	X	-4.4	-4.4	0	0
23 COR-PL-210-1	X	-4.4	-4.4	0	0
24 COR-PL-210-2	X	-4.4	-4.4	0	0
25 COR-PL-210-3	X	-4.4	-4.4	0	0
26 COR-PL-210-4	X	-4.4	-4.4	0	0
27 COR-PL-330-1	X	-8.9	-8.9	0	0
28 COR-PL-330-2	X	-8.9	-8.9	0	0
29 COR-PL-330-3	X	-8.9	-8.9	0	0
30 COR-PL-330-4	X	-8.9	-8.9	0	0
31 FM-0	X	-2.6	-2.6	0	0
32 FM-120	X	-2.6	-2.6	0	0
33 FM-240	X	-5.2	-5.2	0	0
34 GRATE-H-90-1	X	-2.5	-2.5	0	0
35 GRATE-H-90-2	X	-2.5	-2.5	0	0
36 GRATE-H-210-1	X	-2.5	-2.5	0	0
37 GRATE-H-210-2	X	-2.5	-2.5	0	0
38 GRATE-H-330-1	X	-4.9	-4.9	0	0
39 GRATE-H-330-2	X	-4.9	-4.9	0	0
40 HR-0	X	-1.8	-1.8	0	0
41 HR-120	X	-1.8	-1.8	0	0
42 HR-240	X	-3.5	-3.5	0	0
43 KICK-1	X	-10.1	-10.1	0	0
44 KICK-2	X	-10.1	-10.1	0	0
45 KICK-3	X	-10.1	-10.1	0	0
46 KICK-PL-1	X	-10.3	-10.3	0	0
47 KICK-PL-2	X	-11.8	-11.8	0	0
48 KICK-PL-3	X	0	0	0	0
49 KICK-PL-4	X	-11.8	-11.8	0	0
50 KICK-PL-5	X	-10.3	-10.3	0	0
51 KICK-PL-6	X	-11.8	-11.8	0	0
52 SA-1	X	-4.6	-4.6	0	0
53 SA-2	X	0	0	0	0
54 SA-3	X	-4.6	-4.6	0	0
55 PL-90-1	X	-4.4	-4.4	0	0
56 PL-90-2	X	-4.4	-4.4	0	0
57 PL-330-1	X	-8.9	-8.9	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 10 : Wind Load (240 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
58	PL-330-2	X	-8.9	-8.9	0	0
59	PL-210-1	X	-4.4	-4.4	0	0
60	PL-210-2	X	-4.4	-4.4	0	0
61	BRACE-1	Z	-4.5	-4.5	0	0
62	BRACE-2	Z	-9	-9	0	0
63	BRACE-3	Z	-4.5	-4.5	0	0
64	CONN-PL-60-1	Z	0	0	0	0
65	CONN-PL-60-2	Z	0	0	0	0
66	CONN-PL-90-1	Z	-7.7	-7.7	0	0
67	CONN-PL-90-2	Z	-7.7	-7.7	0	0
68	CONN-PL-180-1	Z	-13.3	-13.3	0	0
69	CONN-PL-180-2	Z	-13.3	-13.3	0	0
70	CONN-PL-210-1	Z	-7.7	-7.7	0	0
71	CONN-PL-210-2	Z	-7.7	-7.7	0	0
72	CONN-PL-300-1	Z	-13.3	-13.3	0	0
73	CONN-PL-300-2	Z	-13.3	-13.3	0	0
74	CONN-PL-330-1	Z	-15.4	-15.4	0	0
75	CONN-PL-330-2	Z	-15.4	-15.4	0	0
76	COR-1	Z	-3.5	-3.5	0	0
77	COR-2	Z	-7.1	-7.1	0	0
78	COR-3	Z	-3.5	-3.5	0	0
79	COR-PL-90-1	Z	-7.7	-7.7	0	0
80	COR-PL-90-2	Z	-7.7	-7.7	0	0
81	COR-PL-90-3	Z	-7.7	-7.7	0	0
82	COR-PL-90-4	Z	-7.7	-7.7	0	0
83	COR-PL-210-1	Z	-7.7	-7.7	0	0
84	COR-PL-210-2	Z	-7.7	-7.7	0	0
85	COR-PL-210-3	Z	-7.7	-7.7	0	0
86	COR-PL-210-4	Z	-7.7	-7.7	0	0
87	COR-PL-330-1	Z	-15.4	-15.4	0	0
88	COR-PL-330-2	Z	-15.4	-15.4	0	0
89	COR-PL-330-3	Z	-15.4	-15.4	0	0
90	COR-PL-330-4	Z	-15.4	-15.4	0	0
91	FM-0	Z	-4.5	-4.5	0	0
92	FM-120	Z	-4.5	-4.5	0	0
93	FM-240	Z	-9	-9	0	0
94	GRATE-H-90-1	Z	-4.3	-4.3	0	0
95	GRATE-H-90-2	Z	-4.3	-4.3	0	0
96	GRATE-H-210-1	Z	-4.3	-4.3	0	0
97	GRATE-H-210-2	Z	-4.3	-4.3	0	0
98	GRATE-H-330-1	Z	-8.5	-8.5	0	0
99	GRATE-H-330-2	Z	-8.5	-8.5	0	0
100	HR-0	Z	-3.1	-3.1	0	0
101	HR-120	Z	-3.1	-3.1	0	0
102	HR-240	Z	-6.1	-6.1	0	0
103	KICK-1	Z	-17.5	-17.5	0	0
104	KICK-2	Z	-17.5	-17.5	0	0
105	KICK-3	Z	-17.5	-17.5	0	0
106	KICK-PL-1	Z	-17.8	-17.8	0	0
107	KICK-PL-2	Z	-20.5	-20.5	0	0
108	KICK-PL-3	Z	0	0	0	0
109	KICK-PL-4	Z	-20.5	-20.5	0	0
110	KICK-PL-5	Z	-17.8	-17.8	0	0
111	KICK-PL-6	Z	-20.5	-20.5	0	0
112	SA-1	Z	-7.9	-7.9	0	0
113	SA-2	Z	0	0	0	0
114	SA-3	Z	-7.9	-7.9	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 10 : Wind Load (240 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
115	PL-90-1	Z	-7.7	-7.7	0	0
116	PL-90-2	Z	-7.7	-7.7	0	0
117	PL-330-1	Z	-15.4	-15.4	0	0
118	PL-330-2	Z	-15.4	-15.4	0	0
119	PL-210-1	Z	-7.7	-7.7	0	0
120	PL-210-2	Z	-7.7	-7.7	0	0

Member Distributed Loads (BLC 11 : Wind Load (270 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CONN-PL-60-1	X	0	0	0	0
5	CONN-PL-60-2	X	0	0	0	0
6	CONN-PL-90-1	X	0	0	0	0
7	CONN-PL-90-2	X	0	0	0	0
8	CONN-PL-180-1	X	0	0	0	0
9	CONN-PL-180-2	X	0	0	0	0
10	CONN-PL-210-1	X	0	0	0	0
11	CONN-PL-210-2	X	0	0	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	0	0	0	0
17	COR-2	X	0	0	0	0
18	COR-3	X	0	0	0	0
19	COR-PL-90-1	X	0	0	0	0
20	COR-PL-90-2	X	0	0	0	0
21	COR-PL-90-3	X	0	0	0	0
22	COR-PL-90-4	X	0	0	0	0
23	COR-PL-210-1	X	0	0	0	0
24	COR-PL-210-2	X	0	0	0	0
25	COR-PL-210-3	X	0	0	0	0
26	COR-PL-210-4	X	0	0	0	0
27	COR-PL-330-1	X	0	0	0	0
28	COR-PL-330-2	X	0	0	0	0
29	COR-PL-330-3	X	0	0	0	0
30	COR-PL-330-4	X	0	0	0	0
31	FM-0	X	0	0	0	0
32	FM-120	X	0	0	0	0
33	FM-240	X	0	0	0	0
34	GRATE-H-90-1	X	0	0	0	0
35	GRATE-H-90-2	X	0	0	0	0
36	GRATE-H-210-1	X	0	0	0	0
37	GRATE-H-210-2	X	0	0	0	0
38	GRATE-H-330-1	X	0	0	0	0
39	GRATE-H-330-2	X	0	0	0	0
40	HR-0	X	0	0	0	0
41	HR-120	X	0	0	0	0
42	HR-240	X	0	0	0	0
43	KICK-1	X	0	0	0	0
44	KICK-2	X	0	0	0	0
45	KICK-3	X	0	0	0	0
46	KICK-PL-1	X	0	0	0	0
47	KICK-PL-2	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 11 : Wind Load (270 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
48	KICK-PL-3	X	0	0	0
49	KICK-PL-4	X	0	0	0
50	KICK-PL-5	X	0	0	0
51	KICK-PL-6	X	0	0	0
52	SA-1	X	0	0	0
53	SA-2	X	0	0	0
54	SA-3	X	0	0	0
55	PL-90-1	X	0	0	0
56	PL-90-2	X	0	0	0
57	PL-330-1	X	0	0	0
58	PL-330-2	X	0	0	0
59	PL-210-1	X	0	0	0
60	PL-210-2	X	0	0	0
61	BRACE-1	Z	-9	-9	0
62	BRACE-2	Z	-9	-9	0
63	BRACE-3	Z	0	0	0
64	CONN-PL-60-1	Z	-8.9	-8.9	0
65	CONN-PL-60-2	Z	-8.9	-8.9	0
66	CONN-PL-90-1	Z	0	0	0
67	CONN-PL-90-2	Z	0	0	0
68	CONN-PL-180-1	Z	-17.8	-17.8	0
69	CONN-PL-180-2	Z	-17.8	-17.8	0
70	CONN-PL-210-1	Z	-15.4	-15.4	0
71	CONN-PL-210-2	Z	-15.4	-15.4	0
72	CONN-PL-300-1	Z	-8.9	-8.9	0
73	CONN-PL-300-2	Z	-8.9	-8.9	0
74	CONN-PL-330-1	Z	-15.4	-15.4	0
75	CONN-PL-330-2	Z	-15.4	-15.4	0
76	COR-1	Z	-7.1	-7.1	0
77	COR-2	Z	-7.1	-7.1	0
78	COR-3	Z	0	0	0
79	COR-PL-90-1	Z	0	0	0
80	COR-PL-90-2	Z	0	0	0
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	-15.4	-15.4	0
84	COR-PL-210-2	Z	-15.4	-15.4	0
85	COR-PL-210-3	Z	-15.4	-15.4	0
86	COR-PL-210-4	Z	-15.4	-15.4	0
87	COR-PL-330-1	Z	-15.4	-15.4	0
88	COR-PL-330-2	Z	-15.4	-15.4	0
89	COR-PL-330-3	Z	-15.4	-15.4	0
90	COR-PL-330-4	Z	-15.4	-15.4	0
91	FM-0	Z	0	0	0
92	FM-120	Z	-9	-9	0
93	FM-240	Z	-9	-9	0
94	GRATE-H-90-1	Z	0	0	0
95	GRATE-H-90-2	Z	0	0	0
96	GRATE-H-210-1	Z	-8.5	-8.5	0
97	GRATE-H-210-2	Z	-8.5	-8.5	0
98	GRATE-H-330-1	Z	-8.5	-8.5	0
99	GRATE-H-330-2	Z	-8.5	-8.5	0
100	HR-0	Z	0	0	0
101	HR-120	Z	-6.1	-6.1	0
102	HR-240	Z	-6.1	-6.1	0
103	KICK-1	Z	-20.2	-20.2	0
104	KICK-2	Z	-20.2	-20.2	0



Member Distributed Loads (BLC 11 : Wind Load (270 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
105	KICK-3	Z	-20.2	-20.2	0	0
106	KICK-PL-1	Z	-11.8	-11.8	0	0
107	KICK-PL-2	Z	-23.7	-23.7	0	0
108	KICK-PL-3	Z	-11.8	-11.8	0	0
109	KICK-PL-4	Z	-23.7	-23.7	0	0
110	KICK-PL-5	Z	-23.7	-23.7	0	0
111	KICK-PL-6	Z	-23.7	-23.7	0	0
112	SA-1	Z	-5.3	-5.3	0	0
113	SA-2	Z	-5.3	-5.3	0	0
114	SA-3	Z	-10.5	-10.5	0	0
115	PL-90-1	Z	0	0	0	0
116	PL-90-2	Z	0	0	0	0
117	PL-330-1	Z	-15.4	-15.4	0	0
118	PL-330-2	Z	-15.4	-15.4	0	0
119	PL-210-1	Z	-15.4	-15.4	0	0
120	PL-210-2	Z	-15.4	-15.4	0	0

Member Distributed Loads (BLC 12 : Wind Load (300 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	5.2	5.2	0	0
2	BRACE-2	X	2.6	2.6	0	0
3	BRACE-3	X	2.6	2.6	0	0
4	CONN-PL-60-1	X	7.7	7.7	0	0
5	CONN-PL-60-2	X	7.7	7.7	0	0
6	CONN-PL-90-1	X	4.4	4.4	0	0
7	CONN-PL-90-2	X	4.4	4.4	0	0
8	CONN-PL-180-1	X	7.7	7.7	0	0
9	CONN-PL-180-2	X	7.7	7.7	0	0
10	CONN-PL-210-1	X	8.9	8.9	0	0
11	CONN-PL-210-2	X	8.9	8.9	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	4.4	4.4	0	0
15	CONN-PL-330-2	X	4.4	4.4	0	0
16	COR-1	X	4.1	4.1	0	0
17	COR-2	X	2	2	0	0
18	COR-3	X	2	2	0	0
19	COR-PL-90-1	X	4.4	4.4	0	0
20	COR-PL-90-2	X	4.4	4.4	0	0
21	COR-PL-90-3	X	4.4	4.4	0	0
22	COR-PL-90-4	X	4.4	4.4	0	0
23	COR-PL-210-1	X	8.9	8.9	0	0
24	COR-PL-210-2	X	8.9	8.9	0	0
25	COR-PL-210-3	X	8.9	8.9	0	0
26	COR-PL-210-4	X	8.9	8.9	0	0
27	COR-PL-330-1	X	4.4	4.4	0	0
28	COR-PL-330-2	X	4.4	4.4	0	0
29	COR-PL-330-3	X	4.4	4.4	0	0
30	COR-PL-330-4	X	4.4	4.4	0	0
31	FM-0	X	2.6	2.6	0	0
32	FM-120	X	5.2	5.2	0	0
33	FM-240	X	2.6	2.6	0	0
34	GRATE-H-90-1	X	2.5	2.5	0	0
35	GRATE-H-90-2	X	2.5	2.5	0	0
36	GRATE-H-210-1	X	4.9	4.9	0	0
37	GRATE-H-210-2	X	4.9	4.9	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 12 : Wind Load (300 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
38	GRATE-H-330-1	X	2.5	2.5	0	0
39	GRATE-H-330-2	X	2.5	2.5	0	0
40	HR-0	X	1.8	1.8	0	0
41	HR-120	X	3.5	3.5	0	0
42	HR-240	X	1.8	1.8	0	0
43	KICK-1	X	10.1	10.1	0	0
44	KICK-2	X	10.1	10.1	0	0
45	KICK-3	X	10.1	10.1	0	0
46	KICK-PL-1	X	0	0	0	0
47	KICK-PL-2	X	11.8	11.8	0	0
48	KICK-PL-3	X	10.3	10.3	0	0
49	KICK-PL-4	X	11.8	11.8	0	0
50	KICK-PL-5	X	10.3	10.3	0	0
51	KICK-PL-6	X	11.8	11.8	0	0
52	SA-1	X	0	0	0	0
53	SA-2	X	4.6	4.6	0	0
54	SA-3	X	4.6	4.6	0	0
55	PL-90-1	X	4.4	4.4	0	0
56	PL-90-2	X	4.4	4.4	0	0
57	PL-330-1	X	4.4	4.4	0	0
58	PL-330-2	X	4.4	4.4	0	0
59	PL-210-1	X	8.9	8.9	0	0
60	PL-210-2	X	8.9	8.9	0	0
61	BRACE-1	Z	-9	-9	0	0
62	BRACE-2	Z	-4.5	-4.5	0	0
63	BRACE-3	Z	-4.5	-4.5	0	0
64	CONN-PL-60-1	Z	-13.3	-13.3	0	0
65	CONN-PL-60-2	Z	-13.3	-13.3	0	0
66	CONN-PL-90-1	Z	-7.7	-7.7	0	0
67	CONN-PL-90-2	Z	-7.7	-7.7	0	0
68	CONN-PL-180-1	Z	-13.3	-13.3	0	0
69	CONN-PL-180-2	Z	-13.3	-13.3	0	0
70	CONN-PL-210-1	Z	-15.4	-15.4	0	0
71	CONN-PL-210-2	Z	-15.4	-15.4	0	0
72	CONN-PL-300-1	Z	0	0	0	0
73	CONN-PL-300-2	Z	0	0	0	0
74	CONN-PL-330-1	Z	-7.7	-7.7	0	0
75	CONN-PL-330-2	Z	-7.7	-7.7	0	0
76	COR-1	Z	-7.1	-7.1	0	0
77	COR-2	Z	-3.5	-3.5	0	0
78	COR-3	Z	-3.5	-3.5	0	0
79	COR-PL-90-1	Z	-7.7	-7.7	0	0
80	COR-PL-90-2	Z	-7.7	-7.7	0	0
81	COR-PL-90-3	Z	-7.7	-7.7	0	0
82	COR-PL-90-4	Z	-7.7	-7.7	0	0
83	COR-PL-210-1	Z	-15.4	-15.4	0	0
84	COR-PL-210-2	Z	-15.4	-15.4	0	0
85	COR-PL-210-3	Z	-15.4	-15.4	0	0
86	COR-PL-210-4	Z	-15.4	-15.4	0	0
87	COR-PL-330-1	Z	-7.7	-7.7	0	0
88	COR-PL-330-2	Z	-7.7	-7.7	0	0
89	COR-PL-330-3	Z	-7.7	-7.7	0	0
90	COR-PL-330-4	Z	-7.7	-7.7	0	0
91	FM-0	Z	-4.5	-4.5	0	0
92	FM-120	Z	-9	-9	0	0
93	FM-240	Z	-4.5	-4.5	0	0
94	GRATE-H-90-1	Z	-4.3	-4.3	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 12 : Wind Load (300 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
95	GRATE-H-90-2	Z	-4.3	-4.3	0	0
96	GRATE-H-210-1	Z	-8.5	-8.5	0	0
97	GRATE-H-210-2	Z	-8.5	-8.5	0	0
98	GRATE-H-330-1	Z	-4.3	-4.3	0	0
99	GRATE-H-330-2	Z	-4.3	-4.3	0	0
100	HR-0	Z	-3.1	-3.1	0	0
101	HR-120	Z	-6.1	-6.1	0	0
102	HR-240	Z	-3.1	-3.1	0	0
103	KICK-1	Z	-17.5	-17.5	0	0
104	KICK-2	Z	-17.5	-17.5	0	0
105	KICK-3	Z	-17.5	-17.5	0	0
106	KICK-PL-1	Z	0	0	0	0
107	KICK-PL-2	Z	-20.5	-20.5	0	0
108	KICK-PL-3	Z	-17.8	-17.8	0	0
109	KICK-PL-4	Z	-20.5	-20.5	0	0
110	KICK-PL-5	Z	-17.8	-17.8	0	0
111	KICK-PL-6	Z	-20.5	-20.5	0	0
112	SA-1	Z	0	0	0	0
113	SA-2	Z	-7.9	-7.9	0	0
114	SA-3	Z	-7.9	-7.9	0	0
115	PL-90-1	Z	-7.7	-7.7	0	0
116	PL-90-2	Z	-7.7	-7.7	0	0
117	PL-330-1	Z	-7.7	-7.7	0	0
118	PL-330-2	Z	-7.7	-7.7	0	0
119	PL-210-1	Z	-15.4	-15.4	0	0
120	PL-210-2	Z	-15.4	-15.4	0	0

Member Distributed Loads (BLC 13 : Wind Load (330 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	7.8	7.8	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	7.8	7.8	0	0
4	CONN-PL-60-1	X	15.4	15.4	0	0
5	CONN-PL-60-2	X	15.4	15.4	0	0
6	CONN-PL-90-1	X	13.3	13.3	0	0
7	CONN-PL-90-2	X	13.3	13.3	0	0
8	CONN-PL-180-1	X	7.7	7.7	0	0
9	CONN-PL-180-2	X	7.7	7.7	0	0
10	CONN-PL-210-1	X	13.3	13.3	0	0
11	CONN-PL-210-2	X	13.3	13.3	0	0
12	CONN-PL-300-1	X	7.7	7.7	0	0
13	CONN-PL-300-2	X	7.7	7.7	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	6.1	6.1	0	0
17	COR-2	X	0	0	0	0
18	COR-3	X	6.1	6.1	0	0
19	COR-PL-90-1	X	13.3	13.3	0	0
20	COR-PL-90-2	X	13.3	13.3	0	0
21	COR-PL-90-3	X	13.3	13.3	0	0
22	COR-PL-90-4	X	13.3	13.3	0	0
23	COR-PL-210-1	X	13.3	13.3	0	0
24	COR-PL-210-2	X	13.3	13.3	0	0
25	COR-PL-210-3	X	13.3	13.3	0	0
26	COR-PL-210-4	X	13.3	13.3	0	0
27	COR-PL-330-1	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 13 : Wind Load (330 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
28	COR-PL-330-2	X	0	0	0
29	COR-PL-330-3	X	0	0	0
30	COR-PL-330-4	X	0	0	0
31	FM-0	X	7.8	7.8	0
32	FM-120	X	7.8	7.8	0
33	FM-240	X	0	0	0
34	GRATE-H-90-1	X	7.4	7.4	0
35	GRATE-H-90-2	X	7.4	7.4	0
36	GRATE-H-210-1	X	7.4	7.4	0
37	GRATE-H-210-2	X	7.4	7.4	0
38	GRATE-H-330-1	X	0	0	0
39	GRATE-H-330-2	X	0	0	0
40	HR-0	X	5.3	5.3	0
41	HR-120	X	5.3	5.3	0
42	HR-240	X	0	0	0
43	KICK-1	X	17.5	17.5	0
44	KICK-2	X	17.5	17.5	0
45	KICK-3	X	17.5	17.5	0
46	KICK-PL-1	X	10.3	10.3	0
47	KICK-PL-2	X	20.5	20.5	0
48	KICK-PL-3	X	20.5	20.5	0
49	KICK-PL-4	X	20.5	20.5	0
50	KICK-PL-5	X	10.3	10.3	0
51	KICK-PL-6	X	20.5	20.5	0
52	SA-1	X	4.6	4.6	0
53	SA-2	X	9.1	9.1	0
54	SA-3	X	4.6	4.6	0
55	PL-90-1	X	13.3	13.3	0
56	PL-90-2	X	13.3	13.3	0
57	PL-330-1	X	0	0	0
58	PL-330-2	X	0	0	0
59	PL-210-1	X	13.3	13.3	0
60	PL-210-2	X	13.3	13.3	0
61	BRACE-1	Z	-4.5	-4.5	0
62	BRACE-2	Z	0	0	0
63	BRACE-3	Z	-4.5	-4.5	0
64	CONN-PL-60-1	Z	-8.9	-8.9	0
65	CONN-PL-60-2	Z	-8.9	-8.9	0
66	CONN-PL-90-1	Z	-7.7	-7.7	0
67	CONN-PL-90-2	Z	-7.7	-7.7	0
68	CONN-PL-180-1	Z	-4.4	-4.4	0
69	CONN-PL-180-2	Z	-4.4	-4.4	0
70	CONN-PL-210-1	Z	-7.7	-7.7	0
71	CONN-PL-210-2	Z	-7.7	-7.7	0
72	CONN-PL-300-1	Z	-4.4	-4.4	0
73	CONN-PL-300-2	Z	-4.4	-4.4	0
74	CONN-PL-330-1	Z	0	0	0
75	CONN-PL-330-2	Z	0	0	0
76	COR-1	Z	-3.5	-3.5	0
77	COR-2	Z	0	0	0
78	COR-3	Z	-3.5	-3.5	0
79	COR-PL-90-1	Z	-7.7	-7.7	0
80	COR-PL-90-2	Z	-7.7	-7.7	0
81	COR-PL-90-3	Z	-7.7	-7.7	0
82	COR-PL-90-4	Z	-7.7	-7.7	0
83	COR-PL-210-1	Z	-7.7	-7.7	0
84	COR-PL-210-2	Z	-7.7	-7.7	0

