Filed by:
G. Scott Shepherd, Site Development Specialist II - SBA Communications
134 Flanders Rd., Suite 125, Westborough, MA 01581
508.251.0720 x 3807 - gshepherd@sbasite.com

January 4, 2021

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

Notice of Exempt Modification
15 North Granby Road, Granby, CT 06035
Latitude: 41.953583
Longitude: -72.793722
T-Mobile #: CT11281B_Anchor

Dear Ms. Bachman:

T-Mobile currently maintains twelve (12) antennas at the 115-foot level of the existing 150-foot Monopole Tower at 15 North Granby Road in Granby, CT. The tower is owned by SBA 2012 TC Assets, LLC. The property is owned by the Town of Granby. T-Mobile plans to remove four (4) 1900 MHz antennas and replace with four (4) L2500 MHz antennas. The total number of antennas will remain at twelve (12).

The new antennas would support 5G services and would be installed at the 115-foot level of the tower.

Please note: Per the Connecticut Siting Council Website: CSC COVID 19 Guidelines. *In order to prevent the spread of Coronavirus and protect the health and safety of our members and staff, as of March 18, 2020, the Connecticut Siting Council shall convert to full remote operations until March 30, 2020. Please be advised that during this time period, all hard copy filing requirements will be waived in lieu of an electronic filing. Please also be advised that the March 26, 2020 regular meeting shall be held via teleconference. The Council's website is not equipped with an on-line filing fee receipt service. Therefore, filing fees and/or direct cost charges associated with matters received electronically during the above-mentioned time period will be directly invoiced at a later date.*

Planned Modifications:

TOWER

Remove:

- N/A

Remove and Replace:

- (4) RFS APX16DWV-16DWVS-E-A20 antenna (remove) – Ericsson AIR6449 B41 antenna (replace)

Install New:

- (4) Ericsson 4415 B25 RRU
- (4) 1-5/8" fiber

Existing Equipment to Remain:

- Site Pro1 F4P-12W Platform w/SitePro1 F4P-HRK12 Handrail Kit
- (8) 1-5/8" Coax
- (4) 1-1/4" Hybrid
- (4) Ericsson Radio 4449 B71 + B12 RRUs
- (4) Ericsson AIR32 KRD901146-1_B66A_B2A antenna
- (4) RFS APXVAARR24_43-U-NA20 antenna

Entitlements):

- (4) 1-5/8" Coax
- (4) Ericsson KRY 112 489/2 TMAs

GROUND

Install New:

- Equipment within existing Equipment Shelter/Cabinet

This facility was approved prior to the Council's jurisdiction. On December 15, 1997, the Town of Granby's Board of Selectmen voted unanimously to authorize negotiations for the tower. On April 28, 1998, the Town's Planning & Zoning Commission approved Nextel's tower build. No post construction stipulations were made. 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 the Town of Granby's Town Manager, John D. Ward, and Zoning Enforcement Officer, William Volovski. (Separate notice is not being sent to tower owner, as it belongs to SBA.)

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16.50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modification 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 modification 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 telecommunication facility constitute an exempt modifications under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

G. Scott Shepherd
Site Development Specialist II
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3807 + T
508.366.2610 + F
508.868.6000 + C
gshepherd@sbasite.com

Attachments
cc: John D. Ward, Town Manager / with attachments
Town of Granby, Granby Town Hall, 15 North Granby Road, Granby, CT 06035
William Volovski, Zoning Enforcement Officer / with attachments
Town of Granby, Granby Town Hall, 15 North Granby Road, Granby, CT 06035

EXHIBIT LIST

Exhibit 1	Check Copy	To be invoiced at a later date per Covid guidelines
Exhibit 2	Notification Receipts	x
Exhibit 3	Property Card	x
Exhibit 4	Property Map	x
Exhibit 5	Original Zoning Approval	Town of Granby P&Z Commission 4/28/98
Exhibit 6	Construction Drawings	Chappell Engineering 12/22/20
Exhibit 7	Structural Analysis	TES 10/28/20
Exhibit 8	Mount Analysis	TES 11/17/20
Exhibit 9	EME Report	Transcom Engineering 12/14/20

EXHIBIT 1

Normally, Exhibit 1 would contain a copy of the check for the filing fee.

EXHIBIT 2

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

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EXHIBIT 3

15 NORTH GRANBY RD

Location	15 NORTH GRANBY RD	**Mblu**	G-42/ 68/ 8/ /
Acct#	10400015	**Owner**	GRANBY TOWN OF
Assessment	$2,865,380	**Appraisal**	$4,093,400
PID	3604	**Building Count**	5

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$3,565,300	$528,100	$4,093,400
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$2,495,710	$369,670	$2,865,380

Owner of Record

Owner	GRANBY TOWN OF	**Sale Price**	$0
Co-Owner		**Certificate**	
Address	15 NORTH GRANBY ROAD GRANBY, CT 06035	**Book & Page**	226/0147
		Sale Date	09/21/1998

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
GRANBY TOWN OF	$0		226/0147	09/21/1998
GRANBY TOWN OF	$0		226/0146	09/21/1998
GRANBY TOWN OF	$0		208/0293	05/08/1996
GRANBY TOWN OF	$0		140/0511	02/03/1987
GRANBY TOWN OF	$0		116/0880	02/17/1983

Building Information

Building 1 : Section 1

Year Built:	1964
Living Area:	10,354
Replacement Cost:	$962,813
Building Percent Good:	72

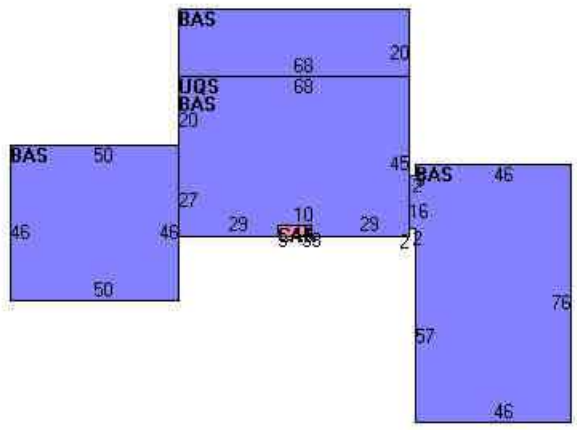
Replacement Cost Less Depreciation: $693,200

Building Attributes	
Field	**Description**
STYLE	City/Town Hall
MODEL	Commercial
Grade	Good
Stories:	1.75
Occupancy	1
Exterior Wall 1	Brick Veneer
Exterior Wall 2	
Roof Structure	Gambrel
Roof Cover	Asphalt
Interior Wall 1	Minimum
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	MUNICIPAL M94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	9030
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	8
% Comn Wall	0

Building Photo

(http://images.vgsi.com/photos2/GranbyCTPhotos//\00\01\26/68

Building Layout



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Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	10,354	10,354
CAN	Canopy	30	0
UQS	3/4 story, Unfinished	3,166	0
		13,550	10,354

Building 2 : Section 1

Year Built: 1981
Living Area: 10,426
Replacement Cost: $1,133,544
Building Percent Good: 71
Replacement Cost Less Depreciation: $804,800

Building Attributes : Bldg 2 of 5	
Field	**Description**

STYLE	Library
MODEL	Commercial
Grade	Good
Stories:	1
Occupancy	1
Exterior Wall 1	Brick Veneer
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	MUNICIPAL M94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	9030
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	0

Building Photo

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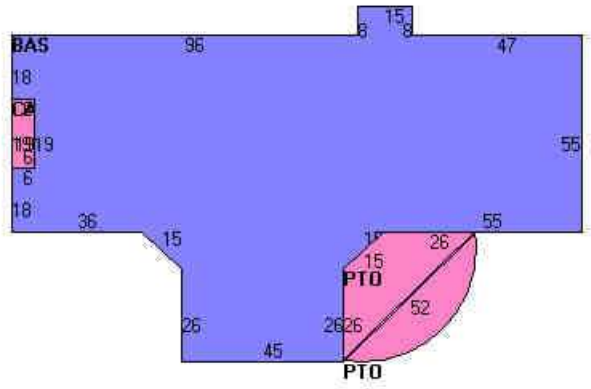
Building Layout



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Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	10,426	10,426
CAN	Canopy	114	0
PTO	PATIO	1,088	0
		11,628	10,426

Building 3 : Section 1

Year Built: 1999
Living Area: 8,913
Replacement Cost: $972,496
Building Percent Good: 84
Replacement Cost Less Depreciation: $816,900

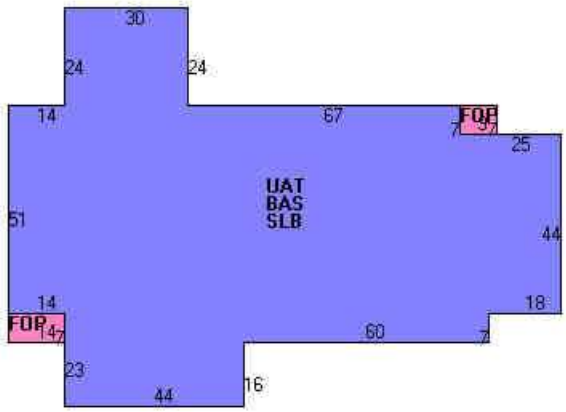
Building Attributes : Bldg 3 of 5	
Field	**Description**
STYLE	Other Municip

MODEL	Commercial
Grade	Excellent
Stories:	1
Occupancy	1
Exterior Wall 1	Brick Veneer
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	Vinyl/Asphalt
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Heat Pump
Bldg Use	MUNICIPAL M96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	903I
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	8
% Comn Wall	0

Building Photo

(http://images.vgsi.com/photos2/GranbyCTPhotos//\00\01\26/7(

Building Layout



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Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	8,913	8,913
FOP	Porch, Open	161	0
SLB	Slab	0	0
UAT	Attic, Unfinished	8,913	0
		17,987	8,913

Building 4 : Section 1

Year Built: 2000
Living Area: 6,416
Replacement Cost: $457,063
Building Percent Good: 83
Replacement Cost Less Depreciation: $379,400

Building Attributes : Bldg 4 of 5	
Field	**Description**

STYLE	Office Bldg
MODEL	Commercial
Grade	Good
Stories:	1
Occupancy	
Exterior Wall 1	Brick Veneer
Exterior Wall 2	Vinyl Siding
Roof Structure	Gable
Roof Cover	Asphalt
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	MUNICIPAL M94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	9030
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	9
% Comn Wall	

Building Photo

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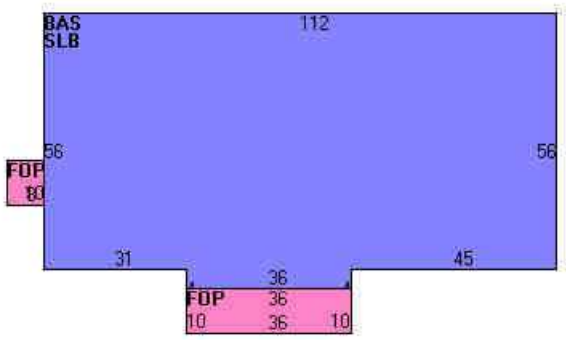
Building Layout



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Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	6,416	6,416
FOP	Porch, Open	440	0
SLB	Slab	0	0
		6,856	6,416

Building 5 : Section 1

Year Built: 2001
Living Area: 8,578
Replacement Cost: $674,326
Building Percent Good: 84
Replacement Cost Less Depreciation: $566,400

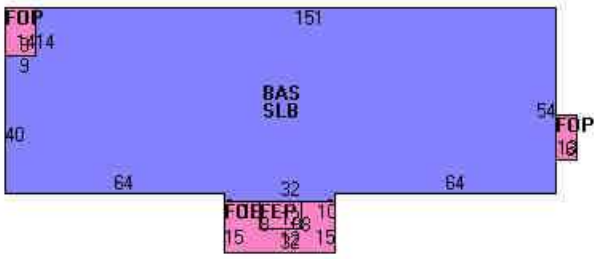
Building Attributes : Bldg 5 of 5	
Field	**Description**
STYLE	Other Municip

MODEL	Commercial
Grade	Good
Stories:	1
Occupancy	1
Exterior Wall 1	Brick Veneer
Exterior Wall 2	Vinyl Siding
Roof Structure	Gable
Roof Cover	Asphalt
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Carpet
Interior Floor 2	Ceram Clay Til
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	Central
Bldg Use	SCHOOL M94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	903I
Heat/AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos2/GranbyCTPhotos//\00\01\26/7

Building Layout



(http://images.vgsi.com/photos2/GranbyCTPhotos//Sketches/360

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	8,578	8,578
FEP	Porch, Enclosed	96	0
FOP	Porch, Open	588	0
SLB	Slab	0	0
		9,262	8,578

Extra Features

Extra Features				Legend
Code	**Description**	**Size**	**Value**	**Bldg #**
SPR1	SPRINKLERS-WET	190 S.F.	$200	4
SPR1	SPRINKLERS-WET	350 S.F.	$300	3
SPR1	SPRINKLERS-WET	8578 S.F.	$7,200	5
VLT2	VAULT-GOOD	1000 S.F.	$90,000	1

Land

Land Use

Use Code	9030
Description	MUNICIPAL M94
Zone	R30
Neighborhood	200
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	14.46
Frontage	0
Depth	0
Assessed Value	$369,670
Appraised Value	$528,100

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
PAV1	PAVING-ASPHALT			60000 S.F.	$60,000	1
LT1	LIGHTS-IN W/PL			19 UNITS	$6,600	1
SHD1	SHED FRAME			120 S.F.	$1,100	1
	CELL TOWER			1	$135,000	1
SHD1	SHED FRAME			280 S.F.	$2,100	1
FN4	FENCE-8' CHAIN			200 L.F.	$2,100	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$3,565,300	$528,100	$4,093,400
2017	$3,565,300	$528,100	$4,093,400
2016	$3,471,600	$506,700	$3,978,300

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$2,495,710	$369,670	$2,865,380
2017	$2,495,710	$369,670	$2,865,380
2016	$2,430,120	$354,690	$2,784,810

EXHIBIT 4

Google Maps 15 N Granby Rd

Map data ©2019 Google 200 ft

15 N Granby Rd

Granby, CT 06035

Directions Save Nearby Send to your phone Share

EXHIBIT 5

annually for the internet access fees and phone line charges will apply as dollars towards the ceiling on increases the Selectmen has committed to.

ON A MOTION by First Selectman Simanski, seconded by Selectman Desrosiers, the Board unanimously (5-0-0) approved the following resolution:

RESOLVED, that William F. Smith, Jr., Town Manager of Granby, CT, is empowered to execute and deliver in the name and on behalf of this organization a certain contract with the Connecticut State Library, State of Connecticut, for a grant to conduct a Federal Library Services and Technology Act Grant Program.

BE IT FURTHER RESOLVED, that the Board of Finance consider an appropriation of $2,500 to be reimbursed 100% from the Connecticut State Library.

IV. BUSINESS

A. Resignations and Appointments to be Considered

No resignations were announced.

Two appointments to the Board of Directors of the Holcomb Farm were presented for consideration of the Board.

ON A MOTION by First Selectman Simanski, seconded by Selectman King, the Board unanimously (5-0-0) approved the reappointment of Myron Stacks, 6 Morningside Drive, West Granby, as a Selectmen appointee to the Friends of the Holcomb Farm. Mr. Stacks' appointment will expire December 15, 1999.

Ms. Beverly Coker, a Social Worker with the Hartford School System, was unanimously chosen by the Friends as their candidate for the Board of Directors. The Friends were seeking confirmation by the Board of Selectmen tonight.

ON A MOTION by First Selectman Simanski, seconded by Selectman King, the Board unanimously (5-0-0) confirmed the appointment of Beverly Coker to the Board of Directors of the Friends of the Holcomb Farm. Ms. Coker is a Bloomfield resident.

B. Proposal for Public Safety Communication Tower

Town Manager Smith provided the Board with a memo dated December 15, 1997, which furnished very detailed information regarding a proposal for a public safety communication tower being proposed for construction by NEXTEL. NEXTEL is a national and international New York based communications service provider of digital wireless services.

Chief Marron was present to answer questions and make clarifications as the discussion progressed. The main concern of the Board was aesthetics. Other concerns voiced were future maintenance costs, exact location of the tower, and was this the best deal available.

In conclusion, ON A MOTION by Selectman King, seconded by First Selectman Simanski, the Board voted unanimously (5-0-0) to authorize Chief Marron to proceed with negotiations with NEXTEL and other possible providers and to forward the information to the Planning and Zoning Commission for their comments.

C. Consideration of Approval of Policy Statement for the Acquisition and Disposition of Open Spaces and Establishment of Fund

The Board was provided with a memo which reviewed the history of this Policy Statement. Selectman King, a member of the subcommittee which drafted the policy, provided background information for the viewing public. Other members of the subcommittee were Selectman John Flint, Paula Johnson and Eric Lukinbeal of the Planning and Zoning Commission, and Fran Armentano, Director of Community Development.

The first part of the Policy Statement listed seven points to be addressed when determining the value of parcels of land to the town. The second part listed four points to be addressed when considering disposition of parcels of land.

Following discussion, ON A MOTION by Selectman Desrosiers to accept the Policy Statement, amended by Selectman Oates to adopt the Policy Statement, seconded by First Selectman Simanski as amended, the Board unanimously (5-0-0) adopted the Policy Statement for the Acquisition and Disposition of Open Spaces. A copy of the Policy Statement is attached to these minutes

ON A MOTION by Selectman Oates, seconded by First Selectman Simanski, the Board unanimously (5-0-0) approved the following resolution:

BE IT RESOLVED by the Board of Selectmen of the Town of Granby to Create an Open Space and Property Improvement Fund.

The purpose of the fund shall be to sell, acquire, preserve, or make improvements to property. Revenues to the fund shall be derived from contributions, grants, gifts, or from proceeds of the sale of land as identified by the Board of Selectmen. Disbursement from said fund shall be made by the Town Manager in accordance with the approval of the Board of Selectmen. The Town Manager shall account for the control and operation of this fund. Upon recommendation of the Town Manager, the Board of Selectmen may vote to terminate the fund and any balance remaining in the fund upon its dissolution shall revert to the town's General Fund.

The Board of Finance will be informed of the creation of this fund.

D. Receipt of Agreement Between Granby Board of Education and Granby Education Association, July 1, 1998 - June 30, 2001

First Selectman Simanski added this agenda item for tonight's meeting as the agreement was received by the Town Clerk today and action on the agreement, if taken, must be concluded within 30 days following the filing.

PLANNING & ZONING COMMISSION
Town of Granby
Minutes
April 28, 1998

Present: Paula Johnson, Chairman, Put Brown, Charlie Kraiza, John Morgan, Fred Wilhelm, Francis Armentano, Director of Community Development and Ed Sweeney, Town Engineer.

The meeting opened at 7:04 p.m.

Public session: John Jenkins of Lost Acres Road presented the Commission with a draft form to be used for requesting Scenic Road Designation. The form was prepared by John Day of Lost Acres Road. The Commission thanked the gentlemen for their efforts and agreed to review the form and finalize the design within a few days.

ON A MOTION by Fred Wilhelm, seconded by John Morgan, the Commission voted to approved the minutes of April 14, 1998 with the following change: Change the word northerly to southerly on page one, paragraph 3, line 5. All approved.

Public hearing on an application for a 5 lot resubdivision with special permit for 2 rear lots, for property of Michael Guarco, Cooley Road re-opened at 7:15 p.m. Skip Alford was in attendance to answer questions from the Commission. Many members had walked the site on the previous Tuesday, 4-21-98. There was a brief discussion and the public was invited to comment on the application. No one from the public spoke regarding the matter and the public hearing was closed at 7:20 p.m.

Public Hearing on an amendment to the Zoning Regulations, definition and application regarding corner lots and opposing yards, opened at 7:21 p.m. Fran Armentano discussed the proposed amendment which changes from rear yards, to side yards, the yards which are opposite all street lines. No one from the public spoke regarding the matter. A letter from CRCOG, the Regional Planning Agency, stated that there were no regional conflicts with the proposal.

The Commission continued to discuss the proposed re-construction of a communications tower at 150 Lost Acres Road. The existing tower appears to be a non-conforming use, having been used for many years by Kemp Communications. Wayne Kemp proposes to remove the existing tower and replace it with a tower of the same height but of a more modern design. The new tower will also require a separate support building. The Commission is reviewing the matter to determine if the change is a permissible continuation of a the non-conformity. Commercial towers are not presently permitted within residential zones. The Commission agreed to hold an informational hearing, in an effort to determine the scope of the non-conformity, at the next meeting.

The Commission considered the Granby Board of Selectmen Referral, under CGS 8-24, regarding the site plan and tower design for a communications tower to be located within the Town Hall complex. ON A MOTION by Put Brown, seconded by Fred Wilhelm, the

Commission found the proposal to be consistent with the Town's plans and policies for the area of the Town Hall complex. All approved.

The Commission held a discussion with Ed Lally, Engineer, regarding the development of property located on Mountain Road, a FRD subdivision. Fred Wilhelm and Put Brown abstained from any discussion. Mr. Lally continued to discuss the evolving design of the development. He discussed and presented written material in response to a large number of issues brought up by town staff. An application for 31 lots had been submitted and a public hearing is anticipated in May. This application will make up phases 1 and possibly 6 of the development. Final details have not been completed to date. The public was invited to comment on the proposed development. Numerous concerns were voiced primarily related to the steep terrain of the area and the impact of traffic and trucks. The Commission agreed to a continuation of the discussion at the next meeting.

The Commission briefly discussed the Cooley Road Subdivision and postponed a decision as they desired the additional participation of members Lukingbeal and Chapple.

Chairman Johnson reported they she has received complaints regarding the deplorable condition of the property where the Granby Car Wash is being constructed. Henry Miga, Zoning Enforcement Officer, will be advised of the situation and asked to take appropriate action.

ON A MOTION by Put Brown, seconded by Fred Wilhelm, the Commission approved an amendment to the Zoning Regulations, definition and application regarding corner lots and opposing yards. (Amendment attached hereto) Reasons for the adoption included the conformity with the general purposes outlined within the regulations and conformity with the goals of the Town's Plan of Conservation and Development. The effective date is May 1, 1998. All approved.

The meeting adjourned at 9:37 p.m.

Respectfully submitted,

Francis G. Armentano
Acting Recording Secretary

EXHIBIT 6

GRANBY/RT 20

15 NORTH GRANBY ROAD
GRANBY, CT 06035
HARTFORD COUNTY

SITE NO.: CT11281B

RF DESIGN GUIDELINE: 4SEC-67D5A997DB INDOOR

APPROVALS

PROJECT MANAGER:	DATE:	ZONING/SITE ACQ.:	DATE:
CONSTRUCTION:	DATE:	OPERATIONS:	DATE:
RF ENGINEERING:	DATE:	TOWER OWNER:	DATE:

T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS BY CERTIFIED CLIMBER
SECTOR B:	ACCESS BY CERTIFIED CLIMBER
SECTOR C:	ACCESS BY CERTIFIED CLIMBER
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NIU/T DEMARC:	UNRESTRICTED
OTHER/SPECIAL:	NONE

SITE NOTES

1. THIS IS AN UNMANNED AND RESTRICTED ACCESS TELECOMMUNICATION FACILITY, AND IS NOT FOR HUMAN HABITATION. IT WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
   - ADA COMPLIANCE NOT REQUIRED.
   - POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.
   - NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.
2. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACE THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.
3. NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
   - BUILDING CODE: 2018 CONNECTICUT STATE BUILDING CODE
   - ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE
   - STRUCTURAL CODE: TIA/EIA-222-G STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

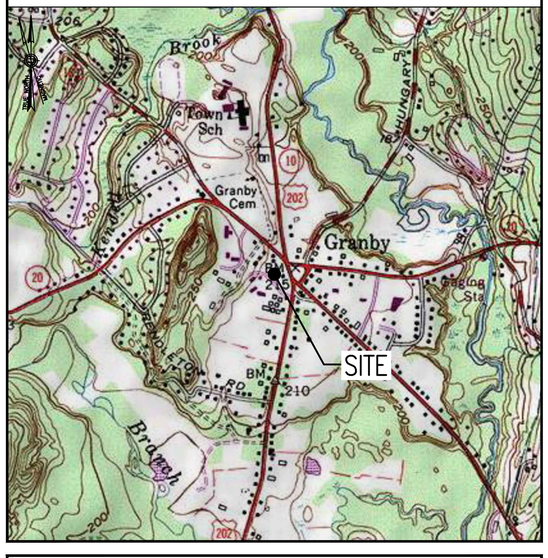
GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE OMNIPOINT REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
15. THE CONTRACTOR SHALL NOTIFY THE PROJECT OWNER'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESSEE/LICENSEE REPRESENTATIVE.
16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK.

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 811

VICINITY MAP

SCALE: 1" = 1000'-0"



DIRECTIONS

TURN LEFT ONTO S WASHINGTON ST. TURN RIGHT ONTO MA-123 E. TURN LEFT TO MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. MERGE ONTO I-495 NORTH. TAKE EXIT 22 TO MERGE ONTO I-90 WEST TOWARD ALBANY. TAKE EXIT 9 FOR I-84 TOWARD HARTFORD CT/NEW YORK CITY. CONTINUE ONTO I-84. TAKE EXIT 61 FOR I-291 WEST. TAKE EXIT 2B TO MERGE ONTO I-91 NORTH TOWARD SPRINGFIELD. TAKE EXIT 40 FOR CT-20 TOWARD BRADLEY INTERNATIONAL AIRPORT. CONTINUE ONTO CT-20 WEST. TAKE THE CT-20 WEST EXIT TOWARD EAST GRANBY. CONTINUE ONTO CT-20 WEST. TURN LEFT, TURN LEFT. SITE WILL BE ON THE RIGHT.