Member Distributed Loads (BLC 13 : Wind Load (330 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
85	COR-PL-210-3	Z	-7.7	-7.7	0	0
86	COR-PL-210-4	Z	-7.7	-7.7	0	0
87	COR-PL-330-1	Z	0	0	0	0
88	COR-PL-330-2	Z	0	0	0	0
89	COR-PL-330-3	Z	0	0	0	0
90	COR-PL-330-4	Z	0	0	0	0
91	FM-0	Z	-4.5	-4.5	0	0
92	FM-120	Z	-4.5	-4.5	0	0
93	FM-240	Z	0	0	0	0
94	GRATE-H-90-1	Z	-4.3	-4.3	0	0
95	GRATE-H-90-2	Z	-4.3	-4.3	0	0
96	GRATE-H-210-1	Z	-4.3	-4.3	0	0
97	GRATE-H-210-2	Z	-4.3	-4.3	0	0
98	GRATE-H-330-1	Z	0	0	0	0
99	GRATE-H-330-2	Z	0	0	0	0
100	HR-0	Z	-3.1	-3.1	0	0
101	HR-120	Z	-3.1	-3.1	0	0
102	HR-240	Z	0	0	0	0
103	KICK-1	Z	-10.1	-10.1	0	0
104	KICK-2	Z	-10.1	-10.1	0	0
105	KICK-3	Z	-10.1	-10.1	0	0
106	KICK-PL-1	Z	-5.9	-5.9	0	0
107	KICK-PL-2	Z	-11.8	-11.8	0	0
108	KICK-PL-3	Z	-11.8	-11.8	0	0
109	KICK-PL-4	Z	-11.8	-11.8	0	0
110	KICK-PL-5	Z	-5.9	-5.9	0	0
111	KICK-PL-6	Z	-11.8	-11.8	0	0
112	SA-1	Z	-2.6	-2.6	0	0
113	SA-2	Z	-5.3	-5.3	0	0
114	SA-3	Z	-2.6	-2.6	0	0
115	PL-90-1	Z	-7.7	-7.7	0	0
116	PL-90-2	Z	-7.7	-7.7	0	0
117	PL-330-1	Z	0	0	0	0
118	PL-330-2	Z	0	0	0	0
119	PL-210-1	Z	-7.7	-7.7	0	0
120	PL-210-2	Z	-7.7	-7.7	0	0

Member Distributed Loads (BLC 14 : Ice Load)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	Y	-9.5	-9.5	0	0
2	BRACE-2	Y	-9.5	-9.5	0	0
3	BRACE-3	Y	-9.5	-9.5	0	0
4	CONN-PL-60-1	Y	-10	-10	0	0
5	CONN-PL-60-2	Y	-10	-10	0	0
6	CONN-PL-90-1	Y	-10	-10	0	0
7	CONN-PL-90-2	Y	-10	-10	0	0
8	CONN-PL-180-1	Y	-10	-10	0	0
9	CONN-PL-180-2	Y	-10	-10	0	0
10	CONN-PL-210-1	Y	-10	-10	0	0
11	CONN-PL-210-2	Y	-10	-10	0	0
12	CONN-PL-300-1	Y	-10	-10	0	0
13	CONN-PL-300-2	Y	-10	-10	0	0
14	CONN-PL-330-1	Y	-10	-10	0	0
15	CONN-PL-330-2	Y	-10	-10	0	0
16	COR-1	Y	-6.5	-6.5	0	0
17	COR-2	Y	-6.5	-6.5	0	0



Member Distributed Loads (BLC 14 : Ice Load) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in.%]	End Location[in.%]
18	COR-3	Y	-6.5	-6.5	0	0
19	COR-PL-90-1	Y	-10	-10	0	0
20	COR-PL-90-2	Y	-10	-10	0	0
21	COR-PL-90-3	Y	-10	-10	0	0
22	COR-PL-90-4	Y	-10	-10	0	0
23	COR-PL-210-1	Y	-10	-10	0	0
24	COR-PL-210-2	Y	-10	-10	0	0
25	COR-PL-210-3	Y	-10	-10	0	0
26	COR-PL-210-4	Y	-10	-10	0	0
27	COR-PL-330-1	Y	-10	-10	0	0
28	COR-PL-330-2	Y	-10	-10	0	0
29	COR-PL-330-3	Y	-10	-10	0	0
30	COR-PL-330-4	Y	-10	-10	0	0
31	FM-0	Y	-6.5	-6.5	0	0
32	FM-120	Y	-6.5	-6.5	0	0
33	FM-240	Y	-6.5	-6.5	0	0
34	GRATE-H-90-1	Y	-5.5	-5.5	0	0
35	GRATE-H-90-2	Y	-5.5	-5.5	0	0
36	GRATE-H-210-1	Y	-5.5	-5.5	0	0
37	GRATE-H-210-2	Y	-5.5	-5.5	0	0
38	GRATE-H-330-1	Y	-5.5	-5.5	0	0
39	GRATE-H-330-2	Y	-5.5	-5.5	0	0
40	HR-0	Y	-4.9	-4.9	0	0
41	HR-120	Y	-4.9	-4.9	0	0
42	HR-240	Y	-4.9	-4.9	0	0
43	KICK-1	Y	-9.3	-9.3	0	0
44	KICK-2	Y	-9.3	-9.3	0	0
45	KICK-3	Y	-9.3	-9.3	0	0
46	KICK-PL-1	Y	-12.8	-12.8	0	0
47	KICK-PL-2	Y	-12.8	-12.8	0	0
48	KICK-PL-3	Y	-12.8	-12.8	0	0
49	KICK-PL-4	Y	-12.8	-12.8	0	0
50	KICK-PL-5	Y	-12.8	-12.8	0	0
51	KICK-PL-6	Y	-12.8	-12.8	0	0
52	SA-1	Y	-9.5	-9.5	0	0
53	SA-2	Y	-9.5	-9.5	0	0
54	SA-3	Y	-9.5	-9.5	0	0
55	PL-90-1	Y	-10	-10	0	0
56	PL-90-2	Y	-10	-10	0	0
57	PL-330-1	Y	-10	-10	0	0
58	PL-330-2	Y	-10	-10	0	0
59	PL-210-1	Y	-10	-10	0	0
60	PL-210-2	Y	-10	-10	0	0

Member Distributed Loads (BLC 15 : Wind on Ice (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in.%]	End Location[in.%]
1	BRACE-1	X	1.4	1.4	0	0
2	BRACE-2	X	1.4	1.4	0	0
3	BRACE-3	X	2.9	2.9	0	0
4	CONN-PL-60-1	X	3.6	3.6	0	0
5	CONN-PL-60-2	X	3.6	3.6	0	0
6	CONN-PL-90-1	X	4.1	4.1	0	0
7	CONN-PL-90-2	X	4.1	4.1	0	0
8	CONN-PL-180-1	X	0	0	0	0
9	CONN-PL-180-2	X	0	0	0	0
10	CONN-PL-210-1	X	2.1	2.1	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
11	CONN-PL-210-2	X	2.1	2.1	0	0
12	CONN-PL-300-1	X	3.6	3.6	0	0
13	CONN-PL-300-2	X	3.6	3.6	0	0
14	CONN-PL-330-1	X	2.1	2.1	0	0
15	CONN-PL-330-2	X	2.1	2.1	0	0
16	COR-1	X	1.2	1.2	0	0
17	COR-2	X	1.2	1.2	0	0
18	COR-3	X	2.3	2.3	0	0
19	COR-PL-90-1	X	4.1	4.1	0	0
20	COR-PL-90-2	X	4.1	4.1	0	0
21	COR-PL-90-3	X	4.1	4.1	0	0
22	COR-PL-90-4	X	4.1	4.1	0	0
23	COR-PL-210-1	X	2.1	2.1	0	0
24	COR-PL-210-2	X	2.1	2.1	0	0
25	COR-PL-210-3	X	2.1	2.1	0	0
26	COR-PL-210-4	X	2.1	2.1	0	0
27	COR-PL-330-1	X	2.1	2.1	0	0
28	COR-PL-330-2	X	2.1	2.1	0	0
29	COR-PL-330-3	X	2.1	2.1	0	0
30	COR-PL-330-4	X	2.1	2.1	0	0
31	FM-0	X	3.2	3.2	0	0
32	FM-120	X	1.6	1.6	0	0
33	FM-240	X	1.6	1.6	0	0
34	GRATE-H-90-1	X	2.8	2.8	0	0
35	GRATE-H-90-2	X	2.8	2.8	0	0
36	GRATE-H-210-1	X	1.4	1.4	0	0
37	GRATE-H-210-2	X	1.4	1.4	0	0
38	GRATE-H-330-1	X	1.4	1.4	0	0
39	GRATE-H-330-2	X	1.4	1.4	0	0
40	HR-0	X	2.6	2.6	0	0
41	HR-120	X	1.3	1.3	0	0
42	HR-240	X	1.3	1.3	0	0
43	KICK-1	X	4.7	4.7	0	0
44	KICK-2	X	4.7	4.7	0	0
45	KICK-3	X	4.7	4.7	0	0
46	KICK-PL-1	X	4.5	4.5	0	0
47	KICK-PL-2	X	5.2	5.2	0	0
48	KICK-PL-3	X	4.5	4.5	0	0
49	KICK-PL-4	X	5.2	5.2	0	0
50	KICK-PL-5	X	0	0	0	0
51	KICK-PL-6	X	5.2	5.2	0	0
52	SA-1	X	2.5	2.5	0	0
53	SA-2	X	2.5	2.5	0	0
54	SA-3	X	0	0	0	0
55	PL-90-1	X	4.1	4.1	0	0
56	PL-90-2	X	4.1	4.1	0	0
57	PL-330-1	X	2.1	2.1	0	0
58	PL-330-2	X	2.1	2.1	0	0
59	PL-210-1	X	2.1	2.1	0	0
60	PL-210-2	X	2.1	2.1	0	0
61	BRACE-1	Z	0	0	0	0
62	BRACE-2	Z	0	0	0	0
63	BRACE-3	Z	0	0	0	0
64	CONN-PL-60-1	Z	0	0	0	0
65	CONN-PL-60-2	Z	0	0	0	0
66	CONN-PL-90-1	Z	0	0	0	0
67	CONN-PL-90-2	Z	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 15 : Wind on Ice (0 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
68	CONN-PL-180-1	Z	0	0	0
69	CONN-PL-180-2	Z	0	0	0
70	CONN-PL-210-1	Z	0	0	0
71	CONN-PL-210-2	Z	0	0	0
72	CONN-PL-300-1	Z	0	0	0
73	CONN-PL-300-2	Z	0	0	0
74	CONN-PL-330-1	Z	0	0	0
75	CONN-PL-330-2	Z	0	0	0
76	COR-1	Z	0	0	0
77	COR-2	Z	0	0	0
78	COR-3	Z	0	0	0
79	COR-PL-90-1	Z	0	0	0
80	COR-PL-90-2	Z	0	0	0
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	0	0	0
84	COR-PL-210-2	Z	0	0	0
85	COR-PL-210-3	Z	0	0	0
86	COR-PL-210-4	Z	0	0	0
87	COR-PL-330-1	Z	0	0	0
88	COR-PL-330-2	Z	0	0	0
89	COR-PL-330-3	Z	0	0	0
90	COR-PL-330-4	Z	0	0	0
91	FM-0	Z	0	0	0
92	FM-120	Z	0	0	0
93	FM-240	Z	0	0	0
94	GRATE-H-90-1	Z	0	0	0
95	GRATE-H-90-2	Z	0	0	0
96	GRATE-H-210-1	Z	0	0	0
97	GRATE-H-210-2	Z	0	0	0
98	GRATE-H-330-1	Z	0	0	0
99	GRATE-H-330-2	Z	0	0	0
100	HR-0	Z	0	0	0
101	HR-120	Z	0	0	0
102	HR-240	Z	0	0	0
103	KICK-1	Z	0	0	0
104	KICK-2	Z	0	0	0
105	KICK-3	Z	0	0	0
106	KICK-PL-1	Z	0	0	0
107	KICK-PL-2	Z	0	0	0
108	KICK-PL-3	Z	0	0	0
109	KICK-PL-4	Z	0	0	0
110	KICK-PL-5	Z	0	0	0
111	KICK-PL-6	Z	0	0	0
112	SA-1	Z	0	0	0
113	SA-2	Z	0	0	0
114	SA-3	Z	0	0	0
115	PL-90-1	Z	0	0	0
116	PL-90-2	Z	0	0	0
117	PL-330-1	Z	0	0	0
118	PL-330-2	Z	0	0	0
119	PL-210-1	Z	0	0	0
120	PL-210-2	Z	0	0	0

Member Distributed Loads (BLC 16 : Wind on Ice (30 deg))

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
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Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 16 : Wind on Ice (30 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1 BRACE-1	X	0	0	0	0
2 BRACE-2	X	2.2	2.2	0	0
3 BRACE-3	X	2.2	2.2	0	0
4 CONN-PL-60-1	X	1.8	1.8	0	0
5 CONN-PL-60-2	X	1.8	1.8	0	0
6 CONN-PL-90-1	X	3.1	3.1	0	0
7 CONN-PL-90-2	X	3.1	3.1	0	0
8 CONN-PL-180-1	X	1.8	1.8	0	0
9 CONN-PL-180-2	X	1.8	1.8	0	0
10 CONN-PL-210-1	X	0	0	0	0
11 CONN-PL-210-2	X	0	0	0	0
12 CONN-PL-300-1	X	3.6	3.6	0	0
13 CONN-PL-300-2	X	3.6	3.6	0	0
14 CONN-PL-330-1	X	3.1	3.1	0	0
15 CONN-PL-330-2	X	3.1	3.1	0	0
16 COR-1	X	0	0	0	0
17 COR-2	X	1.7	1.7	0	0
18 COR-3	X	1.7	1.7	0	0
19 COR-PL-90-1	X	3.1	3.1	0	0
20 COR-PL-90-2	X	3.1	3.1	0	0
21 COR-PL-90-3	X	3.1	3.1	0	0
22 COR-PL-90-4	X	3.1	3.1	0	0
23 COR-PL-210-1	X	0	0	0	0
24 COR-PL-210-2	X	0	0	0	0
25 COR-PL-210-3	X	0	0	0	0
26 COR-PL-210-4	X	0	0	0	0
27 COR-PL-330-1	X	3.1	3.1	0	0
28 COR-PL-330-2	X	3.1	3.1	0	0
29 COR-PL-330-3	X	3.1	3.1	0	0
30 COR-PL-330-4	X	3.1	3.1	0	0
31 FM-0	X	2.4	2.4	0	0
32 FM-120	X	0	0	0	0
33 FM-240	X	2.4	2.4	0	0
34 GRATE-H-90-1	X	2.1	2.1	0	0
35 GRATE-H-90-2	X	2.1	2.1	0	0
36 GRATE-H-210-1	X	0	0	0	0
37 GRATE-H-210-2	X	0	0	0	0
38 GRATE-H-330-1	X	2.1	2.1	0	0
39 GRATE-H-330-2	X	2.1	2.1	0	0
40 HR-0	X	2	2	0	0
41 HR-120	X	0	0	0	0
42 HR-240	X	2	2	0	0
43 KICK-1	X	4	4	0	0
44 KICK-2	X	4	4	0	0
45 KICK-3	X	4	4	0	0
46 KICK-PL-1	X	4.5	4.5	0	0
47 KICK-PL-2	X	4.5	4.5	0	0
48 KICK-PL-3	X	2.3	2.3	0	0
49 KICK-PL-4	X	4.5	4.5	0	0
50 KICK-PL-5	X	2.3	2.3	0	0
51 KICK-PL-6	X	4.5	4.5	0	0
52 SA-1	X	2.5	2.5	0	0
53 SA-2	X	1.3	1.3	0	0
54 SA-3	X	1.3	1.3	0	0
55 PL-90-1	X	3.1	3.1	0	0
56 PL-90-2	X	3.1	3.1	0	0
57 PL-330-1	X	3.1	3.1	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 16 : Wind on Ice (30 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
58	PL-330-2	X	3.1	3.1	0	0
59	PL-210-1	X	0	0	0	0
60	PL-210-2	X	0	0	0	0
61	BRACE-1	Z	0	0	0	0
62	BRACE-2	Z	1.3	1.3	0	0
63	BRACE-3	Z	1.3	1.3	0	0
64	CONN-PL-60-1	Z	1	1	0	0
65	CONN-PL-60-2	Z	1	1	0	0
66	CONN-PL-90-1	Z	1.8	1.8	0	0
67	CONN-PL-90-2	Z	1.8	1.8	0	0
68	CONN-PL-180-1	Z	1	1	0	0
69	CONN-PL-180-2	Z	1	1	0	0
70	CONN-PL-210-1	Z	0	0	0	0
71	CONN-PL-210-2	Z	0	0	0	0
72	CONN-PL-300-1	Z	2.1	2.1	0	0
73	CONN-PL-300-2	Z	2.1	2.1	0	0
74	CONN-PL-330-1	Z	1.8	1.8	0	0
75	CONN-PL-330-2	Z	1.8	1.8	0	0
76	COR-1	Z	0	0	0	0
77	COR-2	Z	1	1	0	0
78	COR-3	Z	1	1	0	0
79	COR-PL-90-1	Z	1.8	1.8	0	0
80	COR-PL-90-2	Z	1.8	1.8	0	0
81	COR-PL-90-3	Z	1.8	1.8	0	0
82	COR-PL-90-4	Z	1.8	1.8	0	0
83	COR-PL-210-1	Z	0	0	0	0
84	COR-PL-210-2	Z	0	0	0	0
85	COR-PL-210-3	Z	0	0	0	0
86	COR-PL-210-4	Z	0	0	0	0
87	COR-PL-330-1	Z	1.8	1.8	0	0
88	COR-PL-330-2	Z	1.8	1.8	0	0
89	COR-PL-330-3	Z	1.8	1.8	0	0
90	COR-PL-330-4	Z	1.8	1.8	0	0
91	FM-0	Z	1.4	1.4	0	0
92	FM-120	Z	0	0	0	0
93	FM-240	Z	1.4	1.4	0	0
94	GRATE-H-90-1	Z	1.2	1.2	0	0
95	GRATE-H-90-2	Z	1.2	1.2	0	0
96	GRATE-H-210-1	Z	0	0	0	0
97	GRATE-H-210-2	Z	0	0	0	0
98	GRATE-H-330-1	Z	1.2	1.2	0	0
99	GRATE-H-330-2	Z	1.2	1.2	0	0
100	HR-0	Z	1.1	1.1	0	0
101	HR-120	Z	0	0	0	0
102	HR-240	Z	1.1	1.1	0	0
103	KICK-1	Z	2.3	2.3	0	0
104	KICK-2	Z	2.3	2.3	0	0
105	KICK-3	Z	2.3	2.3	0	0
106	KICK-PL-1	Z	2.6	2.6	0	0
107	KICK-PL-2	Z	2.6	2.6	0	0
108	KICK-PL-3	Z	1.3	1.3	0	0
109	KICK-PL-4	Z	2.6	2.6	0	0
110	KICK-PL-5	Z	1.3	1.3	0	0
111	KICK-PL-6	Z	2.6	2.6	0	0
112	SA-1	Z	1.5	1.5	0	0
113	SA-2	Z	.7	.7	0	0
114	SA-3	Z	.7	.7	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 16 : Wind on Ice (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
115	PL-90-1	Z	1.8	1.8	0	0
116	PL-90-2	Z	1.8	1.8	0	0
117	PL-330-1	Z	1.8	1.8	0	0
118	PL-330-2	Z	1.8	1.8	0	0
119	PL-210-1	Z	0	0	0	0
120	PL-210-2	Z	0	0	0	0

Member Distributed Loads (BLC 17 : Wind on Ice (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	.7	.7	0	0
2	BRACE-2	X	1.4	1.4	0	0
3	BRACE-3	X	.7	.7	0	0
4	CONN-PL-60-1	X	0	0	0	0
5	CONN-PL-60-2	X	0	0	0	0
6	CONN-PL-90-1	X	1	1	0	0
7	CONN-PL-90-2	X	1	1	0	0
8	CONN-PL-180-1	X	1.8	1.8	0	0
9	CONN-PL-180-2	X	1.8	1.8	0	0
10	CONN-PL-210-1	X	1	1	0	0
11	CONN-PL-210-2	X	1	1	0	0
12	CONN-PL-300-1	X	1.8	1.8	0	0
13	CONN-PL-300-2	X	1.8	1.8	0	0
14	CONN-PL-330-1	X	2.1	2.1	0	0
15	CONN-PL-330-2	X	2.1	2.1	0	0
16	COR-1	X	.6	.6	0	0
17	COR-2	X	1.2	1.2	0	0
18	COR-3	X	.6	.6	0	0
19	COR-PL-90-1	X	1	1	0	0
20	COR-PL-90-2	X	1	1	0	0
21	COR-PL-90-3	X	1	1	0	0
22	COR-PL-90-4	X	1	1	0	0
23	COR-PL-210-1	X	1	1	0	0
24	COR-PL-210-2	X	1	1	0	0
25	COR-PL-210-3	X	1	1	0	0
26	COR-PL-210-4	X	1	1	0	0
27	COR-PL-330-1	X	2.1	2.1	0	0
28	COR-PL-330-2	X	2.1	2.1	0	0
29	COR-PL-330-3	X	2.1	2.1	0	0
30	COR-PL-330-4	X	2.1	2.1	0	0
31	FM-0	X	.8	.8	0	0
32	FM-120	X	.8	.8	0	0
33	FM-240	X	1.6	1.6	0	0
34	GRATE-H-90-1	X	.7	.7	0	0
35	GRATE-H-90-2	X	.7	.7	0	0
36	GRATE-H-210-1	X	.7	.7	0	0
37	GRATE-H-210-2	X	.7	.7	0	0
38	GRATE-H-330-1	X	1.4	1.4	0	0
39	GRATE-H-330-2	X	1.4	1.4	0	0
40	HR-0	X	.7	.7	0	0
41	HR-120	X	.7	.7	0	0
42	HR-240	X	1.3	1.3	0	0
43	KICK-1	X	2.3	2.3	0	0
44	KICK-2	X	2.3	2.3	0	0
45	KICK-3	X	2.3	2.3	0	0
46	KICK-PL-1	X	2.3	2.3	0	0
47	KICK-PL-2	X	2.6	2.6	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
48	KICK-PL-3	X	0	0	0
49	KICK-PL-4	X	2.6	2.6	0
50	KICK-PL-5	X	2.3	2.3	0
51	KICK-PL-6	X	2.6	2.6	0
52	SA-1	X	1.3	1.3	0
53	SA-2	X	0	0	0
54	SA-3	X	1.3	1.3	0
55	PL-90-1	X	1	1	0
56	PL-90-2	X	1	1	0
57	PL-330-1	X	2.1	2.1	0
58	PL-330-2	X	2.1	2.1	0
59	PL-210-1	X	1	1	0
60	PL-210-2	X	1	1	0
61	BRACE-1	Z	1.3	1.3	0
62	BRACE-2	Z	2.5	2.5	0
63	BRACE-3	Z	1.3	1.3	0
64	CONN-PL-60-1	Z	0	0	0
65	CONN-PL-60-2	Z	0	0	0
66	CONN-PL-90-1	Z	1.8	1.8	0
67	CONN-PL-90-2	Z	1.8	1.8	0
68	CONN-PL-180-1	Z	3.1	3.1	0
69	CONN-PL-180-2	Z	3.1	3.1	0
70	CONN-PL-210-1	Z	1.8	1.8	0
71	CONN-PL-210-2	Z	1.8	1.8	0
72	CONN-PL-300-1	Z	3.1	3.1	0
73	CONN-PL-300-2	Z	3.1	3.1	0
74	CONN-PL-330-1	Z	3.6	3.6	0
75	CONN-PL-330-2	Z	3.6	3.6	0
76	COR-1	Z	1	1	0
77	COR-2	Z	2	2	0
78	COR-3	Z	1	1	0
79	COR-PL-90-1	Z	1.8	1.8	0
80	COR-PL-90-2	Z	1.8	1.8	0
81	COR-PL-90-3	Z	1.8	1.8	0
82	COR-PL-90-4	Z	1.8	1.8	0
83	COR-PL-210-1	Z	1.8	1.8	0
84	COR-PL-210-2	Z	1.8	1.8	0
85	COR-PL-210-3	Z	1.8	1.8	0
86	COR-PL-210-4	Z	1.8	1.8	0
87	COR-PL-330-1	Z	3.6	3.6	0
88	COR-PL-330-2	Z	3.6	3.6	0
89	COR-PL-330-3	Z	3.6	3.6	0
90	COR-PL-330-4	Z	3.6	3.6	0
91	FM-0	Z	1.4	1.4	0
92	FM-120	Z	1.4	1.4	0
93	FM-240	Z	2.8	2.8	0
94	GRATE-H-90-1	Z	1.2	1.2	0
95	GRATE-H-90-2	Z	1.2	1.2	0
96	GRATE-H-210-1	Z	1.2	1.2	0
97	GRATE-H-210-2	Z	1.2	1.2	0
98	GRATE-H-330-1	Z	2.5	2.5	0
99	GRATE-H-330-2	Z	2.5	2.5	0
100	HR-0	Z	1.1	1.1	0
101	HR-120	Z	1.1	1.1	0
102	HR-240	Z	2.3	2.3	0
103	KICK-1	Z	4	4	0
104	KICK-2	Z	4	4	0

Member Distributed Loads (BLC 17 : Wind on Ice (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
105	KICK-3	Z	4	4	0	0
106	KICK-PL-1	Z	3.9	3.9	0	0
107	KICK-PL-2	Z	4.5	4.5	0	0
108	KICK-PL-3	Z	0	0	0	0
109	KICK-PL-4	Z	4.5	4.5	0	0
110	KICK-PL-5	Z	3.9	3.9	0	0
111	KICK-PL-6	Z	4.5	4.5	0	0
112	SA-1	Z	2.2	2.2	0	0
113	SA-2	Z	0	0	0	0
114	SA-3	Z	2.2	2.2	0	0
115	PL-90-1	Z	1.8	1.8	0	0
116	PL-90-2	Z	1.8	1.8	0	0
117	PL-330-1	Z	3.6	3.6	0	0
118	PL-330-2	Z	3.6	3.6	0	0
119	PL-210-1	Z	1.8	1.8	0	0
120	PL-210-2	Z	1.8	1.8	0	0

Member Distributed Loads (BLC 18 : Wind on Ice (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CONN-PL-60-1	X	0	0	0	0
5	CONN-PL-60-2	X	0	0	0	0
6	CONN-PL-90-1	X	0	0	0	0
7	CONN-PL-90-2	X	0	0	0	0
8	CONN-PL-180-1	X	0	0	0	0
9	CONN-PL-180-2	X	0	0	0	0
10	CONN-PL-210-1	X	0	0	0	0
11	CONN-PL-210-2	X	0	0	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	0	0	0	0
17	COR-2	X	0	0	0	0
18	COR-3	X	0	0	0	0
19	COR-PL-90-1	X	0	0	0	0
20	COR-PL-90-2	X	0	0	0	0
21	COR-PL-90-3	X	0	0	0	0
22	COR-PL-90-4	X	0	0	0	0
23	COR-PL-210-1	X	0	0	0	0
24	COR-PL-210-2	X	0	0	0	0
25	COR-PL-210-3	X	0	0	0	0
26	COR-PL-210-4	X	0	0	0	0
27	COR-PL-330-1	X	0	0	0	0
28	COR-PL-330-2	X	0	0	0	0
29	COR-PL-330-3	X	0	0	0	0
30	COR-PL-330-4	X	0	0	0	0
31	FM-0	X	0	0	0	0
32	FM-120	X	0	0	0	0
33	FM-240	X	0	0	0	0
34	GRATE-H-90-1	X	0	0	0	0
35	GRATE-H-90-2	X	0	0	0	0
36	GRATE-H-210-1	X	0	0	0	0
37	GRATE-H-210-2	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 18 : Wind on Ice (90 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
38	GRATE-H-330-1	X	0	0	0
39	GRATE-H-330-2	X	0	0	0
40	HR-0	X	0	0	0
41	HR-120	X	0	0	0
42	HR-240	X	0	0	0
43	KICK-1	X	0	0	0
44	KICK-2	X	0	0	0
45	KICK-3	X	0	0	0
46	KICK-PL-1	X	0	0	0
47	KICK-PL-2	X	0	0	0
48	KICK-PL-3	X	0	0	0
49	KICK-PL-4	X	0	0	0
50	KICK-PL-5	X	0	0	0
51	KICK-PL-6	X	0	0	0
52	SA-1	X	0	0	0
53	SA-2	X	0	0	0
54	SA-3	X	0	0	0
55	PL-90-1	X	0	0	0
56	PL-90-2	X	0	0	0
57	PL-330-1	X	0	0	0
58	PL-330-2	X	0	0	0
59	PL-210-1	X	0	0	0
60	PL-210-2	X	0	0	0
61	BRACE-1	Z	2.5	2.5	0
62	BRACE-2	Z	2.5	2.5	0
63	BRACE-3	Z	0	0	0
64	CONN-PL-60-1	Z	2.1	2.1	0
65	CONN-PL-60-2	Z	2.1	2.1	0
66	CONN-PL-90-1	Z	0	0	0
67	CONN-PL-90-2	Z	0	0	0
68	CONN-PL-180-1	Z	4.1	4.1	0
69	CONN-PL-180-2	Z	4.1	4.1	0
70	CONN-PL-210-1	Z	3.6	3.6	0
71	CONN-PL-210-2	Z	3.6	3.6	0
72	CONN-PL-300-1	Z	2.1	2.1	0
73	CONN-PL-300-2	Z	2.1	2.1	0
74	CONN-PL-330-1	Z	3.6	3.6	0
75	CONN-PL-330-2	Z	3.6	3.6	0
76	COR-1	Z	2	2	0
77	COR-2	Z	2	2	0
78	COR-3	Z	0	0	0
79	COR-PL-90-1	Z	0	0	0
80	COR-PL-90-2	Z	0	0	0
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	3.6	3.6	0
84	COR-PL-210-2	Z	3.6	3.6	0
85	COR-PL-210-3	Z	3.6	3.6	0
86	COR-PL-210-4	Z	3.6	3.6	0
87	COR-PL-330-1	Z	3.6	3.6	0
88	COR-PL-330-2	Z	3.6	3.6	0
89	COR-PL-330-3	Z	3.6	3.6	0
90	COR-PL-330-4	Z	3.6	3.6	0
91	FM-0	Z	0	0	0
92	FM-120	Z	2.8	2.8	0
93	FM-240	Z	2.8	2.8	0
94	GRATE-H-90-1	Z	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 18 : Wind on Ice (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
95	GRATE-H-90-2	Z	0	0	0	0
96	GRATE-H-210-1	Z	2.5	2.5	0	0
97	GRATE-H-210-2	Z	2.5	2.5	0	0
98	GRATE-H-330-1	Z	2.5	2.5	0	0
99	GRATE-H-330-2	Z	2.5	2.5	0	0
100	HR-0	Z	0	0	0	0
101	HR-120	Z	2.3	2.3	0	0
102	HR-240	Z	2.3	2.3	0	0
103	KICK-1	Z	4.7	4.7	0	0
104	KICK-2	Z	4.7	4.7	0	0
105	KICK-3	Z	4.7	4.7	0	0
106	KICK-PL-1	Z	2.6	2.6	0	0
107	KICK-PL-2	Z	5.2	5.2	0	0
108	KICK-PL-3	Z	2.6	2.6	0	0
109	KICK-PL-4	Z	5.2	5.2	0	0
110	KICK-PL-5	Z	5.2	5.2	0	0
111	KICK-PL-6	Z	5.2	5.2	0	0
112	SA-1	Z	1.5	1.5	0	0
113	SA-2	Z	1.5	1.5	0	0
114	SA-3	Z	2.9	2.9	0	0
115	PL-90-1	Z	0	0	0	0
116	PL-90-2	Z	0	0	0	0
117	PL-330-1	Z	3.6	3.6	0	0
118	PL-330-2	Z	3.6	3.6	0	0
119	PL-210-1	Z	3.6	3.6	0	0
120	PL-210-2	Z	3.6	3.6	0	0

Member Distributed Loads (BLC 19 : Wind on Ice (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	-1.4	-1.4	0	0
2	BRACE-2	X	-7	-7	0	0
3	BRACE-3	X	-7	-7	0	0
4	CONN-PL-60-1	X	-1.8	-1.8	0	0
5	CONN-PL-60-2	X	-1.8	-1.8	0	0
6	CONN-PL-90-1	X	-1	-1	0	0
7	CONN-PL-90-2	X	-1	-1	0	0
8	CONN-PL-180-1	X	-1.8	-1.8	0	0
9	CONN-PL-180-2	X	-1.8	-1.8	0	0
10	CONN-PL-210-1	X	-2.1	-2.1	0	0
11	CONN-PL-210-2	X	-2.1	-2.1	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	-1	-1	0	0
15	CONN-PL-330-2	X	-1	-1	0	0
16	COR-1	X	-1.2	-1.2	0	0
17	COR-2	X	-6	-6	0	0
18	COR-3	X	-6	-6	0	0
19	COR-PL-90-1	X	-1	-1	0	0
20	COR-PL-90-2	X	-1	-1	0	0
21	COR-PL-90-3	X	-1	-1	0	0
22	COR-PL-90-4	X	-1	-1	0	0
23	COR-PL-210-1	X	-2.1	-2.1	0	0
24	COR-PL-210-2	X	-2.1	-2.1	0	0
25	COR-PL-210-3	X	-2.1	-2.1	0	0
26	COR-PL-210-4	X	-2.1	-2.1	0	0
27	COR-PL-330-1	X	-1	-1	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
28	COR-PL-330-2	X	-1	-1	0	0
29	COR-PL-330-3	X	-1	-1	0	0
30	COR-PL-330-4	X	-1	-1	0	0
31	FM-0	X	-8	-8	0	0
32	FM-120	X	-1.6	-1.6	0	0
33	FM-240	X	-8	-8	0	0
34	GRATE-H-90-1	X	-7	-7	0	0
35	GRATE-H-90-2	X	-7	-7	0	0
36	GRATE-H-210-1	X	-1.4	-1.4	0	0
37	GRATE-H-210-2	X	-1.4	-1.4	0	0
38	GRATE-H-330-1	X	-7	-7	0	0
39	GRATE-H-330-2	X	-7	-7	0	0
40	HR-0	X	-7	-7	0	0
41	HR-120	X	-1.3	-1.3	0	0
42	HR-240	X	-7	-7	0	0
43	KICK-1	X	-2.3	-2.3	0	0
44	KICK-2	X	-2.3	-2.3	0	0
45	KICK-3	X	-2.3	-2.3	0	0
46	KICK-PL-1	X	0	0	0	0
47	KICK-PL-2	X	-2.6	-2.6	0	0
48	KICK-PL-3	X	-2.3	-2.3	0	0
49	KICK-PL-4	X	-2.6	-2.6	0	0
50	KICK-PL-5	X	-2.3	-2.3	0	0
51	KICK-PL-6	X	-2.6	-2.6	0	0
52	SA-1	X	0	0	0	0
53	SA-2	X	-1.3	-1.3	0	0
54	SA-3	X	-1.3	-1.3	0	0
55	PL-90-1	X	-1	-1	0	0
56	PL-90-2	X	-1	-1	0	0
57	PL-330-1	X	-1	-1	0	0
58	PL-330-2	X	-1	-1	0	0
59	PL-210-1	X	-2.1	-2.1	0	0
60	PL-210-2	X	-2.1	-2.1	0	0
61	BRACE-1	Z	2.5	2.5	0	0
62	BRACE-2	Z	1.3	1.3	0	0
63	BRACE-3	Z	1.3	1.3	0	0
64	CONN-PL-60-1	Z	3.1	3.1	0	0
65	CONN-PL-60-2	Z	3.1	3.1	0	0
66	CONN-PL-90-1	Z	1.8	1.8	0	0
67	CONN-PL-90-2	Z	1.8	1.8	0	0
68	CONN-PL-180-1	Z	3.1	3.1	0	0
69	CONN-PL-180-2	Z	3.1	3.1	0	0
70	CONN-PL-210-1	Z	3.6	3.6	0	0
71	CONN-PL-210-2	Z	3.6	3.6	0	0
72	CONN-PL-300-1	Z	0	0	0	0
73	CONN-PL-300-2	Z	0	0	0	0
74	CONN-PL-330-1	Z	1.8	1.8	0	0
75	CONN-PL-330-2	Z	1.8	1.8	0	0
76	COR-1	Z	2	2	0	0
77	COR-2	Z	1	1	0	0
78	COR-3	Z	1	1	0	0
79	COR-PL-90-1	Z	1.8	1.8	0	0
80	COR-PL-90-2	Z	1.8	1.8	0	0
81	COR-PL-90-3	Z	1.8	1.8	0	0
82	COR-PL-90-4	Z	1.8	1.8	0	0
83	COR-PL-210-1	Z	3.6	3.6	0	0
84	COR-PL-210-2	Z	3.6	3.6	0	0

Member Distributed Loads (BLC 19 : Wind on Ice (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
85	COR-PL-210-3	Z	3.6	3.6	0	0
86	COR-PL-210-4	Z	3.6	3.6	0	0
87	COR-PL-330-1	Z	1.8	1.8	0	0
88	COR-PL-330-2	Z	1.8	1.8	0	0
89	COR-PL-330-3	Z	1.8	1.8	0	0
90	COR-PL-330-4	Z	1.8	1.8	0	0
91	FM-0	Z	1.4	1.4	0	0
92	FM-120	Z	2.8	2.8	0	0
93	FM-240	Z	1.4	1.4	0	0
94	GRATE-H-90-1	Z	1.2	1.2	0	0
95	GRATE-H-90-2	Z	1.2	1.2	0	0
96	GRATE-H-210-1	Z	2.5	2.5	0	0
97	GRATE-H-210-2	Z	2.5	2.5	0	0
98	GRATE-H-330-1	Z	1.2	1.2	0	0
99	GRATE-H-330-2	Z	1.2	1.2	0	0
100	HR-0	Z	1.1	1.1	0	0
101	HR-120	Z	2.3	2.3	0	0
102	HR-240	Z	1.1	1.1	0	0
103	KICK-1	Z	4	4	0	0
104	KICK-2	Z	4	4	0	0
105	KICK-3	Z	4	4	0	0
106	KICK-PL-1	Z	0	0	0	0
107	KICK-PL-2	Z	4.5	4.5	0	0
108	KICK-PL-3	Z	3.9	3.9	0	0
109	KICK-PL-4	Z	4.5	4.5	0	0
110	KICK-PL-5	Z	3.9	3.9	0	0
111	KICK-PL-6	Z	4.5	4.5	0	0
112	SA-1	Z	0	0	0	0
113	SA-2	Z	2.2	2.2	0	0
114	SA-3	Z	2.2	2.2	0	0
115	PL-90-1	Z	1.8	1.8	0	0
116	PL-90-2	Z	1.8	1.8	0	0
117	PL-330-1	Z	1.8	1.8	0	0
118	PL-330-2	Z	1.8	1.8	0	0
119	PL-210-1	Z	3.6	3.6	0	0
120	PL-210-2	Z	3.6	3.6	0	0

Member Distributed Loads (BLC 20 : Wind on Ice (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	-2.2	-2.2	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	-2.2	-2.2	0	0
4	CONN-PL-60-1	X	-3.6	-3.6	0	0
5	CONN-PL-60-2	X	-3.6	-3.6	0	0
6	CONN-PL-90-1	X	-3.1	-3.1	0	0
7	CONN-PL-90-2	X	-3.1	-3.1	0	0
8	CONN-PL-180-1	X	-1.8	-1.8	0	0
9	CONN-PL-180-2	X	-1.8	-1.8	0	0
10	CONN-PL-210-1	X	-3.1	-3.1	0	0
11	CONN-PL-210-2	X	-3.1	-3.1	0	0
12	CONN-PL-300-1	X	-1.8	-1.8	0	0
13	CONN-PL-300-2	X	-1.8	-1.8	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	-1.7	-1.7	0	0
17	COR-2	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
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Member Distributed Loads (BLC 20 : Wind on Ice (150 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
18	COR-3	X	-1.7	-1.7	0	0
19	COR-PL-90-1	X	-3.1	-3.1	0	0
20	COR-PL-90-2	X	-3.1	-3.1	0	0
21	COR-PL-90-3	X	-3.1	-3.1	0	0
22	COR-PL-90-4	X	-3.1	-3.1	0	0
23	COR-PL-210-1	X	-3.1	-3.1	0	0
24	COR-PL-210-2	X	-3.1	-3.1	0	0
25	COR-PL-210-3	X	-3.1	-3.1	0	0
26	COR-PL-210-4	X	-3.1	-3.1	0	0
27	COR-PL-330-1	X	0	0	0	0
28	COR-PL-330-2	X	0	0	0	0
29	COR-PL-330-3	X	0	0	0	0
30	COR-PL-330-4	X	0	0	0	0
31	FM-0	X	-2.4	-2.4	0	0
32	FM-120	X	-2.4	-2.4	0	0
33	FM-240	X	0	0	0	0
34	GRATE-H-90-1	X	-2.1	-2.1	0	0
35	GRATE-H-90-2	X	-2.1	-2.1	0	0
36	GRATE-H-210-1	X	-2.1	-2.1	0	0
37	GRATE-H-210-2	X	-2.1	-2.1	0	0
38	GRATE-H-330-1	X	0	0	0	0
39	GRATE-H-330-2	X	0	0	0	0
40	HR-0	X	-2	-2	0	0
41	HR-120	X	-2	-2	0	0
42	HR-240	X	0	0	0	0
43	KICK-1	X	-4	-4	0	0
44	KICK-2	X	-4	-4	0	0
45	KICK-3	X	-4	-4	0	0
46	KICK-PL-1	X	-2.3	-2.3	0	0
47	KICK-PL-2	X	-4.5	-4.5	0	0
48	KICK-PL-3	X	-4.5	-4.5	0	0
49	KICK-PL-4	X	-4.5	-4.5	0	0
50	KICK-PL-5	X	-2.3	-2.3	0	0
51	KICK-PL-6	X	-4.5	-4.5	0	0
52	SA-1	X	-1.3	-1.3	0	0
53	SA-2	X	-2.5	-2.5	0	0
54	SA-3	X	-1.3	-1.3	0	0
55	PL-90-1	X	-3.1	-3.1	0	0
56	PL-90-2	X	-3.1	-3.1	0	0
57	PL-330-1	X	0	0	0	0
58	PL-330-2	X	0	0	0	0
59	PL-210-1	X	-3.1	-3.1	0	0
60	PL-210-2	X	-3.1	-3.1	0	0
61	BRACE-1	Z	1.3	1.3	0	0
62	BRACE-2	Z	0	0	0	0
63	BRACE-3	Z	1.3	1.3	0	0
64	CONN-PL-60-1	Z	2.1	2.1	0	0
65	CONN-PL-60-2	Z	2.1	2.1	0	0
66	CONN-PL-90-1	Z	1.8	1.8	0	0
67	CONN-PL-90-2	Z	1.8	1.8	0	0
68	CONN-PL-180-1	Z	1	1	0	0
69	CONN-PL-180-2	Z	1	1	0	0
70	CONN-PL-210-1	Z	1.8	1.8	0	0
71	CONN-PL-210-2	Z	1.8	1.8	0	0
72	CONN-PL-300-1	Z	1	1	0	0
73	CONN-PL-300-2	Z	1	1	0	0
74	CONN-PL-330-1	Z	0	0	0	0



Member Distributed Loads (BLC 20 : Wind on Ice (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
75	CONN-PL-330-2	Z	0	0	0	0
76	COR-1	Z	1	1	0	0
77	COR-2	Z	0	0	0	0
78	COR-3	Z	1	1	0	0
79	COR-PL-90-1	Z	1.8	1.8	0	0
80	COR-PL-90-2	Z	1.8	1.8	0	0
81	COR-PL-90-3	Z	1.8	1.8	0	0
82	COR-PL-90-4	Z	1.8	1.8	0	0
83	COR-PL-210-1	Z	1.8	1.8	0	0
84	COR-PL-210-2	Z	1.8	1.8	0	0
85	COR-PL-210-3	Z	1.8	1.8	0	0
86	COR-PL-210-4	Z	1.8	1.8	0	0
87	COR-PL-330-1	Z	0	0	0	0
88	COR-PL-330-2	Z	0	0	0	0
89	COR-PL-330-3	Z	0	0	0	0
90	COR-PL-330-4	Z	0	0	0	0
91	FM-0	Z	1.4	1.4	0	0
92	FM-120	Z	1.4	1.4	0	0
93	FM-240	Z	0	0	0	0
94	GRATE-H-90-1	Z	1.2	1.2	0	0
95	GRATE-H-90-2	Z	1.2	1.2	0	0
96	GRATE-H-210-1	Z	1.2	1.2	0	0
97	GRATE-H-210-2	Z	1.2	1.2	0	0
98	GRATE-H-330-1	Z	0	0	0	0
99	GRATE-H-330-2	Z	0	0	0	0
100	HR-0	Z	1.1	1.1	0	0
101	HR-120	Z	1.1	1.1	0	0
102	HR-240	Z	0	0	0	0
103	KICK-1	Z	2.3	2.3	0	0
104	KICK-2	Z	2.3	2.3	0	0
105	KICK-3	Z	2.3	2.3	0	0
106	KICK-PL-1	Z	1.3	1.3	0	0
107	KICK-PL-2	Z	2.6	2.6	0	0
108	KICK-PL-3	Z	2.6	2.6	0	0
109	KICK-PL-4	Z	2.6	2.6	0	0
110	KICK-PL-5	Z	1.3	1.3	0	0
111	KICK-PL-6	Z	2.6	2.6	0	0
112	SA-1	Z	.7	.7	0	0
113	SA-2	Z	1.5	1.5	0	0
114	SA-3	Z	.7	.7	0	0
115	PL-90-1	Z	1.8	1.8	0	0
116	PL-90-2	Z	1.8	1.8	0	0
117	PL-330-1	Z	0	0	0	0
118	PL-330-2	Z	0	0	0	0
119	PL-210-1	Z	1.8	1.8	0	0
120	PL-210-2	Z	1.8	1.8	0	0

Member Distributed Loads (BLC 21 : Wind on Ice (180 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	-1.4	-1.4	0	0
2	BRACE-2	X	-1.4	-1.4	0	0
3	BRACE-3	X	-2.9	-2.9	0	0
4	CONN-PL-60-1	X	-3.6	-3.6	0	0
5	CONN-PL-60-2	X	-3.6	-3.6	0	0
6	CONN-PL-90-1	X	-4.1	-4.1	0	0
7	CONN-PL-90-2	X	-4.1	-4.1	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 21 : Wind on Ice (180 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
8	CONN-PL-180-1	X	0	0	0
9	CONN-PL-180-2	X	0	0	0
10	CONN-PL-210-1	X	-2.1	-2.1	0
11	CONN-PL-210-2	X	-2.1	-2.1	0
12	CONN-PL-300-1	X	-3.6	-3.6	0
13	CONN-PL-300-2	X	-3.6	-3.6	0
14	CONN-PL-330-1	X	-2.1	-2.1	0
15	CONN-PL-330-2	X	-2.1	-2.1	0
16	COR-1	X	-1.2	-1.2	0
17	COR-2	X	-1.2	-1.2	0
18	COR-3	X	-2.3	-2.3	0
19	COR-PL-90-1	X	-4.1	-4.1	0
20	COR-PL-90-2	X	-4.1	-4.1	0
21	COR-PL-90-3	X	-4.1	-4.1	0
22	COR-PL-90-4	X	-4.1	-4.1	0
23	COR-PL-210-1	X	-2.1	-2.1	0
24	COR-PL-210-2	X	-2.1	-2.1	0
25	COR-PL-210-3	X	-2.1	-2.1	0
26	COR-PL-210-4	X	-2.1	-2.1	0
27	COR-PL-330-1	X	-2.1	-2.1	0
28	COR-PL-330-2	X	-2.1	-2.1	0
29	COR-PL-330-3	X	-2.1	-2.1	0
30	COR-PL-330-4	X	-2.1	-2.1	0
31	FM-0	X	-3.2	-3.2	0
32	FM-120	X	-1.6	-1.6	0
33	FM-240	X	-1.6	-1.6	0
34	GRATE-H-90-1	X	-2.8	-2.8	0
35	GRATE-H-90-2	X	-2.8	-2.8	0
36	GRATE-H-210-1	X	-1.4	-1.4	0
37	GRATE-H-210-2	X	-1.4	-1.4	0
38	GRATE-H-330-1	X	-1.4	-1.4	0
39	GRATE-H-330-2	X	-1.4	-1.4	0
40	HR-0	X	-2.6	-2.6	0
41	HR-120	X	-1.3	-1.3	0
42	HR-240	X	-1.3	-1.3	0
43	KICK-1	X	-4.7	-4.7	0
44	KICK-2	X	-4.7	-4.7	0
45	KICK-3	X	-4.7	-4.7	0
46	KICK-PL-1	X	-4.5	-4.5	0
47	KICK-PL-2	X	-5.2	-5.2	0
48	KICK-PL-3	X	-4.5	-4.5	0
49	KICK-PL-4	X	-5.2	-5.2	0
50	KICK-PL-5	X	0	0	0
51	KICK-PL-6	X	-5.2	-5.2	0
52	SA-1	X	-2.5	-2.5	0
53	SA-2	X	-2.5	-2.5	0
54	SA-3	X	0	0	0
55	PL-90-1	X	-4.1	-4.1	0
56	PL-90-2	X	-4.1	-4.1	0
57	PL-330-1	X	-2.1	-2.1	0
58	PL-330-2	X	-2.1	-2.1	0
59	PL-210-1	X	-2.1	-2.1	0
60	PL-210-2	X	-2.1	-2.1	0
61	BRACE-1	Z	0	0	0
62	BRACE-2	Z	0	0	0
63	BRACE-3	Z	0	0	0
64	CONN-PL-60-1	Z	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