SHEET INDEX

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A-3	SITE DETAILS	1
A-4	ANTENNA & FEEDLINE CHARTS	1
E-1	ELECTRIC & GROUNDING DETAILS	1

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

PROJECT SUMMARY

SITE NUMBER:	CT11281B
SBA SITE NUMBER:	CT46134-A
SBA SITE NAME:	GRANBY-N. GRANBY
SITE ADDRESS:	15 NORTH GRANBY ROAD GRANBY, CT 06035
PROPERTY OWNER:	TOWN OF GRANBY 15 NORTH GRANBY ROAD GRANBY, CT 06035
TOWER OWNER:	SBA 2012 TC ASSETS, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	HARTFORD
ZONING DISTRICT:	CC (CENTER COMMONS)
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	150'±
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
SBA RSM:	STEPHEN ROTH PHONE: 860-539-4920 EMAIL: SRoth@sbasite.com
ARCHITECT:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
STRUCTURAL ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
SITE CONTROL POINT:	LATITUDE: N.41.953562° N.41°57'12.82" LONGITUDE W.72.793809° W.72°47'37.71"

SPECIAL ZONING NOTE:
BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW, AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW, OR ADMINISTRATIVE REVIEW).

T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
(508) 286-2700

SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil ·Structural ·Land Surveying
R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com

STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25997
LICENSED
PROFESSIONAL CIVIL ENGINEER
12/22/20

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	12/22/20	ISSUED FOR CONSTRUCTION	CMC
0	11/20/20	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11281B

SITE ADDRESS:
15 NORTH GRANBY ROAD
GRANBY, CT 06035

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

1815.156

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – T–MOBILE
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – T–MOBILE
   OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.

4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.

10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.

12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.

13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.

15. CONSTRUCTION SHALL COMPLY WITH ALL T–MOBILE STANDARDS AND SPECIFICATIONS.

16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

18. IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.

3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.

6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

8. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.

9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T–MOBILE SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF .....1½ IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER
   OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....¾ IN.
   BEAMS AND COLUMNS .....1½ IN.

5. A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.

7. CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.

8. AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.

9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T–MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM–A–36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾"ø) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.

4. NON–STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ⅝" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.

5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL

6. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.

2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.

3. AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.

4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.

5. AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND–OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL–GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUN, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T–MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.

2. COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.

3. CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.

3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

4. CABLES SHALL NOT BE ROUTED THROUGH LADDER–STYLE CABLE TRAY RUNGS.

5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.

6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.

7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).

8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

21. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

23. CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

24. CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

25. WIREWAYS SHALL BE EPOXY–COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED, OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

32. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25937
LICENSED
PROFESSIONAL CIVIL ENGINEER
12/22/20

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	12/22/20	ISSUED FOR CONSTRUCTION	CMC
0	11/20/20	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11281B

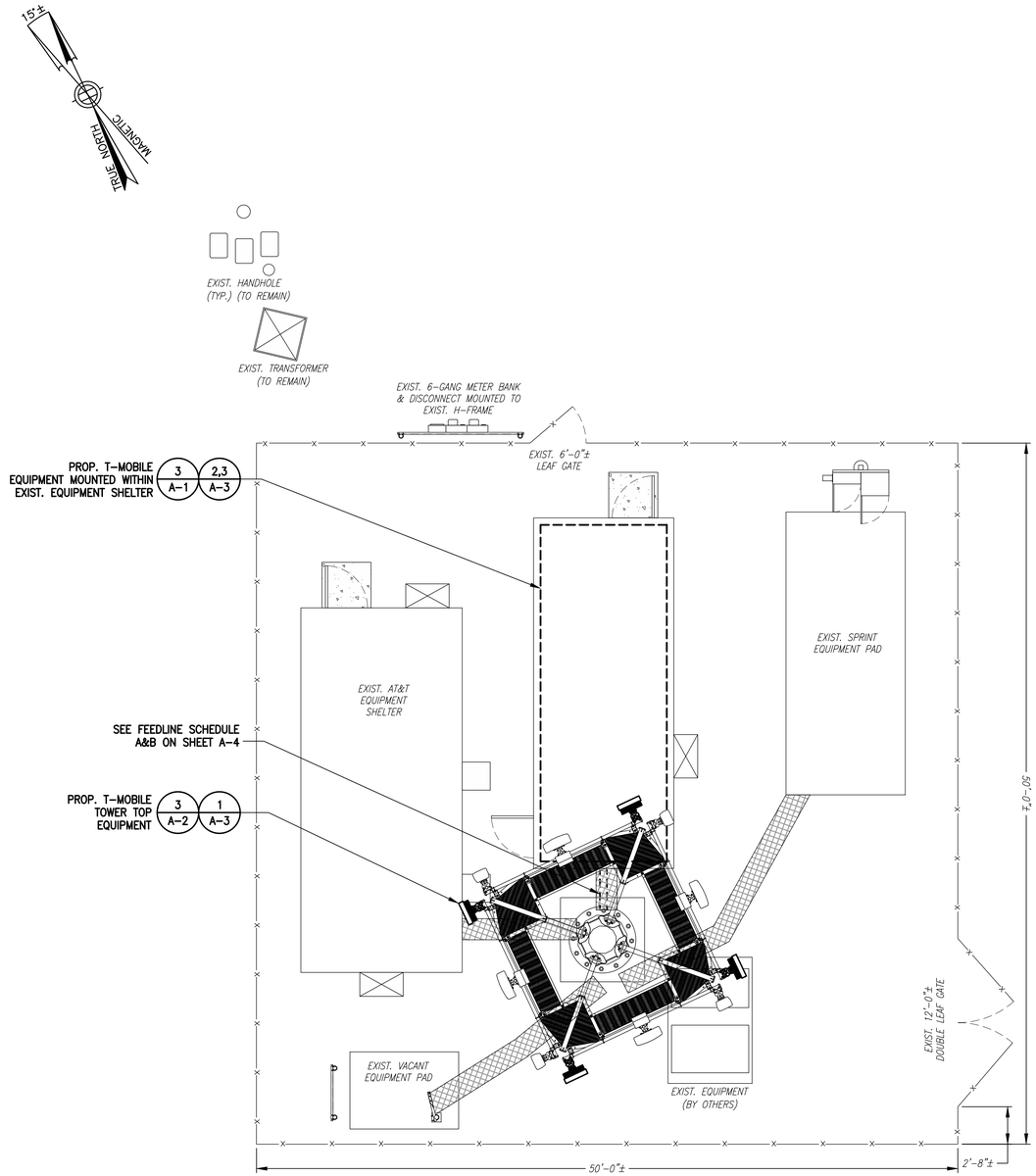
SITE ADDRESS:
15 NORTH GRANBY ROAD
GRANBY, CT 06035

SHEET TITLE
GENERAL NOTES

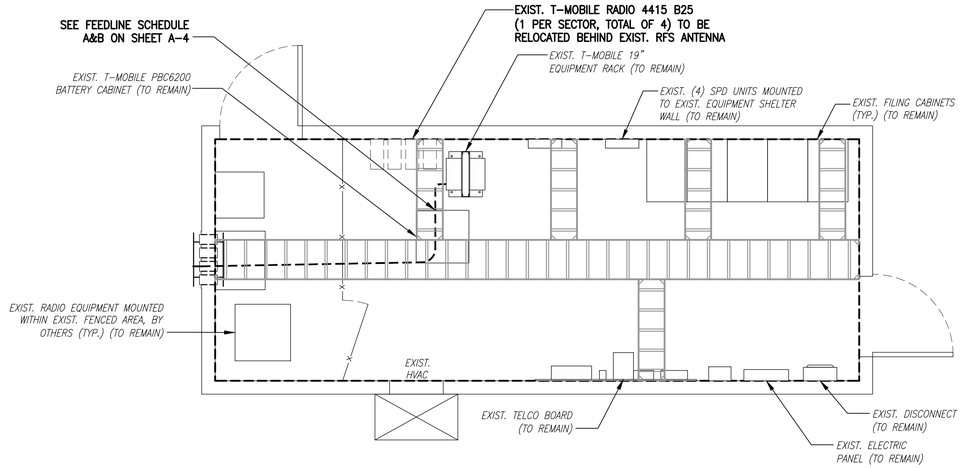
SHEET NUMBER
GN-1

1815.156

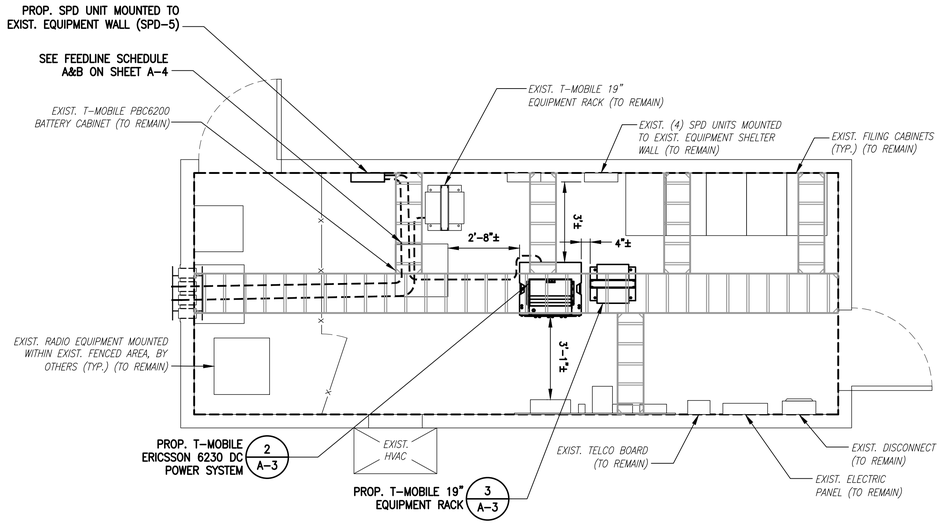
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.



COMPOUND PLAN 1 A-1
SCALE: 3/16" = 1'-0"
0 5'-4" 10'-8" 16'-0"



EXISTING EQUIPMENT PLAN 2 A-1
SCALE: 3/8" = 1'-0"
0 2'-8" 5'-4" 8'-0"



PROPOSED EQUIPMENT PLAN 3 A-1
SCALE: 3/8" = 1'-0"
0 2'-8" 5'-4" 8'-0"

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STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25997
LICENSED PROFESSIONAL CIVIL ENGINEER
12/22/20

CHECKED BY: JMT

APPROVED BY: JMT

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GRANBY, CT 06035

SHEET TITLE
COMPOUND & EQUIPMENT PLAN

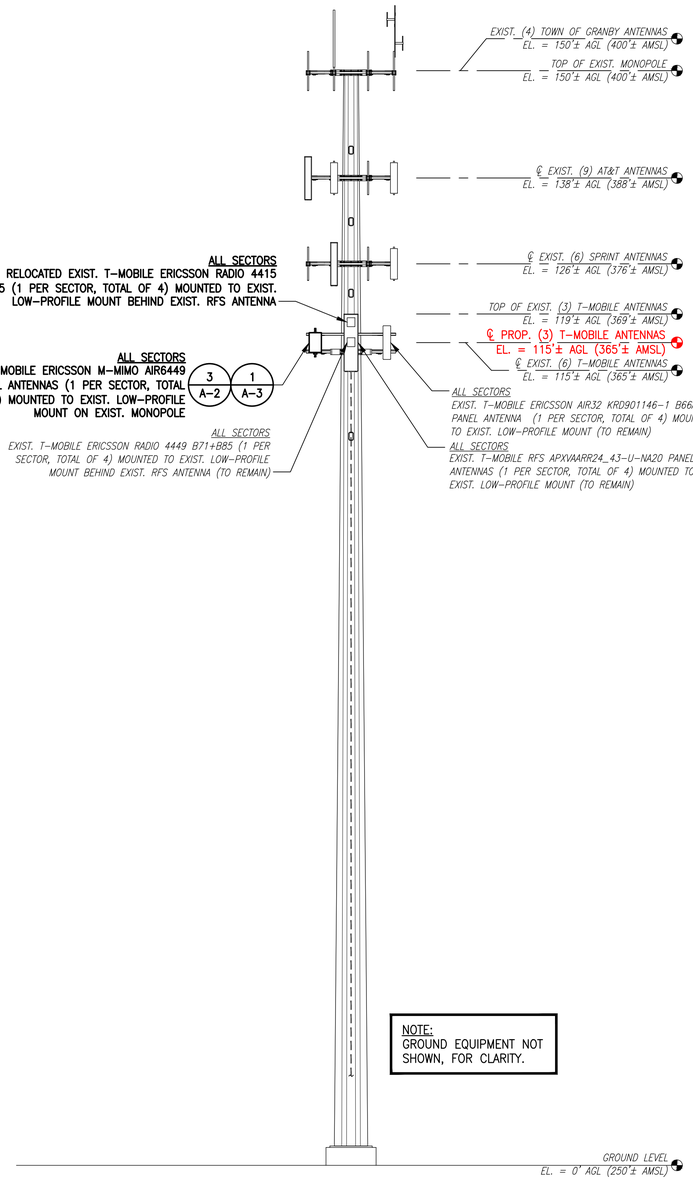
SHEET NUMBER
A-1

1815.156

SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.

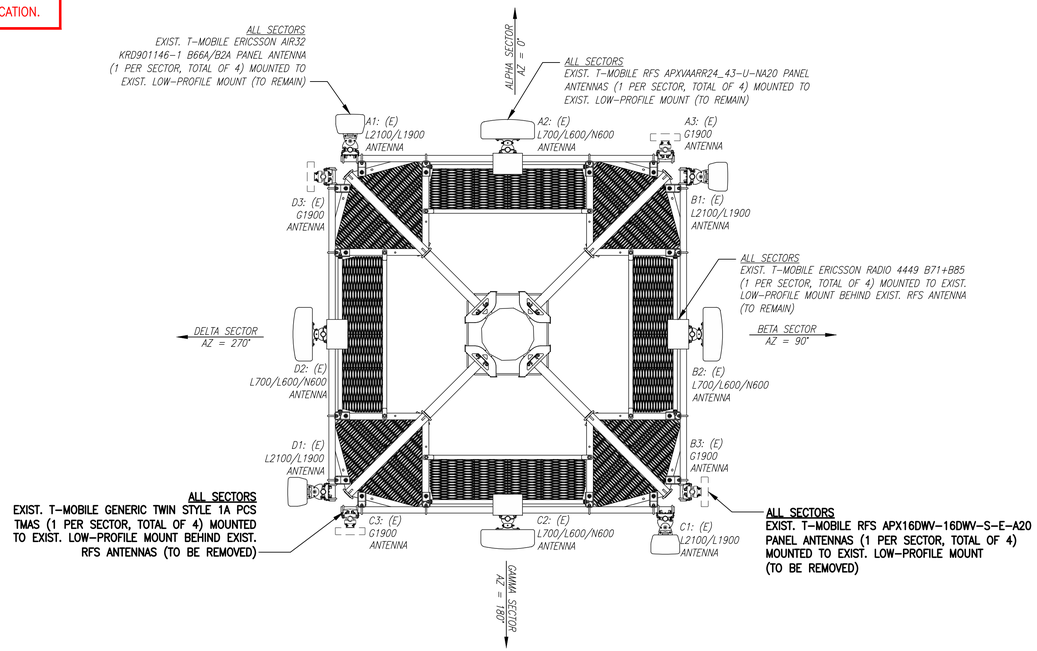
SPECIAL TOWER TOP EQUIPMENT INSTALLATION WORK NOTE (SAFETY-CLIMB ALIGNMENT REQUIREMENTS):
GENERAL CONTRACTOR SHALL ORIENT PROPOSED PLATFORM REINFORCEMENT KIT RING-MOUNTS SO THAT EXISTING SAFETY CLIMB CABLE IS NOT OBSTRUCTED/RE-ROUTED FROM VERTICAL ALIGNMENT AND IS NOT IN PHYSICAL CONTACT WITH EXISTING OR PROPOSED RING-MOUNT HARDWARE. GENERAL CONTRACTOR SHALL INSTALL NEW OR ADDITIONAL SAFETY-CLIMB CABLE GUIDES IF ADDITIONAL CLEARANCE IS REQUIRED. ADDITIONAL CABLE GUIDES SHALL BE ATTACHED SECURELY TO THE POLE USING MECHANICAL FASTENERS OR FIELD WELDED BY A CERTIFIED WELDING TECHNICIAN.

RAD CENTER NOTE:
T-MOBILE RAD CENTER SHOWN IN RED TEXT BASED ON SBA-PROVIDED CO-LOCATION APPLICATION, EQUIPMENT DATABASE, AND STRUCTURAL ANALYSIS. THE SBA-PROVIDED ANTENNA RAD CENTER SHALL SUPERSEDE ANY CONFLICTING INFORMATION DERIVED FROM THE T-MOBILE RFDS.

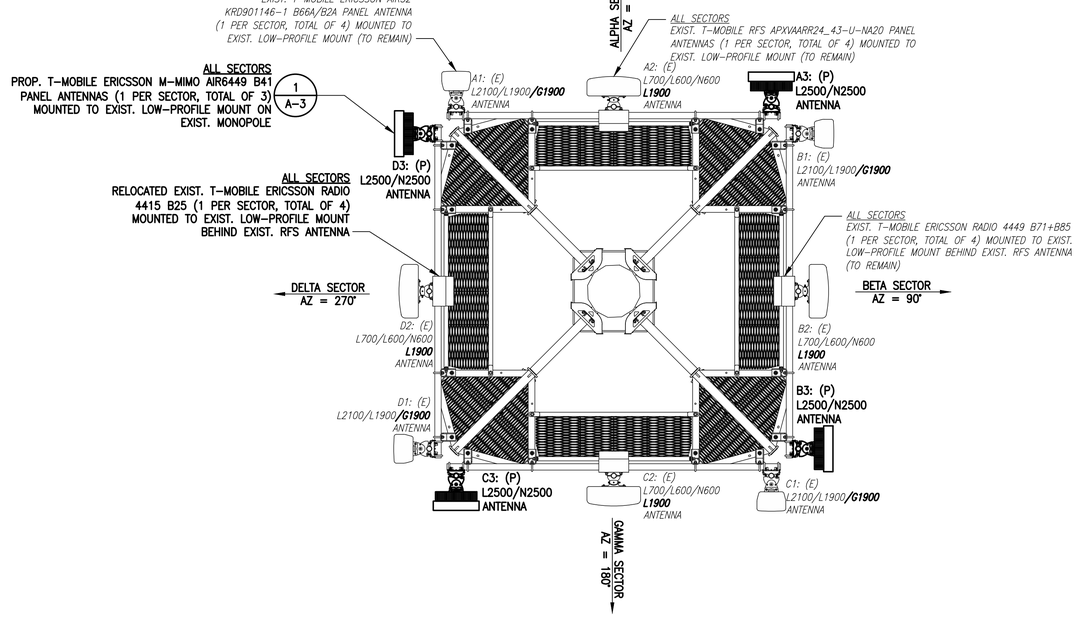


NOTE:
GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.

TOWER ELEVATION
SCALE: 1" = 10'
1 A-2
0 10' 20' 30'



EXISTING ANTENNA PLAN
SCALE: 3/8" = 1'-0"
2 A-2
NORTH



PROPOSED ANTENNA PLAN
SCALE: 3/8" = 1'-0"
3 A-2
NORTH

NOTE:
VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

ANTENNA STATUS LEGEND:

EMPTY - EMPTY PIPE

(E) - EXISTING
(P) - INSTALL
(F) - FUTURE

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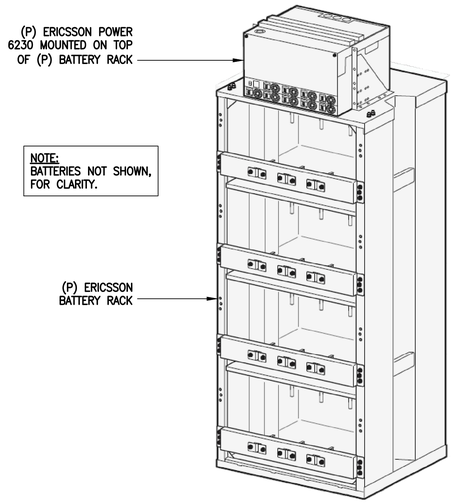
SHEET TITLE
TOWER ELEVATIONS & ANTENNA PLAN

SHEET NUMBER
A-2

1815.156

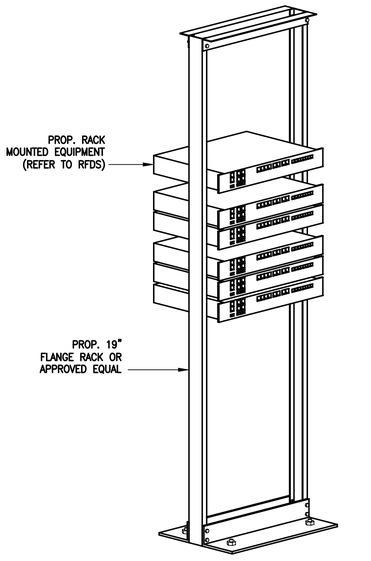
ERICSSON M-MIMO AIR6449
B41 ANTENNA
DIMENSIONS: 33.1"H x 20.5"W x 8.3"D
WEIGHT: 103.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

ANTENNA DETAILS
SCALE: N.T.S.
1 / A-3



ERICSSON 6230 DC POWER SYSTEM
DIMENSIONS: 63.0"H x 27.6"W x 23.6"D
QUANTITY: TOTAL OF 1

EQUIPMENT DETAIL
SCALE: N.T.S.
2 / A-3



EQUIPMENT RACK
SCALE: N.T.S.
3 / A-3

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SITE DETAILS

SHEET NUMBER
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1815.156

FINAL ANTENNA CONFIGURATION

SECTOR		ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	SIGNAL CABLES
ALPHA	A1	*ERICSSON AIR32 KRD901146-1 B66A/B2A*	*115'± AGL*	*90°*	*0°*	–	*L2100/L1900/**G1900***	–	*(4) 1-5/8" (6x12) HCS FIBER CABLES* **(4) 1-5/8" (6x12) HCS FIBER CABLES**
	A2	*RFS APXVAARR24_43-U-NA20*	*115'± AGL*	*90°*	*0°*	–	*L700/L600/N600*	*RADIO 4449 B71+B85*	
						–	**L1900**	**RADIO 4415 B25**	
	A3	**ERICSSON M-MIMO AIR6449 B41**	**115'± AGL**	**90°**	**0°**	–	**L2500/N2500**	–	
BETA	B1	*ERICSSON AIR32 KRD901146-1 B66A/B2A*	*115'± AGL*	*180°*	*0°*	–	*L2100/L1900/**G1900***	–	
	B2	*RFS APXVAARR24_43-U-NA20*	*115'± AGL*	*180°*	*0°*	–	*L700/L600/N600*	*RADIO 4449 B71+B85*	
						–	**L1900**	**RADIO 4415 B25**	
	B3	**ERICSSON M-MIMO AIR6449 B41**	**115'± AGL**	**180°**	**0°**	–	**L2500/N2500**	–	
GAMMA	C1	*ERICSSON AIR32 KRD901146-1 B66A/B2A*	*115'± AGL*	*270°*	*0°*	–	*L2100/L1900/**G1900***	–	
	C2	*RFS APXVAARR24_43-U-NA20*	*115'± AGL*	*270°*	*0°*	–	*L700/L600/N600*	*RADIO 4449 B71+B85*	
						–	**L1900**	**RADIO 4415 B25**	
	C3	**ERICSSON M-MIMO AIR6449 B41**	**115'± AGL**	**270°**	**0°**	–	**L2500/N2500**	–	
GAMMA	D1	*ERICSSON AIR32 KRD901146-1 B66A/B2A*	*115'± AGL*	*0°*	*0°*	–	*L2100/L1900/**G1900***	–	
	D2	*RFS APXVAARR24_43-U-NA20*	*115'± AGL*	*0°*	*0°*	–	*L700/L600/N600*	*RADIO 4449 B71+B85*	
						–	**L1900**	**RADIO 4415 B25**	
	D3	**ERICSSON M-MIMO AIR6449 B41**	**115'± AGL**	**0°**	**0°**	–	**L2500/N2500**	–	

CABLE NOTE: (E)(4) 1-¼" COAX CABLES TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV3 – 09/25/20

FEEDLINE SCHEDULE

SCHEDULE	FEEDLINES		LOCATION
A	*EXISTING TO REMAIN:*	*(4) 1-5/8" (6x12) HCS FIBER CABLES* *(1) ½" COAX CABLE FOR GPS ANTENNA*	ROUTED PER STRUCTURAL ANALYSIS
	EXISTING TO BE REMOVED:	*(4) 1-¼" COAX CABLES*	
B	**PROPOSED:**	**(4) 1-5/8" (6x12) HCS FIBER CABLES**	

NOTE:
EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.

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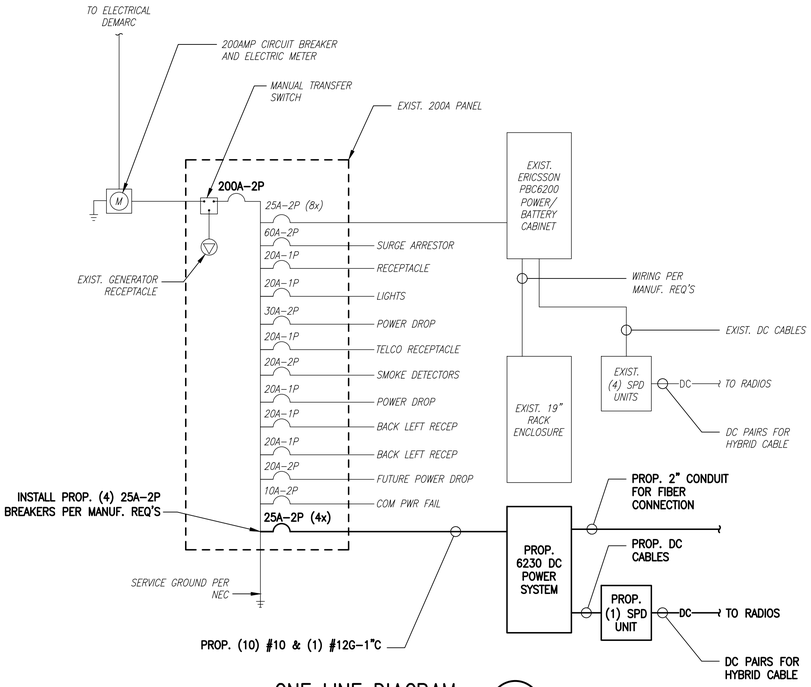
15 NORTH GRANBY ROAD
GRANBY, CT 06035

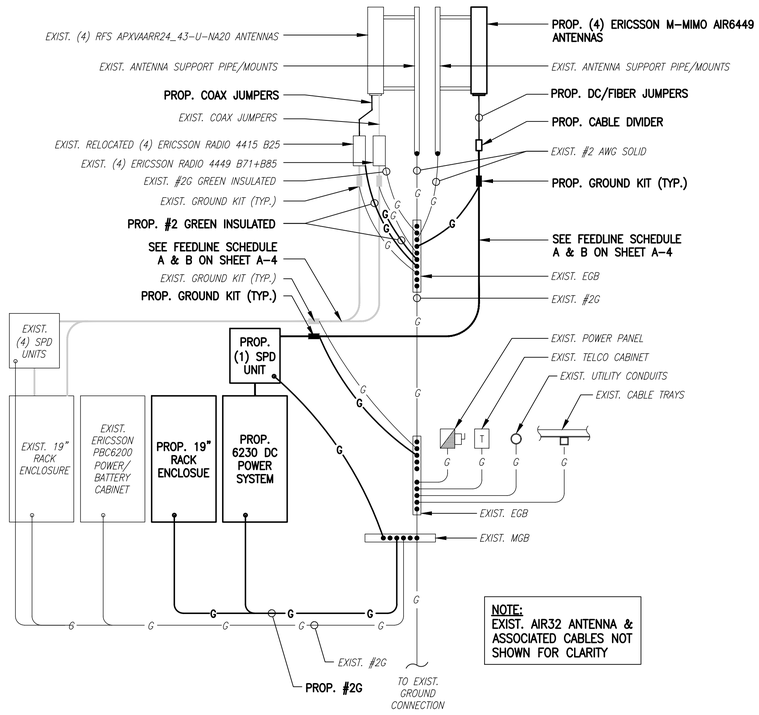
SHEET TITLE
ANTENNA & FEEDLINE CHARTS

SHEET NUMBER
A-4

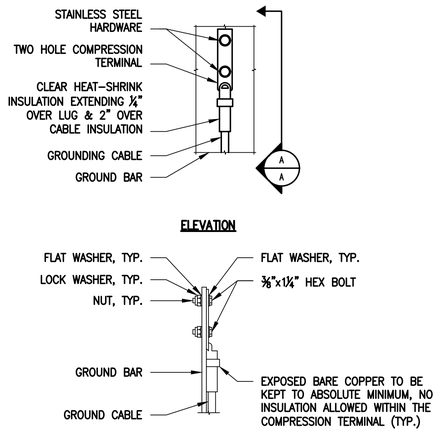
1815.156



ONE LINE DIAGRAM
SCALE: NOT TO SCALE — 1 / E–1

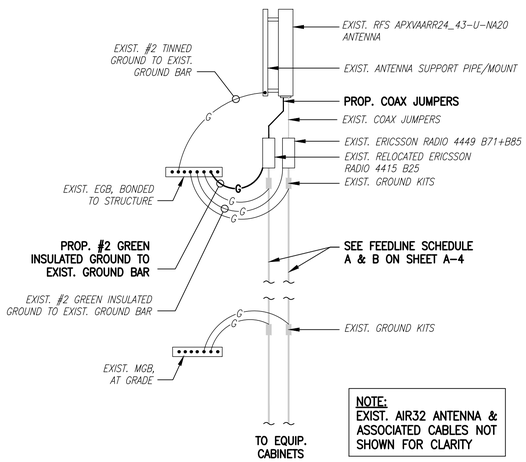


GROUNDING RISER DIAGRAM
SCALE: NOT TO SCALE — 2 / E–1

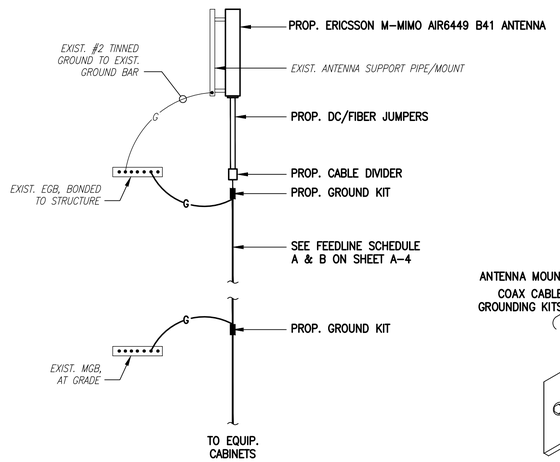


NOTES:
1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELL DOWNLEADS FROM UPPER EGB, LOWER EGB AND MGB.

TYPICAL GROUND BAR CONNECTIONS DETAIL
SCALE: NOT TO SCALE — 3 / E–1

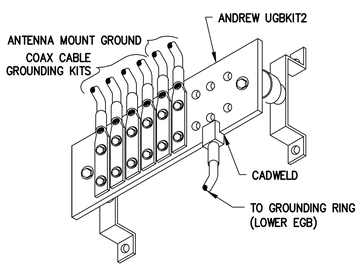


L700/L600/N600/L1900 ANTENNA



L2500/N2500 ANTENNA

COAX CABLE CONNECTION AND GROUNDING DETAIL
SCALE: NOT TO SCALE — 4 / E–1



GROUND BAR (EGB)
SCALE: NOT TO SCALE — 5 / E–1

ELECTRICAL AND GROUNDING NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THHNINSULATION.
8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
12. PPC SUPPLIED BY PROJECT OWNER.
13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T–MOBILE BTS SITE GROUNDING STANDARDS".
14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
20. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXIST. TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
21. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE–OUT DOCUMENTATION. 5 OHMNS MINIMUM RESISTANCE REQUIRED.
22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN–LOSS AND DISTANCE– TO–FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.

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15 COMMERCE WAY, SUITE B
NORTON, MA 02766
(508) 286–2700

SBA
SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
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CHAPPELL ENGINEERING ASSOCIATES, LLC
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www.chappellengineering.com

STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25997
LICENSED
PROFESSIONAL CIVIL ENGINEER
12/22/20

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	12/22/20	ISSUED FOR CONSTRUCTION	CMC
0	11/20/20	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11281B

SITE ADDRESS:
15 NORTH GRANBY ROAD
GRANBY, CT 06035

SHEET TITLE
ELECTRIC & GROUNDING DETAILS

SHEET NUMBER
E-1

1815.156

EXHIBIT 7

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 150 ft EEI Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT46134-A

Customer Site Name: Granby-n. Granby

Carrier Name: T-Mobile (App#: 113978, V#2)

Carrier Site ID / Name: CT11281B / Granby/Rt. 20

Site Location: 15 North Granby Road

Granby, Connecticut

Hartford County

Latitude: 41.953583

Longitude: -72.793722

Analysis Result:

Max Structural Usage: 98.0% [Pass]

Max Foundation Usage: 97.4% [Pass]

Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Mukunda Pokharel

Introduction

The purpose of this report is to summarize the analysis results on the 150 ft EEI Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Engineered Endeavors, Inc. Job #3934, Drawing #GS51005, Dated 06/26/98
Foundation Drawing	Engineered Endeavors, Inc. Job #3934, Drawing #F3934-150, Dated 06/26/98
Geotechnical Report	Tectonic Engineering Consultants Job #1170.C938, Dated 06/18/98
Modification Drawings	Semaan Engineering Solutions Project #CT2010, Dated 02/06/09 Vertical Solutions Project #121657, Dated 09/07/12 FDH Project #1331731400, Dated 09/11/13 TES Job #66021, Dated 02/18/2019
Mount Analysis	CENTEK Engineering, Project No. 18058.22, Dated 05/07/2018

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA-222-G-2**.** In accordance with this standard, the structure was analyzed using **TESPoles,** a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed V_{ult} = 120 mph (3-Sec. Gust)/ Nominal Design Wind Speed V_{asd} = 93 mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	S_S = 0.177, S_1 = 0.065

This structural analysis is based upon the tower being classified as a Structure Class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	150.0	1	Generic - 10' Omni - Whip	Low Profile Platform	(3) 1/2" (1) 7/8"	Town of Granby
2		1	Generic - 18' Omni - Whip			
3		1	Generic - 10' Dipole - Whip			
4		1	Generic - 3' Yagi - Yagi			
5	138.0	3	CCI - DMP65R-BU8DA - Panel	Low Profile Platform w/ SitePro1 HRK-12 Handrail Kit & SitePro1 PRK-SFS Reinforcement Kit	(12) 1 1/4" Coax (1) 3" Conduit (3) 1" DC (1) 1/2" Fiber	AT&T
6		3	Powerwave - 7770 - Panel			
7		3	HPA-65R-BU8A - Panel			
8		6	Powerwave - TT19-08BP111-001 - TMA			
9		6	Powerwave - LGP 21901 - Diplexer			
10		3	Ericsson - 4449 B5/B12- RRU			
11		3	Ericsson - RRUS-11 700MHz - RRU			
12		3	Ericsson – 8843 B2 B66A- RRU			
13		1	Raycap DC9-48-60-24-8C-EV			
14	126.0	3	RFS - APXVTM14-C-120 – Panel	Low Profile Platform	(3) 1-1/4"	Sprint
15		3	ALU - 1900MHz - RRU			
16		3	ALU - 800 MHz - RRU			
17		3	ALU - TD-RRH8x20-25 - RRU			
18		3	ALU - 800MHz Filter - Filter			
19		4	ALU - ACU-A20-N - RET			
20		3	RFS - APXVSPP18-C-A20 - Panel			
-	115.0	4	Ericsson - AIR32 KRD901146-1_B66A_B2A - Panel	SitePro1 F4P-12W Platform w/ SitePro1 F4P-HRK12 Handrail Kit	(8) 1 5/8" Coax (4) 1 1/4" Hybrid	T-Mobile
-		4	RFS - APXVAARR24_43-U-NA20 (Octa) - Panel			
-		4	RFS - APX16DWV-16DWVS-E-A20 - Panel			
-		4	Ericsson - KRY 112 489/2 - TMA			
-		4	Ericsson – Radio 4449 B71 + B12 - RRU			
27	50.0	1	GPS	Stand-Off	---	Sprint

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
21	115.0	4	Ericsson - AIR32 KRD901146-1_B66A_B2A - Panel	SitePro1 F4P-12W Platform w/ SitePro1 F4P-HRK12 Handrail Kit	(4) 1 5/8" Coax (4) 1 1/4" Hybrid (4) 1 5/8" Fiber	T-Mobile
22		4	RFS - APXVAARR24_43-U-NA20 (Octa) - Panel			
23		4	Ericsson - AIR6449 B41 - Panel			
24		4	Ericsson - KRY 112 489/2 - TMA			
25		4	Ericsson - Radio 4449 B71 + B12 - RRU			
26		4	Ericsson - 4415 B25 - RRU			

All transmission lines are considered running inside of the pole shafts.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	**98.0%**	**87.9%**	**80.8%**
Pass/Fail	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	3824.5	36.0	38.6

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.5766 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC.** Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.

2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.

3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the EIA/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.

4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.

6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 91.98% at 102.0ft

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020
Site Name:	Granby-n. Granby	**Exposure:**	C	
Height:	150.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

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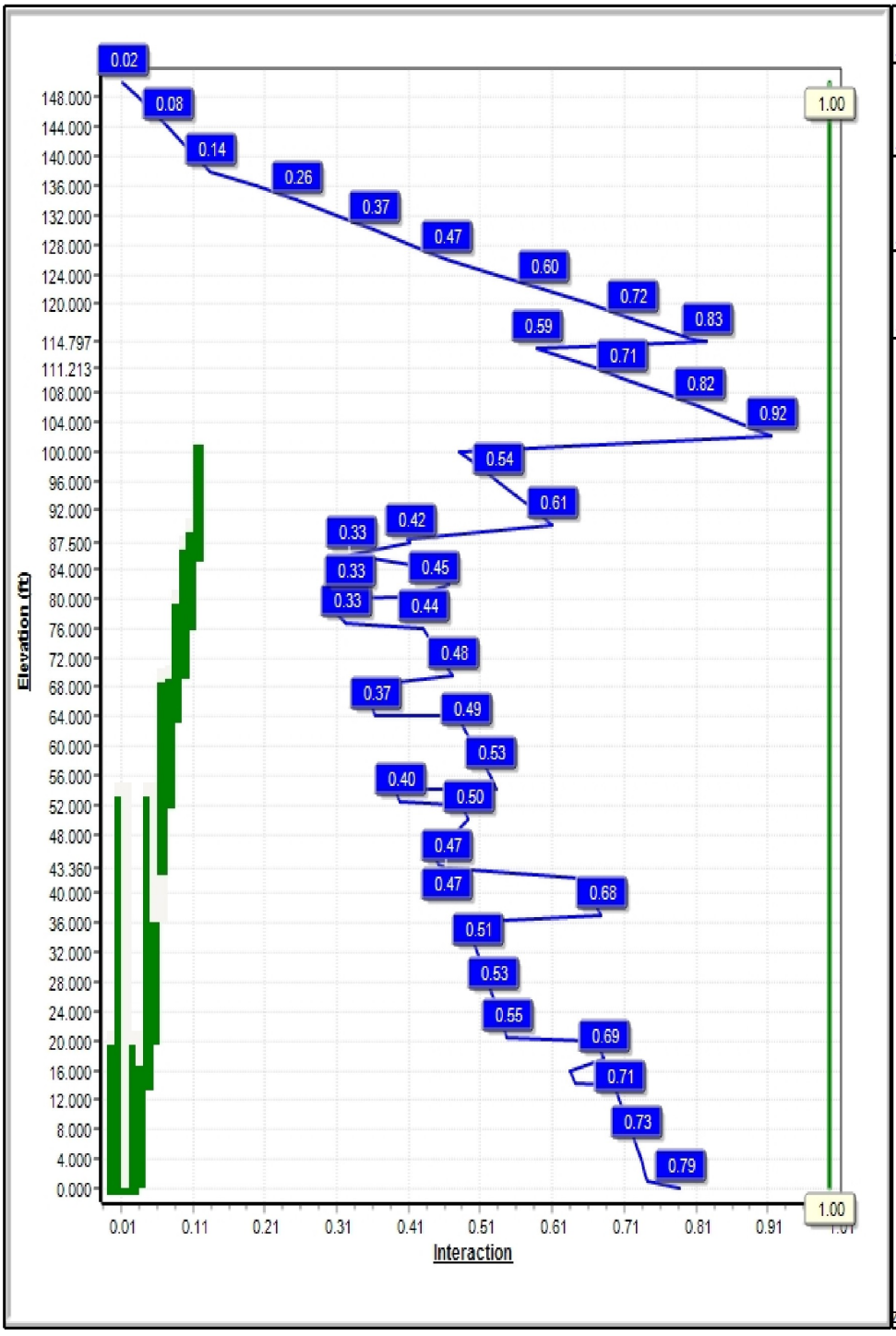
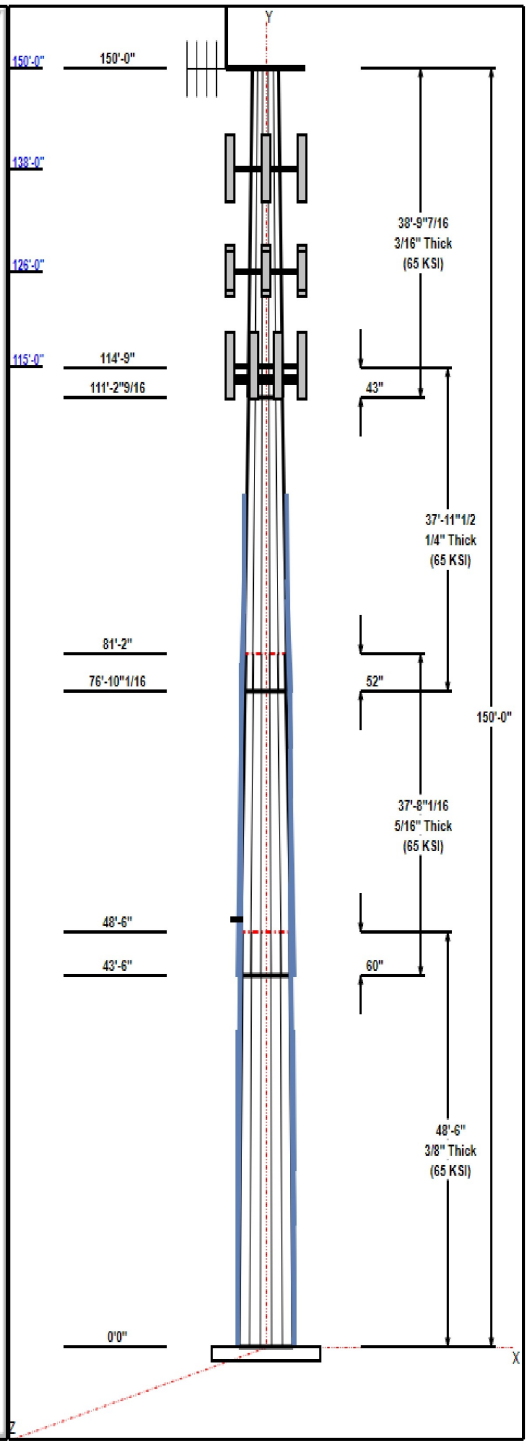
Dead Load Factor:	1.20	**Iterations:**	28
Wind Load Factor:	1.60		

Load Case : 1.2D + 1.6W 93 mph Wind





Structure: CT46134-A-SBA

Type: Tapered
Site Name: Granby-n. Granby
Height: 150.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.18000

10/28/2020

Tower Engineering Solutions

Shaft Properties

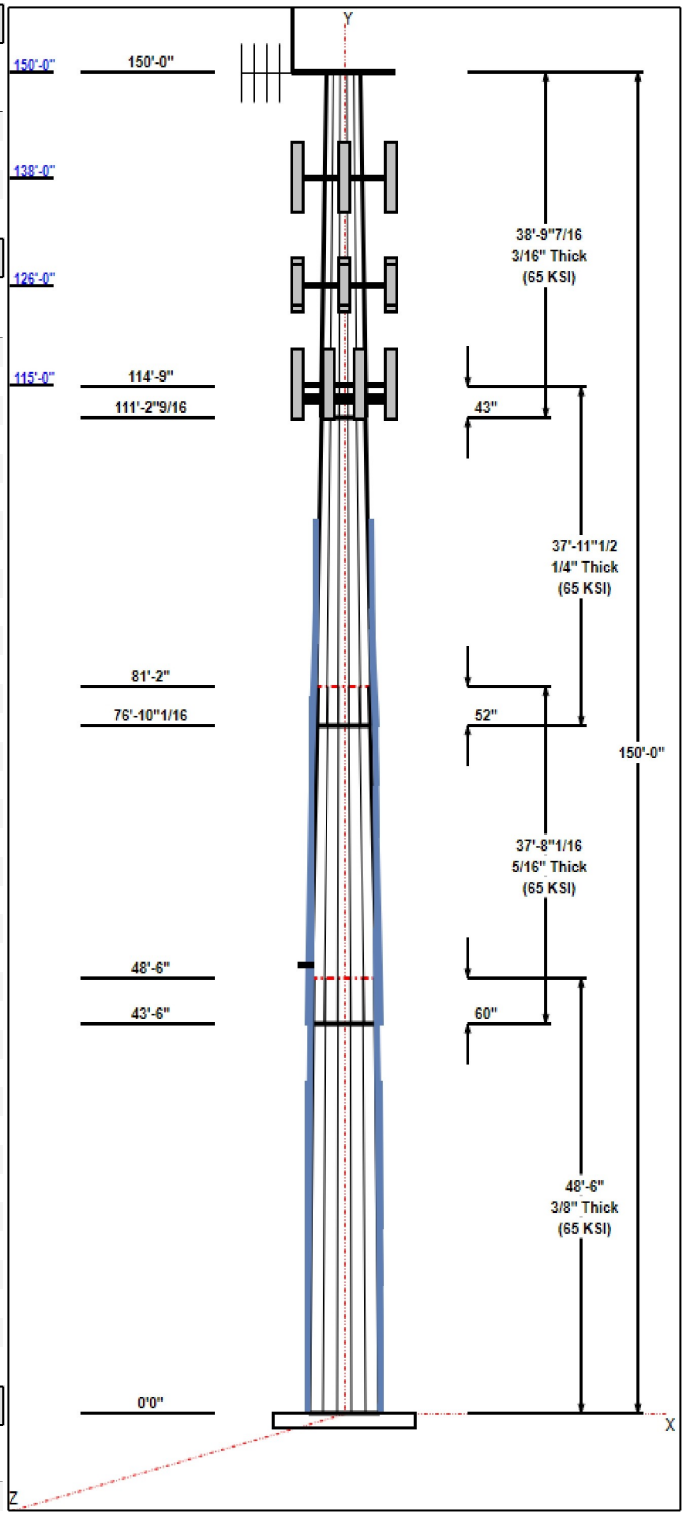
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	48.50	34.27	43.00	0.375		0.18000	65
2	37.67	29.01	35.80	0.313	Slip	0.18000	65
3	37.96	23.46	30.29	0.250	Slip	0.18000	65
4	38.79	17.50	24.48	0.188	Slip	0.18000	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
150.00	150.00	1	Low Profile Platform-flat	Town of Granby
150.00	155.00	1	10' Omni	Town of Granby
150.00	159.00	1	18' Omni	Town of Granby
150.00	155.00	1	10' Dipole	Town of Granby
150.00	150.00	1	3' Yagi	Town of Granby
138.00	138.00	1	Low Profile Platform-flat	AT&T
138.00	138.00	3	7770.00	AT&T
138.00	138.00	6	TT19-08BP111-001	AT&T
138.00	138.00	3	RRUS-11 700MHz	AT&T
138.00	138.00	6	LGP 21901	AT&T
138.00	138.00	3	DMP65R-BU8DA	AT&T
138.00	138.00	3	HPA-65R-BU8A	AT&T
138.00	138.00	3	4449 B5/B12	AT&T
138.00	138.00	3	B2 B66A 8843	AT&T
138.00	138.00	1	DC9-48-60-24-8C-EV	AT&T
138.00	138.00	1	HRK12 (Handrail Kit)	AT&T
138.00	138.00	1	PRK-1245 (kicker kit)	AT&T
126.00	126.00	1	Low Profile Platform-flat	Sprint
126.00	126.00	3	APXVTM14-C-120	Sprint
126.00	126.00	3	1900MHz	Sprint
126.00	126.00	3	800 MHz	Sprint
126.00	126.00	3	TD-RRH8x20-25	Sprint
126.00	126.00	3	800MHz Filter	Sprint
126.00	126.00	4	ACU-A20-N	Sprint
126.00	126.00	3	APXVSPP18-C-A20	Sprint
115.00	115.00	4	Radio 4415 B25	T-Mobile
115.00	115.00	1	F4P-12W	T-Mobile
115.00	115.00	1	F4P-HRK12	T-Mobile
115.00	115.00	4	AIR32	T-Mobile
115.00	115.00	4	APXVAARR24_43-U-NA20	T-Mobile
115.00	115.00	4	AIR6449 B41	T-Mobile
115.00	115.00	4	KRY 112 489/2	T-Mobile
115.00	115.00	4	Radio 4449 B71 + B12	T-Mobile
50.00	50.00	1	Standoff	Sprint
50.00	50.00	1	GPS	Sprint
20.50	20.50	2	Splice Plate	---

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	150.00	Inside	1/2"	Town of Granby
0.00	150.00	Inside	7/8"	Town of Granby
0.00	138.00	Inside	1 1/4" Coax	AT&T
0.00	138.00	Inside	1" DC	AT&T
0.00	138.00	Inside	1/2" Fiber	AT&T
0.00	138.00	Inside	3" Conduit	AT&T