May 4, 2022
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Member Distributed Loads (BLC 21 : Wind on Ice (180 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
65	CONN-PL-60-2	Z	0	0	0
66	CONN-PL-90-1	Z	0	0	0
67	CONN-PL-90-2	Z	0	0	0
68	CONN-PL-180-1	Z	0	0	0
69	CONN-PL-180-2	Z	0	0	0
70	CONN-PL-210-1	Z	0	0	0
71	CONN-PL-210-2	Z	0	0	0
72	CONN-PL-300-1	Z	0	0	0
73	CONN-PL-300-2	Z	0	0	0
74	CONN-PL-330-1	Z	0	0	0
75	CONN-PL-330-2	Z	0	0	0
76	COR-1	Z	0	0	0
77	COR-2	Z	0	0	0
78	COR-3	Z	0	0	0
79	COR-PL-90-1	Z	0	0	0
80	COR-PL-90-2	Z	0	0	0
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	0	0	0
84	COR-PL-210-2	Z	0	0	0
85	COR-PL-210-3	Z	0	0	0
86	COR-PL-210-4	Z	0	0	0
87	COR-PL-330-1	Z	0	0	0
88	COR-PL-330-2	Z	0	0	0
89	COR-PL-330-3	Z	0	0	0
90	COR-PL-330-4	Z	0	0	0
91	FM-0	Z	0	0	0
92	FM-120	Z	0	0	0
93	FM-240	Z	0	0	0
94	GRATE-H-90-1	Z	0	0	0
95	GRATE-H-90-2	Z	0	0	0
96	GRATE-H-210-1	Z	0	0	0
97	GRATE-H-210-2	Z	0	0	0
98	GRATE-H-330-1	Z	0	0	0
99	GRATE-H-330-2	Z	0	0	0
100	HR-0	Z	0	0	0
101	HR-120	Z	0	0	0
102	HR-240	Z	0	0	0
103	KICK-1	Z	0	0	0
104	KICK-2	Z	0	0	0
105	KICK-3	Z	0	0	0
106	KICK-PL-1	Z	0	0	0
107	KICK-PL-2	Z	0	0	0
108	KICK-PL-3	Z	0	0	0
109	KICK-PL-4	Z	0	0	0
110	KICK-PL-5	Z	0	0	0
111	KICK-PL-6	Z	0	0	0
112	SA-1	Z	0	0	0
113	SA-2	Z	0	0	0
114	SA-3	Z	0	0	0
115	PL-90-1	Z	0	0	0
116	PL-90-2	Z	0	0	0
117	PL-330-1	Z	0	0	0
118	PL-330-2	Z	0	0	0
119	PL-210-1	Z	0	0	0
120	PL-210-2	Z	0	0	0



Member Distributed Loads (BLC 22 : Wind on Ice (210 deg))

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1 BRACE-1	X	0	0	0	0
2 BRACE-2	X	-2.2	-2.2	0	0
3 BRACE-3	X	-2.2	-2.2	0	0
4 CONN-PL-60-1	X	-1.8	-1.8	0	0
5 CONN-PL-60-2	X	-1.8	-1.8	0	0
6 CONN-PL-90-1	X	-3.1	-3.1	0	0
7 CONN-PL-90-2	X	-3.1	-3.1	0	0
8 CONN-PL-180-1	X	-1.8	-1.8	0	0
9 CONN-PL-180-2	X	-1.8	-1.8	0	0
10 CONN-PL-210-1	X	0	0	0	0
11 CONN-PL-210-2	X	0	0	0	0
12 CONN-PL-300-1	X	-3.6	-3.6	0	0
13 CONN-PL-300-2	X	-3.6	-3.6	0	0
14 CONN-PL-330-1	X	-3.1	-3.1	0	0
15 CONN-PL-330-2	X	-3.1	-3.1	0	0
16 COR-1	X	0	0	0	0
17 COR-2	X	-1.7	-1.7	0	0
18 COR-3	X	-1.7	-1.7	0	0
19 COR-PL-90-1	X	-3.1	-3.1	0	0
20 COR-PL-90-2	X	-3.1	-3.1	0	0
21 COR-PL-90-3	X	-3.1	-3.1	0	0
22 COR-PL-90-4	X	-3.1	-3.1	0	0
23 COR-PL-210-1	X	0	0	0	0
24 COR-PL-210-2	X	0	0	0	0
25 COR-PL-210-3	X	0	0	0	0
26 COR-PL-210-4	X	0	0	0	0
27 COR-PL-330-1	X	-3.1	-3.1	0	0
28 COR-PL-330-2	X	-3.1	-3.1	0	0
29 COR-PL-330-3	X	-3.1	-3.1	0	0
30 COR-PL-330-4	X	-3.1	-3.1	0	0
31 FM-0	X	-2.4	-2.4	0	0
32 FM-120	X	0	0	0	0
33 FM-240	X	-2.4	-2.4	0	0
34 GRATE-H-90-1	X	-2.1	-2.1	0	0
35 GRATE-H-90-2	X	-2.1	-2.1	0	0
36 GRATE-H-210-1	X	0	0	0	0
37 GRATE-H-210-2	X	0	0	0	0
38 GRATE-H-330-1	X	-2.1	-2.1	0	0
39 GRATE-H-330-2	X	-2.1	-2.1	0	0
40 HR-0	X	-2	-2	0	0
41 HR-120	X	0	0	0	0
42 HR-240	X	-2	-2	0	0
43 KICK-1	X	-4	-4	0	0
44 KICK-2	X	-4	-4	0	0
45 KICK-3	X	-4	-4	0	0
46 KICK-PL-1	X	-4.5	-4.5	0	0
47 KICK-PL-2	X	-4.5	-4.5	0	0
48 KICK-PL-3	X	-2.3	-2.3	0	0
49 KICK-PL-4	X	-4.5	-4.5	0	0
50 KICK-PL-5	X	-2.3	-2.3	0	0
51 KICK-PL-6	X	-4.5	-4.5	0	0
52 SA-1	X	-2.5	-2.5	0	0
53 SA-2	X	-1.3	-1.3	0	0
54 SA-3	X	-1.3	-1.3	0	0
55 PL-90-1	X	-3.1	-3.1	0	0
56 PL-90-2	X	-3.1	-3.1	0	0
57 PL-330-1	X	-3.1	-3.1	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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 Checked By: DHK

Member Distributed Loads (BLC 22 : Wind on Ice (210 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
58	PL-330-2	X	-3.1	-3.1	0	0
59	PL-210-1	X	0	0	0	0
60	PL-210-2	X	0	0	0	0
61	BRACE-1	Z	0	0	0	0
62	BRACE-2	Z	-1.3	-1.3	0	0
63	BRACE-3	Z	-1.3	-1.3	0	0
64	CONN-PL-60-1	Z	-1	-1	0	0
65	CONN-PL-60-2	Z	-1	-1	0	0
66	CONN-PL-90-1	Z	-1.8	-1.8	0	0
67	CONN-PL-90-2	Z	-1.8	-1.8	0	0
68	CONN-PL-180-1	Z	-1	-1	0	0
69	CONN-PL-180-2	Z	-1	-1	0	0
70	CONN-PL-210-1	Z	0	0	0	0
71	CONN-PL-210-2	Z	0	0	0	0
72	CONN-PL-300-1	Z	-2.1	-2.1	0	0
73	CONN-PL-300-2	Z	-2.1	-2.1	0	0
74	CONN-PL-330-1	Z	-1.8	-1.8	0	0
75	CONN-PL-330-2	Z	-1.8	-1.8	0	0
76	COR-1	Z	0	0	0	0
77	COR-2	Z	-1	-1	0	0
78	COR-3	Z	-1	-1	0	0
79	COR-PL-90-1	Z	-1.8	-1.8	0	0
80	COR-PL-90-2	Z	-1.8	-1.8	0	0
81	COR-PL-90-3	Z	-1.8	-1.8	0	0
82	COR-PL-90-4	Z	-1.8	-1.8	0	0
83	COR-PL-210-1	Z	0	0	0	0
84	COR-PL-210-2	Z	0	0	0	0
85	COR-PL-210-3	Z	0	0	0	0
86	COR-PL-210-4	Z	0	0	0	0
87	COR-PL-330-1	Z	-1.8	-1.8	0	0
88	COR-PL-330-2	Z	-1.8	-1.8	0	0
89	COR-PL-330-3	Z	-1.8	-1.8	0	0
90	COR-PL-330-4	Z	-1.8	-1.8	0	0
91	FM-0	Z	-1.4	-1.4	0	0
92	FM-120	Z	0	0	0	0
93	FM-240	Z	-1.4	-1.4	0	0
94	GRATE-H-90-1	Z	-1.2	-1.2	0	0
95	GRATE-H-90-2	Z	-1.2	-1.2	0	0
96	GRATE-H-210-1	Z	0	0	0	0
97	GRATE-H-210-2	Z	0	0	0	0
98	GRATE-H-330-1	Z	-1.2	-1.2	0	0
99	GRATE-H-330-2	Z	-1.2	-1.2	0	0
100	HR-0	Z	-1.1	-1.1	0	0
101	HR-120	Z	0	0	0	0
102	HR-240	Z	-1.1	-1.1	0	0
103	KICK-1	Z	-2.3	-2.3	0	0
104	KICK-2	Z	-2.3	-2.3	0	0
105	KICK-3	Z	-2.3	-2.3	0	0
106	KICK-PL-1	Z	-2.6	-2.6	0	0
107	KICK-PL-2	Z	-2.6	-2.6	0	0
108	KICK-PL-3	Z	-1.3	-1.3	0	0
109	KICK-PL-4	Z	-2.6	-2.6	0	0
110	KICK-PL-5	Z	-1.3	-1.3	0	0
111	KICK-PL-6	Z	-2.6	-2.6	0	0
112	SA-1	Z	-1.5	-1.5	0	0
113	SA-2	Z	-.7	-.7	0	0
114	SA-3	Z	-.7	-.7	0	0



Member Distributed Loads (BLC 22 : Wind on Ice (210 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
115	PL-90-1	Z	-1.8	-1.8	0	0
116	PL-90-2	Z	-1.8	-1.8	0	0
117	PL-330-1	Z	-1.8	-1.8	0	0
118	PL-330-2	Z	-1.8	-1.8	0	0
119	PL-210-1	Z	0	0	0	0
120	PL-210-2	Z	0	0	0	0

Member Distributed Loads (BLC 23 : Wind on Ice (240 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	-7	-7	0	0
2	BRACE-2	X	-1.4	-1.4	0	0
3	BRACE-3	X	-7	-7	0	0
4	CONN-PL-60-1	X	0	0	0	0
5	CONN-PL-60-2	X	0	0	0	0
6	CONN-PL-90-1	X	-1	-1	0	0
7	CONN-PL-90-2	X	-1	-1	0	0
8	CONN-PL-180-1	X	-1.8	-1.8	0	0
9	CONN-PL-180-2	X	-1.8	-1.8	0	0
10	CONN-PL-210-1	X	-1	-1	0	0
11	CONN-PL-210-2	X	-1	-1	0	0
12	CONN-PL-300-1	X	-1.8	-1.8	0	0
13	CONN-PL-300-2	X	-1.8	-1.8	0	0
14	CONN-PL-330-1	X	-2.1	-2.1	0	0
15	CONN-PL-330-2	X	-2.1	-2.1	0	0
16	COR-1	X	-6	-6	0	0
17	COR-2	X	-1.2	-1.2	0	0
18	COR-3	X	-6	-6	0	0
19	COR-PL-90-1	X	-1	-1	0	0
20	COR-PL-90-2	X	-1	-1	0	0
21	COR-PL-90-3	X	-1	-1	0	0
22	COR-PL-90-4	X	-1	-1	0	0
23	COR-PL-210-1	X	-1	-1	0	0
24	COR-PL-210-2	X	-1	-1	0	0
25	COR-PL-210-3	X	-1	-1	0	0
26	COR-PL-210-4	X	-1	-1	0	0
27	COR-PL-330-1	X	-2.1	-2.1	0	0
28	COR-PL-330-2	X	-2.1	-2.1	0	0
29	COR-PL-330-3	X	-2.1	-2.1	0	0
30	COR-PL-330-4	X	-2.1	-2.1	0	0
31	FM-0	X	-8	-8	0	0
32	FM-120	X	-8	-8	0	0
33	FM-240	X	-1.6	-1.6	0	0
34	GRATE-H-90-1	X	-7	-7	0	0
35	GRATE-H-90-2	X	-7	-7	0	0
36	GRATE-H-210-1	X	-7	-7	0	0
37	GRATE-H-210-2	X	-7	-7	0	0
38	GRATE-H-330-1	X	-1.4	-1.4	0	0
39	GRATE-H-330-2	X	-1.4	-1.4	0	0
40	HR-0	X	-7	-7	0	0
41	HR-120	X	-7	-7	0	0
42	HR-240	X	-1.3	-1.3	0	0
43	KICK-1	X	-2.3	-2.3	0	0
44	KICK-2	X	-2.3	-2.3	0	0
45	KICK-3	X	-2.3	-2.3	0	0
46	KICK-PL-1	X	-2.3	-2.3	0	0
47	KICK-PL-2	X	-2.6	-2.6	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 23 : Wind on Ice (240 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
48	KICK-PL-3	X	0	0	0
49	KICK-PL-4	X	-2.6	-2.6	0
50	KICK-PL-5	X	-2.3	-2.3	0
51	KICK-PL-6	X	-2.6	-2.6	0
52	SA-1	X	-1.3	-1.3	0
53	SA-2	X	0	0	0
54	SA-3	X	-1.3	-1.3	0
55	PL-90-1	X	-1	-1	0
56	PL-90-2	X	-1	-1	0
57	PL-330-1	X	-2.1	-2.1	0
58	PL-330-2	X	-2.1	-2.1	0
59	PL-210-1	X	-1	-1	0
60	PL-210-2	X	-1	-1	0
61	BRACE-1	Z	-1.3	-1.3	0
62	BRACE-2	Z	-2.5	-2.5	0
63	BRACE-3	Z	-1.3	-1.3	0
64	CONN-PL-60-1	Z	0	0	0
65	CONN-PL-60-2	Z	0	0	0
66	CONN-PL-90-1	Z	-1.8	-1.8	0
67	CONN-PL-90-2	Z	-1.8	-1.8	0
68	CONN-PL-180-1	Z	-3.1	-3.1	0
69	CONN-PL-180-2	Z	-3.1	-3.1	0
70	CONN-PL-210-1	Z	-1.8	-1.8	0
71	CONN-PL-210-2	Z	-1.8	-1.8	0
72	CONN-PL-300-1	Z	-3.1	-3.1	0
73	CONN-PL-300-2	Z	-3.1	-3.1	0
74	CONN-PL-330-1	Z	-3.6	-3.6	0
75	CONN-PL-330-2	Z	-3.6	-3.6	0
76	COR-1	Z	-1	-1	0
77	COR-2	Z	-2	-2	0
78	COR-3	Z	-1	-1	0
79	COR-PL-90-1	Z	-1.8	-1.8	0
80	COR-PL-90-2	Z	-1.8	-1.8	0
81	COR-PL-90-3	Z	-1.8	-1.8	0
82	COR-PL-90-4	Z	-1.8	-1.8	0
83	COR-PL-210-1	Z	-1.8	-1.8	0
84	COR-PL-210-2	Z	-1.8	-1.8	0
85	COR-PL-210-3	Z	-1.8	-1.8	0
86	COR-PL-210-4	Z	-1.8	-1.8	0
87	COR-PL-330-1	Z	-3.6	-3.6	0
88	COR-PL-330-2	Z	-3.6	-3.6	0
89	COR-PL-330-3	Z	-3.6	-3.6	0
90	COR-PL-330-4	Z	-3.6	-3.6	0
91	FM-0	Z	-1.4	-1.4	0
92	FM-120	Z	-1.4	-1.4	0
93	FM-240	Z	-2.8	-2.8	0
94	GRATE-H-90-1	Z	-1.2	-1.2	0
95	GRATE-H-90-2	Z	-1.2	-1.2	0
96	GRATE-H-210-1	Z	-1.2	-1.2	0
97	GRATE-H-210-2	Z	-1.2	-1.2	0
98	GRATE-H-330-1	Z	-2.5	-2.5	0
99	GRATE-H-330-2	Z	-2.5	-2.5	0
100	HR-0	Z	-1.1	-1.1	0
101	HR-120	Z	-1.1	-1.1	0
102	HR-240	Z	-2.3	-2.3	0
103	KICK-1	Z	-4	-4	0
104	KICK-2	Z	-4	-4	0

Member Distributed Loads (BLC 23 : Wind on Ice (240 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
105	KICK-3	Z	-4	-4	0	0
106	KICK-PL-1	Z	-3.9	-3.9	0	0
107	KICK-PL-2	Z	-4.5	-4.5	0	0
108	KICK-PL-3	Z	0	0	0	0
109	KICK-PL-4	Z	-4.5	-4.5	0	0
110	KICK-PL-5	Z	-3.9	-3.9	0	0
111	KICK-PL-6	Z	-4.5	-4.5	0	0
112	SA-1	Z	-2.2	-2.2	0	0
113	SA-2	Z	0	0	0	0
114	SA-3	Z	-2.2	-2.2	0	0
115	PL-90-1	Z	-1.8	-1.8	0	0
116	PL-90-2	Z	-1.8	-1.8	0	0
117	PL-330-1	Z	-3.6	-3.6	0	0
118	PL-330-2	Z	-3.6	-3.6	0	0
119	PL-210-1	Z	-1.8	-1.8	0	0
120	PL-210-2	Z	-1.8	-1.8	0	0

Member Distributed Loads (BLC 24 : Wind on Ice (270 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	0	0	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	0	0	0	0
4	CONN-PL-60-1	X	0	0	0	0
5	CONN-PL-60-2	X	0	0	0	0
6	CONN-PL-90-1	X	0	0	0	0
7	CONN-PL-90-2	X	0	0	0	0
8	CONN-PL-180-1	X	0	0	0	0
9	CONN-PL-180-2	X	0	0	0	0
10	CONN-PL-210-1	X	0	0	0	0
11	CONN-PL-210-2	X	0	0	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	0	0	0	0
17	COR-2	X	0	0	0	0
18	COR-3	X	0	0	0	0
19	COR-PL-90-1	X	0	0	0	0
20	COR-PL-90-2	X	0	0	0	0
21	COR-PL-90-3	X	0	0	0	0
22	COR-PL-90-4	X	0	0	0	0
23	COR-PL-210-1	X	0	0	0	0
24	COR-PL-210-2	X	0	0	0	0
25	COR-PL-210-3	X	0	0	0	0
26	COR-PL-210-4	X	0	0	0	0
27	COR-PL-330-1	X	0	0	0	0
28	COR-PL-330-2	X	0	0	0	0
29	COR-PL-330-3	X	0	0	0	0
30	COR-PL-330-4	X	0	0	0	0
31	FM-0	X	0	0	0	0
32	FM-120	X	0	0	0	0
33	FM-240	X	0	0	0	0
34	GRATE-H-90-1	X	0	0	0	0
35	GRATE-H-90-2	X	0	0	0	0
36	GRATE-H-210-1	X	0	0	0	0
37	GRATE-H-210-2	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 24 : Wind on Ice (270 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
38	GRATE-H-330-1	X	0	0	0
39	GRATE-H-330-2	X	0	0	0
40	HR-0	X	0	0	0
41	HR-120	X	0	0	0
42	HR-240	X	0	0	0
43	KICK-1	X	0	0	0
44	KICK-2	X	0	0	0
45	KICK-3	X	0	0	0
46	KICK-PL-1	X	0	0	0
47	KICK-PL-2	X	0	0	0
48	KICK-PL-3	X	0	0	0
49	KICK-PL-4	X	0	0	0
50	KICK-PL-5	X	0	0	0
51	KICK-PL-6	X	0	0	0
52	SA-1	X	0	0	0
53	SA-2	X	0	0	0
54	SA-3	X	0	0	0
55	PL-90-1	X	0	0	0
56	PL-90-2	X	0	0	0
57	PL-330-1	X	0	0	0
58	PL-330-2	X	0	0	0
59	PL-210-1	X	0	0	0
60	PL-210-2	X	0	0	0
61	BRACE-1	Z	-2.5	-2.5	0
62	BRACE-2	Z	-2.5	-2.5	0
63	BRACE-3	Z	0	0	0
64	CONN-PL-60-1	Z	-2.1	-2.1	0
65	CONN-PL-60-2	Z	-2.1	-2.1	0
66	CONN-PL-90-1	Z	0	0	0
67	CONN-PL-90-2	Z	0	0	0
68	CONN-PL-180-1	Z	-4.1	-4.1	0
69	CONN-PL-180-2	Z	-4.1	-4.1	0
70	CONN-PL-210-1	Z	-3.6	-3.6	0
71	CONN-PL-210-2	Z	-3.6	-3.6	0
72	CONN-PL-300-1	Z	-2.1	-2.1	0
73	CONN-PL-300-2	Z	-2.1	-2.1	0
74	CONN-PL-330-1	Z	-3.6	-3.6	0
75	CONN-PL-330-2	Z	-3.6	-3.6	0
76	COR-1	Z	-2	-2	0
77	COR-2	Z	-2	-2	0
78	COR-3	Z	0	0	0
79	COR-PL-90-1	Z	0	0	0
80	COR-PL-90-2	Z	0	0	0
81	COR-PL-90-3	Z	0	0	0
82	COR-PL-90-4	Z	0	0	0
83	COR-PL-210-1	Z	-3.6	-3.6	0
84	COR-PL-210-2	Z	-3.6	-3.6	0
85	COR-PL-210-3	Z	-3.6	-3.6	0
86	COR-PL-210-4	Z	-3.6	-3.6	0
87	COR-PL-330-1	Z	-3.6	-3.6	0
88	COR-PL-330-2	Z	-3.6	-3.6	0
89	COR-PL-330-3	Z	-3.6	-3.6	0
90	COR-PL-330-4	Z	-3.6	-3.6	0
91	FM-0	Z	0	0	0
92	FM-120	Z	-2.8	-2.8	0
93	FM-240	Z	-2.8	-2.8	0
94	GRATE-H-90-1	Z	0	0	0



Member Distributed Loads (BLC 24 : Wind on Ice (270 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
95	GRATE-H-90-2	Z	0	0	0	0
96	GRATE-H-210-1	Z	-2.5	-2.5	0	0
97	GRATE-H-210-2	Z	-2.5	-2.5	0	0
98	GRATE-H-330-1	Z	-2.5	-2.5	0	0
99	GRATE-H-330-2	Z	-2.5	-2.5	0	0
100	HR-0	Z	0	0	0	0
101	HR-120	Z	-2.3	-2.3	0	0
102	HR-240	Z	-2.3	-2.3	0	0
103	KICK-1	Z	-4.7	-4.7	0	0
104	KICK-2	Z	-4.7	-4.7	0	0
105	KICK-3	Z	-4.7	-4.7	0	0
106	KICK-PL-1	Z	-2.6	-2.6	0	0
107	KICK-PL-2	Z	-5.2	-5.2	0	0
108	KICK-PL-3	Z	-2.6	-2.6	0	0
109	KICK-PL-4	Z	-5.2	-5.2	0	0
110	KICK-PL-5	Z	-5.2	-5.2	0	0
111	KICK-PL-6	Z	-5.2	-5.2	0	0
112	SA-1	Z	-1.5	-1.5	0	0
113	SA-2	Z	-1.5	-1.5	0	0
114	SA-3	Z	-2.9	-2.9	0	0
115	PL-90-1	Z	0	0	0	0
116	PL-90-2	Z	0	0	0	0
117	PL-330-1	Z	-3.6	-3.6	0	0
118	PL-330-2	Z	-3.6	-3.6	0	0
119	PL-210-1	Z	-3.6	-3.6	0	0
120	PL-210-2	Z	-3.6	-3.6	0	0