0.00	126.00	Inside	1-1/4" Fiber	Sprint
0.00	115.00	Inside	1 1/4" Hybrid	T-Mobile
0.00	115.00	Inside	1 5/8" Coax	T-Mobile
0.00	115.00	Inside	1 5/8" Fiber	T-Mobile
76.70	90.00	Outside	1.5" Reinforcing Plate	---
69.50	76.70	Outside	1.25" Reinforcing Plate	---
43.40	69.50	Outside	1.5" Reinforcing Plate	---
37.00	43.40	Outside	1.25" Reinforcing Plate	---
0.50	37.00	Outside	1.5" Reinforcing Plate	---

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
12	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
1.7500	57.0	60.0	Round

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 93 mph Wind	3824.5	36.0	38.6
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1244.6	10.6	71.7
1.2D + 1.0E	150.1	1.3	38.6
0.9D + 1.0E	148.4	1.3	29.0
1.0D + 1.0W 60 mph Wind	989.7	9.4	32.2

Structure: CT46134-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Granby-n. Granby
Height: 150.00 (ft)

10/28/2020

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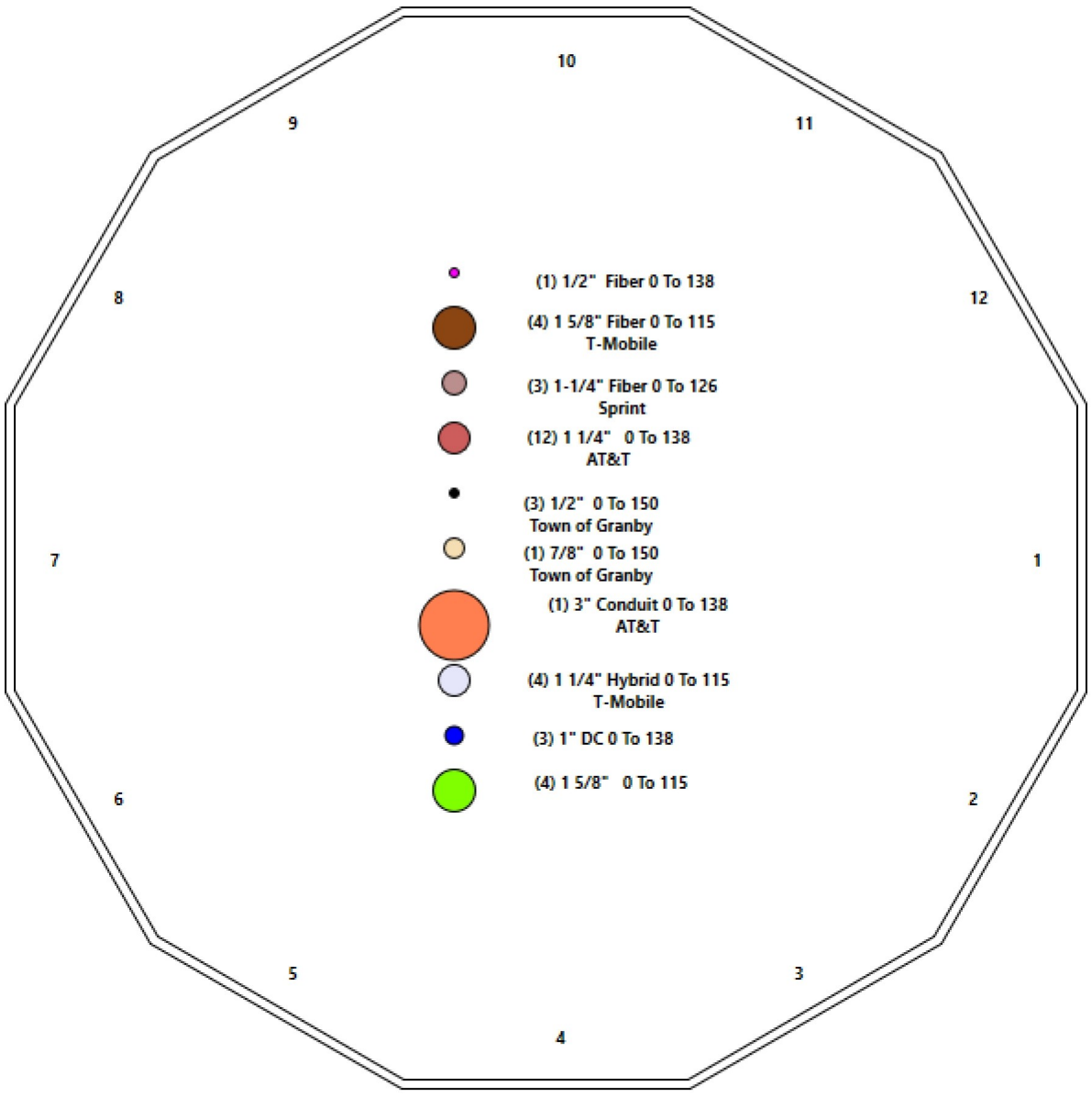

Shaft Properties

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 5	

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Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	12	48.500	0.3750	65		0.00	7,624
2	12	37.670	0.3125	65	Slip	60.00	4,139
3	12	37.960	0.2500	65	Slip	52.00	2,769
4	12	38.787	0.1875	65	Slip	43.00	1,658
					Total Shaft Weight:		**16,190**

	Bottom						Top						
Sec. No.	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (in^4)**	**W/t Ratio**	**D/t Ratio**	**Dia (in)**	**Elev (ft)**	**Area (sqin)**	**Ix (in^4)**	**W/t Ratio**	**D/t Ratio**	**Taper**
1	43.00	0.00	51.47	11936.20	28.58	114.67	34.27	48.50	40.93	6001.78	22.34	91.39	0.180000
2	35.80	43.50	35.70	5737.66	28.55	114.54	29.01	81.17	28.88	3036.85	22.73	92.85	0.180000
3	30.29	76.84	24.19	2786.59	30.33	121.18	23.46	114.80	18.69	1284.98	23.00	93.85	0.180000
4	24.48	111.2	14.67	1104.96	32.84	130.57	17.50	150.00	10.45	399.87	22.86	93.33	0.180000

Additional Steel

							Intermediate Connectors		Termination Connectors			
Elev From (ft)	**Elev To (ft)**	**Qty**	**Description**	**Fy (ksi)**	**Fu (ksi)**	**Offset (in)**	**Description**	**Spacing (in)**	**Description**	**Spacing (in)**	**Lower Qty**	**Upper Qty**
0.00	20.50	1	PLT 7.25"x1.25(1.25hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	13	13
0.00	54.17	2	PLT 7.25"x1.25(1.25hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	13	13
0.00	1.00	1	SOL 1 3/4" William R71	128	150	2.50	5/8" Hollo Bolt	12.00	5/8" Hollo Bolt	3.00		
0.00	20.50	2	PLT 6.5x1.5(31mm Hole)	50	65	0.00	AJM20&sleeve	15.00	AJM20&sleeve	3.00	12	11
1.00	17.50	1	LNP LP6X125-B-20T	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		10
14.17	54.17	1	PLT 7.25"x1.25(1.25hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	13	13
20.50	37.00	3	PLT 5.75x1.5(31mm Hole)	50	65	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	11	11
43.36	69.50	3	PLT 5.75x1.5(31mm Hole)	50	65	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	11	9
52.50	70.00	3	LNP LP6X100-G-20TC	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00	8	
64.17	80.17	3	PLT 6"X1-1/4"(1.25" Hole	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	11	11
70.00	87.50	3	LNP LP6X100-G-20CT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		8
76.71	90.00	3	PLT 4.75x1.5(31mm Hole)	50	65	0.00	AJM20&sleeve	24.00	AJM20&sleeve	3.00	8	7
85.92	100.0	3	PLT 5"x1-1/4"(1.25"Hole)	65	80	0.00	AJM20&sleeve	24.00	AJM20&sleeve	3.00	9	9

Load Summary

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 6	

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Discrete Appurtenances

				No Ice			Ice				
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	150.00	Low Profile Platform-flat	1	1200.00	34.00	1.00	2596.17	71.976	1.00	0.00	0.00
2	150.00	10' Omni	1	25.00	3.00	1.00	126.41	7.808	1.00	0.00	5.00
3	150.00	18' Omni	1	55.00	5.40	1.00	236.02	13.934	1.00	0.00	9.00
4	150.00	10' Dipole	1	30.00	3.76	1.00	178.78	11.760	1.00	0.00	5.00
5	150.00	3' Yagi	1	10.00	2.98	1.00	130.02	11.351	1.00	0.00	0.00
6	138.00	Low Profile Platform-flat	1	1200.00	34.00	1.00	2584.58	71.661	1.00	0.00	0.00
7	138.00	7770.00	3	35.00	5.50	0.77	228.42	6.962	0.77	0.00	0.00
8	138.00	TT19-08BP111-001	6	16.00	0.64	0.50	42.76	1.424	0.50	0.00	0.00
9	138.00	RRUS-11 700MHz	3	51.00	2.52	0.50	146.56	3.357	0.50	0.00	0.00
10	138.00	LGP 21901	6	5.50	0.23	0.50	15.67	0.717	0.50	0.00	0.00
11	138.00	DMP65R-BU8DA	3	95.70	17.07	0.74	616.38	20.314	0.74	0.00	0.00
12	138.00	HPA-65R-BU8A	3	54.00	11.20	0.89	329.09	13.402	0.89	0.00	0.00
13	138.00	4449 B5/B12	3	71.00	1.97	0.50	141.58	2.694	0.50	0.00	0.00
14	138.00	B2 B66A 8843	3	70.00	1.64	0.50	130.80	2.323	0.50	0.00	0.00
15	138.00	DC9-48-60-24-8C-EV	1	26.20	1.14	1.00	166.35	3.238	1.00	0.00	0.00
16	138.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	672.41	15.473	1.00	0.00	0.00
17	138.00	PRK-1245 (kicker kit)	1	464.91	9.50	1.00	894.05	22.654	1.00	0.00	0.00
18	126.00	Low Profile Platform-flat	1	1200.00	34.00	1.00	2572.04	71.320	1.00	0.00	0.00
19	126.00	APXVTM14-C-120	3	56.00	6.34	0.78	278.10	7.854	0.82	0.00	0.00
20	126.00	1900MHz	3	44.00	3.80	0.50	187.04	5.621	0.50	0.00	0.00
21	126.00	800 MHz	3	53.00	2.49	0.50	149.91	3.989	0.50	0.00	0.00
22	126.00	TD-RRH8x20-25	3	70.00	4.05	0.50	207.47	5.173	0.50	0.00	0.00
23	126.00	800MHz Filter	3	8.80	0.78	0.50	31.92	1.628	0.50	0.00	0.00
24	126.00	ACU-A20-N	4	1.00	0.14	0.50	6.63	0.529	0.50	0.00	0.00
25	126.00	APXVSPP18-C-A20	3	57.00	8.02	0.50	283.49	11.681	0.50	0.00	0.00
26	115.00	Radio 4415 B25	4	46.30	1.86	0.50	131.92	2.617	0.50	0.00	0.00
27	115.00	F4P-12W	1	3100.00	63.31	1.00	7033.67	66.599	1.00	0.00	0.00
28	115.00	F4P-HRK12	1	507.00	7.57	1.00	1150.35	19.920	1.00	0.00	0.00
29	115.00	AIR32 KRD901146-1_B66A_B2A	4	132.20	6.51	0.91	366.57	7.991	0.92	0.00	0.00
30	115.00	APXVAARR24_43-U-NA20 (Octa)	4	99.00	20.24	0.81	712.40	22.735	0.83	0.00	0.00
31	115.00	AIR6449 B41	4	103.00	5.65	0.71	281.03	6.884	0.71	0.00	0.00
32	115.00	KRY 112 489/2	4	15.40	0.64	0.50	38.31	1.431	0.50	0.00	0.00
33	115.00	Radio 4449 B71 + B12	4	70.00	1.65	0.50	196.89	2.398	0.50	0.00	0.00
34	50.00	Standoff	1	50.00	1.50	1.00	154.24	3.585	1.00	0.00	0.00
35	50.00	GPS	1	1.00	0.01	1.00	1.08	0.011	1.00	0.00	0.00
36	20.50	Splice Plate	2	276.00	3.83	0.94	378.53	5.118	0.96	0.00	0.00
		Totals:	**92**	**12,675.93**			**34,731.12**				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	150.00	(3) 1/2"	0.00	Inside
0.00	150.00	(1) 7/8"	0.00	Inside
0.00	138.00	(12) 1 1/4" Coax	0.00	Inside
0.00	138.00	(3) 1" DC	0.00	Inside
0.00	138.00	(1) 1/2" Fiber	0.00	Inside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
0.00	138.00	(1) 3" Conduit			0.00	Inside					
0.00	126.00	(3) 1-1/4" Fiber			0.00	Inside					
0.00	115.00	(4) 1 1/4" Hybrid			0.01	Inside					
0.00	115.00	(4) 1 5/8" Coax			0.01	Inside					
0.00	115.00	(4) 1 5/8" Fiber			0.00	Inside					
76.70	90.00	(1) 1.5" Reinforcing Plate			3.00	Outside					
69.50	76.70	(1) 1.25" Reinforcing Plate			2.50	Outside					
43.40	69.50	(1) 1.5" Reinforcing Plate			3.00	Outside					
37.00	43.40	(1) 1.25" Reinforcing Plate			2.50	Outside					
0.50	37.00	(1) 1.5" Reinforcing Plate			3.00	Outside					

Shaft Section Properties

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 8	

Tower Engineering Solutions

Increment Length: **2 (ft)**

											Additional Reinforcing			
Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00	RB1 RB2 RB3 RB4	0.3750	43.000	51.470	11936.2	28.58	114.67	65	74	0.0	49.29	15667.3	7010.8	
1.00	RT3 RB5	0.3750	42.820	51.252	11785.6	28.45	114.19	65	74	174.8	54.19	15905.4	7717.3	184.4
2.00		0.3750	42.640	51.035	11636.3	28.32	113.71	65	74	174.0	54.19	15776.9	7651.4	184.4
4.00		0.3750	42.280	50.600	11341.5	28.07	112.75	65	74	345.8	54.19	15521.4	7520.5	368.8
6.00		0.3750	41.920	50.166	11051.7	27.81	111.79	65	74	342.9	54.19	15268.0	7390.8	368.8
8.00		0.3750	41.560	49.731	10766.9	27.55	110.83	65	75	339.9	54.19	15016.7	7262.4	368.8
10.00		0.3750	41.200	49.296	10487.0	27.30	109.87	65	75	337.0	54.19	14767.5	7135.2	368.8
12.00		0.3750	40.840	48.861	10212.0	27.04	108.91	65	75	334.0	54.19	14520.4	7009.3	368.8
14.00		0.3750	40.480	48.427	9941.9	26.78	107.95	65	76	331.1	54.19	14275.4	6884.6	368.8
14.17	RB6	0.3750	40.449	48.390	9919.1	26.76	107.87	65	76	28.0	63.25	17499.3	8716.2	36.6
16.00		0.3750	40.120	47.992	9676.6	26.52	106.99	65	76	300.1	63.25	17226.5	8577.7	393.9
17.50	RT5	0.3750	39.850	47.666	9480.7	26.33	106.27	65	76	244.1	55.75	15471.8	7343.9	284.6
18.00		0.3750	39.760	47.557	9416.0	26.27	106.03	65	76	81.0	55.75	15404.5	7311.9	94.9
20.00		0.3750	39.400	47.123	9160.1	26.01	105.07	65	76	322.2	55.75	15136.8	7184.7	379.4
20.50	RT1 RT4 RB7	0.3750	39.310	47.014	9096.9	25.94	104.83	65	76	80.1	53.06	11076.9	11076.9	90.3
22.00		0.3750	39.040	46.688	8909.0	25.75	104.11	65	77	239.1	53.06	10931.7	10931.7	270.8
24.00		0.3750	38.680	46.253	8662.4	25.49	103.15	65	77	316.3	53.06	10739.5	10739.5	361.1
26.00		0.3750	38.320	45.819	8420.5	25.24	102.19	65	77	313.3	53.06	10549.1	10549.1	361.1
28.00		0.3750	37.960	45.384	8183.1	24.98	101.23	65	77	310.3	53.06	10360.4	10360.4	361.1
30.00		0.3750	37.600	44.949	7950.2	24.72	100.27	65	78	307.4	53.06	10173.5	10173.5	361.1
32.00		0.3750	37.240	44.514	7721.8	24.47	99.31	65	78	304.4	53.06	9988.2	9988.2	361.1
34.00		0.3750	36.880	44.080	7497.7	24.21	98.35	65	78	301.5	53.06	9804.7	9804.7	361.1
36.00		0.3750	36.520	43.645	7278.1	23.95	97.39	65	79	298.5	53.06	9622.9	9622.9	361.1
37.00	RT7	0.3750	36.340	43.428	7169.9	23.82	96.91	65	79	148.1	27.19	4863.3	4863.3	92.5
38.00		0.3750	36.160	43.210	7062.8	23.69	96.43	65	79	147.4	27.19	4817.5	4817.5	92.5
40.00		0.3750	35.800	42.776	6851.8	23.44	95.47	65	79	292.6	27.19	4726.4	4726.4	185.0
42.00		0.3750	35.440	42.341	6645.0	23.18	94.51	65	79	289.6	27.19	4636.1	4636.1	185.0
43.36	RB8	0.3750	35.195	42.045	6506.8	23.00	93.85	65	80	195.3	53.06	8968.6	8968.6	245.6
43.50	Bot - Section 2	0.3750	35.170	42.015	6492.7	22.99	93.79	65	80	20.0	53.06	8956.4	8956.4	25.3
44.00		0.3750	35.080	41.906	6442.4	22.92	93.55	65	80	132.1	53.06	9217.6	9217.6	90.3
46.00		0.3750	34.720	41.472	6244.0	22.66	92.59	65	80	524.9	53.06	9041.4	9041.4	361.1
48.00		0.3750	34.360	41.037	6049.7	22.41	91.63	65	80	519.4	53.06	8866.9	8866.9	361.1
48.50	Top - Section 1	0.3125	34.895	34.799	5312.0	27.78	111.66	65	74	129.0	53.06	8823.6	8823.6	90.3
50.00		0.3125	34.625	34.527	5188.6	27.55	110.80	65	75	176.9	53.06	8694.1	8694.1	270.8
52.00		0.3125	34.265	34.165	5027.0	27.24	109.65	65	75	233.7	53.06	8523.1	8523.1	361.1
52.50	RB9	0.3125	34.175	34.074	4987.1	27.16	109.36	65	75	58.1	71.06	11292.2	11292.2	120.9
54.00		0.3125	33.905	33.802	4868.8	26.93	108.50	65	75	173.2	71.06	11122.8	11122.8	362.7
54.17	RT2 RT6	0.3125	33.874	33.772	4855.5	26.90	108.40	65	75	19.5	43.88	6849.7	6849.7	25.4
56.00		0.3125	33.545	33.440	4713.9	26.62	107.34	65	76	209.3	43.88	6723.2	6723.2	273.2
58.00		0.3125	33.185	33.078	4562.4	26.31	106.19	65	76	226.3	43.88	6586.3	6586.3	298.6
60.00		0.3125	32.825	32.716	4414.1	26.00	105.04	65	76	223.9	43.88	6450.9	6450.9	298.6
62.00		0.3125	32.465	32.353	4269.1	25.69	103.89	65	77	221.4	43.88	6316.9	6316.9	298.6
64.00		0.3125	32.105	31.991	4127.3	25.38	102.74	65	77	219.0	43.88	6184.3	6184.3	298.6
64.17	RB10	0.3125	32.074	31.960	4115.4	25.36	102.64	65	77	18.5	66.38	9331.6	9331.6	38.4
66.00		0.3125	31.745	31.629	3988.7	25.08	101.58	65	77	198.0	66.38	9150.2	9150.2	413.3
68.00		0.3125	31.385	31.267	3853.2	24.77	100.43	65	78	214.0	66.38	8954.0	8954.0	451.7
69.50	RT8	0.3125	31.115	30.995	3753.6	24.54	99.57	65	78	158.9	40.50	5329.6	5329.6	206.7
70.00	RT9 RB11	0.3125	31.025	30.904	3720.8	24.46	99.28	65	78	52.7	40.50	5300.3	5300.3	68.9
72.00		0.3125	30.665	30.542	3591.5	24.15	98.13	65	78	209.1	40.50	5183.7	5183.7	275.6
74.00		0.3125	30.305	30.180	3465.2	23.84	96.98	65	79	206.6	40.50	5068.4	5068.4	275.6

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
76.00		0.3125	29.945	29.818	3341.9	23.53	95.82	65	79	204.2	40.50	4954.5	4954.5	275.6
76.71	RB12	0.3125	29.817	29.689	3298.9	23.42	95.42	65	79	71.9	61.88	7556.9	7556.9	149.5
76.84	Bot - Section 3	0.3125	29.794	29.666	3291.2	23.40	95.34	65	79	12.8	61.88	7546.0	7546.0	26.7
78.00		0.3125	29.585	29.455	3221.6	23.22	94.67	65	79	212.4	61.88	7686.2	7686.2	244.9
80.00		0.3125	29.225	29.093	3104.2	22.92	93.52	65	80	361.7	61.88	7512.7	7512.7	421.1
80.17	RT10	0.3125	29.194	29.062	3094.3	22.89	93.42	65	80	30.5	39.38	4769.7	4769.7	22.8
81.17	Top - Section 2	0.2500	29.514	23.558	2575.1	29.49	118.06	65	73	179.0	39.38	4714.9	4714.9	134.0
82.00		0.2500	29.365	23.438	2535.9	29.33	117.46	65	73	66.4	39.38	4669.8	4669.8	111.2
84.00		0.2500	29.005	23.148	2443.0	28.94	116.02	65	73	158.5	39.38	4561.9	4561.9	268.0
85.92	RB13	0.2500	28.659	22.870	2356.0	28.57	114.64	65	74	150.3	58.13	6576.8	6576.8	379.7
86.00		0.2500	28.645	22.858	2352.4	28.56	114.58	65	74	6.2	58.13	6570.6	6570.6	15.8
87.50	RT11	0.2500	28.375	22.641	2285.9	28.27	113.50	65	74	116.1	40.13	4484.5	4484.5	204.8
88.00		0.2500	28.285	22.568	2264.0	28.17	113.14	65	74	38.5	40.13	4457.7	4457.7	68.3
90.00	RT12	0.2500	27.925	22.278	2177.9	27.79	111.70	65	74	152.6	18.75	2015.7	2015.7	127.6
92.00		0.2500	27.565	21.989	2094.0	27.40	110.26	65	75	150.6	18.75	1966.8	1966.8	127.6
94.00		0.2500	27.205	21.699	2012.3	27.01	108.82	65	75	148.7	18.75	1918.5	1918.5	127.6
96.00		0.2500	26.845	21.409	1932.8	26.63	107.38	65	76	146.7	18.75	1870.7	1870.7	127.6
98.00		0.2500	26.485	21.119	1855.3	26.24	105.94	65	76	144.7	18.75	1823.6	1823.6	127.6
100.00	RT13	0.2500	26.125	20.829	1780.0	25.86	104.50	65	77	142.7	18.75	1777.1	1777.1	127.6
102.00		0.2500	25.765	20.540	1706.7	25.47	103.06	65	77	140.8				
104.00		0.2500	25.405	20.250	1635.5	25.09	101.62	65	77	138.8				
106.00		0.2500	25.045	19.960	1566.3	24.70	100.18	65	78	136.8				
108.00		0.2500	24.685	19.670	1499.1	24.31	98.74	65	78	134.9				
110.00		0.2500	24.325	19.380	1433.8	23.93	97.30	65	79	132.9				
111.21	Bot - Section 4	0.2500	24.107	19.205	1395.1	23.69	96.43	65	79	79.7				
112.00		0.2500	23.965	19.091	1370.4	23.54	95.86	65	79	90.4				
114.00		0.2500	23.605	18.801	1308.9	23.16	94.42	65	79	227.4				
114.80	Top - Section 3	0.1875	23.837	14.278	1019.3	31.92	127.13	65	70	89.6				
115.00		0.1875	23.800	14.256	1014.5	31.87	126.93	65	70	9.9				
116.00		0.1875	23.620	14.147	991.5	31.61	125.97	65	70	48.3				
118.00		0.1875	23.260	13.930	946.5	31.10	124.05	65	71	95.5				
120.00		0.1875	22.900	13.713	902.9	30.58	122.13	65	71	94.1				
122.00		0.1875	22.540	13.495	860.6	30.07	120.21	65	72	92.6				
124.00		0.1875	22.180	13.278	819.7	29.55	118.29	65	72	91.1				
126.00		0.1875	21.820	13.061	780.1	29.04	116.37	65	73	89.6				
128.00		0.1875	21.460	12.843	741.8	28.52	114.45	65	74	88.1				
130.00		0.1875	21.100	12.626	704.8	28.01	112.53	65	74	86.7				
132.00		0.1875	20.740	12.409	669.0	27.50	110.61	65	75	85.2				
134.00		0.1875	20.380	12.191	634.5	26.98	108.69	65	75	83.7				
136.00		0.1875	20.020	11.974	601.1	26.47	106.77	65	76	82.2				
138.00		0.1875	19.660	11.757	569.0	25.95	104.85	65	76	80.7				
140.00		0.1875	19.300	11.539	538.0	25.44	102.93	65	77	79.3				
142.00		0.1875	18.940	11.322	508.2	24.92	101.01	65	78	77.8				
144.00		0.1875	18.580	11.104	479.5	24.41	99.09	65	78	76.3				
146.00		0.1875	18.220	10.887	451.9	23.89	97.17	65	79	74.8				
148.00		0.1875	17.860	10.670	425.3	23.38	95.25	65	79	73.4				
150.00		0.1875	17.500	10.452	399.9	22.86	93.33	65	80	71.9				
									Total Weight	**16190.3**				**15815.1**

Wind Loading - Shaft

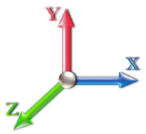
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 10	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 28

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2 RB3 RB4	1.00	0.85	17.879	19.67	318.08	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT3 RB5	1.00	0.85	17.879	19.67	316.75	1.000	0.000	1.00	3.702	3.70	116.5	0.0	209.7
2.00		1.00	0.85	17.879	19.67	315.42	1.000	0.000	1.00	3.686	3.69	116.0	0.0	208.8
4.00		1.00	0.85	17.879	19.67	312.75	1.000	0.000	2.00	7.326	7.33	230.5	0.0	415.0
6.00		1.00	0.85	17.879	19.67	310.09	1.000	0.000	2.00	7.264	7.26	228.6	0.0	411.5
8.00		1.00	0.85	17.879	19.67	307.43	1.000	0.000	2.00	7.202	7.20	226.6	0.0	407.9
10.00		1.00	0.85	17.879	19.67	304.76	1.000	0.000	2.00	7.140	7.14	224.7	0.0	404.4
12.00		1.00	0.85	17.879	19.67	302.10	1.000	0.000	2.00	7.078	7.08	222.7	0.0	400.8
14.00		1.00	0.85	17.879	19.67	299.44	1.000	0.000	2.00	7.016	7.02	220.8	0.0	397.3
14.17	RB6	1.00	0.85	17.879	19.67	299.21	1.000	0.000	0.17	0.593	0.59	18.7	0.0	33.6
16.00		1.00	0.86	18.100	19.91	298.60	1.000	0.000	1.83	6.360	6.36	202.6	0.0	360.1
17.50	RT5	1.00	0.88	18.445	20.29	299.40	1.000	0.000	1.50	5.174	5.17	168.0	0.0	293.0
18.00		1.00	0.88	18.554	20.41	299.61	1.000	0.000	0.50	1.717	1.72	56.1	0.0	97.2
20.00		1.00	0.90	18.971	20.87	300.21	1.000	0.000	2.00	6.829	6.83	228.0	0.0	386.6
20.50	RT1 RT4 RB7	1.00	0.91	19.069	20.98	300.31	1.000	0.000	0.50	1.698	1.70	57.0	0.0	96.1
22.00		1.00	0.92	19.355	21.29	300.47	1.000	0.000	1.50	5.070	5.07	172.7	0.0	287.0
24.00		1.00	0.94	19.713	21.68	300.44	1.000	0.000	2.00	6.705	6.71	232.6	0.0	379.5
26.00		1.00	0.95	20.048	22.05	300.16	1.000	0.000	2.00	6.643	6.64	234.4	0.0	376.0
28.00		1.00	0.97	20.363	22.40	299.67	1.000	0.000	2.00	6.581	6.58	235.9	0.0	372.4
30.00		1.00	0.98	20.661	22.73	298.99	1.000	0.000	2.00	6.519	6.52	237.0	0.0	368.9
32.00		1.00	1.00	20.944	23.04	298.15	1.000	0.000	2.00	6.457	6.46	238.0	0.0	365.3
34.00		1.00	1.01	21.213	23.33	297.15	1.000	0.000	2.00	6.395	6.39	238.7	0.0	361.8
36.00		1.00	1.02	21.470	23.62	296.03	1.000	0.000	2.00	6.332	6.33	239.3	0.0	358.2
37.00	RT7	1.00	1.03	21.594	23.75	295.42	1.000	0.000	1.00	3.143	3.14	119.4	0.0	177.8
38.00		1.00	1.03	21.715	23.89	294.78	1.000	0.000	1.00	3.127	3.13	119.5	0.0	176.9
40.00		1.00	1.04	21.951	24.15	293.43	1.000	0.000	2.00	6.208	6.21	239.8	0.0	351.1
42.00		1.00	1.05	22.178	24.40	291.97	1.000	0.000	2.00	6.146	6.15	239.9	0.0	347.6
43.36	RB8	1.00	1.06	22.327	24.56	290.93	1.000	0.000	1.36	4.144	4.14	162.8	0.0	234.3
43.50	Bot - Section 2	1.00	1.06	22.342	24.58	290.82	1.000	0.000	0.14	0.425	0.42	16.7	0.0	24.0
44.00		1.00	1.06	22.396	24.64	290.43	1.000	0.000	0.50	1.542	1.54	60.8	0.0	158.5
46.00		1.00	1.07	22.607	24.87	288.80	1.000	0.000	2.00	6.130	6.13	243.9	0.0	629.8
48.00		1.00	1.08	22.810	25.09	287.08	1.000	0.000	2.00	6.068	6.07	243.6	0.0	623.3
48.50	Top - Section 1	1.00	1.09	22.860	25.15	286.64	1.000	0.000	0.50	1.507	1.51	60.6	0.0	154.8
50.00	Appurtenance(s)	1.00	1.09	23.007	25.31	290.54	1.000	0.000	1.50	4.498	4.50	182.1	0.0	212.3
52.00		1.00	1.10	23.198	25.52	288.71	1.000	0.000	2.00	5.943	5.94	242.7	0.0	280.5
52.50	RB9	1.00	1.11	23.244	25.57	288.24	1.000	0.000	0.50	1.476	1.48	60.4	0.0	69.7
54.00		1.00	1.11	23.383	25.72	286.82	1.000	0.000	1.50	4.405	4.41	181.3	0.0	207.9
54.17	RT2 RT6	1.00	1.11	23.398	25.74	286.65	1.000	0.000	0.17	0.497	0.50	20.5	0.0	23.5
56.00		1.00	1.12	23.562	25.92	284.86	1.000	0.000	1.83	5.322	5.32	220.7	0.0	251.1
58.00		1.00	1.13	23.737	26.11	282.85	1.000	0.000	2.00	5.757	5.76	240.5	0.0	271.6
60.00		1.00	1.14	23.907	26.30	280.78	1.000	0.000	2.00	5.695	5.69	239.6	0.0	268.7
62.00		1.00	1.14	24.073	26.48	278.66	1.000	0.000	2.00	5.633	5.63	238.6	0.0	265.7
64.00		1.00	1.15	24.234	26.66	276.49	1.000	0.000	2.00	5.571	5.57	237.6	0.0	262.7
64.17	RB10	1.00	1.15	24.248	26.67	276.30	1.000	0.000	0.17	0.471	0.47	20.1	0.0	22.2
66.00		1.00	1.16	24.392	26.83	274.28	1.000	0.000	1.83	5.038	5.04	216.3	0.0	237.6
68.00		1.00	1.17	24.545	27.00	272.02	1.000	0.000	2.00	5.446	5.45	235.3	0.0	256.8
69.50	RT8	1.00	1.17	24.658	27.12	270.30	1.000	0.000	1.50	4.044	4.04	175.5	0.0	190.7

Wind Loading - Shaft

Structure: CT46134-A-SBA | **Code:** EIA/TIA-222-G | 10/28/2020

Site Name: Granby-n. Granby | **Exposure:** C

Height: 150.00 (ft) | **Crest Height:** 0.00

Base Elev: 0.000 (ft) | **Site Class:** D - Stiff Soil

Gh: 1.1 | **Topography:** 1 | **Struct Class:** II

Tower Engineering Solutions

70.00	RT9 RB11	1.00	1.17	24.696	27.17	269.72	1.000	0.000	0.50	1.340	1.34	58.3	0.0	63.2
72.00		1.00	1.18	24.843	27.33	267.38	1.000	0.000	2.00	5.322	5.32	232.7	0.0	250.9
74.00		1.00	1.19	24.986	27.48	265.01	1.000	0.000	2.00	5.260	5.26	231.3	0.0	247.9
76.00		1.00	1.19	25.127	27.64	262.60	1.000	0.000	2.00	5.198	5.20	229.9	0.0	245.0
76.71	RB12	1.00	1.20	25.176	27.69	261.73	1.000	0.000	0.71	1.830	1.83	81.1	0.0	86.3
76.84	Bot - Section 3	1.00	1.20	25.185	27.70	261.58	1.000	0.000	0.13	0.326	0.33	14.4	0.0	15.3
78.00		1.00	1.20	25.265	27.79	260.15	1.000	0.000	1.16	3.030	3.03	134.7	0.0	254.9
80.00		1.00	1.21	25.400	27.94	257.67	1.000	0.000	2.00	5.160	5.16	230.7	0.0	434.0
80.17	RT10	1.00	1.21	25.411	27.95	257.46	1.000	0.000	0.17	0.436	0.44	19.5	0.0	36.6
81.17	Top - Section 2	1.00	1.21	25.478	28.03	256.20	1.000	0.000	1.00	2.554	2.55	114.5	0.0	214.8
82.00		1.00	1.21	25.532	28.09	259.58	1.000	0.000	0.83	2.108	2.11	94.7	0.0	79.6
84.00		1.00	1.22	25.662	28.23	257.05	1.000	0.000	2.00	5.036	5.04	227.4	0.0	190.2
85.92	RB13	1.00	1.23	25.784	28.36	254.59	1.002 *	0.000	1.92	4.776	4.78	217.1	0.0	180.4
86.00		1.00	1.23	25.789	28.37	254.49	1.003 *	0.000	0.08	0.198	0.20	9.0	0.0	7.5
87.50	RT11	1.00	1.23	25.884	28.47	252.55	1.005 *	0.000	1.50	3.689	3.71	168.9	0.0	139.3
88.00		1.00	1.23	25.915	28.51	251.90	1.007 *	0.000	0.50	1.222	1.23	56.1	0.0	46.2
90.00	RT12	1.00	1.24	26.037	28.64	249.28	1.009 *	0.000	2.00	4.849	4.89	224.3	0.0	183.1
92.00		1.00	1.24	26.158	28.77	246.64	1.000	0.000	2.00	4.787	4.79	220.4	0.0	180.8
94.00		1.00	1.25	26.277	28.90	243.97	1.000	0.000	2.00	4.725	4.73	218.5	0.0	178.4
96.00		1.00	1.25	26.394	29.03	241.27	1.000	0.000	2.00	4.663	4.66	216.6	0.0	176.0
98.00		1.00	1.26	26.509	29.16	238.55	1.000	0.000	2.00	4.601	4.60	214.7	0.0	173.7
100.00	RT13	1.00	1.27	26.621	29.28	235.81	1.000	0.000	2.00	4.539	4.54	212.7	0.0	171.3
102.00		1.00	1.27	26.733	29.41	233.05	1.000	0.000	2.00	4.477	4.48	210.6	0.0	168.9
104.00		1.00	1.28	26.842	29.53	230.26	1.000	0.000	2.00	4.415	4.41	208.6	0.0	166.6
106.00		1.00	1.28	26.950	29.65	227.45	1.000	0.000	2.00	4.352	4.35	206.4	0.0	164.2
108.00		1.00	1.29	27.056	29.76	224.63	1.000	0.000	2.00	4.290	4.29	204.3	0.0	161.8
110.00		1.00	1.29	27.161	29.88	221.78	1.000	0.000	2.00	4.228	4.23	202.1	0.0	159.5
111.21	Bot - Section 4	1.00	1.29	27.224	29.95	220.04	1.000	0.000	1.21	2.535	2.53	121.5	0.0	95.6
112.00		1.00	1.30	27.264	29.99	218.91	1.000	0.000	0.79	1.657	1.66	79.5	0.0	108.5
114.00		1.00	1.30	27.366	30.10	216.02	1.000	0.000	2.00	4.169	4.17	200.8	0.0	272.9
114.80	Top - Section 3	1.00	1.30	27.406	30.15	214.87	1.000	0.000	0.80	1.643	1.64	79.3	0.0	107.6
115.00	Appurtenance(s)	1.00	1.30	27.416	30.16	218.01	1.000	0.000	0.20	0.418	0.42	20.2	0.0	11.8
116.00		1.00	1.31	27.466	30.21	216.56	1.000	0.000	1.00	2.046	2.05	98.9	0.0	58.0
118.00		1.00	1.31	27.565	30.32	213.64	1.000	0.000	2.00	4.044	4.04	196.2	0.0	114.6
120.00		1.00	1.32	27.663	30.43	210.71	1.000	0.000	2.00	3.982	3.98	193.9	0.0	112.9
122.00		1.00	1.32	27.760	30.54	207.76	1.000	0.000	2.00	3.920	3.92	191.5	0.0	111.1
124.00		1.00	1.32	27.855	30.64	204.79	1.000	0.000	2.00	3.858	3.86	189.1	0.0	109.3
126.00	Appurtenance(s)	1.00	1.33	27.949	30.74	201.80	1.000	0.000	2.00	3.796	3.80	186.7	0.0	107.5
128.00		1.00	1.33	28.042	30.85	198.80	1.000	0.000	2.00	3.734	3.73	184.3	0.0	105.8
130.00		1.00	1.34	28.133	30.95	195.79	1.000	0.000	2.00	3.672	3.67	181.8	0.0	104.0
132.00		1.00	1.34	28.224	31.05	192.76	1.000	0.000	2.00	3.610	3.61	179.3	0.0	102.2
134.00		1.00	1.35	28.313	31.14	189.71	1.000	0.000	2.00	3.548	3.55	176.8	0.0	100.4
136.00		1.00	1.35	28.402	31.24	186.65	1.000	0.000	2.00	3.485	3.49	174.2	0.0	98.7
138.00	Appurtenance(s)	1.00	1.35	28.489	31.34	183.58	1.000	0.000	2.00	3.423	3.42	171.6	0.0	96.9
140.00		1.00	1.36	28.576	31.43	180.49	1.000	0.000	2.00	3.361	3.36	169.0	0.0	95.1
142.00		1.00	1.36	28.661	31.53	177.39	1.000	0.000	2.00	3.299	3.30	166.4	0.0	93.3
144.00		1.00	1.37	28.746	31.62	174.27	1.000	0.000	2.00	3.237	3.24	163.8	0.0	91.6
146.00		1.00	1.37	28.829	31.71	171.14	1.000	0.000	2.00	3.175	3.17	161.1	0.0	89.8
148.00		1.00	1.37	28.912	31.80	168.00	1.000	0.000	2.00	3.113	3.11	158.4	0.0	88.0
150.00	Appurtenance(s)	1.00	1.38	28.994	31.89	164.85	1.000	0.000	2.00	3.051	3.05	155.7	0.0	86.2
								Totals:	**150.00**			**16,223.3**		**19,428.4**

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

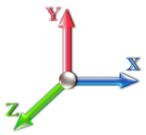
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 12	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	150.00	3' Yagi	1	28.994	31.893	1.00	1.00	2.98	12.00	0.000	0.000	152.07	0.00	0.00
2	150.00	10' Dipole	1	29.195	32.114	1.00	1.00	3.76	36.00	0.000	5.000	193.20	0.00	965.99
3	150.00	18' Omni	1	29.352	32.287	1.00	1.00	5.40	66.00	0.000	9.000	278.96	0.00	2510.62
4	150.00	10' Omni	1	29.195	32.114	1.00	1.00	3.00	30.00	0.000	5.000	154.15	0.00	770.74
5	150.00	Low Profile Platform-flat	1	28.994	31.893	1.00	1.00	34.00	1440.00	0.000	0.000	1734.99	0.00	0.00
6	138.00	LGP 21901	6	28.489	31.338	0.38	0.75	0.52	39.60	0.000	0.000	25.95	0.00	0.00
7	138.00	RRUS-11 700MHz	3	28.489	31.338	0.38	0.75	2.83	183.60	0.000	0.000	142.15	0.00	0.00
8	138.00	DMP65R-BU8DA	3	28.489	31.338	0.55	0.75	28.42	344.52	0.000	0.000	1425.09	0.00	0.00
9	138.00	TT19-08BP111-001	6	28.489	31.338	0.38	0.75	1.44	115.20	0.000	0.000	72.20	0.00	0.00
10	138.00	7770.00	3	28.489	31.338	0.58	0.75	9.53	126.00	0.000	0.000	477.78	0.00	0.00
11	138.00	Low Profile Platform-flat	1	28.489	31.338	1.00	1.00	34.00	1440.00	0.000	0.000	1704.80	0.00	0.00
12	138.00	B2 B66A 8843	3	28.489	31.338	0.38	0.75	1.84	252.00	0.000	0.000	92.51	0.00	0.00
13	138.00	HPA-65R-BU8A	3	28.489	31.338	0.67	0.75	22.43	194.40	0.000	0.000	1124.56	0.00	0.00
14	138.00	4449 B5/B12	3	28.489	31.338	0.38	0.75	2.22	255.60	0.000	0.000	111.13	0.00	0.00
15	138.00	DC9-48-60-24-8C-EV	1	28.489	31.338	0.75	0.75	0.85	31.44	0.000	0.000	42.87	0.00	0.00
16	138.00	HRK12 (Handrail Kit)	1	28.489	31.338	1.00	1.00	6.75	314.06	0.000	0.000	338.45	0.00	0.00
17	138.00	PRK-1245 (kicker kit)	1	28.489	31.338	1.00	1.00	9.50	557.89	0.000	0.000	476.34	0.00	0.00
18	126.00	APXVSPP18-C-A20	3	27.949	30.744	0.40	0.80	9.62	205.20	0.000	0.000	473.40	0.00	0.00
19	126.00	ACU-A20-N	4	27.949	30.744	0.40	0.80	0.22	4.80	0.000	0.000	11.02	0.00	0.00
20	126.00	TD-RRH8x20-25	3	27.949	30.744	0.40	0.80	4.86	252.00	0.000	0.000	239.06	0.00	0.00
21	126.00	800 MHz	3	27.949	30.744	0.40	0.80	2.99	190.80	0.000	0.000	146.98	0.00	0.00
22	126.00	1900MHz	3	27.949	30.744	0.40	0.80	4.56	158.40	0.000	0.000	224.31	0.00	0.00
23	126.00	APXVTM14-C-120	3	27.949	30.744	0.62	0.80	11.87	201.60	0.000	0.000	583.81	0.00	0.00
24	126.00	Low Profile Platform-flat	1	27.949	30.744	1.00	1.00	34.00	1440.00	0.000	0.000	1672.46	0.00	0.00
25	126.00	800MHz Filter	3	27.949	30.744	0.40	0.80	0.94	31.68	0.000	0.000	46.04	0.00	0.00
26	115.00	AIR32	4	27.416	30.158	0.68	0.75	17.73	634.56	0.000	0.000	855.68	0.00	0.00
27	115.00	Radio 4415 B25	4	27.416	30.158	0.38	0.75	2.79	222.24	0.000	0.000	134.63	0.00	0.00
28	115.00	F4P-12W	1	27.416	30.158	1.00	1.00	63.31	3720.00	0.000	0.000	3054.89	0.00	0.00
29	115.00	F4P-HRK12	1	27.416	30.158	1.00	1.00	7.57	608.40	0.000	0.000	365.27	0.00	0.00
30	115.00	AIR6449 B41	4	27.416	30.158	0.53	0.75	12.03	494.40	0.000	0.000	580.70	0.00	0.00
31	115.00	APXVAARR24_43-U-NA2	4	27.416	30.158	0.61	0.75	49.18	475.20	0.000	0.000	2373.23	0.00	0.00
32	115.00	KRY 112 489/2	4	27.416	30.158	0.38	0.75	0.96	73.92	0.000	0.000	46.32	0.00	0.00
33	115.00	Radio 4449 B71 + B12	4	27.416	30.158	0.38	0.75	2.47	336.00	0.000	0.000	119.43	0.00	0.00
34	50.00	GPS	1	23.007	25.308	1.00	1.00	0.01	1.20	0.000	0.000	0.40	0.00	0.00
35	50.00	Standoff	1	23.007	25.308	1.00	1.00	1.50	60.00	0.000	0.000	60.74	0.00	0.00
36	20.50	Splice Plate	2	19.069	20.976	0.94	1.00	7.20	662.40	0.000	0.000	241.66	0.00	0.00
							Totals:		**15,211.12**			**19,777.21**		

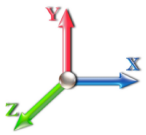
Total Applied Force Summary

Structure:	CT46134-A-SBA		**Code:**	EIA/TIA-222-G	10/28/2020
Site Name:	Granby-n. Granby		**Exposure:**	C	
Height:	150.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 13

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 28

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		116.49	240.82	0.00	0.00
2.00		116.00	239.93	0.00	0.00
4.00		230.54	477.20	0.00	0.00
6.00		228.59	473.65	0.00	0.00
8.00		226.63	470.10	0.00	0.00
10.00		224.68	466.55	0.00	0.00
12.00		222.72	463.00	0.00	0.00
14.00		220.77	459.45	0.00	0.00
14.17		18.68	38.89	0.00	0.00
16.00		202.61	417.01	0.00	0.00
17.50		167.98	339.59	0.00	0.00
18.00		56.07	112.75	0.00	0.00
20.00		228.02	448.80	0.00	0.00
20.50	(2) attachments	298.64	774.05	0.00	0.00
22.00		172.70	333.60	0.00	0.00
24.00		232.63	441.70	0.00	0.00
26.00		234.39	438.15	0.00	0.00
28.00		235.85	434.60	0.00	0.00
30.00		237.05	431.05	0.00	0.00
32.00		238.00	427.50	0.00	0.00
34.00		238.74	423.95	0.00	0.00
36.00		239.28	420.40	0.00	0.00
37.00		119.45	208.87	0.00	0.00
38.00		119.53	207.98	0.00	0.00
40.00		239.85	413.30	0.00	0.00
42.00		239.90	409.75	0.00	0.00
43.36		162.84	276.60	0.00	0.00
43.50		16.71	28.38	0.00	0.00
44.00		60.79	174.02	0.00	0.00
46.00		243.89	692.01	0.00	0.00
48.00		243.59	685.51	0.00	0.00
48.50		60.64	170.36	0.00	0.00
50.00	(2) attachments	243.29	320.15	0.00	0.00
52.00		242.65	342.68	0.00	0.00
52.50		60.39	85.21	0.00	0.00
54.00		181.29	254.51	0.00	0.00
54.17		20.47	28.74	0.00	0.00
56.00		220.71	308.02	0.00	0.00
58.00		240.51	333.80	0.00	0.00
60.00		239.62	330.85	0.00	0.00
62.00		238.65	327.89	0.00	0.00
64.00		237.60	324.93	0.00	0.00
64.17		20.09	27.48	0.00	0.00
66.00		216.27	294.49	0.00	0.00
68.00		235.29	319.01	0.00	0.00
69.50		175.51	237.32	0.00	0.00

Total Applied Force Summary

Structure:	CT46134-A-SBA		**Code:**	EIA/TIA-222-G	10/28/2020
Site Name:	Granby-n. Granby		**Exposure:**	C	
Height:	150.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 14

Tower Engineering Solutions

70.00		58.25	78.74	0.00	0.00
72.00		232.70	313.10	0.00	0.00
74.00		231.32	310.14	0.00	0.00
76.00		229.87	307.18	0.00	0.00
76.71		81.10	108.34	0.00	0.00
76.84		14.44	19.29	0.00	0.00
78.00		134.73	291.08	0.00	0.00
80.00		230.67	496.22	0.00	0.00
80.17		19.49	41.93	0.00	0.00
81.17		114.53	245.89	0.00	0.00
82.00		94.73	105.45	0.00	0.00
84.00		227.44	252.41	0.00	0.00
85.92		217.06	240.09	0.00	0.00
86.00		9.01	9.96	0.00	0.00
87.50		168.90	185.98	0.00	0.00
88.00		56.12	61.70	0.00	0.00
90.00		224.30	245.31	0.00	0.00
92.00		220.40	242.95	0.00	0.00
94.00		218.53	240.58	0.00	0.00
96.00		216.61	238.21	0.00	0.00
98.00		214.66	235.85	0.00	0.00
100.00		212.66	233.48	0.00	0.00
102.00		210.63	231.11	0.00	0.00
104.00		208.56	228.75	0.00	0.00
106.00		206.45	226.38	0.00	0.00
108.00		204.30	224.01	0.00	0.00
110.00		202.12	221.65	0.00	0.00
111.21		121.46	133.31	0.00	0.00
112.00		79.50	132.95	0.00	0.00
114.00		200.78	335.11	0.00	0.00
114.80		79.26	132.33	0.00	0.00
115.00	(26) attachments	7550.31	6582.89	0.00	0.00
116.00		98.88	75.93	0.00	0.00
118.00		196.22	150.53	0.00	0.00
120.00		193.89	148.76	0.00	0.00
122.00		191.53	146.98	0.00	0.00
124.00		189.14	145.21	0.00	0.00
126.00	(23) attachments	3583.80	2627.91	0.00	0.00
128.00		184.28	134.79	0.00	0.00
130.00		181.81	133.02	0.00	0.00
132.00		179.31	131.24	0.00	0.00
134.00		176.78	129.47	0.00	0.00
136.00		174.23	127.69	0.00	0.00
138.00	(34) attachments	6205.47	3980.23	0.00	0.00
140.00		169.05	97.52	0.00	0.00
142.00		166.42	95.75	0.00	0.00
144.00		163.77	93.97	0.00	0.00
146.00		161.09	92.20	0.00	0.00
148.00		158.39	90.42	0.00	0.00
150.00	(5) attachments	2669.02	1672.65	0.00	4247.35
	Totals:	**36,000.48**	**38,601.22**	**0.00**	**4,247.35**

Linear Appurtenance Segment Forces (Factored)