Member Distributed Loads (BLC 25 : Wind on Ice (300 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	1.4	1.4	0	0
2	BRACE-2	X	.7	.7	0	0
3	BRACE-3	X	.7	.7	0	0
4	CONN-PL-60-1	X	1.8	1.8	0	0
5	CONN-PL-60-2	X	1.8	1.8	0	0
6	CONN-PL-90-1	X	1	1	0	0
7	CONN-PL-90-2	X	1	1	0	0
8	CONN-PL-180-1	X	1.8	1.8	0	0
9	CONN-PL-180-2	X	1.8	1.8	0	0
10	CONN-PL-210-1	X	2.1	2.1	0	0
11	CONN-PL-210-2	X	2.1	2.1	0	0
12	CONN-PL-300-1	X	0	0	0	0
13	CONN-PL-300-2	X	0	0	0	0
14	CONN-PL-330-1	X	1	1	0	0
15	CONN-PL-330-2	X	1	1	0	0
16	COR-1	X	1.2	1.2	0	0
17	COR-2	X	.6	.6	0	0
18	COR-3	X	.6	.6	0	0
19	COR-PL-90-1	X	1	1	0	0
20	COR-PL-90-2	X	1	1	0	0
21	COR-PL-90-3	X	1	1	0	0
22	COR-PL-90-4	X	1	1	0	0
23	COR-PL-210-1	X	2.1	2.1	0	0
24	COR-PL-210-2	X	2.1	2.1	0	0
25	COR-PL-210-3	X	2.1	2.1	0	0
26	COR-PL-210-4	X	2.1	2.1	0	0
27	COR-PL-330-1	X	1	1	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 25 : Wind on Ice (300 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
28	COR-PL-330-2	X	1	1	0	0
29	COR-PL-330-3	X	1	1	0	0
30	COR-PL-330-4	X	1	1	0	0
31	FM-0	X	.8	.8	0	0
32	FM-120	X	1.6	1.6	0	0
33	FM-240	X	.8	.8	0	0
34	GRATE-H-90-1	X	.7	.7	0	0
35	GRATE-H-90-2	X	.7	.7	0	0
36	GRATE-H-210-1	X	1.4	1.4	0	0
37	GRATE-H-210-2	X	1.4	1.4	0	0
38	GRATE-H-330-1	X	.7	.7	0	0
39	GRATE-H-330-2	X	.7	.7	0	0
40	HR-0	X	.7	.7	0	0
41	HR-120	X	1.3	1.3	0	0
42	HR-240	X	.7	.7	0	0
43	KICK-1	X	2.3	2.3	0	0
44	KICK-2	X	2.3	2.3	0	0
45	KICK-3	X	2.3	2.3	0	0
46	KICK-PL-1	X	0	0	0	0
47	KICK-PL-2	X	2.6	2.6	0	0
48	KICK-PL-3	X	2.3	2.3	0	0
49	KICK-PL-4	X	2.6	2.6	0	0
50	KICK-PL-5	X	2.3	2.3	0	0
51	KICK-PL-6	X	2.6	2.6	0	0
52	SA-1	X	0	0	0	0
53	SA-2	X	1.3	1.3	0	0
54	SA-3	X	1.3	1.3	0	0
55	PL-90-1	X	1	1	0	0
56	PL-90-2	X	1	1	0	0
57	PL-330-1	X	1	1	0	0
58	PL-330-2	X	1	1	0	0
59	PL-210-1	X	2.1	2.1	0	0
60	PL-210-2	X	2.1	2.1	0	0
61	BRACE-1	Z	-2.5	-2.5	0	0
62	BRACE-2	Z	-1.3	-1.3	0	0
63	BRACE-3	Z	-1.3	-1.3	0	0
64	CONN-PL-60-1	Z	-3.1	-3.1	0	0
65	CONN-PL-60-2	Z	-3.1	-3.1	0	0
66	CONN-PL-90-1	Z	-1.8	-1.8	0	0
67	CONN-PL-90-2	Z	-1.8	-1.8	0	0
68	CONN-PL-180-1	Z	-3.1	-3.1	0	0
69	CONN-PL-180-2	Z	-3.1	-3.1	0	0
70	CONN-PL-210-1	Z	-3.6	-3.6	0	0
71	CONN-PL-210-2	Z	-3.6	-3.6	0	0
72	CONN-PL-300-1	Z	0	0	0	0
73	CONN-PL-300-2	Z	0	0	0	0
74	CONN-PL-330-1	Z	-1.8	-1.8	0	0
75	CONN-PL-330-2	Z	-1.8	-1.8	0	0
76	COR-1	Z	-2	-2	0	0
77	COR-2	Z	-1	-1	0	0
78	COR-3	Z	-1	-1	0	0
79	COR-PL-90-1	Z	-1.8	-1.8	0	0
80	COR-PL-90-2	Z	-1.8	-1.8	0	0
81	COR-PL-90-3	Z	-1.8	-1.8	0	0
82	COR-PL-90-4	Z	-1.8	-1.8	0	0
83	COR-PL-210-1	Z	-3.6	-3.6	0	0
84	COR-PL-210-2	Z	-3.6	-3.6	0	0

Member Distributed Loads (BLC 25 : Wind on Ice (300 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
85	COR-PL-210-3	Z	-3.6	-3.6	0	0
86	COR-PL-210-4	Z	-3.6	-3.6	0	0
87	COR-PL-330-1	Z	-1.8	-1.8	0	0
88	COR-PL-330-2	Z	-1.8	-1.8	0	0
89	COR-PL-330-3	Z	-1.8	-1.8	0	0
90	COR-PL-330-4	Z	-1.8	-1.8	0	0
91	FM-0	Z	-1.4	-1.4	0	0
92	FM-120	Z	-2.8	-2.8	0	0
93	FM-240	Z	-1.4	-1.4	0	0
94	GRATE-H-90-1	Z	-1.2	-1.2	0	0
95	GRATE-H-90-2	Z	-1.2	-1.2	0	0
96	GRATE-H-210-1	Z	-2.5	-2.5	0	0
97	GRATE-H-210-2	Z	-2.5	-2.5	0	0
98	GRATE-H-330-1	Z	-1.2	-1.2	0	0
99	GRATE-H-330-2	Z	-1.2	-1.2	0	0
100	HR-0	Z	-1.1	-1.1	0	0
101	HR-120	Z	-2.3	-2.3	0	0
102	HR-240	Z	-1.1	-1.1	0	0
103	KICK-1	Z	-4	-4	0	0
104	KICK-2	Z	-4	-4	0	0
105	KICK-3	Z	-4	-4	0	0
106	KICK-PL-1	Z	0	0	0	0
107	KICK-PL-2	Z	-4.5	-4.5	0	0
108	KICK-PL-3	Z	-3.9	-3.9	0	0
109	KICK-PL-4	Z	-4.5	-4.5	0	0
110	KICK-PL-5	Z	-3.9	-3.9	0	0
111	KICK-PL-6	Z	-4.5	-4.5	0	0
112	SA-1	Z	0	0	0	0
113	SA-2	Z	-2.2	-2.2	0	0
114	SA-3	Z	-2.2	-2.2	0	0
115	PL-90-1	Z	-1.8	-1.8	0	0
116	PL-90-2	Z	-1.8	-1.8	0	0
117	PL-330-1	Z	-1.8	-1.8	0	0
118	PL-330-2	Z	-1.8	-1.8	0	0
119	PL-210-1	Z	-3.6	-3.6	0	0
120	PL-210-2	Z	-3.6	-3.6	0	0

Member Distributed Loads (BLC 26 : Wind on Ice (330 deg))

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-1	X	2.2	2.2	0	0
2	BRACE-2	X	0	0	0	0
3	BRACE-3	X	2.2	2.2	0	0
4	CONN-PL-60-1	X	3.6	3.6	0	0
5	CONN-PL-60-2	X	3.6	3.6	0	0
6	CONN-PL-90-1	X	3.1	3.1	0	0
7	CONN-PL-90-2	X	3.1	3.1	0	0
8	CONN-PL-180-1	X	1.8	1.8	0	0
9	CONN-PL-180-2	X	1.8	1.8	0	0
10	CONN-PL-210-1	X	3.1	3.1	0	0
11	CONN-PL-210-2	X	3.1	3.1	0	0
12	CONN-PL-300-1	X	1.8	1.8	0	0
13	CONN-PL-300-2	X	1.8	1.8	0	0
14	CONN-PL-330-1	X	0	0	0	0
15	CONN-PL-330-2	X	0	0	0	0
16	COR-1	X	1.7	1.7	0	0
17	COR-2	X	0	0	0	0



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 26 : Wind on Ice (330 deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft.F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
18	COR-3	X	1.7	1.7	0	0
19	COR-PL-90-1	X	3.1	3.1	0	0
20	COR-PL-90-2	X	3.1	3.1	0	0
21	COR-PL-90-3	X	3.1	3.1	0	0
22	COR-PL-90-4	X	3.1	3.1	0	0
23	COR-PL-210-1	X	3.1	3.1	0	0
24	COR-PL-210-2	X	3.1	3.1	0	0
25	COR-PL-210-3	X	3.1	3.1	0	0
26	COR-PL-210-4	X	3.1	3.1	0	0
27	COR-PL-330-1	X	0	0	0	0
28	COR-PL-330-2	X	0	0	0	0
29	COR-PL-330-3	X	0	0	0	0
30	COR-PL-330-4	X	0	0	0	0
31	FM-0	X	2.4	2.4	0	0
32	FM-120	X	2.4	2.4	0	0
33	FM-240	X	0	0	0	0
34	GRATE-H-90-1	X	2.1	2.1	0	0
35	GRATE-H-90-2	X	2.1	2.1	0	0
36	GRATE-H-210-1	X	2.1	2.1	0	0
37	GRATE-H-210-2	X	2.1	2.1	0	0
38	GRATE-H-330-1	X	0	0	0	0
39	GRATE-H-330-2	X	0	0	0	0
40	HR-0	X	2	2	0	0
41	HR-120	X	2	2	0	0
42	HR-240	X	0	0	0	0
43	KICK-1	X	4	4	0	0
44	KICK-2	X	4	4	0	0
45	KICK-3	X	4	4	0	0
46	KICK-PL-1	X	2.3	2.3	0	0
47	KICK-PL-2	X	4.5	4.5	0	0
48	KICK-PL-3	X	4.5	4.5	0	0
49	KICK-PL-4	X	4.5	4.5	0	0
50	KICK-PL-5	X	2.3	2.3	0	0
51	KICK-PL-6	X	4.5	4.5	0	0
52	SA-1	X	1.3	1.3	0	0
53	SA-2	X	2.5	2.5	0	0
54	SA-3	X	1.3	1.3	0	0
55	PL-90-1	X	3.1	3.1	0	0
56	PL-90-2	X	3.1	3.1	0	0
57	PL-330-1	X	0	0	0	0
58	PL-330-2	X	0	0	0	0
59	PL-210-1	X	3.1	3.1	0	0
60	PL-210-2	X	3.1	3.1	0	0
61	BRACE-1	Z	-1.3	-1.3	0	0
62	BRACE-2	Z	0	0	0	0
63	BRACE-3	Z	-1.3	-1.3	0	0
64	CONN-PL-60-1	Z	-2.1	-2.1	0	0
65	CONN-PL-60-2	Z	-2.1	-2.1	0	0
66	CONN-PL-90-1	Z	-1.8	-1.8	0	0
67	CONN-PL-90-2	Z	-1.8	-1.8	0	0
68	CONN-PL-180-1	Z	-1	-1	0	0
69	CONN-PL-180-2	Z	-1	-1	0	0
70	CONN-PL-210-1	Z	-1.8	-1.8	0	0
71	CONN-PL-210-2	Z	-1.8	-1.8	0	0
72	CONN-PL-300-1	Z	-1	-1	0	0
73	CONN-PL-300-2	Z	-1	-1	0	0
74	CONN-PL-330-1	Z	0	0	0	0



Member Distributed Loads (BLC 26 : Wind on Ice (330 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
75	CONN-PL-330-2	Z	0	0	0	0
76	COR-1	Z	-1	-1	0	0
77	COR-2	Z	0	0	0	0
78	COR-3	Z	-1	-1	0	0
79	COR-PL-90-1	Z	-1.8	-1.8	0	0
80	COR-PL-90-2	Z	-1.8	-1.8	0	0
81	COR-PL-90-3	Z	-1.8	-1.8	0	0
82	COR-PL-90-4	Z	-1.8	-1.8	0	0
83	COR-PL-210-1	Z	-1.8	-1.8	0	0
84	COR-PL-210-2	Z	-1.8	-1.8	0	0
85	COR-PL-210-3	Z	-1.8	-1.8	0	0
86	COR-PL-210-4	Z	-1.8	-1.8	0	0
87	COR-PL-330-1	Z	0	0	0	0
88	COR-PL-330-2	Z	0	0	0	0
89	COR-PL-330-3	Z	0	0	0	0
90	COR-PL-330-4	Z	0	0	0	0
91	FM-0	Z	-1.4	-1.4	0	0
92	FM-120	Z	-1.4	-1.4	0	0
93	FM-240	Z	0	0	0	0
94	GRATE-H-90-1	Z	-1.2	-1.2	0	0
95	GRATE-H-90-2	Z	-1.2	-1.2	0	0
96	GRATE-H-210-1	Z	-1.2	-1.2	0	0
97	GRATE-H-210-2	Z	-1.2	-1.2	0	0
98	GRATE-H-330-1	Z	0	0	0	0
99	GRATE-H-330-2	Z	0	0	0	0
100	HR-0	Z	-1.1	-1.1	0	0
101	HR-120	Z	-1.1	-1.1	0	0
102	HR-240	Z	0	0	0	0
103	KICK-1	Z	-2.3	-2.3	0	0
104	KICK-2	Z	-2.3	-2.3	0	0
105	KICK-3	Z	-2.3	-2.3	0	0
106	KICK-PL-1	Z	-1.3	-1.3	0	0
107	KICK-PL-2	Z	-2.6	-2.6	0	0
108	KICK-PL-3	Z	-2.6	-2.6	0	0
109	KICK-PL-4	Z	-2.6	-2.6	0	0
110	KICK-PL-5	Z	-1.3	-1.3	0	0
111	KICK-PL-6	Z	-2.6	-2.6	0	0
112	SA-1	Z	-7	-7	0	0
113	SA-2	Z	-1.5	-1.5	0	0
114	SA-3	Z	-7	-7	0	0
115	PL-90-1	Z	-1.8	-1.8	0	0
116	PL-90-2	Z	-1.8	-1.8	0	0
117	PL-330-1	Z	0	0	0	0
118	PL-330-2	Z	0	0	0	0
119	PL-210-1	Z	-1.8	-1.8	0	0
120	PL-210-2	Z	-1.8	-1.8	0	0

Member Distributed Loads (BLC 213 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft.F.psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
1	BRACE-2	Y	-.002	-.106	0	4.142
2	BRACE-2	Y	-.106	-.369	4.142	8.284
3	BRACE-2	Y	-.369	-.708	8.284	12.426
4	BRACE-2	Y	-.708	-1.112	12.426	16.569
5	BRACE-2	Y	-1.112	-1.214	16.569	20.711
6	BRACE-2	Y	-1.214	-.648	20.711	24.853
7	BRACE-2	Y	-.648	-.207	24.853	28.995



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 213 : BLC 1 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
8	BRACE-2	Y	-207	-448	28.995	33.137
9	BRACE-2	Y	-448	-1.087	33.137	37.279
10	BRACE-2	Y	-1.087	-1.21	37.279	41.422
11	BRACE-2	Y	-1.21	-.689	41.422	45.564
12	BRACE-2	Y	-.689	-.401	45.564	49.706
13	BRACE-2	Y	-.401	-.307	49.706	53.848
14	GRATE-H-90-2	Y	-.009	-.143	0	4.226
15	GRATE-H-90-2	Y	-.143	-.369	4.226	8.453
16	GRATE-H-90-2	Y	-.369	-.498	8.453	12.679
17	GRATE-H-90-2	Y	-.498	-.6	12.679	16.906
18	GRATE-H-90-2	Y	-.6	-.737	16.906	21.132
19	GRATE-H-90-2	Y	-.737	-.924	21.132	25.359
20	GRATE-H-90-2	Y	-.924	-1.123	25.359	29.585
21	GRATE-H-90-2	Y	-1.123	-1.225	29.585	33.811
22	GRATE-H-90-2	Y	-1.225	-1.209	33.811	38.038
23	GRATE-H-90-2	Y	-1.209	-.813	38.038	42.264
24	GRATE-H-90-2	Y	-.813	-.342	42.264	46.491
25	GRATE-H-90-2	Y	-.342	-.025	46.491	50.717
26	GRATE-H-210-1	Y	-.006	-.14	0	4.226
27	GRATE-H-210-1	Y	-.14	-.369	4.226	8.453
28	GRATE-H-210-1	Y	-.369	-.499	8.453	12.679
29	GRATE-H-210-1	Y	-.499	-.61	12.679	16.906
30	GRATE-H-210-1	Y	-.61	-.775	16.906	21.132
31	GRATE-H-210-1	Y	-.775	-.922	21.132	25.358
32	GRATE-H-210-1	Y	-.922	-1.166	25.358	29.585
33	GRATE-H-210-1	Y	-1.166	-1.288	29.585	33.811
34	GRATE-H-210-1	Y	-1.288	-1.042	33.811	38.038
35	GRATE-H-210-1	Y	-1.042	-.638	38.038	42.264
36	GRATE-H-210-1	Y	-.638	-.284	42.264	46.49
37	GRATE-H-210-1	Y	-.284	-.006	46.49	50.717
38	SA-2	Y	-.058	-.325	0	4.15
39	SA-2	Y	-.325	-.631	4.15	8.3
40	SA-2	Y	-.631	-.1	8.3	12.45
41	SA-2	Y	-.1	-1.423	12.45	16.6
42	SA-2	Y	-1.423	-1.646	16.6	20.75
43	SA-2	Y	-1.646	-1.988	20.75	24.9
44	SA-2	Y	-1.988	-2.293	24.9	29.05
45	SA-2	Y	-2.293	-2.484	29.05	33.2
46	SA-2	Y	-2.484	-1.894	33.2	37.35
47	SA-2	Y	-1.894	-.798	37.35	41.5
48	SA-2	Y	-.798	-.163	41.5	45.65
49	SA-2	Y	-.163	-.006	45.65	49.8
50	BRACE-3	Y	-.002	-.106	0	4.142
51	BRACE-3	Y	-.106	-.369	4.142	8.284
52	BRACE-3	Y	-.369	-.708	8.284	12.426
53	BRACE-3	Y	-.708	-1.112	12.426	16.569
54	BRACE-3	Y	-1.112	-1.214	16.569	20.711
55	BRACE-3	Y	-1.214	-.648	20.711	24.853
56	BRACE-3	Y	-.648	-.207	24.853	28.995
57	BRACE-3	Y	-.207	-.448	28.995	33.137
58	BRACE-3	Y	-.448	-1.087	33.137	37.279
59	BRACE-3	Y	-1.087	-1.21	37.279	41.422
60	BRACE-3	Y	-1.21	-.689	41.422	45.564
61	BRACE-3	Y	-.689	-.401	45.564	49.706
62	BRACE-3	Y	-.401	-.307	49.706	53.848
63	GRATE-H-210-2	Y	-.009	-.143	0	4.226
64	GRATE-H-210-2	Y	-.143	-.369	4.226	8.453



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 213 : BLC 1 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
65	GRATE-H-210-2	Y	- .369	- .498	8.453	12.679
66	GRATE-H-210-2	Y	- .498	- .599	12.679	16.906
67	GRATE-H-210-2	Y	- .599	- .738	16.906	21.132
68	GRATE-H-210-2	Y	- .738	- .925	21.132	25.359
69	GRATE-H-210-2	Y	- .925	- 1.122	25.359	29.585
70	GRATE-H-210-2	Y	- 1.122	- 1.224	29.585	33.811
71	GRATE-H-210-2	Y	- 1.224	- 1.208	33.811	38.038
72	GRATE-H-210-2	Y	- 1.208	- .813	38.038	42.264
73	GRATE-H-210-2	Y	- .813	- .342	42.264	46.491
74	GRATE-H-210-2	Y	- .342	- .025	46.491	50.717
75	GRATE-H-330-1	Y	- .006	- .14	0	4.226
76	GRATE-H-330-1	Y	- .14	- .369	4.226	8.453
77	GRATE-H-330-1	Y	- .369	- .499	8.453	12.679
78	GRATE-H-330-1	Y	- .499	- .61	12.679	16.906
79	GRATE-H-330-1	Y	- .61	- .775	16.906	21.132
80	GRATE-H-330-1	Y	- .775	- .922	21.132	25.358
81	GRATE-H-330-1	Y	- .922	- 1.166	25.358	29.585
82	GRATE-H-330-1	Y	- 1.166	- 1.288	29.585	33.811
83	GRATE-H-330-1	Y	- 1.288	- 1.042	33.811	38.038
84	GRATE-H-330-1	Y	- 1.042	- .638	38.038	42.264
85	GRATE-H-330-1	Y	- .638	- .284	42.264	46.49
86	GRATE-H-330-1	Y	- .284	- .006	46.49	50.717
87	SA-3	Y	- .058	- .325	0	4.15
88	SA-3	Y	- .325	- .631	4.15	8.3
89	SA-3	Y	- .631	- 1.1	8.3	12.45
90	SA-3	Y	- 1.1	- 1.422	12.45	16.6
91	SA-3	Y	- 1.422	- 1.646	16.6	20.75
92	SA-3	Y	- 1.646	- 1.99	20.75	24.9
93	SA-3	Y	- 1.99	- 2.294	24.9	29.05
94	SA-3	Y	- 2.294	- 2.483	29.05	33.2
95	SA-3	Y	- 2.483	- 1.893	33.2	37.35
96	SA-3	Y	- 1.893	- .798	37.35	41.5
97	SA-3	Y	- .798	- .163	41.5	45.65
98	SA-3	Y	- .163	- .006	45.65	49.8
99	BRACE-1	Y	- .002	- .106	0	4.142
100	BRACE-1	Y	- .106	- .369	4.142	8.284
101	BRACE-1	Y	- .369	- .708	8.284	12.426
102	BRACE-1	Y	- .708	- 1.112	12.426	16.569
103	BRACE-1	Y	- 1.112	- 1.214	16.569	20.711
104	BRACE-1	Y	- 1.214	- .648	20.711	24.853
105	BRACE-1	Y	- .648	- .207	24.853	28.995
106	BRACE-1	Y	- .207	- .448	28.995	33.137
107	BRACE-1	Y	- .448	- 1.087	33.137	37.279
108	BRACE-1	Y	- 1.087	- 1.21	37.279	41.422
109	BRACE-1	Y	- 1.21	- .689	41.422	45.564
110	BRACE-1	Y	- .689	- .401	45.564	49.706
111	BRACE-1	Y	- .401	- .307	49.706	53.848
112	GRATE-H-90-1	Y	- .006	- .14	0	4.226
113	GRATE-H-90-1	Y	- .14	- .369	4.226	8.453
114	GRATE-H-90-1	Y	- .369	- .499	8.453	12.679
115	GRATE-H-90-1	Y	- .499	- .61	12.679	16.906
116	GRATE-H-90-1	Y	- .61	- .775	16.906	21.132
117	GRATE-H-90-1	Y	- .775	- .922	21.132	25.358
118	GRATE-H-90-1	Y	- .922	- 1.166	25.358	29.585
119	GRATE-H-90-1	Y	- 1.166	- 1.288	29.585	33.811
120	GRATE-H-90-1	Y	- 1.288	- 1.042	33.811	38.038
121	GRATE-H-90-1	Y	- 1.042	- .638	38.038	42.264



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 213 : BLC 1 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
122	GRATE-H-90-1	Y	-.638	-284	42.264	46.49
123	GRATE-H-90-1	Y	-.284	-.006	46.49	50.717
124	GRATE-H-330-2	Y	-.009	-.143	0	4.226
125	GRATE-H-330-2	Y	-.143	-.369	4.226	8.453
126	GRATE-H-330-2	Y	-.369	-.498	8.453	12.679
127	GRATE-H-330-2	Y	-.498	-.599	12.679	16.906
128	GRATE-H-330-2	Y	-.599	-.738	16.906	21.132
129	GRATE-H-330-2	Y	-.738	-.925	21.132	25.359
130	GRATE-H-330-2	Y	-.925	-1.122	25.359	29.585
131	GRATE-H-330-2	Y	-1.122	-1.224	29.585	33.811
132	GRATE-H-330-2	Y	-1.224	-1.208	33.811	38.038
133	GRATE-H-330-2	Y	-1.208	-.813	38.038	42.264
134	GRATE-H-330-2	Y	-.813	-.342	42.264	46.491
135	GRATE-H-330-2	Y	-.342	-.025	46.491	50.717
136	SA-1	Y	-.058	-.325	0	4.15
137	SA-1	Y	-.325	-.631	4.15	8.3
138	SA-1	Y	-.631	-.1	8.3	12.45
139	SA-1	Y	-.1	-1.422	12.45	16.6
140	SA-1	Y	-1.422	-1.646	16.6	20.75
141	SA-1	Y	-1.646	-1.99	20.75	24.9
142	SA-1	Y	-1.99	-2.294	24.9	29.05
143	SA-1	Y	-2.294	-2.483	29.05	33.2
144	SA-1	Y	-2.483	-1.893	33.2	37.35
145	SA-1	Y	-1.893	-.798	37.35	41.5
146	SA-1	Y	-.798	-.163	41.5	45.65
147	SA-1	Y	-.163	-.006	45.65	49.8