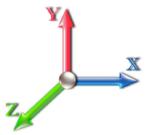
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 15	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.034	0.000	17.879	0.00	0.00
2.00	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.25	0.00	0.068	0.000	17.879	0.00	0.00
4.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.068	0.000	17.879	0.00	0.00
6.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.069	0.000	17.879	0.00	0.00
8.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.069	0.000	17.879	0.00	0.00
10.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.070	0.000	17.879	0.00	0.00
12.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.071	0.000	17.879	0.00	0.00
14.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.071	0.000	17.879	0.00	0.00
14.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.072	0.000	17.879	0.00	0.00
16.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	0.46	0.00	0.072	0.000	18.100	0.00	0.00
17.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.072	0.000	18.445	0.00	0.00
18.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.073	0.000	18.554	0.00	0.00
20.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.073	0.000	18.971	0.00	0.00
20.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.074	0.000	19.069	0.00	0.00
22.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.074	0.000	19.355	0.00	0.00
24.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.075	0.000	19.713	0.00	0.00
26.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.075	0.000	20.048	0.00	0.00
28.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.076	0.000	20.363	0.00	0.00
30.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.077	0.000	20.661	0.00	0.00
32.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.077	0.000	20.944	0.00	0.00
34.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.078	0.000	21.213	0.00	0.00
36.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.079	0.000	21.470	0.00	0.00
37.00	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.25	0.00	0.080	0.000	21.594	0.00	0.00
38.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.067	0.000	21.715	0.00	0.00
40.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.067	0.000	21.951	0.00	0.00
42.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.068	0.000	22.178	0.00	0.00
43.36	1.25" Reinforcing	Yes	1.36	0.000	2.50	0.28	0.00	0.068	0.000	22.327	0.00	0.00
43.50	1.5" Reinforcing Plate	Yes	0.10	0.000	3.00	0.03	0.00	0.078	0.000	22.342	0.00	0.00
43.50	1.25" Reinforcing	Yes	0.04	0.000	2.50	0.01	0.00	0.078	0.000	22.342	0.00	0.00
44.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.082	0.000	22.396	0.00	0.00
46.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.083	0.000	22.607	0.00	0.00
48.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.084	0.000	22.810	0.00	0.00
48.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.084	0.000	22.860	0.00	0.00
50.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.083	0.000	23.007	0.00	0.00
52.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.084	0.000	23.198	0.00	0.00
52.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.085	0.000	23.244	0.00	0.00
54.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.085	0.000	23.383	0.00	0.00
54.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.086	0.000	23.398	0.00	0.00
56.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	0.46	0.00	0.086	0.000	23.562	0.00	0.00
58.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.087	0.000	23.737	0.00	0.00
60.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.088	0.000	23.907	0.00	0.00
62.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.089	0.000	24.073	0.00	0.00
64.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.090	0.000	24.234	0.00	0.00
64.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.090	0.000	24.248	0.00	0.00
66.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	0.46	0.00	0.091	0.000	24.392	0.00	0.00
68.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.092	0.000	24.545	0.00	0.00
69.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.093	0.000	24.658	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

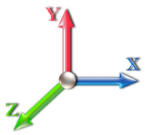
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 16	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
70.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.078	0.000	24.696	0.00	0.00
72.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.078	0.000	24.843	0.00	0.00
74.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.079	0.000	24.986	0.00	0.00
76.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.080	0.000	25.127	0.00	0.00
76.71	1.5" Reinforcing Plate	Yes	0.01	0.000	3.00	0.00	0.00	0.081	0.000	25.176	0.00	0.00
76.71	1.25" Reinforcing	Yes	0.70	0.000	2.50	0.15	0.00	0.081	0.000	25.176	0.00	0.00
76.84	1.5" Reinforcing Plate	Yes	0.13	0.000	3.00	0.03	0.00	0.097	0.000	25.185	0.00	0.00
78.00	1.5" Reinforcing Plate	Yes	1.16	0.000	3.00	0.29	0.00	0.098	0.000	25.265	0.00	0.00
80.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.099	0.000	25.400	0.00	0.00
80.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.099	0.000	25.411	0.00	0.00
81.17	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.25	0.00	0.100	0.000	25.478	0.00	0.00
82.00	1.5" Reinforcing Plate	Yes	0.83	0.000	3.00	0.21	0.00	0.098	0.000	25.532	0.00	0.00
84.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.099	0.000	25.662	0.00	0.00
85.92	1.5" Reinforcing Plate	Yes	1.92	0.000	3.00	0.48	0.00	0.101	1.002	25.784	0.00	0.00
86.00	1.5" Reinforcing Plate	Yes	0.08	0.000	3.00	0.02	0.00	0.101	1.003	25.789	0.00	0.00
87.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.102	1.005	25.884	0.00	0.00
88.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.102	1.007	25.915	0.00	0.00
90.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.103	1.009	26.037	0.00	0.00
										Totals:	**0.0**	**0.0**

Calculated Forces

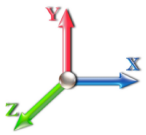
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 17	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 28

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-38.58	-36.02	0.00	-3824.4	0.00	3824.45	3406.69	1703.35	5989.16	2957.82	0.00	0.000	0.000	0.792
1.00	-38.31	-35.94	0.00	-3788.4	0.00	3788.43	3398.78	1699.39	5949.79	2938.38	0.01	-0.055	0.000	0.748
2.00	-38.02	-35.87	0.00	-3752.4	0.00	3752.49	3390.81	1695.40	5910.44	2918.95	0.02	-0.108	0.000	0.744
4.00	-37.48	-35.71	0.00	-3680.7	0.00	3680.75	3374.70	1687.35	5831.83	2880.12	0.09	-0.212	0.000	0.737
6.00	-36.94	-35.55	0.00	-3609.3	0.00	3609.33	3358.38	1679.19	5753.31	2841.35	0.20	-0.317	0.000	0.730
8.00	-36.41	-35.38	0.00	-3538.2	0.00	3538.23	3341.83	1670.92	5674.92	2802.63	0.36	-0.421	0.000	0.723
10.00	-35.88	-35.22	0.00	-3467.4	0.00	3467.46	3325.07	1662.53	5596.65	2763.98	0.56	-0.527	0.000	0.715
12.00	-35.35	-35.06	0.00	-3397.0	0.00	3397.02	3308.08	1654.04	5518.52	2725.39	0.80	-0.632	0.000	0.708
14.00	-34.86	-34.87	0.00	-3326.9	0.00	3326.90	3290.88	1645.44	5440.53	2686.87	1.09	-0.737	0.000	0.701
14.17	-34.79	-34.88	0.00	-3320.9	0.00	3320.97	3289.41	1644.70	5433.91	2683.60	1.11	-0.747	0.000	0.647
16.00	-34.33	-34.72	0.00	-3257.1	0.00	3257.14	3273.46	1636.73	5362.70	2648.44	1.42	-0.836	0.000	0.640
17.50	-33.96	-34.58	0.00	-3205.0	0.00	3205.06	3260.25	1630.12	5304.43	2619.66	1.69	-0.910	0.000	0.687
18.00	-33.81	-34.56	0.00	-3187.7	0.00	3187.78	3255.82	1627.91	5285.03	2610.08	1.79	-0.936	0.000	0.685
20.00	-33.33	-34.36	0.00	-3118.6	0.00	3118.66	3237.96	1618.98	5207.54	2571.81	2.20	-1.042	0.000	0.677
20.50	-32.53	-34.07	0.00	-3101.4	0.00	3101.48	3233.46	1616.73	5188.20	2562.26	2.31	-1.069	0.000	0.551
22.00	-32.15	-33.94	0.00	-3050.3	0.00	3050.37	3219.87	1609.94	5130.24	2533.63	2.66	-1.134	0.000	0.546
24.00	-31.67	-33.74	0.00	-2982.5	0.00	2982.50	3201.57	1600.79	5053.13	2495.55	3.16	-1.221	0.000	0.539
26.00	-31.18	-33.55	0.00	-2915.0	0.00	2915.01	3183.05	1591.53	4976.22	2457.57	3.69	-1.307	0.000	0.532
28.00	-30.70	-33.35	0.00	-2847.9	0.00	2847.92	3164.31	1582.16	4899.54	2419.70	4.25	-1.394	0.000	0.524
30.00	-30.23	-33.14	0.00	-2781.2	0.00	2781.22	3145.35	1572.68	4823.07	2381.93	4.85	-1.480	0.000	0.517
32.00	-29.76	-32.94	0.00	-2714.9	0.00	2714.94	3126.18	1563.09	4746.84	2344.29	5.49	-1.566	0.000	0.510
34.00	-29.29	-32.73	0.00	-2649.0	0.00	2649.06	3106.78	1553.39	4670.86	2306.76	6.17	-1.652	0.000	0.502
36.00	-28.84	-32.51	0.00	-2583.5	0.00	2583.59	3087.16	1543.58	4595.12	2269.36	6.88	-1.739	0.000	0.495
37.00	-28.61	-32.41	0.00	-2551.0	0.00	2551.07	3077.27	1538.63	4557.36	2250.71	7.25	-1.782	0.000	0.682
38.00	-28.35	-32.33	0.00	-2518.6	0.00	2518.66	3067.32	1533.66	4519.66	2232.09	7.63	-1.842	0.000	0.677
40.00	-27.88	-32.14	0.00	-2453.9	0.00	2453.99	3047.27	1523.63	4444.46	2194.95	8.42	-1.961	0.000	0.668
42.00	-27.42	-31.93	0.00	-2389.7	0.00	2389.72	3026.99	1513.49	4369.56	2157.96	9.27	-2.080	0.000	0.658
43.36	-27.13	-31.78	0.00	-2346.2	0.00	2346.29	3013.08	1506.54	4318.79	2132.89	9.87	-2.161	0.000	0.467
43.50	-27.10	-31.77	0.00	-2341.8	0.00	2341.84	3011.64	1505.82	4313.57	2130.31	9.94	-2.167	0.000	0.466
44.00	-26.89	-31.73	0.00	-2325.9	0.00	2325.96	3006.49	1503.25	4294.94	2121.11	10.17	-2.189	0.000	0.456
46.00	-26.17	-31.49	0.00	-2262.5	0.00	2262.51	2985.78	1492.89	4220.63	2084.41	11.10	-2.272	0.000	0.448
48.00	-25.46	-31.24	0.00	-2199.5	0.00	2199.53	2964.84	1482.42	4146.63	2047.87	12.07	-2.355	0.000	0.440
48.50	-25.27	-31.20	0.00	-2183.9	0.00	2183.90	2330.75	1165.37	3323.66	1641.43	12.32	-2.376	0.000	0.481
50.00	-24.92	-30.97	0.00	-2137.1	0.00	2137.11	2320.40	1160.20	3282.84	1621.27	13.07	-2.438	0.000	0.498
52.00	-24.56	-30.74	0.00	-2075.1	0.00	2075.17	2306.40	1153.20	3228.50	1594.43	14.11	-2.524	0.000	0.488
52.50	-24.46	-30.69	0.00	-2059.8	0.00	2059.80	2302.87	1151.43	3214.93	1587.73	14.38	-2.546	0.000	0.402
54.00	-24.20	-30.51	0.00	-2013.7	0.00	2013.77	2292.19	1146.09	3174.27	1567.65	15.19	-2.599	0.000	0.395
54.17	-24.15	-30.51	0.00	-2008.5	0.00	2008.58	2290.97	1145.49	3169.67	1565.38	15.28	-2.606	0.000	0.538
56.00	-23.80	-30.31	0.00	-1952.7	0.00	1952.76	2277.76	1138.88	3120.17	1540.93	16.30	-2.694	0.000	0.528
58.00	-23.43	-30.09	0.00	-1892.1	0.00	1892.14	2263.10	1131.55	3066.20	1514.28	17.45	-2.789	0.000	0.516
60.00	-23.06	-29.88	0.00	-1831.9	0.00	1831.95	2248.23	1124.12	3012.38	1487.70	18.63	-2.884	0.000	0.505
62.00	-22.70	-29.66	0.00	-1772.2	0.00	1772.20	2233.14	1116.57	2958.71	1461.20	19.86	-2.979	0.000	0.494
64.00	-22.36	-29.42	0.00	-1712.8	0.00	1712.88	2217.83	1108.92	2905.21	1434.77	21.13	-3.072	0.000	0.483
64.17	-22.31	-29.42	0.00	-1707.8	0.00	1707.88	2216.52	1108.26	2900.67	1432.53	21.24	-3.080	0.000	0.369
66.00	-22.00	-29.21	0.00	-1654.0	0.00	1654.05	2202.30	1101.15	2851.88	1408.44	22.43	-3.145	0.000	0.360
68.00	-21.66	-28.98	0.00	-1595.6	0.00	1595.63	2186.55	1093.28	2798.74	1382.19	23.76	-3.216	0.000	0.351
69.50	-21.41	-28.81	0.00	-1552.1	0.00	1552.16	2174.60	1087.30	2759.01	1362.57	24.78	-3.268	0.000	0.476
70.00	-21.31	-28.77	0.00	-1537.7	0.00	1537.76	2170.58	1085.29	2745.79	1356.04	25.13	-3.292	0.000	0.473

Calculated Forces

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 18

TES Tower Engineering Solutions

72.00	-20.96	-28.55	0.00	-1480.2	0.00	1480.23	2154.39	1077.20	2693.05	1329.99	26.53	-3.388	0.000	0.460
74.00	-20.62	-28.33	0.00	-1423.1	0.00	1423.13	2137.99	1068.99	2640.51	1304.05	27.96	-3.482	0.000	0.448
76.00	-20.30	-28.11	0.00	-1366.4	0.00	1366.46	2121.36	1060.68	2588.21	1278.22	29.44	-3.575	0.000	0.435
76.71	-20.18	-28.03	0.00	-1346.5	0.00	1346.50	2115.40	1057.70	2569.69	1269.07	29.98	-3.608	0.000	0.326
76.84	-20.15	-28.02	0.00	-1342.9	0.00	1342.95	2114.34	1057.17	2566.39	1267.45	30.07	-3.612	0.000	0.326
78.00	-19.85	-27.89	0.00	-1310.3	0.00	1310.36	2104.51	1052.26	2536.13	1252.50	30.96	-3.653	0.000	0.313
80.00	-19.35	-27.64	0.00	-1254.5	0.00	1254.59	2087.45	1043.72	2484.30	1226.90	32.50	-3.720	0.000	0.303
80.17	-19.30	-27.62	0.00	-1249.8	0.00	1249.89	2085.98	1042.99	2479.91	1224.73	32.63	-3.725	0.000	0.406
81.17	-19.04	-27.50	0.00	-1222.2	0.00	1222.27	1538.24	769.12	1857.13	917.17	33.42	-3.770	0.000	0.448
82.00	-18.91	-27.42	0.00	-1199.4	0.00	1199.44	1534.07	767.04	1842.56	909.97	34.08	-3.807	0.000	0.470
84.00	-18.63	-27.21	0.00	-1144.5	0.00	1144.59	1523.87	761.94	1807.49	892.65	35.69	-3.900	0.000	0.453
85.92	-18.38	-26.99	0.00	-1092.3	0.00	1092.35	1513.87	756.94	1773.86	876.04	37.27	-3.987	0.000	0.334
86.00	-18.36	-26.99	0.00	-1090.1	0.00	1090.19	1513.45	756.73	1772.46	875.35	37.34	-3.990	0.000	0.333
87.50	-18.17	-26.82	0.00	-1049.7	0.00	1049.70	1505.49	752.75	1746.23	862.40	38.60	-4.041	0.000	0.417
88.00	-18.09	-26.78	0.00	-1036.2	0.00	1036.29	1502.81	751.41	1737.49	858.08	39.03	-4.063	0.000	0.412
90.00	-17.81	-26.57	0.00	-982.74	0.00	982.74	1491.95	745.98	1702.59	840.84	40.74	-4.148	0.000	0.615
92.00	-17.52	-26.37	0.00	-929.60	0.00	929.60	1480.87	740.44	1667.76	823.65	42.51	-4.278	0.000	0.590
94.00	-17.24	-26.17	0.00	-876.86	0.00	876.86	1469.57	734.79	1633.03	806.49	44.33	-4.404	0.000	0.564
96.00	-16.97	-25.97	0.00	-824.51	0.00	824.51	1458.05	729.03	1598.39	789.39	46.20	-4.528	0.000	0.538
98.00	-16.70	-25.78	0.00	-772.56	0.00	772.56	1446.32	723.16	1563.86	772.33	48.12	-4.647	0.000	0.512
100.00	-16.43	-25.58	0.00	-721.01	0.00	721.01	1434.36	717.18	1529.45	755.34	50.09	-4.762	0.000	0.485
102.00	-16.15	-25.40	0.00	-669.86	0.00	669.86	1422.18	711.09	1495.16	738.41	52.10	-4.874	0.000	0.920
104.00	-15.84	-25.23	0.00	-619.07	0.00	619.07	1409.79	704.89	1461.02	721.54	54.19	-5.089	0.000	0.870
106.00	-15.55	-25.05	0.00	-568.62	0.00	568.62	1397.17	698.58	1427.02	704.75	56.37	-5.295	0.000	0.819
108.00	-15.26	-24.88	0.00	-518.51	0.00	518.51	1384.33	692.17	1393.17	688.04	58.62	-5.493	0.000	0.766
110.00	-15.00	-24.70	0.00	-468.75	0.00	468.75	1371.28	685.64	1359.50	671.40	60.96	-5.680	0.000	0.710
111.21	-14.84	-24.59	0.00	-438.78	0.00	438.78	1363.25	681.63	1339.15	661.36	62.42	-5.789	0.000	0.676
112.00	-14.66	-24.52	0.00	-419.44	0.00	419.44	1358.00	679.00	1326.00	654.86	63.38	-5.858	0.000	0.653
114.00	-14.30	-24.32	0.00	-370.39	0.00	370.39	1344.51	672.26	1292.68	638.41	65.86	-6.022	0.000	0.592
114.80	-14.16	-24.23	0.00	-351.02	0.00	351.02	898.25	449.12	876.91	433.07	66.87	-6.085	0.000	0.829
115.00	-8.40	-16.04	0.00	-346.09	0.00	346.09	897.59	448.79	874.90	432.08	67.13	-6.100	0.000	0.812
116.00	-8.30	-15.95	0.00	-330.06	0.00	330.06	894.32	447.16	865.01	427.20	68.42	-6.195	0.000	0.783
118.00	-8.12	-15.76	0.00	-298.16	0.00	298.16	887.61	443.81	845.23	417.43	71.05	-6.375	0.000	0.725
120.00	-7.95	-15.58	0.00	-266.63	0.00	266.63	880.69	440.34	825.45	407.66	73.75	-6.545	0.000	0.664
122.00	-7.79	-15.39	0.00	-235.48	0.00	235.48	873.54	436.77	805.67	397.89	76.52	-6.703	0.000	0.602
124.00	-7.63	-15.20	0.00	-204.70	0.00	204.70	866.18	433.09	785.90	388.13	79.36	-6.849	0.000	0.537
126.00	-5.43	-11.34	0.00	-174.30	0.00	174.30	858.60	429.30	766.16	378.38	82.25	-6.980	0.000	0.468
128.00	-5.30	-11.15	0.00	-151.62	0.00	151.62	850.80	425.40	746.46	368.65	85.19	-7.099	0.000	0.418
130.00	-5.17	-10.96	0.00	-129.31	0.00	129.31	842.77	421.39	726.80	358.94	88.18	-7.207	0.000	0.367
132.00	-5.04	-10.78	0.00	-107.38	0.00	107.38	834.53	417.27	707.19	349.25	91.22	-7.302	0.000	0.314
134.00	-4.92	-10.59	0.00	-85.83	0.00	85.83	826.07	413.04	687.65	339.60	94.29	-7.385	0.000	0.259
136.00	-4.81	-10.41	0.00	-64.65	0.00	64.65	817.39	408.69	668.18	329.99	97.39	-7.452	0.000	0.202
138.00	-1.67	-3.74	0.00	-43.83	0.00	43.83	808.49	404.24	648.79	320.41	100.51	-7.503	0.000	0.139
140.00	-1.59	-3.56	0.00	-36.35	0.00	36.35	799.37	399.68	629.50	310.89	103.65	-7.544	0.000	0.119
142.00	-1.52	-3.38	0.00	-29.24	0.00	29.24	790.03	395.01	610.32	301.41	106.81	-7.578	0.000	0.099
144.00	-1.44	-3.21	0.00	-22.47	0.00	22.47	780.47	390.24	591.24	291.99	109.98	-7.607	0.000	0.079
146.00	-1.37	-3.04	0.00	-16.06	0.00	16.06	770.69	385.35	572.29	282.63	113.17	-7.630	0.000	0.059
148.00	-1.30	-2.87	0.00	-9.98	0.00	9.98	760.69	380.35	553.47	273.34	116.36	-7.646	0.000	0.038
150.00	0.00	-2.67	0.00	-4.25	0.00	4.25	750.48	375.24	534.80	264.12	119.55	-7.656	0.000	0.016

Wind Loading - Shaft

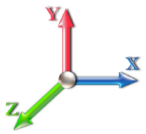
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 19	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 27

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2 RB3 RB4	1.00	0.85	5.168	5.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT3 RB5	1.00	0.85	5.168	5.68	0.00	1.200	1.410	1.00	3.937	4.72	26.9	80.8	290.5
2.00		1.00	0.85	5.168	5.68	0.00	1.200	1.511	1.00	3.938	4.73	26.9	86.4	295.2
4.00		1.00	0.85	5.168	5.68	0.00	1.200	1.620	2.00	7.866	9.44	53.7	184.1	599.1
6.00		1.00	0.85	5.168	5.68	0.00	1.200	1.687	2.00	7.826	9.39	53.4	190.4	601.9
8.00		1.00	0.85	5.168	5.68	0.00	1.200	1.736	2.00	7.781	9.34	53.1	194.6	602.5
10.00		1.00	0.85	5.168	5.68	0.00	1.200	1.775	2.00	7.732	9.28	52.7	197.5	601.9
12.00		1.00	0.85	5.168	5.68	0.00	1.200	1.808	2.00	7.680	9.22	52.4	199.6	600.4
14.00		1.00	0.85	5.168	5.68	0.00	1.200	1.836	2.00	7.628	9.15	52.0	201.1	598.4
14.17	RB6	1.00	0.85	5.168	5.68	0.00	1.200	1.838	0.17	0.646	0.77	4.4	17.1	50.7
16.00		1.00	0.86	5.232	5.76	0.00	1.200	1.860	1.83	6.928	8.31	47.8	185.0	545.1
17.50	RT5	1.00	0.88	5.331	5.86	0.00	1.200	1.877	1.50	5.644	6.77	39.7	152.1	445.0
18.00		1.00	0.88	5.363	5.90	0.00	1.200	1.882	0.50	1.874	2.25	13.3	50.7	147.9
20.00		1.00	0.90	5.483	6.03	0.00	1.200	1.902	2.00	7.463	8.96	54.0	203.4	590.0
20.50	RT1 RT4 RB7	1.00	0.91	5.512	6.06	0.00	1.200	1.907	0.50	1.857	2.23	13.5	50.9	147.0
22.00		1.00	0.92	5.595	6.15	0.00	1.200	1.921	1.50	5.550	6.66	41.0	152.7	439.7
24.00		1.00	0.94	5.698	6.27	0.00	1.200	1.937	2.00	7.351	8.82	55.3	203.7	583.2
26.00		1.00	0.95	5.795	6.37	0.00	1.200	1.953	2.00	7.294	8.75	55.8	203.6	579.5
28.00		1.00	0.97	5.886	6.47	0.00	1.200	1.967	2.00	7.237	8.68	56.2	203.3	575.7
30.00		1.00	0.98	5.972	6.57	0.00	1.200	1.981	2.00	7.179	8.61	56.6	203.0	571.8
32.00		1.00	1.00	6.054	6.66	0.00	1.200	1.994	2.00	7.121	8.55	56.9	202.5	567.8
34.00		1.00	1.01	6.132	6.74	0.00	1.200	2.006	2.00	7.063	8.48	57.2	201.9	563.7
36.00		1.00	1.02	6.206	6.83	0.00	1.200	2.017	2.00	7.005	8.41	57.4	201.2	559.4
37.00	RT7	1.00	1.03	6.242	6.87	0.00	1.200	2.023	1.00	3.480	4.18	28.7	100.4	278.2
38.00		1.00	1.03	6.277	6.90	0.00	1.200	2.028	1.00	3.465	4.16	28.7	100.2	277.1
40.00		1.00	1.04	6.345	6.98	0.00	1.200	2.039	2.00	6.888	8.27	57.7	199.7	550.8
42.00		1.00	1.05	6.410	7.05	0.00	1.200	2.049	2.00	6.829	8.19	57.8	198.8	546.3
43.36	RB8	1.00	1.06	6.454	7.10	0.00	1.200	2.055	1.36	4.610	5.53	39.3	134.7	369.0
43.50	Bot - Section 2	1.00	1.06	6.458	7.10	0.00	1.200	2.056	0.14	0.473	0.57	4.0	13.9	37.9
44.00		1.00	1.06	6.474	7.12	0.00	1.200	2.058	0.50	1.714	2.06	14.6	50.3	208.8
46.00		1.00	1.07	6.534	7.19	0.00	1.200	2.068	2.00	6.819	8.18	58.8	200.2	830.0
48.00		1.00	1.08	6.593	7.25	0.00	1.200	2.076	2.00	6.760	8.11	58.8	199.1	822.5
48.50	Top - Section 1	1.00	1.09	6.608	7.27	0.00	1.200	2.079	0.50	1.680	2.02	14.7	49.7	204.5
50.00	Appurtenance(s)	1.00	1.09	6.650	7.32	0.00	1.200	2.085	1.50	5.019	6.02	44.1	148.5	360.9
52.00		1.00	1.10	6.705	7.38	0.00	1.200	2.093	2.00	6.641	7.97	58.8	196.9	477.4
52.50	RB9	1.00	1.11	6.719	7.39	0.00	1.200	2.095	0.50	1.651	1.98	14.6	49.2	118.8
54.00		1.00	1.11	6.759	7.43	0.00	1.200	2.101	1.50	4.930	5.92	44.0	146.8	354.7
54.17	RT2 RT6	1.00	1.11	6.763	7.44	0.00	1.200	2.102	0.17	0.557	0.67	5.0	16.6	40.1
56.00		1.00	1.12	6.811	7.49	0.00	1.200	2.109	1.83	5.965	7.16	53.6	178.0	429.1
58.00		1.00	1.13	6.861	7.55	0.00	1.200	2.116	2.00	6.462	7.75	58.5	193.3	464.9
60.00		1.00	1.14	6.910	7.60	0.00	1.200	2.123	2.00	6.403	7.68	58.4	192.0	460.7
62.00		1.00	1.14	6.958	7.65	0.00	1.200	2.130	2.00	6.343	7.61	58.3	190.7	456.4
64.00		1.00	1.15	7.005	7.71	0.00	1.200	2.137	2.00	6.283	7.54	58.1	189.3	452.1
64.17	RB10	1.00	1.15	7.009	7.71	0.00	1.200	2.138	0.17	0.531	0.64	4.9	16.1	38.3
66.00		1.00	1.16	7.050	7.76	0.00	1.200	2.144	1.83	5.692	6.83	53.0	172.0	409.5
68.00		1.00	1.17	7.095	7.80	0.00	1.200	2.150	2.00	6.163	7.40	57.7	186.5	443.4
69.50	RT8	1.00	1.17	7.128	7.84	0.00	1.200	2.155	1.50	4.583	5.50	43.1	139.1	329.8

Wind Loading - Shaft

Structure: CT46134-A-SBA | **Code:** EIA/TIA-222-G | 10/28/2020

Site Name: Granby-n. Granby | **Exposure:** C

Height: 150.00 (ft) | **Crest Height:** 0.00

Base Elev: 0.000 (ft) | **Site Class:** D - Stiff Soil

Gh: 1.1 | **Topography:** 1 | **Struct Class:** II

Tower Engineering Solutions

70.00	RT9 RB11	1.00	1.17	7.138	7.85	0.00	1.200	2.156	0.50	1.520	1.82	14.3	46.3	109.5
72.00		1.00	1.18	7.181	7.90	0.00	1.200	2.162	2.00	6.043	7.25	57.3	183.6	434.5
74.00		1.00	1.19	7.222	7.94	0.00	1.200	2.168	2.00	5.983	7.18	57.0	182.1	430.1
76.00		1.00	1.19	7.263	7.99	0.00	1.200	2.174	2.00	5.923	7.11	56.8	180.6	425.6
76.71	RB12	1.00	1.20	7.277	8.00	0.00	1.200	2.176	0.71	2.088	2.51	20.1	63.9	150.2
76.84	Bot - Section 3	1.00	1.20	7.280	8.01	0.00	1.200	2.176	0.13	0.372	0.45	3.6	11.4	26.7
78.00		1.00	1.20	7.303	8.03	0.00	1.200	2.180	1.16	3.453	4.14	33.3	105.8	360.7
80.00		1.00	1.21	7.342	8.08	0.00	1.200	2.185	2.00	5.888	7.07	57.1	180.4	614.4
80.17	RT10	1.00	1.21	7.345	8.08	0.00	1.200	2.186	0.17	0.498	0.60	4.8	15.3	52.0
81.17	Top - Section 2	1.00	1.21	7.364	8.10	0.00	1.200	2.188	1.00	2.919	3.50	28.4	89.7	304.5
82.00		1.00	1.21	7.380	8.12	0.00	1.200	2.191	0.83	2.411	2.89	23.5	74.2	153.8
84.00		1.00	1.22	7.418	8.16	0.00	1.200	2.196	2.00	5.768	6.92	56.5	177.2	367.4
85.92	RB13	1.00	1.23	7.453	8.20	0.00	1.202 *	2.201	1.92	5.480	6.59	54.0	168.6	349.0
86.00		1.00	1.23	7.454	8.20	0.00	1.204 *	2.201	0.08	0.227	0.27	2.2	7.0	14.5
87.50	RT11	1.00	1.23	7.482	8.23	0.00	1.206 *	2.205	1.50	4.241	5.11	42.1	130.8	270.1
88.00		1.00	1.23	7.491	8.24	0.00	1.208 *	2.206	0.50	1.406	1.70	14.0	43.5	89.6
90.00	RT12	1.00	1.24	7.526	8.28	0.00	1.211 *	2.211	2.00	5.586	6.77	56.0	172.3	355.5
92.00		1.00	1.24	7.561	8.32	0.00	1.200	2.216	2.00	5.526	6.63	55.2	170.7	351.4
94.00		1.00	1.25	7.595	8.35	0.00	1.200	2.221	2.00	5.465	6.56	54.8	169.0	347.4
96.00		1.00	1.25	7.629	8.39	0.00	1.200	2.225	2.00	5.405	6.49	54.4	167.3	343.3
98.00		1.00	1.26	7.662	8.43	0.00	1.200	2.230	2.00	5.344	6.41	54.1	165.6	339.2
100.00	RT13	1.00	1.27	7.695	8.46	0.00	1.200	2.234	2.00	5.284	6.34	53.7	163.9	335.2
102.00		1.00	1.27	7.727	8.50	0.00	1.200	2.239	2.00	5.223	6.27	53.3	162.1	331.0
104.00		1.00	1.28	7.759	8.53	0.00	1.200	2.243	2.00	5.162	6.19	52.9	160.4	326.9
106.00		1.00	1.28	7.790	8.57	0.00	1.200	2.248	2.00	5.102	6.12	52.5	158.6	322.8
108.00		1.00	1.29	7.821	8.60	0.00	1.200	2.252	2.00	5.041	6.05	52.0	156.8	318.6
110.00		1.00	1.29	7.851	8.64	0.00	1.200	2.256	2.00	4.980	5.98	51.6	155.0	314.5
111.21	Bot - Section 4	1.00	1.29	7.869	8.66	0.00	1.200	2.258	1.21	2.992	3.59	31.1	93.4	189.0
112.00		1.00	1.30	7.881	8.67	0.00	1.200	2.260	0.79	1.953	2.34	20.3	61.1	169.6
114.00		1.00	1.30	7.910	8.70	0.00	1.200	2.264	2.00	4.923	5.91	51.4	153.6	426.5
114.80	Top - Section 3	1.00	1.30	7.922	8.71	0.00	1.200	2.266	0.80	1.944	2.33	20.3	60.9	168.5
115.00	Appurtenance(s)	1.00	1.30	7.925	8.72	0.00	1.200	2.266	0.20	0.495	0.59	5.2	15.5	27.4
116.00		1.00	1.31	7.939	8.73	0.00	1.200	2.268	1.00	2.424	2.91	25.4	75.9	133.9
118.00		1.00	1.31	7.968	8.76	0.00	1.200	2.272	2.00	4.802	5.76	50.5	149.9	264.6
120.00		1.00	1.32	7.996	8.80	0.00	1.200	2.276	2.00	4.741	5.69	50.0	148.1	261.0
122.00		1.00	1.32	8.024	8.83	0.00	1.200	2.279	2.00	4.680	5.62	49.6	146.2	257.3
124.00		1.00	1.32	8.051	8.86	0.00	1.200	2.283	2.00	4.619	5.54	49.1	144.3	253.7
126.00	Appurtenance(s)	1.00	1.33	8.079	8.89	0.00	1.200	2.287	2.00	4.558	5.47	48.6	142.5	250.0
128.00		1.00	1.33	8.105	8.92	0.00	1.200	2.290	2.00	4.497	5.40	48.1	140.6	246.3
130.00		1.00	1.34	8.132	8.95	0.00	1.200	2.294	2.00	4.436	5.32	47.6	138.7	242.7
132.00		1.00	1.34	8.158	8.97	0.00	1.200	2.297	2.00	4.375	5.25	47.1	136.8	239.0
134.00		1.00	1.35	8.184	9.00	0.00	1.200	2.301	2.00	4.314	5.18	46.6	134.8	235.3
136.00		1.00	1.35	8.210	9.03	0.00	1.200	2.304	2.00	4.254	5.10	46.1	132.9	231.6
138.00	Appurtenance(s)	1.00	1.35	8.235	9.06	0.00	1.200	2.308	2.00	4.193	5.03	45.6	131.0	227.9
140.00		1.00	1.36	8.260	9.09	0.00	1.200	2.311	2.00	4.132	4.96	45.0	129.0	224.1
142.00		1.00	1.36	8.285	9.11	0.00	1.200	2.314	2.00	4.070	4.88	44.5	127.1	220.4
144.00		1.00	1.37	8.309	9.14	0.00	1.200	2.317	2.00	4.009	4.81	44.0	125.1	216.7
146.00		1.00	1.37	8.333	9.17	0.00	1.200	2.321	2.00	3.948	4.74	43.4	123.1	212.9
148.00		1.00	1.37	8.357	9.19	0.00	1.200	2.324	2.00	3.887	4.66	42.9	121.1	209.2
150.00	Appurtenance(s)	1.00	1.38	8.381	9.22	0.00	1.200	2.327	2.00	3.826	4.59	42.3	119.1	205.4
								Totals:	**150.00**			**4,015.4**		**32,468.9**

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

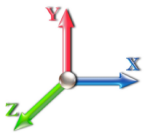
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 21	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 27

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	150.00	3' Yagi	1	8.381	9.219	1.00	1.00	11.35	106.32	0.000	0.000	104.64	0.00	0.00
2	150.00	10' Dipole	1	8.439	9.283	1.00	1.00	11.76	152.78	0.000	5.000	109.17	0.00	545.83
3	150.00	18' Omni	1	8.484	9.333	1.00	1.00	13.93	208.22	0.000	9.000	130.04	0.00	1170.40
4	150.00	10' Omni	1	8.439	9.283	1.00	1.00	7.81	109.71	0.000	5.000	72.48	0.00	362.41
5	150.00	Low Profile Platform-flat	1	8.381	9.219	1.00	1.00	71.98	2536.17	0.000	0.000	663.53	0.00	0.00
6	138.00	LGP 21901	6	8.235	9.058	0.38	0.75	1.61	87.41	0.000	0.000	14.61	0.00	0.00
7	138.00	RRUS-11 700MHz	3	8.235	9.058	0.38	0.75	3.78	422.29	0.000	0.000	34.21	0.00	0.00
8	138.00	DMP65R-BU8DA	3	8.235	9.058	0.55	0.75	33.82	1906.57	0.000	0.000	306.37	0.00	0.00
9	138.00	TT19-08BP111-001	6	8.235	9.058	0.38	0.75	3.20	240.97	0.000	0.000	29.02	0.00	0.00
10	138.00	7770.00	3	8.235	9.058	0.58	0.75	12.06	811.26	0.000	0.000	109.26	0.00	0.00
11	138.00	Low Profile Platform-flat	1	8.235	9.058	1.00	1.00	71.66	2524.58	0.000	0.000	649.12	0.00	0.00
12	138.00	B2 B66A 8843	3	8.235	9.058	0.38	0.75	2.61	400.50	0.000	0.000	23.67	0.00	0.00
13	138.00	HPA-65R-BU8A	3	8.235	9.058	0.67	0.75	26.84	956.98	0.000	0.000	243.10	0.00	0.00
14	138.00	4449 B5/B12	3	8.235	9.058	0.38	0.75	3.03	426.55	0.000	0.000	27.45	0.00	0.00
15	138.00	DC9-48-60-24-8C-EV	1	8.235	9.058	0.75	0.75	2.43	154.49	0.000	0.000	22.00	0.00	0.00
16	138.00	HRK12 (Handrail Kit)	1	8.235	9.058	1.00	1.00	15.47	986.47	0.000	0.000	140.16	0.00	0.00
17	138.00	PRK-1245 (kicker kit)	1	8.235	9.058	1.00	1.00	22.65	891.94	0.000	0.000	205.20	0.00	0.00
18	126.00	APXVSPP18-C-A20	3	8.079	8.886	0.40	0.80	14.02	736.16	0.000	0.000	124.56	0.00	0.00
19	126.00	ACU-A20-N	4	8.079	8.886	0.40	0.80	0.85	22.12	0.000	0.000	7.52	0.00	0.00
20	126.00	TD-RRH8x20-25	3	8.079	8.886	0.40	0.80	6.21	598.41	0.000	0.000	55.16	0.00	0.00
21	126.00	800 MHz	3	8.079	8.886	0.40	0.80	4.79	418.23	0.000	0.000	42.53	0.00	0.00
22	126.00	1900MHz	3	8.079	8.886	0.40	0.80	6.75	493.91	0.000	0.000	59.94	0.00	0.00
23	126.00	APXVTM14-C-120	3	8.079	8.886	0.66	0.80	15.46	760.21	0.000	0.000	137.35	0.00	0.00
24	126.00	Low Profile Platform-flat	1	8.079	8.886	1.00	1.00	71.32	2512.04	0.000	0.000	633.78	0.00	0.00
25	126.00	800MHz Filter	3	8.079	8.886	0.40	0.80	1.95	86.03	0.000	0.000	17.36	0.00	0.00
26	115.00	AIR32	4	7.925	8.717	0.69	0.75	22.06	1407.65	0.000	0.000	192.26	0.00	0.00
27	115.00	Radio 4415 B25	4	7.925	8.717	0.38	0.75	3.93	564.72	0.000	0.000	34.22	0.00	0.00
28	115.00	F4P-12W	1	7.925	8.717	1.00	1.00	166.60	6812.67	0.000	0.000	1452.28	0.00	0.00
29	115.00	F4P-HRK12	1	7.925	8.717	1.00	1.00	19.92	1140.75	0.000	0.000	173.65	0.00	0.00
30	115.00	AIR6449 B41	4	7.925	8.717	0.53	0.75	14.66	1079.73	0.000	0.000	127.82	0.00	0.00
31	115.00	APXVAARR24_43-U-NA2	4	7.925	8.717	0.62	0.75	56.34	2514.81	0.000	0.000	491.10	0.00	0.00
32	115.00	KRY 112 489/2	4	7.925	8.717	0.38	0.75	2.15	145.54	0.000	0.000	18.71	0.00	0.00
33	115.00	Radio 4449 B71 + B12	4	7.925	8.717	0.38	0.75	3.60	798.37	0.000	0.000	31.35	0.00	0.00
34	50.00	GPS	1	6.650	7.315	1.00	1.00	0.01	2.28	0.000	0.000	0.08	0.00	0.00
35	50.00	Standoff	1	6.650	7.315	1.00	1.00	3.58	139.24	0.000	0.000	26.22	0.00	0.00
36	20.50	Splice Plate	2	5.512	6.063	0.96	1.00	9.83	1419.46	0.000	0.000	59.59	0.00	0.00
							Totals:		**34,575.54**			**6,569.53**		

Total Applied Force Summary

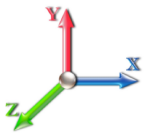
Structure:	CT46134-A-SBA		**Code:**	EIA/TIA-222-G	10/28/2020
Site Name:	Granby-n. Granby		**Exposure:**	C	
Height:	150.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 22

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 27

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		26.86	323.70	0.00	0.00
2.00		26.87	331.06	0.00	0.00
4.00		53.66	671.87	0.00	0.00
6.00		53.39	675.34	0.00	0.00
8.00		53.08	676.47	0.00	0.00
10.00		52.74	676.26	0.00	0.00
12.00		52.39	675.16	0.00	0.00
14.00		52.03	673.44	0.00	0.00
14.17		4.40	57.09	0.00	0.00
16.00		47.84	614.06	0.00	0.00
17.50		39.72	501.70	0.00	0.00
18.00		13.27	166.84	0.00	0.00
20.00		54.02	665.85	0.00	0.00
20.50	(2) attachments	73.09	1585.40	0.00	0.00
22.00		40.98	496.73	0.00	0.00
24.00		55.29	659.46	0.00	0.00
26.00		55.79	655.98	0.00	0.00
28.00		56.23	652.35	0.00	0.00
30.00		56.59	648.59	0.00	0.00
32.00		56.91	644.71	0.00	0.00
34.00		57.17	640.73	0.00	0.00
36.00		57.38	636.65	0.00	0.00
37.00		28.67	316.85	0.00	0.00
38.00		28.71	315.35	0.00	0.00
40.00		57.69	627.34	0.00	0.00
42.00		57.79	623.03	0.00	0.00
43.36		39.27	421.25	0.00	0.00
43.50		4.03	43.31	0.00	0.00
44.00		14.64	228.19	0.00	0.00
46.00		58.82	907.84	0.00	0.00
48.00		58.83	900.40	0.00	0.00
48.50		14.66	224.02	0.00	0.00
50.00	(2) attachments	70.37	560.91	0.00	0.00
52.00		58.78	555.57	0.00	0.00
52.50		14.64	138.36	0.00	0.00
54.00		43.99	413.37	0.00	0.00
54.17		4.97	46.74	0.00	0.00
56.00		53.63	500.81	0.00	0.00
58.00		58.53	543.34	0.00	0.00
60.00		58.40	539.18	0.00	0.00
62.00		58.26	534.99	0.00	0.00
64.00		58.10	530.77	0.00	0.00
64.17		4.91	44.97	0.00	0.00
66.00		52.97	481.65	0.00	0.00
68.00		57.72	522.23	0.00	0.00
69.50		43.12	388.97	0.00	0.00

Total Applied Force Summary

Structure:	CT46134-A-SBA		**Code:**	EIA/TIA-222-G	10/28/2020
Site Name:	Granby-n. Granby		**Exposure:**	C	
Height:	150.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 23

70.00		14.32	128.96	0.00	0.00
72.00		57.28	512.61	0.00	0.00
74.00		57.04	508.24	0.00	0.00
76.00		56.78	503.84	0.00	0.00
76.71		20.06	177.97	0.00	0.00
76.84		3.57	31.77	0.00	0.00
78.00		33.28	406.83	0.00	0.00
80.00		57.07	693.73	0.00	0.00
80.17		4.83	58.71	0.00	0.00
81.17		28.37	344.21	0.00	0.00
82.00		23.49	186.79	0.00	0.00
84.00		56.47	446.91	0.00	0.00
85.92		54.00	425.39	0.00	0.00
86.00		2.24	17.67	0.00	0.00
87.50		42.09	329.82	0.00	0.00
88.00		14.00	109.55	0.00	0.00
90.00		56.02	435.13	0.00	0.00
92.00		55.15	413.62	0.00	0.00
94.00		54.80	409.57	0.00	0.00
96.00		54.43	405.51	0.00	0.00
98.00		54.05	401.43	0.00	0.00
100.00		53.67	397.34	0.00	0.00
102.00		53.27	393.23	0.00	0.00
104.00		52.87	389.11	0.00	0.00
106.00		52.46	384.98	0.00	0.00
108.00		52.04	380.83	0.00	0.00
110.00		51.61	376.67	0.00	0.00
111.21		31.07	226.69	0.00	0.00
112.00		20.32	194.07	0.00	0.00
114.00		51.41	488.71	0.00	0.00
114.80		20.33	193.23	0.00	0.00
115.00	(26) attachments	2526.57	14497.93	0.00	0.00
116.00		25.40	151.82	0.00	0.00
118.00		50.50	300.47	0.00	0.00
120.00		50.04	296.84	0.00	0.00
122.00		49.57	293.21	0.00	0.00
124.00		49.09	289.56	0.00	0.00
126.00	(23) attachments	1126.81	5913.00	0.00	0.00
128.00		48.12	275.37	0.00	0.00
130.00		47.62	271.69	0.00	0.00
132.00		47.12	268.00	0.00	0.00
134.00		46.61	264.30	0.00	0.00
136.00		46.09	260.60	0.00	0.00
138.00	(34) attachments	1849.75	10066.90	0.00	0.00
140.00		45.05	226.54	0.00	0.00
142.00		44.51	222.81	0.00	0.00
144.00		43.97	219.07	0.00	0.00
146.00		43.43	215.32	0.00	0.00
148.00		42.88	211.56	0.00	0.00
150.00	(5) attachments	1122.19	3320.99	0.00	2078.64
	Totals:	**10,584.88**	**71,678.00**	**0.00**	**2,078.64**

Linear Appurtenance Segment Forces (Factored)

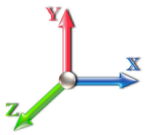
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.24	0.00	0.034	0.000	5.168	0.00	2.13
2.00	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.50	0.00	0.068	0.000	5.168	0.00	4.74
4.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.04	0.00	0.068	0.000	5.168	0.00	10.56
6.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.06	0.00	0.069	0.000	5.168	0.00	11.26
8.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.08	0.00	0.069	0.000	5.168	0.00	11.79
10.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.09	0.00	0.070	0.000	5.168	0.00	12.21
12.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.10	0.00	0.071	0.000	5.168	0.00	12.58
14.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.11	0.00	0.071	0.000	5.168	0.00	12.89
14.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.09	0.00	0.072	0.000	5.168	0.00	1.10
16.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	1.02	0.00	0.072	0.000	5.232	0.00	12.05
17.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.84	0.00	0.072	0.000	5.331	0.00	10.02
18.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.28	0.00	0.073	0.000	5.363	0.00	3.36
20.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.13	0.00	0.073	0.000	5.483	0.00	13.66
20.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.28	0.00	0.074	0.000	5.512	0.00	3.43
22.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.86	0.00	0.074	0.000	5.595	0.00	10.40
24.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.15	0.00	0.075	0.000	5.698	0.00	14.07
26.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.15	0.00	0.075	0.000	5.795	0.00	14.25
28.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.16	0.00	0.076	0.000	5.886	0.00	14.42
30.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.16	0.00	0.077	0.000	5.972	0.00	14.59
32.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.16	0.00	0.077	0.000	6.054	0.00	14.74
34.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.17	0.00	0.078	0.000	6.132	0.00	14.89
36.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.17	0.00	0.079	0.000	6.206	0.00	15.03
37.00	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.59	0.00	0.080	0.000	6.242	0.00	7.55
38.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.55	0.00	0.067	0.000	6.277	0.00	7.13
40.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	1.10	0.00	0.067	0.000	6.345	0.00	14.38
42.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	1.10	0.00	0.068	0.000	6.410	0.00	14.50
43.36	1.25" Reinforcing	Yes	1.36	0.000	2.50	0.75	0.00	0.068	0.000	6.454	0.00	9.91
43.50	1.5" Reinforcing Plate	Yes	0.10	0.000	3.00	0.06	0.00	0.078	0.000	6.458	0.00	0.78
43.50	1.25" Reinforcing	Yes	0.04	0.000	2.50	0.02	0.00	0.078	0.000	6.458	0.00	0.29
44.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.30	0.00	0.082	0.000	6.474	0.00	3.88
46.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.19	0.00	0.083	0.000	6.534	0.00	15.64
48.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.19	0.00	0.084	0.000	6.593	0.00	15.75
48.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.30	0.00	0.084	0.000	6.608	0.00	3.95
50.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.90	0.00	0.083	0.000	6.650	0.00	11.90
52.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.20	0.00	0.084	0.000	6.705	0.00	15.96
52.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.30	0.00	0.085	0.000	6.719	0.00	4.00
54.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.90	0.00	0.085	0.000	6.759	0.00	12.05
54.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.10	0.00	0.086	0.000	6.763	0.00	1.37
56.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	1.10	0.00	0.086	0.000	6.811	0.00	14.79
58.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.21	0.00	0.087	0.000	6.861	0.00	16.25
60.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.21	0.00	0.088	0.000	6.910	0.00	16.34
62.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.21	0.00	0.089	0.000	6.958	0.00	16.43
64.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.21	0.00	0.090	0.000	7.005	0.00	16.52
64.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.10	0.00	0.090	0.000	7.009	0.00	1.40
66.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	1.11	0.00	0.091	0.000	7.050	0.00	15.19
68.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.22	0.00	0.092	0.000	7.095	0.00	16.69
69.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.91	0.00	0.093	0.000	7.128	0.00	12.56

Linear Appurtenance Segment Forces (Factored)