Member Distributed Loads (BLC 214 : BLC 14 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
1	BRACE-2	Y	-.011	-.645	0	4.142
2	BRACE-2	Y	-.645	-2.248	4.142	8.284
3	BRACE-2	Y	-2.248	-4.311	8.284	12.426
4	BRACE-2	Y	-4.311	-6.771	12.426	16.569
5	BRACE-2	Y	-6.771	-7.395	16.569	20.711
6	BRACE-2	Y	-7.395	-3.946	20.711	24.853
7	BRACE-2	Y	-3.946	-1.262	24.853	28.995
8	BRACE-2	Y	-1.262	-2.726	28.995	33.137
9	BRACE-2	Y	-2.726	-6.622	33.137	37.279
10	BRACE-2	Y	-6.622	-7.373	37.279	41.422
11	BRACE-2	Y	-7.373	-4.197	41.422	45.564
12	BRACE-2	Y	-4.197	-2.441	45.564	49.706
13	BRACE-2	Y	-2.441	-1.872	49.706	53.848
14	GRATE-H-90-2	Y	-.052	-.868	0	4.226
15	GRATE-H-90-2	Y	-.868	-2.249	4.226	8.453
16	GRATE-H-90-2	Y	-2.249	-3.031	8.453	12.679
17	GRATE-H-90-2	Y	-3.031	-3.652	12.679	16.906
18	GRATE-H-90-2	Y	-3.652	-4.491	16.906	21.132
19	GRATE-H-90-2	Y	-4.491	-5.631	21.132	25.359
20	GRATE-H-90-2	Y	-5.631	-6.839	25.359	29.585
21	GRATE-H-90-2	Y	-6.839	-7.463	29.585	33.811
22	GRATE-H-90-2	Y	-7.463	-7.363	33.811	38.038
23	GRATE-H-90-2	Y	-7.363	-4.953	38.038	42.264
24	GRATE-H-90-2	Y	-4.953	-2.081	42.264	46.491
25	GRATE-H-90-2	Y	-2.081	-.151	46.491	50.717
26	GRATE-H-210-1	Y	-.036	-.853	0	4.226
27	GRATE-H-210-1	Y	-.853	-2.245	4.226	8.453



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 214 : BLC 14 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
28	GRATE-H-210-1	Y	-2.245	-3.041	8.453	12.679
29	GRATE-H-210-1	Y	-3.041	-3.718	12.679	16.906
30	GRATE-H-210-1	Y	-3.718	-4.718	16.906	21.132
31	GRATE-H-210-1	Y	-4.718	-5.618	21.132	25.358
32	GRATE-H-210-1	Y	-5.618	-7.101	25.358	29.585
33	GRATE-H-210-1	Y	-7.101	-7.848	29.585	33.811
34	GRATE-H-210-1	Y	-7.848	-6.349	33.811	38.038
35	GRATE-H-210-1	Y	-6.349	-3.888	38.038	42.264
36	GRATE-H-210-1	Y	-3.888	-1.728	42.264	46.49
37	GRATE-H-210-1	Y	-1.728	-.036	46.49	50.717
38	SA-2	Y	-.353	-1.981	0	4.15
39	SA-2	Y	-1.981	-3.841	4.15	8.3
40	SA-2	Y	-3.841	-6.703	8.3	12.45
41	SA-2	Y	-6.703	-8.665	12.45	16.6
42	SA-2	Y	-8.665	-10.025	16.6	20.75
43	SA-2	Y	-10.025	-12.112	20.75	24.9
44	SA-2	Y	-12.112	-13.969	24.9	29.05
45	SA-2	Y	-13.969	-15.128	29.05	33.2
46	SA-2	Y	-15.128	-11.534	33.2	37.35
47	SA-2	Y	-11.534	-4.858	37.35	41.5
48	SA-2	Y	-4.858	-.993	41.5	45.65
49	SA-2	Y	-.993	-.034	45.65	49.8
50	BRACE-3	Y	-.011	-.645	0	4.142
51	BRACE-3	Y	-.645	-2.248	4.142	8.284
52	BRACE-3	Y	-2.248	-4.311	8.284	12.426
53	BRACE-3	Y	-4.311	-6.771	12.426	16.569
54	BRACE-3	Y	-6.771	-7.395	16.569	20.711
55	BRACE-3	Y	-7.395	-3.946	20.711	24.853
56	BRACE-3	Y	-3.946	-1.262	24.853	28.995
57	BRACE-3	Y	-1.262	-2.726	28.995	33.137
58	BRACE-3	Y	-2.726	-6.622	33.137	37.279
59	BRACE-3	Y	-6.622	-7.372	37.279	41.422
60	BRACE-3	Y	-7.372	-4.197	41.422	45.564
61	BRACE-3	Y	-4.197	-2.441	45.564	49.706
62	BRACE-3	Y	-2.441	-1.872	49.706	53.848
63	GRATE-H-210-2	Y	-.052	-.868	0	4.226
64	GRATE-H-210-2	Y	-.868	-2.249	4.226	8.453
65	GRATE-H-210-2	Y	-2.249	-3.031	8.453	12.679
66	GRATE-H-210-2	Y	-3.031	-3.651	12.679	16.906
67	GRATE-H-210-2	Y	-3.651	-4.494	16.906	21.132
68	GRATE-H-210-2	Y	-4.494	-5.632	21.132	25.359
69	GRATE-H-210-2	Y	-5.632	-6.834	25.359	29.585
70	GRATE-H-210-2	Y	-6.834	-7.458	29.585	33.811
71	GRATE-H-210-2	Y	-7.458	-7.361	33.811	38.038
72	GRATE-H-210-2	Y	-7.361	-4.953	38.038	42.264
73	GRATE-H-210-2	Y	-4.953	-2.081	42.264	46.491
74	GRATE-H-210-2	Y	-2.081	-.151	46.491	50.717
75	GRATE-H-330-1	Y	-.036	-.853	0	4.226
76	GRATE-H-330-1	Y	-.853	-2.245	4.226	8.453
77	GRATE-H-330-1	Y	-2.245	-3.041	8.453	12.679
78	GRATE-H-330-1	Y	-3.041	-3.718	12.679	16.906
79	GRATE-H-330-1	Y	-3.718	-4.718	16.906	21.132
80	GRATE-H-330-1	Y	-4.718	-5.618	21.132	25.358
81	GRATE-H-330-1	Y	-5.618	-7.101	25.358	29.585
82	GRATE-H-330-1	Y	-7.101	-7.848	29.585	33.811
83	GRATE-H-330-1	Y	-7.848	-6.349	33.811	38.038
84	GRATE-H-330-1	Y	-6.349	-3.888	38.038	42.264



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Member Distributed Loads (BLC 214 : BLC 14 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]	
85	GRATE-H-330-1	Y	-3.888	-1.728	42.264	46.49
86	GRATE-H-330-1	Y	-1.728	-0.036	46.49	50.717
87	SA-3	Y	-0.353	-1.981	0	4.15
88	SA-3	Y	-1.981	-3.841	4.15	8.3
89	SA-3	Y	-3.841	-6.702	8.3	12.45
90	SA-3	Y	-6.702	-8.662	12.45	16.6
91	SA-3	Y	-8.662	-10.029	16.6	20.75
92	SA-3	Y	-10.029	-12.121	20.75	24.9
93	SA-3	Y	-12.121	-13.971	24.9	29.05
94	SA-3	Y	-13.971	-15.127	29.05	33.2
95	SA-3	Y	-15.127	-11.534	33.2	37.35
96	SA-3	Y	-11.534	-4.858	37.35	41.5
97	SA-3	Y	-4.858	-0.993	41.5	45.65
98	SA-3	Y	-0.993	-0.034	45.65	49.8
99	BRACE-1	Y	-0.011	-0.645	0	4.142
100	BRACE-1	Y	-0.645	-2.248	4.142	8.284
101	BRACE-1	Y	-2.248	-4.311	8.284	12.426
102	BRACE-1	Y	-4.311	-6.771	12.426	16.569
103	BRACE-1	Y	-6.771	-7.395	16.569	20.711
104	BRACE-1	Y	-7.395	-3.946	20.711	24.853
105	BRACE-1	Y	-3.946	-1.262	24.853	28.995
106	BRACE-1	Y	-1.262	-2.726	28.995	33.137
107	BRACE-1	Y	-2.726	-6.622	33.137	37.279
108	BRACE-1	Y	-6.622	-7.372	37.279	41.422
109	BRACE-1	Y	-7.372	-4.197	41.422	45.564
110	BRACE-1	Y	-4.197	-2.441	45.564	49.706
111	BRACE-1	Y	-2.441	-1.872	49.706	53.848
112	GRATE-H-90-1	Y	-0.036	-0.853	0	4.226
113	GRATE-H-90-1	Y	-0.853	-2.245	4.226	8.453
114	GRATE-H-90-1	Y	-2.245	-3.041	8.453	12.679
115	GRATE-H-90-1	Y	-3.041	-3.718	12.679	16.906
116	GRATE-H-90-1	Y	-3.718	-4.718	16.906	21.132
117	GRATE-H-90-1	Y	-4.718	-5.618	21.132	25.358
118	GRATE-H-90-1	Y	-5.618	-7.101	25.358	29.585
119	GRATE-H-90-1	Y	-7.101	-7.848	29.585	33.811
120	GRATE-H-90-1	Y	-7.848	-6.349	33.811	38.038
121	GRATE-H-90-1	Y	-6.349	-3.888	38.038	42.264
122	GRATE-H-90-1	Y	-3.888	-1.728	42.264	46.49
123	GRATE-H-90-1	Y	-1.728	-0.036	46.49	50.717
124	GRATE-H-330-2	Y	-0.052	-0.868	0	4.226
125	GRATE-H-330-2	Y	-0.868	-2.249	4.226	8.453
126	GRATE-H-330-2	Y	-2.249	-3.031	8.453	12.679
127	GRATE-H-330-2	Y	-3.031	-3.651	12.679	16.906
128	GRATE-H-330-2	Y	-3.651	-4.494	16.906	21.132
129	GRATE-H-330-2	Y	-4.494	-5.632	21.132	25.359
130	GRATE-H-330-2	Y	-5.632	-6.834	25.359	29.585
131	GRATE-H-330-2	Y	-6.834	-7.458	29.585	33.811
132	GRATE-H-330-2	Y	-7.458	-7.361	33.811	38.038
133	GRATE-H-330-2	Y	-7.361	-4.953	38.038	42.264
134	GRATE-H-330-2	Y	-4.953	-2.081	42.264	46.491
135	GRATE-H-330-2	Y	-2.081	-0.151	46.491	50.717
136	SA-1	Y	-0.353	-1.981	0	4.15
137	SA-1	Y	-1.981	-3.841	4.15	8.3
138	SA-1	Y	-3.841	-6.702	8.3	12.45
139	SA-1	Y	-6.702	-8.662	12.45	16.6
140	SA-1	Y	-8.662	-10.029	16.6	20.75
141	SA-1	Y	-10.029	-12.121	20.75	24.9



Member Distributed Loads (BLC 214 : BLC 14 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude...	Start Location[in, %]	End Location[in, %]
142	SA-1	Y	-12.121	-13.971	24.9	29.05
143	SA-1	Y	-13.971	-15.127	29.05	33.2
144	SA-1	Y	-15.127	-11.534	33.2	37.35
145	SA-1	Y	-11.534	-4.858	37.35	41.5
146	SA-1	Y	-4.858	-.993	41.5	45.65
147	SA-1	Y	-.993	-.034	45.65	49.8

Member Area Loads (BLC 1 : Dead Load)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N117	N118	N113		Y	Two Way	-1.75
2	N9	N13	N14		Y	Two Way	-1.75
3	N140	N135	N139		Y	Two Way	-1.75

Member Area Loads (BLC 14 : Ice Load)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N117	N118	N113		Y	Two Way	-10.66
2	N9	N13	N14		Y	Two Way	-10.66
3	N140	N135	N139		Y	Two Way	-10.66

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
1	Dead Load	None		-1			21		3	
2	Wind Load (0 deg)	None					42	120		
3	Wind Load (30 deg)	None					42	120		
4	Wind Load (60 deg)	None					42	120		
5	Wind Load (90 deg)	None					42	120		
6	Wind Load (120 deg)	None					42	120		
7	Wind Load (150 deg)	None					42	120		
8	Wind Load (180 deg)	None					42	120		
9	Wind Load (210 deg)	None					42	120		
10	Wind Load (240 deg)	None					42	120		
11	Wind Load (270 deg)	None					42	120		
12	Wind Load (300 deg)	None					42	120		
13	Wind Load (330 deg)	None					42	120		
14	Ice Load	None					21	60	3	
15	Wind on Ice (0 deg)	None					42	120		
16	Wind on Ice (30 deg)	None					42	120		
17	Wind on Ice (60 deg)	None					42	120		
18	Wind on Ice (90 deg)	None					42	120		
19	Wind on Ice (120 deg)	None					42	120		
20	Wind on Ice (150 deg)	None					42	120		
21	Wind on Ice (180 deg)	None					42	120		
22	Wind on Ice (210 deg)	None					42	120		
23	Wind on Ice (240 deg)	None					42	120		
24	Wind on Ice (270 deg)	None					42	120		
25	Wind on Ice (300 deg)	None					42	120		
26	Wind on Ice (330 deg)	None					42	120		
27	Horizontal Seismic, Eh (0)	None	1				42			
28	Horizontal Seismic, Eh (30)	None	.866		.5		42			
29	Horizontal Seismic, Eh (60)	None	.5		.866		42			
30	Horizontal Seismic, Eh (90)	None			1		42			
31	Horizontal Seismic, Eh (120)	None	-.5		.866		42			
32	Horizontal Seismic, Eh (150)	None	-.866		.5		42			



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
33 Horizontal Seismic, Eh (180)	None	-1				42			
34 Horizontal Seismic, Eh (210)	None	-.866		-.5		42			
35 Horizontal Seismic, Eh (240)	None	-.5		-.866		42			
36 Horizontal Seismic, Eh (270)	None			-.1		42			
37 Horizontal Seismic, Eh (300)	None	.5		-.866		42			
38 Horizontal Seismic, Eh (330)	None	.866		-.5		42			
39 Maintenance Load, Lm (MP1)	None					1			
40 Maintenance Load, Lm (MP2)	None					1			
41 Maintenance Load, Lm (MP3)	None					1			
42 Maintenance Load, Lm (MP4)	None					1			
43 Maintenance Load, Lm (MP5)	None					1			
44 Maintenance Load, Lm (MP6)	None					1			
45 Maintenance Load, Lm (MP7)	None					1			
46 Maintenance Load, Lm (MP8)	None					1			
47 Maintenance Load, Lm (MP9)	None					1			
48 Maintenance Load, Lm (MP10)	None					1			
49 Maintenance Load, Lm (MP11)	None					1			
50 Maintenance Load, Lm (MP12)	None					1			
51 Maintenance Load, Lm (MP13)	None								
52 Maintenance Load, Lm (MP14)	None								
53 Maintenance Load, Lm (MP15)	None								
54 Maintenance Load, Lm (MP16)	None								
55 Maintenance Load, Lm (MP17)	None								
56 Maintenance Load, Lm (MP18)	None								
57 Maintenance Load, Lm (MP19)	None								
58 Maintenance Load, Lm (MP20)	None								
59 Maintenance Load, Lm (MP21)	None								
60 Maintenance Load, Lm (MP22)	None								
61 Maintenance Load, Lm (MP23)	None								
62 Maintenance Load, Lm (MP24)	None								
63 Maintenance Load, Lm (MP25)	None								
64 Maintenance Load, Lm (MP26)	None								
65 Maintenance Load, Lm (MP27)	None								
66 Maintenance Load, Lm (MP28)	None								
67 Maintenance Load, Lm (MP29)	None								
68 Maintenance Load, Lm (MP30)	None								
69 Maintenance Load, Lm (MP31)	None								
70 Maintenance Load, Lm (MP32)	None								
71 Maintenance Load, Lm (MP33)	None								
72 Maintenance Load, Lm (MP34)	None								
73 Maintenance Load, Lm (MP35)	None								
74 Maintenance Load, Lm (MP36)	None								
75 Maintenance Load, Lv (Pos. 1)	None					1			
76 Maintenance Load, Lv (Pos. 2)	None					1			
77 Maintenance Load, Lv (Pos. 3)	None					1			
78 Maintenance Load, Lv (Pos. 4)	None					1			
79 Maintenance Load, Lv (Pos. 5)	None					1			
80 Maintenance Load, Lv (Pos. 6)	None					1			
81 Maintenance Load, Lv (Pos. 7)	None					1			
82 Maintenance Load, Lv (Pos. 8)	None					1			
83 Maintenance Load, Lv (Pos. 9)	None					1			
84 Maintenance Load, Lv (Pos. 10)	None					1			
85 Maintenance Load, Lv (Pos. 11)	None					1			
86 Maintenance Load, Lv (Pos. 12)	None					1			
87 Maintenance Load, Lv (Pos. 13)	None					1			
88 Maintenance Load, Lv (Pos. 14)	None					1			
89 Maintenance Load, Lv (Pos. 15)	None					1			



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

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Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
90 Maintenance Load, Lv (Pos. 16)	None					1			
91 Maintenance Load, Lv (Pos. 17)	None					1			
92 Maintenance Load, Lv (Pos. 18)	None					1			
93 Maintenance Load, Lv (Pos. 19)	None					1			
94 Maintenance Load, Lv (Pos. 20)	None					1			
95 Maintenance Load, Lv (Pos. 21)	None					1			
96 Maintenance Load, Lv (Pos. 22)	None					1			
97 Maintenance Load, Lv (Pos. 23)	None					1			
98 Maintenance Load, Lv (Pos. 24)	None					1			
99 Maintenance Load, Lv (Pos. 25)	None								
100 Maintenance Load, Lv (Pos. 26)	None								
101 Maintenance Load, Lv (Pos. 27)	None								
102 Maintenance Load, Lv (Pos. 28)	None								
103 Maintenance Load, Lv (Pos. 29)	None								
104 Maintenance Load, Lv (Pos. 30)	None								
105 Maintenance Load, Lv (Pos. 31)	None								
106 Maintenance Load, Lv (Pos. 32)	None								
107 Maintenance Load, Lv (Pos. 33)	None								
108 Maintenance Load, Lv (Pos. 34)	None								
109 Maintenance Load, Lv (Pos. 35)	None								
110 Maintenance Load, Lv (Pos. 36)	None								
111 Maintenance Load, Lv (Pos. 37)	None								
112 Maintenance Load, Lv (Pos. 38)	None								
113 Maintenance Load, Lv (Pos. 39)	None								
114 Maintenance Load, Lv (Pos. 40)	None								
115 Maintenance Load, Lv (Pos. 41)	None								
116 Maintenance Load, Lv (Pos. 42)	None								
117 Maintenance Load, Lv (Pos. 43)	None								
118 Maintenance Load, Lv (Pos. 44)	None								
119 Maintenance Load, Lv (Pos. 45)	None								
120 Maintenance Load, Lv (Pos. 46)	None								
121 Maintenance Load, Lv (Pos. 47)	None								
122 Maintenance Load, Lv (Pos. 48)	None								
123 Maintenance Load, Lv (Pos. 49)	None								
124 Maintenance Load, Lv (Pos. 50)	None								
125 Maintenance Load, Lv (Pos. 51)	None								
126 Maintenance Load, Lv (Pos. 52)	None								
127 Maintenance Load, Lv (Pos. 53)	None								
128 Maintenance Load, Lv (Pos. 54)	None								
129 Maintenance Load, Lv (Pos. 55)	None								
130 Maintenance Load, Lv (Pos. 56)	None								
131 Maintenance Load, Lv (Pos. 57)	None								
132 Maintenance Load, Lv (Pos. 58)	None								
133 Maintenance Load, Lv (Pos. 59)	None								
134 Maintenance Load, Lv (Pos. 60)	None								
135 Maintenance Load, Lv (Pos. 61)	None								
136 Maintenance Load, Lv (Pos. 62)	None								
137 Maintenance Load, Lv (Pos. 63)	None								
138 Maintenance Load, Lv (Pos. 64)	None								
139 Maintenance Load, Lv (Pos. 65)	None								
140 Maintenance Load, Lv (Pos. 66)	None								
141 Maintenance Load, Lv (Pos. 67)	None								
142 Maintenance Load, Lv (Pos. 68)	None								
143 Maintenance Load, Lv (Pos. 69)	None								
144 Maintenance Load, Lv (Pos. 70)	None								
145 Maintenance Load, Lv (Pos. 71)	None								
146 Maintenance Load, Lv (Pos. 72)	None								



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 Model Name : BARKHAMSTEDW CT

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Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
147	Maintenance Load, Lv (Pos. 73)	None								
148	Maintenance Load, Lv (Pos. 74)	None								
149	Maintenance Load, Lv (Pos. 75)	None								
150	Maintenance Load, Lv (Pos. 76)	None								
151	Maintenance Load, Lv (Pos. 77)	None								
152	Maintenance Load, Lv (Pos. 78)	None								
153	Maintenance Load, Lv (Pos. 79)	None								
154	Maintenance Load, Lv (Pos. 80)	None								
155	Maintenance Load, Lv (Pos. 81)	None								
156	Maintenance Load, Lv (Pos. 82)	None								
157	Maintenance Load, Lv (Pos. 83)	None								
158	Maintenance Load, Lv (Pos. 84)	None								
159	Maintenance Load, Lv (Pos. 85)	None								
160	Maintenance Load, Lv (Pos. 86)	None								
161	Maintenance Load, Lv (Pos. 87)	None								
162	Maintenance Load, Lv (Pos. 88)	None								
163	Maintenance Load, Lv (Pos. 89)	None								
164	Maintenance Load, Lv (Pos. 90)	None								
165	Maintenance Load, Lv (Pos. 91)	None								
166	Maintenance Load, Lv (Pos. 92)	None								
167	Maintenance Load, Lv (Pos. 93)	None								
168	Maintenance Load, Lv (Pos. 94)	None								
169	Maintenance Load, Lv (Pos. 95)	None								
170	Maintenance Load, Lv (Pos. 96)	None								
171	Maintenance Load, Lv (Pos. 97)	None								
172	Maintenance Load, Lv (Pos. 98)	None								
173	Maintenance Load, Lv (Pos. 99)	None								
174	Maintenance Load, Lv (Pos. 100)	None								
175	Antenna Dead Load	None					12			
176	Antenna Wind Load (0 deg)	None					24			
177	Antenna Wind Load (30 deg)	None					24			
178	Antenna Wind Load (60 deg)	None					24			
179	Antenna Wind Load (90 deg)	None					24			
180	Antenna Wind Load (120 deg)	None					24			
181	Antenna Wind Load (150 deg)	None					24			
182	Antenna Wind Load (180 deg)	None					24			
183	Antenna Wind Load (210 deg)	None					24			
184	Antenna Wind Load (240 deg)	None					24			
185	Antenna Wind Load (270 deg)	None					24			
186	Antenna Wind Load (300 deg)	None					24			
187	Antenna Wind Load (330 deg)	None					24			
188	Antenna Ice Load	None					12			
189	Antenna Wind on Ice (0 deg)	None					24			
190	Antenna Wind on Ice (30 deg)	None					24			
191	Antenna Wind on Ice (60 deg)	None					24			
192	Antenna Wind on Ice (90 deg)	None					24			
193	Antenna Wind on Ice (120 deg)	None					24			
194	Antenna Wind on Ice (150 deg)	None					24			
195	Antenna Wind on Ice (180 deg)	None					24			
196	Antenna Wind on Ice (210 deg)	None					24			
197	Antenna Wind on Ice (240 deg)	None					24			
198	Antenna Wind on Ice (270 deg)	None					24			
199	Antenna Wind on Ice (300 deg)	None					24			
200	Antenna Wind on Ice (330 deg)	None					24			
201	Ant. Horiz. Seismic, Eh (0)	None					24			
202	Ant. Horiz. Seismic, Eh (30)	None					24			
203	Ant. Horiz. Seismic, Eh (60)	None					24			



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
204 Ant. Horiz. Seismic, Eh (90)	None					24			
205 Ant. Horiz. Seismic, Eh (120)	None					24			
206 Ant. Horiz. Seismic, Eh (150)	None					24			
207 Ant. Horiz. Seismic, Eh (180)	None					24			
208 Ant. Horiz. Seismic, Eh (210)	None					24			
209 Ant. Horiz. Seismic, Eh (240)	None					24			
210 Ant. Horiz. Seismic, Eh (270)	None					24			
211 Ant. Horiz. Seismic, Eh (300)	None					24			
212 Ant. Horiz. Seismic, Eh (330)	None					24			
213 BLC 1 Transient Area Loads	None						147		
214 BLC 14 Transient Area Loads	None						147		

Load Combinations

Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1 1.4D	Yes	Y	1	1.4	175	1.4													
2 1.2D + 1.0W (0 deg)	Yes	Y	1	1.2	2	1	175	1.2	176	1									
3 1.2D + 1.0W (30 deg)	Yes	Y	1	1.2	3	1	175	1.2	177	1									
4 1.2D + 1.0W (60 deg)	Yes	Y	1	1.2	4	1	175	1.2	178	1									
5 1.2D + 1.0W (90 deg)	Yes	Y	1	1.2	5	1	175	1.2	179	1									
6 1.2D + 1.0W (120 deg)	Yes	Y	1	1.2	6	1	175	1.2	180	1									
7 1.2D + 1.0W (150 deg)	Yes	Y	1	1.2	7	1	175	1.2	181	1									
8 1.2D + 1.0W (180 deg)	Yes	Y	1	1.2	8	1	175	1.2	182	1									
9 1.2D + 1.0W (210 deg)	Yes	Y	1	1.2	9	1	175	1.2	183	1									
10 1.2D + 1.0W (240 deg)	Yes	Y	1	1.2	10	1	175	1.2	184	1									
11 1.2D + 1.0W (270 deg)	Yes	Y	1	1.2	11	1	175	1.2	185	1									
12 1.2D + 1.0W (300 deg)	Yes	Y	1	1.2	12	1	175	1.2	186	1									
13 1.2D + 1.0W (330 deg)	Yes	Y	1	1.2	13	1	175	1.2	187	1									
14 1.2D + Di + Wi (0 deg)	Yes	Y	1	1.2	14	1	15	1	175	1.2	188	1	189	1					
15 1.2D + Di + Wi (30 deg)	Yes	Y	1	1.2	14	1	16	1	175	1.2	188	1	190	1					
16 1.2D + Di + Wi (60 deg)	Yes	Y	1	1.2	14	1	17	1	175	1.2	188	1	191	1					
17 1.2D + Di + Wi (90 deg)	Yes	Y	1	1.2	14	1	18	1	175	1.2	188	1	192	1					
18 1.2D + Di + Wi (120 deg)	Yes	Y	1	1.2	14	1	19	1	175	1.2	188	1	193	1					
19 1.2D + Di + Wi (150 deg)	Yes	Y	1	1.2	14	1	20	1	175	1.2	188	1	194	1					
20 1.2D + Di + Wi (180 deg)	Yes	Y	1	1.2	14	1	21	1	175	1.2	188	1	195	1					
21 1.2D + Di + Wi (210 deg)	Yes	Y	1	1.2	14	1	22	1	175	1.2	188	1	196	1					
22 1.2D + Di + Wi (240 deg)	Yes	Y	1	1.2	14	1	23	1	175	1.2	188	1	197	1					
23 1.2D + Di + Wi (270 deg)	Yes	Y	1	1.2	14	1	24	1	175	1.2	188	1	198	1					
24 1.2D + Di + Wi (300 deg)	Yes	Y	1	1.2	14	1	25	1	175	1.2	188	1	199	1					
25 1.2D + Di + Wi (330 deg)	Yes	Y	1	1.2	14	1	26	1	175	1.2	188	1	200	1					
26 1.2D + 1.0 Ev + 1.0Eh (0 deg)	Yes	Y	1	1.2	1	.036	27	.09	175	1.2	175	.036	201	.09					
27 1.2D + 1.0 Ev + 1.0Eh (30 de...	Yes	Y	1	1.2	1	.036	28	.09	175	1.2	175	.036	202	.09					
28 1.2D + 1.0 Ev + 1.0Eh (60 de...	Yes	Y	1	1.2	1	.036	29	.09	175	1.2	175	.036	203	.09					
29 1.2D + 1.0 Ev + 1.0Eh (90 de...	Yes	Y	1	1.2	1	.036	30	.09	175	1.2	175	.036	204	.09					
30 1.2D + 1.0 Ev + 1.0Eh (120 d...	Yes	Y	1	1.2	1	.036	31	.09	175	1.2	175	.036	205	.09					
31 1.2D + 1.0 Ev + 1.0Eh (150 d...	Yes	Y	1	1.2	1	.036	32	.09	175	1.2	175	.036	206	.09					
32 1.2D + 1.0 Ev + 1.0Eh (180 d...	Yes	Y	1	1.2	1	.036	33	.09	175	1.2	175	.036	207	.09					
33 1.2D + 1.0 Ev + 1.0Eh (210 d...	Yes	Y	1	1.2	1	.036	34	.09	175	1.2	175	.036	208	.09					
34 1.2D + 1.0 Ev + 1.0Eh (240 d...	Yes	Y	1	1.2	1	.036	35	.09	175	1.2	175	.036	209	.09					
35 1.2D + 1.0 Ev + 1.0Eh (270 d...	Yes	Y	1	1.2	1	.036	36	.09	175	1.2	175	.036	210	.09					
36 1.2D + 1.0 Ev + 1.0Eh (300 d...	Yes	Y	1	1.2	1	.036	37	.09	175	1.2	175	.036	211	.09					
37 1.2D + 1.0 Ev + 1.0Eh (330 d...	Yes	Y	1	1.2	1	.036	38	.09	175	1.2	175	.036	212	.09					
38 1.2D + 1.5Lm1 + 1.0Wm (0 d...	Yes	Y	1	1.2	39	1.5	2	.068	175	1.2	176	.068							
39 1.2D + 1.5Lm1 + 1.0Wm (30 ...	Yes	Y	1	1.2	39	1.5	3	.068	175	1.2	177	.068							
40 1.2D + 1.5Lm1 + 1.0Wm (60 ...	Yes	Y	1	1.2	39	1.5	4	.068	175	1.2	178	.068							
41 1.2D + 1.5Lm1 + 1.0Wm (90 ...	Yes	Y	1	1.2	39	1.5	5	.068	175	1.2	179	.068							



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

May 4, 2022
 2:40 PM
 Checked By: DHK

Load Combinations (Continued)

	Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...
213	1.2D + 1.5Lm15 + 1.0Wm (2...		Y		1	1.2	53	1.5	9	.068	175	1.2	183	.068							
214	1.2D + 1.5Lm15 + 1.0Wm (2...		Y		1	1.2	53	1.5	10	.068	175	1.2	184	.068							
215	1.2D + 1.5Lm15 + 1.0Wm (2...		Y		1	1.2	53	1.5	11	.068	175	1.2	185	.068							
216	1.2D + 1.5Lm15 + 1.0Wm (3...		Y		1	1.2	53	1.5	12	.068	175	1.2	186	.068							
217	1.2D + 1.5Lm15 + 1.0Wm (3...		Y		1	1.2	53	1.5	13	.068	175	1.2	187	.068							
218	1.2D + 1.5Lm16 + 1.0Wm (0 ...		Y		1	1.2	54	1.5	2	.068	175	1.2	176	.068							
219	1.2D + 1.5Lm16 + 1.0Wm (3...		Y		1	1.2	54	1.5	3	.068	175	1.2	177	.068							
220	1.2D + 1.5Lm16 + 1.0Wm (6...		Y		1	1.2	54	1.5	4	.068	175	1.2	178	.068							
221	1.2D + 1.5Lm16 + 1.0Wm (9...		Y		1	1.2	54	1.5	5	.068	175	1.2	179	.068							
222	1.2D + 1.5Lm16 + 1.0Wm (1...		Y		1	1.2	54	1.5	6	.068	175	1.2	180	.068							
223	1.2D + 1.5Lm16 + 1.0Wm (1...		Y		1	1.2	54	1.5	7	.068	175	1.2	181	.068							
224	1.2D + 1.5Lm16 + 1.0Wm (1...		Y		1	1.2	54	1.5	8	.068	175	1.2	182	.068							
225	1.2D + 1.5Lm16 + 1.0Wm (2...		Y		1	1.2	54	1.5	9	.068	175	1.2	183	.068							
226	1.2D + 1.5Lm16 + 1.0Wm (2...		Y		1	1.2	54	1.5	10	.068	175	1.2	184	.068							
227	1.2D + 1.5Lm16 + 1.0Wm (2...		Y		1	1.2	54	1.5	11	.068	175	1.2	185	.068							
228	1.2D + 1.5Lm16 + 1.0Wm (3...		Y		1	1.2	54	1.5	12	.068	175	1.2	186	.068							
229	1.2D + 1.5Lm16 + 1.0Wm (3...		Y		1	1.2	54	1.5	13	.068	175	1.2	187	.068							
230	1.2D + 1.5Lm17 + 1.0Wm (0 ...		Y		1	1.2	55	1.5	2	.068	175	1.2	176	.068							
231	1.2D + 1.5Lm17 + 1.0Wm (3...		Y		1	1.2	55	1.5	3	.068	175	1.2	177	.068							
232	1.2D + 1.5Lm17 + 1.0Wm (6...		Y		1	1.2	55	1.5	4	.068	175	1.2	178	.068							
233	1.2D + 1.5Lm17 + 1.0Wm (9...		Y		1	1.2	55	1.5	5	.068	175	1.2	179	.068							
234	1.2D + 1.5Lm17 + 1.0Wm (1...		Y		1	1.2	55	1.5	6	.068	175	1.2	180	.068							
235	1.2D + 1.5Lm17 + 1.0Wm (1...		Y		1	1.2	55	1.5	7	.068	175	1.2	181	.068							
236	1.2D + 1.5Lm17 + 1.0Wm (1...		Y		1	1.2	55	1.5	8	.068	175	1.2	182	.068							
237	1.2D + 1.5Lm17 + 1.0Wm (2...		Y		1	1.2	55	1.5	9	.068	175	1.2	183	.068							
238	1.2D + 1.5Lm17 + 1.0Wm (2...		Y		1	1.2	55	1.5	10	.068	175	1.2	184	.068							
239	1.2D + 1.5Lm17 + 1.0Wm (2...		Y		1	1.2	55	1.5	11	.068	175	1.2	185	.068							
240	1.2D + 1.5Lm17 + 1.0Wm (3...		Y		1	1.2	55	1.5	12	.068	175	1.2	186	.068							
241	1.2D + 1.5Lm17 + 1.0Wm (3...		Y		1	1.2	55	1.5	13	.068	175	1.2	187	.068							
242	1.2D + 1.5Lm18 + 1.0Wm (0 ...		Y		1	1.2	56	1.5	2	.068	175	1.2	176	.068							
243	1.2D + 1.5Lm18 + 1.0Wm (3...		Y		1	1.2	56	1.5	3	.068	175	1.2	177	.068							
244	1.2D + 1.5Lm18 + 1.0Wm (6...		Y		1	1.2	56	1.5	4	.068	175	1.2	178	.068							
245	1.2D + 1.5Lm18 + 1.0Wm (9...		Y		1	1.2	56	1.5	5	.068	175	1.2	179	.068							
246	1.2D + 1.5Lm18 + 1.0Wm (1...		Y		1	1.2	56	1.5	6	.068	175	1.2	180	.068							
247	1.2D + 1.5Lm18 + 1.0Wm (1...		Y		1	1.2	56	1.5	7	.068	175	1.2	181	.068							
248	1.2D + 1.5Lm18 + 1.0Wm (1...		Y		1	1.2	56	1.5	8	.068	175	1.2	182	.068							
249	1.2D + 1.5Lm18 + 1.0Wm (2...		Y		1	1.2	56	1.5	9	.068	175	1.2	183	.068							
250	1.2D + 1.5Lm18 + 1.0Wm (2...		Y		1	1.2	56	1.5	10	.068	175	1.2	184	.068							
251	1.2D + 1.5Lm18 + 1.0Wm (2...		Y		1	1.2	56	1.5	11	.068	175	1.2	185	.068							
252	1.2D + 1.5Lm18 + 1.0Wm (3...		Y		1	1.2	56	1.5	12	.068	175	1.2	186	.068							
253	1.2D + 1.5Lm18 + 1.0Wm (3...		Y		1	1.2	56	1.5	13	.068	175	1.2	187	.068							
254	1.2D + 1.5Lm19 + 1.0Wm (0 ...		Y		1	1.2	57	1.5	2	.068	175	1.2	176	.068							
255	1.2D + 1.5Lm19 + 1.0Wm (3...		Y		1	1.2	57	1.5	3	.068	175	1.2	177	.068							
256	1.2D + 1.5Lm19 + 1.0Wm (6...		Y		1	1.2	57	1.5	4	.068	175	1.2	178	.068							
257	1.2D + 1.5Lm19 + 1.0Wm (9...		Y		1	1.2	57	1.5	5	.068	175	1.2	179	.068							
258	1.2D + 1.5Lm19 + 1.0Wm (1...		Y		1	1.2	57	1.5	6	.068	175	1.2	180	.068							
259	1.2D + 1.5Lm19 + 1.0Wm (1...		Y		1	1.2	57	1.5	7	.068	175	1.2	181	.068							
260	1.2D + 1.5Lm19 + 1.0Wm (1...		Y		1	1.2	57	1.5	8	.068	175	1.2	182	.068							
261	1.2D + 1.5Lm19 + 1.0Wm (2...		Y		1	1.2	57	1.5	9	.068	175	1.2	183	.068							
262	1.2D + 1.5Lm19 + 1.0Wm (2...		Y		1	1.2	57	1.5	10	.068	175	1.2	184	.068							
263	1.2D + 1.5Lm19 + 1.0Wm (2...		Y		1	1.2	57	1.5	11	.068	175	1.2	185	.068							
264	1.2D + 1.5Lm19 + 1.0Wm (3...		Y		1	1.2	57	1.5	12	.068	175	1.2	186	.068							
265	1.2D + 1.5Lm19 + 1.0Wm (3...		Y		1	1.2	57	1.5	13	.068	175	1.2	187	.068							
266	1.2D + 1.5Lm20 + 1.0Wm (0 ...		Y		1	1.2	58	1.5	2	.068	175	1.2	176	.068							
267	1.2D + 1.5Lm20 + 1.0Wm (3...		Y		1	1.2	58	1.5	3	.068	175	1.2	177	.068							
268	1.2D + 1.5Lm20 + 1.0Wm (6...		Y		1	1.2	58	1.5	4	.068	175	1.2	178	.068							
269	1.2D + 1.5Lm20 + 1.0Wm (9...		Y		1	1.2	58	1.5	5	.068	175	1.2	179	.068							



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

May 4, 2022
 2:40 PM
 Checked By: DHK

Load Combinations (Continued)

Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
270	1.2D + 1.5Lm20 + 1.0Wm (1...		Y		1	1.2	58	1.5	6	.068	175	1.2	180	.068					
271	1.2D + 1.5Lm20 + 1.0Wm (1...		Y		1	1.2	58	1.5	7	.068	175	1.2	181	.068					
272	1.2D + 1.5Lm20 + 1.0Wm (1...		Y		1	1.2	58	1.5	8	.068	175	1.2	182	.068					
273	1.2D + 1.5Lm20 + 1.0Wm (2...		Y		1	1.2	58	1.5	9	.068	175	1.2	183	.068					
274	1.2D + 1.5Lm20 + 1.0Wm (2...		Y		1	1.2	58	1.5	10	.068	175	1.2	184	.068					
275	1.2D + 1.5Lm20 + 1.0Wm (2...		Y		1	1.2	58	1.5	11	.068	175	1.2	185	.068					
276	1.2D + 1.5Lm20 + 1.0Wm (3...		Y		1	1.2	58	1.5	12	.068	175	1.2	186	.068					
277	1.2D + 1.5Lm20 + 1.0Wm (3...		Y		1	1.2	58	1.5	13	.068	175	1.2	187	.068					
278	1.2D + 1.5Lm21 + 1.0Wm (0 ...		Y		1	1.2	59	1.5	2	.068	175	1.2	176	.068					
279	1.2D + 1.5Lm21 + 1.0Wm (3...		Y		1	1.2	59	1.5	3	.068	175	1.2	177	.068					
280	1.2D + 1.5Lm21 + 1.0Wm (6...		Y		1	1.2	59	1.5	4	.068	175	1.2	178	.068					
281	1.2D + 1.5Lm21 + 1.0Wm (9...		Y		1	1.2	59	1.5	5	.068	175	1.2	179	.068					
282	1.2D + 1.5Lm21 + 1.0Wm (1...		Y		1	1.2	59	1.5	6	.068	175	1.2	180	.068					
283	1.2D + 1.5Lm21 + 1.0Wm (1...		Y		1	1.2	59	1.5	7	.068	175	1.2	181	.068					
284	1.2D + 1.5Lm21 + 1.0Wm (1...		Y		1	1.2	59	1.5	8	.068	175	1.2	182	.068					
285	1.2D + 1.5Lm21 + 1.0Wm (2...		Y		1	1.2	59	1.5	9	.068	175	1.2	183	.068					
286	1.2D + 1.5Lm21 + 1.0Wm (2...		Y		1	1.2	59	1.5	10	.068	175	1.2	184	.068					
287	1.2D + 1.5Lm21 + 1.0Wm (2...		Y		1	1.2	59	1.5	11	.068	175	1.2	185	.068					
288	1.2D + 1.5Lm21 + 1.0Wm (3...		Y		1	1.2	59	1.5	12	.068	175	1.2	186	.068					
289	1.2D + 1.5Lm21 + 1.0Wm (3...		Y		1	1.2	59	1.5	13	.068	175	1.2	187	.068					
290	1.2D + 1.5Lm22 + 1.0Wm (0 ...		Y		1	1.2	60	1.5	2	.068	175	1.2	176	.068					
291	1.2D + 1.5Lm22 + 1.0Wm (3...		Y		1	1.2	60	1.5	3	.068	175	1.2	177	.068					
292	1.2D + 1.5Lm22 + 1.0Wm (6...		Y		1	1.2	60	1.5	4	.068	175	1.2	178	.068					
293	1.2D + 1.5Lm22 + 1.0Wm (9...		Y		1	1.2	60	1.5	5	.068	175	1.2	179	.068					
294	1.2D + 1.5Lm22 + 1.0Wm (1...		Y		1	1.2	60	1.5	6	.068	175	1.2	180	.068					
295	1.2D + 1.5Lm22 + 1.0Wm (1...		Y		1	1.2	60	1.5	7	.068	175	1.2	181	.068					
296	1.2D + 1.5Lm22 + 1.0Wm (1...		Y		1	1.2	60	1.5	8	.068	175	1.2	182	.068					
297	1.2D + 1.5Lm22 + 1.0Wm (2...		Y		1	1.2	60	1.5	9	.068	175	1.2	183	.068					
298	1.2D + 1.5Lm22 + 1.0Wm (2...		Y		1	1.2	60	1.5	10	.068	175	1.2	184	.068					
299	1.2D + 1.5Lm22 + 1.0Wm (2...		Y		1	1.2	60	1.5	11	.068	175	1.2	185	.068					
300	1.2D + 1.5Lm22 + 1.0Wm (3...		Y		1	1.2	60	1.5	12	.068	175	1.2	186	.068					
301	1.2D + 1.5Lm22 + 1.0Wm (3...		Y		1	1.2	60	1.5	13	.068	175	1.2	187	.068					
302	1.2D + 1.5Lm23 + 1.0Wm (0 ...		Y		1	1.2	61	1.5	2	.068	175	1.2	176	.068					
303	1.2D + 1.5Lm23 + 1.0Wm (3...		Y		1	1.2	61	1.5	3	.068	175	1.2	177	.068					
304	1.2D + 1.5Lm23 + 1.0Wm (6...		Y		1	1.2	61	1.5	4	.068	175	1.2	178	.068					
305	1.2D + 1.5Lm23 + 1.0Wm (9...		Y		1	1.2	61	1.5	5	.068	175	1.2	179	.068					
306	1.2D + 1.5Lm23 + 1.0Wm (1...		Y		1	1.2	61	1.5	6	.068	175	1.2	180	.068					
307	1.2D + 1.5Lm23 + 1.0Wm (1...		Y		1	1.2	61	1.5	7	.068	175	1.2	181	.068					
308	1.2D + 1.5Lm23 + 1.0Wm (1...		Y		1	1.2	61	1.5	8	.068	175	1.2	182	.068					
309	1.2D + 1.5Lm23 + 1.0Wm (2...		Y		1	1.2	61	1.5	9	.068	175	1.2	183	.068					
310	1.2D + 1.5Lm23 + 1.0Wm (2...		Y		1	1.2	61	1.5	10	.068	175	1.2	184	.068					
311	1.2D + 1.5Lm23 + 1.0Wm (2...		Y		1	1.2	61	1.5	11	.068	175	1.2	185	.068					
312	1.2D + 1.5Lm23 + 1.0Wm (3...		Y		1	1.2	61	1.5	12	.068	175	1.2	186	.068					
313	1.2D + 1.5Lm23 + 1.0Wm (3...		Y		1	1.2	61	1.5	13	.068	175	1.2	187	.068					
314	1.2D + 1.5Lm24 + 1.0Wm (0 ...		Y		1	1.2	62	1.5	2	.068	175	1.2	176	.068					
315	1.2D + 1.5Lm24 + 1.0Wm (3...		Y		1	1.2	62	1.5	3	.068	175	1.2	177	.068					
316	1.2D + 1.5Lm24 + 1.0Wm (6...		Y		1	1.2	62	1.5	4	.068	175	1.2	178	.068					
317	1.2D + 1.5Lm24 + 1.0Wm (9...		Y		1	1.2	62	1.5	5	.068	175	1.2	179	.068					
318	1.2D + 1.5Lm24 + 1.0Wm (1...		Y		1	1.2	62	1.5	6	.068	175	1.2	180	.068					
319	1.2D + 1.5Lm24 + 1.0Wm (1...		Y		1	1.2	62	1.5	7	.068	175	1.2	181	.068					
320	1.2D + 1.5Lm24 + 1.0Wm (1...		Y		1	1.2	62	1.5	8	.068	175	1.2	182	.068					
321	1.2D + 1.5Lm24 + 1.0Wm (2...		Y		1	1.2	62	1.5	9	.068	175	1.2	183	.068					
322	1.2D + 1.5Lm24 + 1.0Wm (2...		Y		1	1.2	62	1.5	10	.068	175	1.2	184	.068					
323	1.2D + 1.5Lm24 + 1.0Wm (2...		Y		1	1.2	62	1.5	11	.068	175	1.2	185	.068					
324	1.2D + 1.5Lm24 + 1.0Wm (3...		Y		1	1.2	62	1.5	12	.068	175	1.2	186	.068					
325	1.2D + 1.5Lm24 + 1.0Wm (3...		Y		1	1.2	62	1.5	13	.068	175	1.2	187	.068					
326	1.2D + 1.5Lm25 + 1.0Wm (0 ...		Y		1	1.2	63	1.5	2	.068	175	1.2	176	.068					



Load Combinations (Continued)

	Description	S...	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
555	1.2D + 1.5Lv (Position 86)		Y	1	1.2	160	1.5	175	1.2											
556	1.2D + 1.5Lv (Position 87)		Y	1	1.2	161	1.5	175	1.2											
557	1.2D + 1.5Lv (Position 88)		Y	1	1.2	162	1.5	175	1.2											
558	1.2D + 1.5Lv (Position 89)		Y	1	1.2	163	1.5	175	1.2											
559	1.2D + 1.5Lv (Position 90)		Y	1	1.2	164	1.5	175	1.2											
560	1.2D + 1.5Lv (Position 91)		Y	1	1.2	165	1.5	175	1.2											
561	1.2D + 1.5Lv (Position 92)		Y	1	1.2	166	1.5	175	1.2											
562	1.2D + 1.5Lv (Position 93)		Y	1	1.2	167	1.5	175	1.2											
563	1.2D + 1.5Lv (Position 94)		Y	1	1.2	168	1.5	175	1.2											
564	1.2D + 1.5Lv (Position 95)		Y	1	1.2	169	1.5	175	1.2											
565	1.2D + 1.5Lv (Position 96)		Y	1	1.2	170	1.5	175	1.2											
566	1.2D + 1.5Lv (Position 97)		Y	1	1.2	171	1.5	175	1.2											
567	1.2D + 1.5Lv (Position 98)		Y	1	1.2	172	1.5	175	1.2											
568	1.2D + 1.5Lv (Position 99)		Y	1	1.2	173	1.5	175	1.2											
569	1.2D + 1.5Lv (Position 100)		Y	1	1.2	174	1.5	175	1.2											

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC	
1	N10	max	1720.569	8	578.705	149	780.681	11	693.871	120	981.744	5	698.585	146
2		min	-3437.728	2	151.223	71	-780.609	5	-589.911	150	-984.932	11	175.544	56
3	N110	max	2589.431	14	1530.076	14	47.824	11	.46	133	10.767	5	365.775	14
4		min	223.731	8	123.19	8	-47.823	5	-.318	139	-10.688	11	29.046	8
5	N114	max	1717.077	10	578.706	109	2981.77	10	898.069	109	982.737	13	163.43	98
6		min	-858.842	4	151.229	163	-1494.495	4	89.102	7	-985.926	7	-947.616	68
7	N132	max	-111.134	4	1530.397	22	-192.474	4	316.745	22	10.768	13	-14.433	4
8		min	-1294.909	22	122.338	4	-2243.258	22	24.971	4	-10.689	7	-183.084	22
9	N136	max	1723.932	6	578.705	57	1490.889	12	-149.797	119	982.963	9	254.198	160
10		min	-865.022	12	151.223	111	-2977.791	6	-949.03	161	-986.147	3	-858.316	58
11	N154	max	-111.103	12	1530.389	18	2243.022	18	-24.983	12	10.768	9	-14.408	12
12		min	-1295.29	18	122.331	12	192.479	12	-316.926	18	-10.689	3	-182.767	18
13	Totals:	max	3589.836	8	5717.869	18	3501.99	11						
14		min	-3589.836	2	2573.26	12	-3501.987	5						

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

Member	Shape	Code Check	Loc[in]	LC	Shea...	Loc[in]	Dir	LC	phi*Pn...	phi*...	phi*...	phi*...	Cb	Eqn	
1	GRATE-H...	L2x2x3	.798	25.359	480	.028	50.7...	z	480	9528.06	227...	542...	108...	1.311	H2-1
2	GRATE-H...	L2x2x3	.798	25.359	482	.028	50.7...	z	482	9528.06	227...	542...	108...	1.311	H2-1
3	GRATE-H...	L2x2x3	.798	25.359	484	.028	50.7...	z	484	9528.06	227...	542...	108...	1.311	H2-1
4	GRATE-H...	L2x2x3	.797	25.358	479	.028	50.7...	y	479	9528.13	227...	542...	108...	1.311	H2-1
5	GRATE-H...	L2x2x3	.797	25.358	483	.028	50.7...	y	483	9528.13	227...	542...	108...	1.311	H2-1
6	GRATE-H...	L2x2x3	.797	25.358	481	.028	50.7...	y	481	9528.13	227...	542...	108...	1.311	H2-1
7	MP4	PIPE 2.0	.304	69	8	.119	69		8	14916...	321...	187...	187...	1.541	H1-...
8	MP12	PIPE 2.0	.298	27	4	.119	69		4	14916...	321...	187...	187...	1.556	H1-...
9	MP8	PIPE 2.0	.298	27	12	.119	69		12	14916...	321...	187...	187...	1.393	H1-...
10	HR-0	PIPE 2.0	.260	132.812	7	.223	139...		2	6295.4...	321...	187...	187...	4.197	H1-...
11	HR-240	PIPE 2.0	.260	132.812	3	.223	139...		10	6295.4...	321...	187...	187...	4.197	H1-...
12	HR-120	PIPE 2.0	.260	132.812	11	.223	139...		6	6295.4...	321...	187...	187...	4.197	H1-...
13	COR-3	L2.5x2.5x4	.248	0	13	.098	0	y	12	35743...	374...	108...	246...	2.156	H2-1
14	COR-2	L2.5x2.5x4	.248	0	9	.098	0	y	8	35743...	374...	108...	246...	2.156	H2-1
15	COR-1	L2.5x2.5x4	.248	0	5	.098	0	y	4	35743...	374...	108...	246...	2.156	H2-1
16	MP3	PIPE 2.0	.244	27	5	.052	27		4	14916...	321...	187...	187...	2.475	H1-...
17	MP7	PIPE 2.0	.244	27	9	.052	27		8	14916...	321...	187...	187...	4.953	H1-...
18	MP11	PIPE 2.0	.244	27	13	.052	27		12	14916...	321...	187...	187...	4.663	H1-...
19	MP2	PIPE 2.0	.242	27	5	.054	27		7	14916...	321...	187...	187...	3.374	H1-...



Company : ETS, PLLC
 Designer : KM
 Job Number : ETS#22106741.STR.5264
 Model Name : BARKHAMSTEDW CT

May 4, 2022
 2:40 PM
 Checked By: DHK

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

Member	Shape	Code Check	Loc[in]	LC	Shea	Loc[in]	Dir	LC	phi*Pn...	phi*...	phi*...	phi*...	Cb	Eqn	
20	MP10	PIPE 2.0	.242	27	13	.054	27		3	14916...	321...	187...	187...	4.697	H1...
21	MP6	PIPE 2.0	.242	27	9	.054	27		11	14916...	321...	187...	187...	4.844	H1...
22	MP1	PIPE 2.0	.214	27	5	.090	27		9	14916...	321...	187...	187...	4.178	H1...
23	MP9	PIPE 2.0	.214	27	13	.090	27		5	14916...	321...	187...	187...	4.526	H1...
24	MP5	PIPE 2.0	.214	27	9	.090	27		13	14916...	321...	187...	187...	4.838	H1...
25	SA-1	HSS4X4X4	.111	62.25	9	.086	62.25	y	160	101146...	106...	123...	123...	3.179	H1...
26	SA-2	HSS4X4X4	.111	62.25	13	.086	62.25	y	68	101146...	106...	123...	123...	3.18	H1...
27	SA-3	HSS4X4X4	.111	62.25	5	.086	62.25	y	120	101146...	106...	123...	123...	3.179	H1...
28	BRACE-2	HSS4X4X4	.100	29.916	69	.036	29.2...	y	107	104591...	106...	123...	123...	1.415	H1...
29	BRACE-1	HSS4X4X4	.100	29.916	161	.036	29.2...	y	55	104591...	106...	123...	123...	1.415	H1...
30	BRACE-3	HSS4X4X4	.100	29.916	121	.036	29.2...	y	147	104591...	106...	123...	123...	1.415	H1...
31	COR-PL-3...	PL 1/2x6	.098	0	4	.052	0	y	95	90856...	945...	984...	118...	1.327	H1...
32	COR-PL-2...	PL 1/2x6	.098	0	12	.052	0	y	43	90856...	945...	984...	118...	1.327	H1...
33	COR-PL-9...	PL 1/2x6	.098	0	8	.052	0	y	135	90856...	945...	984...	118...	1.326	H1...
34	COR-PL-2...	PL 1/2x6	.097	0	6	.061	0	y	172	90856...	945...	984...	118...	1.345	H1...
35	COR-PL-3...	PL 1/2x6	.097	0	10	.060	0	y	80	90856...	945...	984...	118...	1.345	H1...
36	COR-PL-9...	PL 1/2x6	.097	0	2	.060	0	y	132	90856...	945...	984...	118...	1.345	H1...
37	FM-0	PIPE 3.0	.084	132.812	80	.072	95.3...		2	59550...	652...	574...	574...	3.17	H1...
38	FM-240	PIPE 3.0	.084	132.812	172	.072	95.3...		10	59550...	652...	574...	574...	3.17	H1...
39	FM-120	PIPE 3.0	.084	17.187	132	.072	54.6...		6	59550...	652...	574...	574...	3.17	H1...
40	KICK-3	LL2.5x2.5x3...	.072	0	22	.003	0	z	8	41807...	568...	412...	254...	1.136	H1...
41	KICK-2	LL2.5x2.5x3...	.072	0	18	.003	50.56	z	4	41807...	568...	412...	254...	1.136	H1...
42	KICK-1	LL2.5x2.5x3...	.072	0	14	.003	50.56	z	12	41807...	568...	412...	254...	1	H1...
43	CONN-PL...	PL 3/8x6	.068	0	6	.061	0	y	110	70797...	708...	553...	885...	1.07	H1...
44	CONN-PL...	PL 3/8x6	.068	0	2	.061	0	y	70	70797...	708...	553...	885...	1.07	H1...
45	CONN-PL...	PL 3/8x6	.068	0	10	.061	0	y	162	70797...	708...	553...	885...	1.07	H1...
46	CONN-PL...	PL 3/8x6	.066	2	9	.169	0	y	162	69647...	708...	553...	885...	1.669	H1...
47	CONN-PL...	PL 3/8x6	.066	2	13	.169	0	y	70	69647...	708...	553...	885...	1.669	H1...
48	CONN-PL...	PL 3/8x6	.065	2	5	.169	0	y	110	69647...	708...	553...	885...	1.669	H1...
49	CONN-PL...	PL 3/8x6	.058	2	3	.172	0	y	55	69647...	708...	553...	885...	1.67	H1...
50	CONN-PL...	PL 3/8x6	.058	2	7	.172	0	y	107	69647...	708...	553...	885...	1.67	H1...
51	CONN-PL...	PL 3/8x6	.058	2	11	.172	0	y	147	69647...	708...	553...	885...	1.67	H1...
52	COR-PL-9...	PL 1/2x6	.051	0	12	.156	0	y	43	93978...	945...	984...	118...	1.661	H1...
53	COR-PL-2...	PL 1/2x6	.051	0	4	.156	0	y	95	93978...	945...	984...	118...	1.661	H1...
54	COR-PL-3...	PL 1/2x6	.051	0	8	.156	0	y	135	93978...	945...	984...	118...	1.661	H1...
55	CONN-PL...	PL 3/8x6	.046	0	3	.062	0	y	55	70797...	708...	553...	885...	1.07	H1...
56	CONN-PL...	PL 3/8x6	.046	0	7	.062	0	y	107	70797...	708...	553...	885...	1.07	H1...
57	CONN-PL...	PL 3/8x6	.046	0	11	.062	0	y	147	70797...	708...	553...	885...	1.07	H1...
58	COR-PL-3...	PL 1/2x6	.044	0	13	.181	0	y	172	93978...	945...	984...	118...	1.67	H1...
59	COR-PL-2...	PL 1/2x6	.044	0	9	.181	0	y	132	93978...	945...	984...	118...	1.67	H1...
60	COR-PL-9...	PL 1/2x6	.044	0	5	.181	0	y	80	93978...	945...	984...	118...	1.67	H1...
61	KICK-PL-4	PL 1/2x8	.036	2.875	23	.052	2.875	y	22	123467...	126...	131...	210...	1.667	H1...
62	KICK-PL-6	PL 1/2x8	.036	2.875	15	.052	2.875	y	14	123467...	126...	131...	210...	1.667	H1...
63	KICK-PL-2	PL 1/2x8	.036	2.875	19	.052	2.875	y	18	123467...	126...	131...	210...	1.667	H1...
64	KICK-PL-3	PL 1/2x8	.029	0	23	.031	0	y	22	123467...	126...	131...	210...	1.668	H1...
65	KICK-PL-5	PL 1/2x8	.028	0	15	.031	0	y	14	123467...	126...	131...	210...	1.668	H1...
66	KICK-PL-1	PL 1/2x8	.028	0	19	.031	0	y	18	123467...	126...	131...	210...	1.668	H1...
67	PL-90-1	PL 3/8x6	.000	1.5	8	.000	1.5	y	25	70011...	729...	569...	911...	1.562	H1...
68	PL-90-2	PL 3/8x6	.000	1.5	8	.000	1.5	y	25	70011...	729...	569...	911...	1.563	H1...
69	PL-210-2	PL 3/8x6	.000	1.5	12	.000	1.5	y	25	70011...	729...	569...	911...	1.563	H1...
70	PL-330-2	PL 3/8x6	.000	1.5	10	.000	1.5	y	25	70011...	729...	569...	911...	1.562	H1...
71	PL-330-1	PL 3/8x6	.000	1.5	10	.000	1.5	y	25	70011...	729...	569...	911...	1.563	H1...
72	PL-210-1	PL 3/8x6	.000	1.5	12	.000	1.5	y	25	70011...	729...	569...	911...	1.562	H1...

TIA-222-H 4-Bolt Connection Check

Connection Details	
Bolt Diameter =	0.625 in
Bolt Quantity =	4
Bolt Threads/Inch, n =	11
Vertical Bolt Spacing =	6.000 in
Horizontal Bolt Spacing =	6.000 in
Bolt Grade =	A325
Plate Height =	8.250 in
Plate Width =	8.250 in
Plate Thickness =	0.75
Plate Grade =	Other
Standoff Member Type =	HSS
Member Height =	4.000 in
Member Width =	4.000 in
Member Thickness =	0.250 in
Use TIA-222-H Section 15.5?	No
Weld Size =	3/8 in

Connection Check (Bolts)		
ϕ =	0.75	Strength Reduction Factor
A_n =	0.226 in ²	Net Bolt Area (AISC Table 7-17)
A_b =	0.307 in ²	Gross Bolt Area
$F_{u_{bolt}}$ =	120 ksi	Bolt Ultimate Stress Capacity
ϕR_{nt} =	20.34 kip	Bolt Nominal Tensile Capacity (TIA-H 4.9.6.1)
ϕR_{nv} =	13.81 kip	Bolt Nominal Shear Capacity (TIA-H 4.9.6.3)
$V_{u_{bolt}}$ =	1.117 kip	Shear Force Per Bolt
$T_{u_{bolt}}$ =	1.085 kip	Tension Force Per Bolt
CSR =	8.1%	OK (TIA 4.9.6.4)

Connection Check (Plate)		
ϕ =	0.9	Strength Reduction Factor
F_y =	35 ksi	Plate Yield Capacity
Y_{LH} =	7.48 in	Horizontal plate yield line
Y_{LV} =	7.48 in	Vertical plate yield line
Y_{LD} =	6.01 in	Diagonal plate yield line
M_{max} =	2.5 kip-in	Plate Bending Moment
F_b =	31.5 ksi	Nominal Plate Yield Capacity
f_b =	2.4 ksi	Plate Bending Stress Demand
CSR =	7.6%	OK

Connection Check (Welds)		
ϕ =	0.75	Strength Reduction Factor
F_{EXX} =	70 ksi	Filler Metal Strength (70 ksi assumed)
$F_{u_{bm}}$ =	58 ksi	Base Metal Strength
ϕR_n =	8.4 k/in	Nominal Weld Capacity
R_u =	0.8 k/in	Weld Shear Demand
CSR =	9.5%	OK



Exhibit F

Power Density/RF Emissions Report



Radio Frequency Emissions Analysis Report



Site ID: CTNH416A

Old Farms - Verizon Colo
14 Old North Road / 5 Old Farms Road
Barkhamsted, CT 06063

July 20, 2022

Fox Hill Telecom Project Number: 221462

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	13.92 %

July 20, 2022

T-MOBILE
Attn: RF Manager
35 Griffin Road South
Bloomfield, CT 06009

Emissions Analysis for Site: **CTNH416A – Old Farms - Verizon Colo**

Fox Hill Telecom, Inc (“Fox Hill”) was directed to analyze the proposed upgrades to the T-MOBILE facility located at **14 Old North Road / 5 Old Farms Road, Barkhamsted, CT**, for the purpose of determining whether the emissions from the Proposed T-MOBILE Antenna Installation located on this property are within specified federal limits.

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

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

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

General population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600 MHz & 700 MHz bands are approximately $400 \mu\text{W}/\text{cm}^2$ and $467 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



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

Additional details can be found in FCC OET 65.



CALCULATIONS

Calculations were performed for the proposed upgrades to the T-MOBILE antenna facility located at **14 Old North Road / 5 Old Farms Road, Barkhamsted, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-MOBILE is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

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

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
LTE / 5G NR	600 MHz	2	40
LTE	700 MHz	2	20
LTE	1900 MHz (PCS)	4	40
GSM	1900 MHz (PCS)	1	15
UMTS	2100 MHz (AWS)	1	40

Table 1: Channel Data Table

The following antennas listed in *Table 2* were used in the modeling for transmission in the 600 MHz, 700 MHz, 1900 MHz (PCS) and 2100 MHz (AWS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	RFS APXVAALL24_43-U-NA20	125
A	2	RFS APX16DWV-16DWV-S-E-A20	125
B	1	RFS APXVAALL24_43-U-NA20	125
B	2	RFS APX16DWV-16DWV-S-E-A20	125
C	1	RFS APXVAALL24_43-U-NA20	125
C	2	RFS APX16DWV-16DWV-S-E-A20	125

Table 2: Antenna Data

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

Cable losses were factored in the calculations for this site. Since the proposed **1900 MHz** and **2100 MHz** radios are ground mounted the following cable loss values were used. For each ground mounted **1900 MHz (PCS)** radio there was **1.65 dB** of cable loss calculated into the system gains / losses for this site. For each ground mounted **2100 MHz (AWS)** radio there was **1.70 dB** of cable loss calculated into the system gains / losses for this site. These values were calculated based upon the manufacturer’s specifications for **160 feet** of **1-5/8”** coax.



RESULTS

Per the calculations completed for the proposed T-MOBILE configurations *Table 3* shows resulting emissions power levels and percentages of the FCC’s allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	RFS APXVAALL24_43-U-NA20	600 MHz / 700 MHz	13.65 / 13.85	4	120	2,824.56	1.71
Antenna A2	RFS APX16DWV-16DWV-S-E-A20	1900 MHz (PCS) / 2100 MHz (AWS)	15.9 / 15.9	6	215	5,708.38	1.45
Sector A Composite MPE%							3.16
Antenna B1	RFS APXVAALL24_43-U-NA20	600 MHz / 700 MHz	13.65 / 13.85	4	120	2,824.56	1.71
Antenna B2	RFS APX16DWV-16DWV-S-E-A20	1900 MHz (PCS) / 2100 MHz (AWS)	15.9 / 15.9	6	215	5,708.38	1.45
Sector B Composite MPE%							3.16
Antenna C1	RFS APXVAALL24_43-U-NA20	600 MHz / 700 MHz	13.65 / 13.85	4	120	2,824.56	1.71
Antenna C2	RFS APX16DWV-16DWV-S-E-A20	1900 MHz (PCS) / 2100 MHz (AWS)	15.9 / 15.9	6	215	5,708.38	1.45
Sector C Composite MPE%							3.16

Table 3: T-MOBILE Emissions Levels

The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum T-MOBILE MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each T-MOBILE Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
T-MOBILE – Max Per Sector Value	3.16 %
Verizon Wireless	9.15 %
MetroPCS	0.57 %
AT&T	1.04 %
Site Total MPE %:	13.92 %

Table 4: All Carrier MPE Contributions

T-MOBILE Sector A Total:	3.16 %
T-MOBILE Sector B Total:	3.16 %
T-MOBILE Sector C Total:	3.16 %
Site Total:	13.92 %

Table 5: Site MPE Summary



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated T-MOBILE sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

T-MOBILE _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile 600 MHz LTE / 5G NR	2	926.96	125	4.71	600 MHz	400	1.18%
T-Mobile 700 MHz LTE	2	485.32	125	2.46	700 MHz	467	0.53%
T-Mobile 1900 MHz (PCS) LTE	4	1,064.29	125	10.81	1900 MHz (PCS)	1000	1.08%
T-Mobile 1900 MHz (PCS) GSM	1	399.11	125	1.01	1900 MHz (PCS)	1000	0.10%
T-Mobile 2100 MHz (AWS) UMTS	1	1,052.11	125	2.67	2100 MHz (AWS)	1000	0.27%
						Total:	3.16%

Table 6: T-MOBILE Maximum Sector MPE Power Values



Summary

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

The anticipated maximum composite contributions from the T-MOBILE facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

T-MOBILE Sector	Power Density Value (%)
Sector A:	3.16 %
Sector B:	3.16 %
Sector C:	3.16 %
T-MOBILE Maximum Total (per sector):	3.16 %
Site Total:	13.92 %
Site Compliance Status:	COMPLIANT


The anticipated composite MPE value for this site assuming all carriers present is **13.92 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

Scott Heffernan
Principal RF Engineer
Fox Hill Telecom, Inc
Holden, MA 01520
(978)660-3998

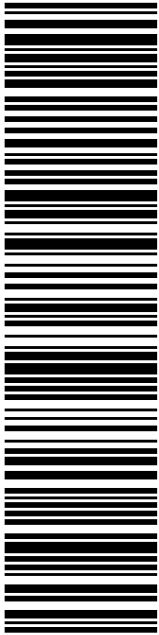
Exhibit G

Recipient Mailings



AMERICAN TOWERS LLC
10 PRESIDENTIAL WAY
WOBURN MA 01801-1053

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420 MAIN ST
STURBRIDGE MA 01566-1359

PRIORITY MAIL®

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Ship Date: 08/03/2022	
Expected Delivery Date: 08/04/2022	

From: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
STE 1
420 MAIN ST
STURBRIDGE MA 01566-1359

Ref#: CTNH416A


To: AMERICAN TOWERS LLC
10 PRESIDENTIAL WAY
WOBURN MA 01801-1053

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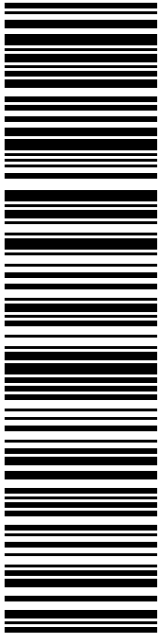
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DONALD S STEIN
FIRST SELECTMAN
67 RIPLEY HILL RD
BARKHAMSTED CT 06063-3329

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Ship Date: 08/03/2022	
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 STE 1
 420 MAIN ST
 STURBRIDGE MA 01566-1359


Ref#: CTNH416A

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 FIRST SELECTMAN
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 BARKHAMSTED CT 06063-3329

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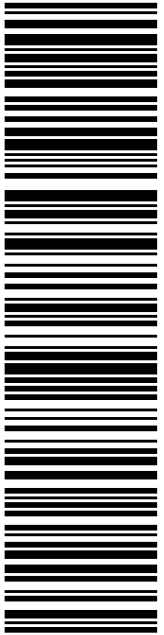


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DEBRA BRYDON
ADMINISTRATOR ZONING & INLANDS
67 RIPLEY HILL RD
BARKHAMSTED CT 06063-3329

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Trans. #: 569014838	Priority Mail® Postage: \$8.95				
Print Date: 08/03/2022	Total: \$8.95				
Ship Date: 08/03/2022					
Expected Delivery Date: 08/05/2022					
<table style="width: 100%;"> <tr> <td style="width: 50%;">From: DEBORAH CHASE NORTHEAST SITE SOLUTIONS STE 1 420 MAIN ST STURBRIDGE MA 01566-1359</td> <td style="width: 50%;">Ref#: CTNH416A</td> </tr> <tr> <td colspan="2" style="padding-top: 10px;">To: DEBRA BRYDON ADMINISTRATOR ZONING & INLANDS WETLANDS OFFICER 67 RIPLEY HILL RD BARKHAMSTED CT 06063-3329</td> </tr> </table>		From: DEBORAH CHASE NORTHEAST SITE SOLUTIONS STE 1 420 MAIN ST STURBRIDGE MA 01566-1359	Ref#: CTNH416A	To: DEBRA BRYDON ADMINISTRATOR ZONING & INLANDS WETLANDS OFFICER 67 RIPLEY HILL RD BARKHAMSTED CT 06063-3329	
From: DEBORAH CHASE NORTHEAST SITE SOLUTIONS STE 1 420 MAIN ST STURBRIDGE MA 01566-1359	Ref#: CTNH416A				
To: DEBRA BRYDON ADMINISTRATOR ZONING & INLANDS WETLANDS OFFICER 67 RIPLEY HILL RD BARKHAMSTED CT 06063-3329					
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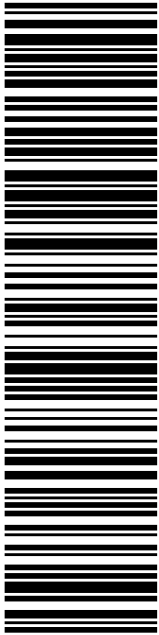


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JOHN P LAVIERI
750 W CENTER ST
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Ship Date:	08/03/2022		
Expected			
Delivery Date:	08/04/2022		

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NORTHEAST SITE SOLUTIONS
STE 1
420 MAIN ST
STURBRIDGE MA 01566-1359

To: JOHN P LAVIERI
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