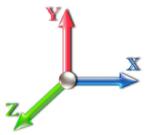
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 25	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
70.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.28	0.00	0.078	0.000	7.138	0.00	3.95
72.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	1.14	0.00	0.078	0.000	7.181	0.00	15.89
74.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	1.14	0.00	0.079	0.000	7.222	0.00	15.96
76.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	1.14	0.00	0.080	0.000	7.263	0.00	16.04
76.71	1.5" Reinforcing Plate	Yes	0.01	0.000	3.00	0.01	0.00	0.081	0.000	7.277	0.00	0.09
76.71	1.25" Reinforcing	Yes	0.70	0.000	2.50	0.40	0.00	0.081	0.000	7.277	0.00	5.62
76.84	1.5" Reinforcing Plate	Yes	0.13	0.000	3.00	0.08	0.00	0.097	0.000	7.280	0.00	1.08
78.00	1.5" Reinforcing Plate	Yes	1.16	0.000	3.00	0.71	0.00	0.098	0.000	7.303	0.00	9.93
80.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.23	0.00	0.099	0.000	7.342	0.00	17.14
80.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.10	0.00	0.099	0.000	7.345	0.00	1.46
81.17	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.61	0.00	0.100	0.000	7.364	0.00	8.59
82.00	1.5" Reinforcing Plate	Yes	0.83	0.000	3.00	0.51	0.00	0.098	0.000	7.380	0.00	7.14
84.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.23	0.00	0.099	0.000	7.418	0.00	17.28
85.92	1.5" Reinforcing Plate	Yes	1.92	0.000	3.00	1.18	0.00	0.101	1.002	7.453	0.00	16.65
86.00	1.5" Reinforcing Plate	Yes	0.08	0.000	3.00	0.05	0.00	0.101	1.003	7.454	0.00	0.69
87.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.93	0.00	0.102	1.005	7.482	0.00	13.05
88.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.31	0.00	0.102	1.007	7.491	0.00	4.35
90.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	1.24	0.00	0.103	1.009	7.526	0.00	17.48
										Totals:	**0.0**	**671.8**

Calculated Forces

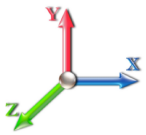
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 26	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 27

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-71.68	-10.60	0.00	-1244.6	0.00	1244.60	3406.69	1703.35	5989.16	2957.82	0.00	0.000	0.000	0.267
1.00	-71.35	-10.59	0.00	-1234.0	0.00	1234.00	3398.78	1699.39	5949.79	2938.38	0.00	-0.018	0.000	0.252
2.00	-71.01	-10.60	0.00	-1223.4	0.00	1223.41	3390.81	1695.40	5910.44	2918.95	0.01	-0.035	0.000	0.251
4.00	-70.34	-10.58	0.00	-1202.2	0.00	1202.22	3374.70	1687.35	5831.83	2880.12	0.03	-0.069	0.000	0.249
6.00	-69.65	-10.57	0.00	-1181.0	0.00	1181.06	3358.38	1679.19	5753.31	2841.35	0.07	-0.103	0.000	0.247
8.00	-68.97	-10.56	0.00	-1159.9	0.00	1159.92	3341.83	1670.92	5674.92	2802.63	0.12	-0.138	0.000	0.245
10.00	-68.29	-10.54	0.00	-1138.8	0.00	1138.81	3325.07	1662.53	5596.65	2763.98	0.18	-0.172	0.000	0.243
12.00	-67.61	-10.53	0.00	-1117.7	0.00	1117.72	3308.08	1654.04	5518.52	2725.39	0.26	-0.207	0.000	0.241
14.00	-66.93	-10.50	0.00	-1096.6	0.00	1096.66	3290.88	1645.44	5440.53	2686.87	0.36	-0.242	0.000	0.239
14.17	-66.87	-10.51	0.00	-1094.8	0.00	1094.88	3289.41	1644.70	5433.91	2683.60	0.36	-0.245	0.000	0.220
16.00	-66.25	-10.49	0.00	-1075.6	0.00	1075.64	3273.46	1636.73	5362.70	2648.44	0.46	-0.274	0.000	0.219
17.50	-65.75	-10.47	0.00	-1059.9	0.00	1059.90	3260.25	1630.12	5304.43	2619.66	0.55	-0.298	0.000	0.235
18.00	-65.58	-10.48	0.00	-1054.6	0.00	1054.67	3255.82	1627.91	5285.03	2610.08	0.59	-0.307	0.000	0.234
20.00	-64.91	-10.45	0.00	-1033.7	0.00	1033.71	3237.96	1618.98	5207.54	2571.81	0.72	-0.342	0.000	0.232
20.50	-63.32	-10.38	0.00	-1028.4	0.00	1028.49	3233.46	1616.73	5188.20	2562.26	0.76	-0.351	0.000	0.190
22.00	-62.82	-10.36	0.00	-1012.9	0.00	1012.92	3219.87	1609.94	5130.24	2533.63	0.87	-0.373	0.000	0.189
24.00	-62.15	-10.34	0.00	-992.19	0.00	992.19	3201.57	1600.79	5053.13	2495.55	1.03	-0.402	0.000	0.187
26.00	-61.49	-10.31	0.00	-971.52	0.00	971.52	3183.05	1591.53	4976.22	2457.57	1.21	-0.430	0.000	0.184
28.00	-60.84	-10.28	0.00	-950.90	0.00	950.90	3164.31	1582.16	4899.54	2419.70	1.39	-0.459	0.000	0.182
30.00	-60.18	-10.24	0.00	-930.35	0.00	930.35	3145.35	1572.68	4823.07	2381.93	1.59	-0.488	0.000	0.180
32.00	-59.53	-10.21	0.00	-909.86	0.00	909.86	3126.18	1563.09	4746.84	2344.29	1.80	-0.517	0.000	0.178
34.00	-58.89	-10.18	0.00	-889.44	0.00	889.44	3106.78	1553.39	4670.86	2306.76	2.03	-0.546	0.000	0.176
36.00	-58.25	-10.14	0.00	-869.08	0.00	869.08	3087.16	1543.58	4595.12	2269.36	2.26	-0.575	0.000	0.173
37.00	-57.93	-10.12	0.00	-858.95	0.00	858.95	3077.27	1538.63	4557.36	2250.71	2.38	-0.589	0.000	0.239
38.00	-57.61	-10.12	0.00	-848.83	0.00	848.83	3067.32	1533.66	4519.66	2232.09	2.51	-0.609	0.000	0.238
40.00	-56.97	-10.10	0.00	-828.59	0.00	828.59	3047.27	1523.63	4444.46	2194.95	2.77	-0.650	0.000	0.235
42.00	-56.35	-10.06	0.00	-808.39	0.00	808.39	3026.99	1513.49	4369.56	2157.96	3.05	-0.690	0.000	0.232
43.36	-55.92	-10.03	0.00	-794.71	0.00	794.71	3013.08	1506.54	4318.79	2132.89	3.25	-0.717	0.000	0.165
43.50	-55.88	-10.03	0.00	-793.30	0.00	793.30	3011.64	1505.82	4313.57	2130.31	3.28	-0.719	0.000	0.165
44.00	-55.65	-10.03	0.00	-788.28	0.00	788.28	3006.49	1503.25	4294.94	2121.11	3.35	-0.727	0.000	0.161
46.00	-54.74	-9.99	0.00	-768.22	0.00	768.22	2985.78	1492.89	4220.63	2084.41	3.66	-0.755	0.000	0.159
48.00	-53.83	-9.94	0.00	-748.24	0.00	748.24	2964.84	1482.42	4146.63	2047.87	3.98	-0.783	0.000	0.156
48.50	-53.61	-9.93	0.00	-743.27	0.00	743.27	2330.75	1165.37	3323.66	1641.43	4.07	-0.790	0.000	0.171
50.00	-53.04	-9.88	0.00	-728.37	0.00	728.37	2320.40	1160.20	3282.84	1621.27	4.32	-0.811	0.000	0.177
52.00	-52.49	-9.83	0.00	-708.62	0.00	708.62	2306.40	1153.20	3228.50	1594.43	4.67	-0.841	0.000	0.174
52.50	-52.34	-9.82	0.00	-703.70	0.00	703.70	2302.87	1151.43	3214.93	1587.73	4.75	-0.848	0.000	0.143
54.00	-51.93	-9.78	0.00	-688.97	0.00	688.97	2292.19	1146.09	3174.27	1567.65	5.02	-0.867	0.000	0.141
54.17	-51.88	-9.79	0.00	-687.31	0.00	687.31	2290.97	1145.49	3169.67	1565.38	5.05	-0.869	0.000	0.192
56.00	-51.38	-9.76	0.00	-669.39	0.00	669.39	2277.76	1138.88	3120.17	1540.93	5.39	-0.899	0.000	0.189
58.00	-50.83	-9.72	0.00	-649.88	0.00	649.88	2263.10	1131.55	3066.20	1514.28	5.78	-0.932	0.000	0.185
60.00	-50.28	-9.68	0.00	-630.44	0.00	630.44	2248.23	1124.12	3012.38	1487.70	6.17	-0.964	0.000	0.182
62.00	-49.74	-9.64	0.00	-611.08	0.00	611.08	2233.14	1116.57	2958.71	1461.20	6.58	-0.997	0.000	0.178
64.00	-49.21	-9.59	0.00	-591.80	0.00	591.80	2217.83	1108.92	2905.21	1434.77	7.01	-1.029	0.000	0.175
64.17	-49.17	-9.59	0.00	-590.17	0.00	590.17	2216.52	1108.26	2900.67	1432.53	7.05	-1.032	0.000	0.133
66.00	-48.68	-9.55	0.00	-572.61	0.00	572.61	2202.30	1101.15	2851.88	1408.44	7.45	-1.054	0.000	0.131
68.00	-48.16	-9.50	0.00	-553.51	0.00	553.51	2186.55	1093.28	2798.74	1382.19	7.89	-1.079	0.000	0.128
69.50	-47.77	-9.46	0.00	-539.26	0.00	539.26	2174.60	1087.30	2759.01	1362.57	8.23	-1.097	0.000	0.173
70.00	-47.63	-9.46	0.00	-534.53	0.00	534.53	2170.58	1085.29	2745.79	1356.04	8.35	-1.105	0.000	0.172

Calculated Forces

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 27

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72.00	-47.12	-9.42	0.00	-515.60	0.00	515.60	2154.39	1077.20	2693.05	1329.99	8.82	-1.139	0.000	0.168
74.00	-46.60	-9.38	0.00	-496.75	0.00	496.75	2137.99	1068.99	2640.51	1304.05	9.30	-1.171	0.000	0.164
76.00	-46.10	-9.33	0.00	-477.99	0.00	477.99	2121.36	1060.68	2588.21	1278.22	9.80	-1.204	0.000	0.160
76.71	-45.92	-9.31	0.00	-471.36	0.00	471.36	2115.40	1057.70	2569.69	1269.07	9.98	-1.215	0.000	0.120
76.84	-45.89	-9.32	0.00	-470.18	0.00	470.18	2114.34	1057.17	2566.39	1267.45	10.01	-1.217	0.000	0.120
78.00	-45.48	-9.29	0.00	-459.35	0.00	459.35	2104.51	1052.26	2536.13	1252.50	10.31	-1.231	0.000	0.115
80.00	-44.78	-9.23	0.00	-440.77	0.00	440.77	2087.45	1043.72	2484.30	1226.90	10.83	-1.255	0.000	0.112
80.17	-44.72	-9.23	0.00	-439.20	0.00	439.20	2085.98	1042.99	2479.91	1224.73	10.88	-1.257	0.000	0.150
81.17	-44.38	-9.20	0.00	-429.97	0.00	429.97	1538.24	769.12	1857.13	917.17	11.14	-1.272	0.000	0.166
82.00	-44.19	-9.19	0.00	-422.33	0.00	422.33	1534.07	767.04	1842.56	909.97	11.37	-1.285	0.000	0.174
84.00	-43.74	-9.15	0.00	-403.95	0.00	403.95	1523.87	761.94	1807.49	892.65	11.91	-1.318	0.000	0.169
85.92	-43.31	-9.10	0.00	-386.38	0.00	386.38	1513.87	756.94	1773.86	876.04	12.45	-1.349	0.000	0.125
86.00	-43.29	-9.10	0.00	-385.65	0.00	385.65	1513.45	756.73	1772.46	875.35	12.47	-1.350	0.000	0.124
87.50	-42.96	-9.06	0.00	-371.99	0.00	371.99	1505.49	752.75	1746.23	862.40	12.90	-1.368	0.000	0.156
88.00	-42.85	-9.06	0.00	-367.46	0.00	367.46	1502.81	751.41	1737.49	858.08	13.04	-1.376	0.000	0.155
90.00	-42.41	-9.02	0.00	-349.34	0.00	349.34	1491.95	745.98	1702.59	840.84	13.62	-1.406	0.000	0.231
92.00	-41.99	-8.99	0.00	-331.29	0.00	331.29	1480.87	740.44	1667.76	823.65	14.22	-1.452	0.000	0.223
94.00	-41.57	-8.96	0.00	-313.31	0.00	313.31	1469.57	734.79	1633.03	806.49	14.84	-1.497	0.000	0.214
96.00	-41.16	-8.92	0.00	-295.40	0.00	295.40	1458.05	729.03	1598.39	789.39	15.48	-1.541	0.000	0.205
98.00	-40.76	-8.89	0.00	-277.55	0.00	277.55	1446.32	723.16	1563.86	772.33	16.13	-1.584	0.000	0.196
100.00	-40.36	-8.85	0.00	-259.77	0.00	259.77	1434.36	717.18	1529.45	755.34	16.81	-1.626	0.000	0.187
102.00	-39.95	-8.83	0.00	-242.06	0.00	242.06	1422.18	711.09	1495.16	738.41	17.50	-1.666	0.000	0.356
104.00	-39.56	-8.82	0.00	-224.40	0.00	224.40	1409.79	704.89	1461.02	721.54	18.21	-1.744	0.000	0.339
106.00	-39.16	-8.81	0.00	-206.77	0.00	206.77	1397.17	698.58	1427.02	704.75	18.96	-1.819	0.000	0.322
108.00	-38.77	-8.79	0.00	-189.16	0.00	189.16	1384.33	692.17	1393.17	688.04	19.73	-1.891	0.000	0.303
110.00	-38.39	-8.76	0.00	-171.58	0.00	171.58	1371.28	685.64	1359.50	671.40	20.54	-1.959	0.000	0.284
111.21	-38.16	-8.74	0.00	-160.95	0.00	160.95	1363.25	681.63	1339.15	661.36	21.04	-1.999	0.000	0.272
112.00	-37.96	-8.74	0.00	-154.08	0.00	154.08	1358.00	679.00	1326.00	654.86	21.38	-2.024	0.000	0.263
114.00	-37.47	-8.70	0.00	-136.59	0.00	136.59	1344.51	672.26	1292.68	638.41	22.24	-2.085	0.000	0.242
114.80	-37.27	-8.68	0.00	-129.66	0.00	129.66	898.25	449.12	876.91	433.07	22.59	-2.108	0.000	0.341
115.00	-22.87	-5.63	0.00	-127.89	0.00	127.89	897.59	448.79	874.90	432.08	22.68	-2.114	0.000	0.322
116.00	-22.72	-5.62	0.00	-122.26	0.00	122.26	894.32	447.16	865.01	427.20	23.12	-2.149	0.000	0.312
118.00	-22.41	-5.59	0.00	-111.01	0.00	111.01	887.61	443.81	845.23	417.43	24.04	-2.216	0.000	0.291
120.00	-22.11	-5.55	0.00	-99.84	0.00	99.84	880.69	440.34	825.45	407.66	24.98	-2.279	0.000	0.270
122.00	-21.82	-5.51	0.00	-88.74	0.00	88.74	873.54	436.77	805.67	397.89	25.95	-2.338	0.000	0.248
124.00	-21.52	-5.47	0.00	-77.73	0.00	77.73	866.18	433.09	785.90	388.13	26.94	-2.393	0.000	0.225
126.00	-15.66	-4.11	0.00	-66.79	0.00	66.79	858.60	429.30	766.16	378.38	27.95	-2.444	0.000	0.195
128.00	-15.38	-4.06	0.00	-58.58	0.00	58.58	850.80	425.40	746.46	368.65	28.99	-2.489	0.000	0.177
130.00	-15.11	-4.01	0.00	-50.47	0.00	50.47	842.77	421.39	726.80	358.94	30.04	-2.531	0.000	0.159
132.00	-14.84	-3.96	0.00	-42.45	0.00	42.45	834.53	417.27	707.19	349.25	31.11	-2.569	0.000	0.139
134.00	-14.58	-3.91	0.00	-34.54	0.00	34.54	826.07	413.04	687.65	339.60	32.19	-2.601	0.000	0.119
136.00	-14.32	-3.86	0.00	-26.72	0.00	26.72	817.39	408.69	668.18	329.99	33.29	-2.629	0.000	0.099
138.00	-4.35	-1.55	0.00	-19.01	0.00	19.01	808.49	404.24	648.79	320.41	34.39	-2.651	0.000	0.065
140.00	-4.12	-1.49	0.00	-15.92	0.00	15.92	799.37	399.68	629.50	310.89	35.51	-2.668	0.000	0.056
142.00	-3.90	-1.44	0.00	-12.94	0.00	12.94	790.03	395.01	610.32	301.41	36.63	-2.683	0.000	0.048
144.00	-3.69	-1.38	0.00	-10.06	0.00	10.06	780.47	390.24	591.24	291.99	37.75	-2.696	0.000	0.039
146.00	-3.47	-1.33	0.00	-7.30	0.00	7.30	770.69	385.35	572.29	282.63	38.89	-2.706	0.000	0.030
148.00	-3.26	-1.28	0.00	-4.64	0.00	4.64	760.69	380.35	553.47	273.34	40.02	-2.714	0.000	0.021
150.00	0.00	-1.12	0.00	-2.08	0.00	2.08	750.48	375.24	534.80	264.12	41.16	-2.718	0.000	0.008

Seismic Segment Forces (Factored)

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 28	

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Load Case:	1.2D + 1.0E							**Iterations**	24
Gust Response Factor	1.10				**Sds**	0.19		**Ss**	0.18
Dead Load Factor	1.20	**Seismic Load Factor**	1.00		**Sd1**	0.10		**S1**	0.07
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.24		**SA**	0.02	**Seismic Importance Factor**		1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2 RB3 RB4	0.00	0.00	0.00	0.00	0.00	
1.00	RT3 RB5	174.77	0.00	0.01	0.00	1.18	
2.00		174.03	0.00	0.01	0.01	2.07	
4.00		345.84	0.00	0.03	0.01	6.65	
6.00		342.88	0.00	0.04	0.02	8.32	
8.00		339.93	0.01	0.05	0.03	9.46	
10.00		336.97	0.01	0.05	0.03	10.26	
12.00		334.01	0.01	0.06	0.03	10.82	
14.00		331.05	0.02	0.06	0.04	11.20	
14.17	RB6	28.00	0.02	0.06	0.04	0.95	
16.00		300.09	0.02	0.06	0.04	10.47	
17.50	RT5	244.13	0.03	0.07	0.04	8.68	
18.00		81.01	0.03	0.07	0.04	2.89	
20.00		322.18	0.03	0.07	0.04	11.72	
20.50	RT1 RT4 RB7	632.08	0.04	0.07	0.04	23.08	
22.00		239.14	0.04	0.07	0.04	8.82	
24.00		316.26	0.05	0.07	0.04	11.80	
26.00		313.30	0.06	0.07	0.04	11.82	
28.00		310.34	0.07	0.07	0.04	11.82	
30.00		307.38	0.08	0.07	0.04	11.82	
32.00		304.43	0.09	0.07	0.04	11.82	
34.00		301.47	0.10	0.07	0.04	11.82	
36.00		298.51	0.11	0.07	0.04	11.83	
37.00	RT7	148.14	0.11	0.07	0.04	5.90	
38.00		147.41	0.12	0.07	0.03	5.90	
40.00		292.59	0.13	0.07	0.03	11.83	
42.00		289.63	0.15	0.07	0.03	11.82	
43.36	RB8	195.26	0.16	0.07	0.03	8.02	
43.50	Bot - Section 2	20.02	0.16	0.07	0.03	0.82	
44.00		132.06	0.16	0.07	0.03	5.44	
46.00		524.85	0.18	0.07	0.03	21.74	
48.00		519.43	0.19	0.06	0.02	21.59	
48.50	Top - Section 1	129.01	0.20	0.06	0.02	5.36	
50.00	Appurtenance(s)	227.92	0.21	0.06	0.02	9.47	
52.00		233.74	0.23	0.06	0.02	9.66	
52.50	RB9	58.05	0.23	0.06	0.02	2.39	
54.00		173.23	0.24	0.06	0.02	7.07	
54.17	RT2 RT6	19.54	0.25	0.06	0.02	0.80	
56.00		209.27	0.26	0.05	0.02	8.36	
58.00		226.35	0.28	0.05	0.01	8.75	
60.00		223.88	0.30	0.04	0.01	8.26	
62.00		221.42	0.32	0.04	0.01	7.64	
64.00		218.95	0.34	0.03	0.01	6.88	
64.17	RB10	18.50	0.35	0.03	0.01	0.58	
66.00		197.99	0.37	0.03	0.01	5.47	
68.00		214.02	0.39	0.02	0.01	4.93	

Seismic Segment Forces (Factored)

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 29	

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69.50	RT8	158.90	0.41	0.02	0.01	3.03		
70.00	RT9 RB11	52.66	0.41	0.01	0.01	0.93		
72.00		209.09	0.44	0.01	0.01	2.42		
74.00		206.62	0.46	0.00	0.01	1.02		
76.00		204.16	0.49	-0.01	0.01	-0.43		
76.71	RB12	71.88	0.49	-0.01	0.01	-0.33		
76.84	Bot - Section 3	12.79	0.50	-0.01	0.01	-0.07		
78.00		212.43	0.51	-0.02	0.01	-1.97		
80.00		361.69	0.54	-0.03	0.01	-5.89		
80.17	RT10	30.54	0.54	-0.03	0.01	-0.52		
81.17	Top - Section 2	178.99	0.55	-0.04	0.01	-3.62		
82.00		66.36	0.56	-0.04	0.01	-1.52		
84.00		158.52	0.59	-0.05	0.01	-4.59		
85.92	RB13	150.32	0.62	-0.06	0.02	-5.11		
86.00		6.22	0.62	-0.06	0.02	-0.21		
87.50	RT11	116.12	0.64	-0.07	0.02	-4.36		
88.00		38.46	0.65	-0.07	0.02	-1.48		
90.00	RT12	152.60	0.68	-0.08	0.03	-6.40		
92.00		150.63	0.71	-0.09	0.03	-6.69		
94.00		148.66	0.74	-0.10	0.04	-6.84		
96.00		146.69	0.77	-0.11	0.05	-6.84		
98.00		144.71	0.81	-0.11	0.06	-6.72		
100.00	RT13	142.74	0.84	-0.12	0.07	-6.48		
102.00		140.77	0.87	-0.12	0.08	-6.12		
104.00		138.80	0.91	-0.12	0.09	-5.66		
106.00		136.82	0.94	-0.12	0.11	-5.10		
108.00		134.85	0.98	-0.11	0.12	-4.46		
110.00		132.88	1.02	-0.11	0.14	-3.73		
111.21	Bot - Section 4	79.65	1.04	-0.10	0.15	-1.96		
112.00		90.40	1.05	-0.09	0.16	-2.02		
114.00		227.44	1.09	-0.07	0.18	-3.60		
114.80	Top - Section 3	89.63	1.11	-0.07	0.19	-1.17		
115.00	Appurtenance(s)	5480.4	1.11	-0.06	0.19	-67.31		
116.00		48.33	1.13	-0.05	0.21	-0.41		
118.00		95.54	1.17	-0.02	0.23	-0.05		
120.00		94.06	1.21	0.01	0.26	0.77		
122.00		92.58	1.25	0.06	0.29	1.64		
124.00		91.10	1.29	0.11	0.33	2.55		
126.00	Appurtenance(s)	2160.0	1.33	0.17	0.37	84.44		
128.00		88.15	1.38	0.24	0.41	4.49		
130.00		86.67	1.42	0.32	0.45	5.51		
132.00		85.19	1.46	0.42	0.50	6.56		
134.00		83.71	1.51	0.52	0.55	7.64		
136.00		82.23	1.55	0.64	0.61	8.74		
138.00	Appurtenance(s)	3292.6	1.60	0.78	0.67	402.46		
140.00		79.27	1.65	0.93	0.73	11.02		
142.00		77.79	1.69	1.10	0.81	12.18		
144.00		76.31	1.74	1.29	0.88	13.35		
146.00		74.83	1.79	1.50	0.96	14.54		
148.00		73.35	1.84	1.73	1.05	15.73		
150.00	Appurtenance(s)	1391.8	1.89	1.98	1.14	327.71		
	Totals:	**28,866.2**				**1,143.0**	**Total Wind:**	**36,000.5**

Seismic Base Shear was not tested because the override was selected - An Analysis is Required

Calculated Forces

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 30	

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Load Case:	1.2D + 1.0E							**Iterations**	24
Gust Response Factor	1.10			**Sds**	0.19			**Ss**	0.18
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.10			**S1**	0.07
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.24	**SA**	0.02	**Seismic Importance Factor**			1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-38.60	-1.31	0.00	-150.13	0.00	150.13	3406.69	1703.35	5989.16	2957.82		0.00	0.00	0.037
1.00	-38.36	-1.31	0.00	-148.82	0.00	148.82	3398.78	1699.39	5949.79	2938.38		0.00	0.00	0.035
2.00	-38.12	-1.31	0.00	-147.50	0.00	147.50	3390.81	1695.40	5910.44	2918.95		0.00	0.00	0.034
4.00	-37.64	-1.31	0.00	-144.88	0.00	144.88	3374.70	1687.35	5831.83	2880.12		0.00	-0.01	0.034
6.00	-37.17	-1.30	0.00	-142.26	0.00	142.26	3358.38	1679.19	5753.31	2841.35		0.01	-0.01	0.034
8.00	-36.70	-1.30	0.00	-139.65	0.00	139.65	3341.83	1670.92	5674.92	2802.63		0.01	-0.02	0.034
10.00	-36.23	-1.29	0.00	-137.06	0.00	137.06	3325.07	1662.53	5596.65	2763.98		0.02	-0.02	0.033
12.00	-35.77	-1.28	0.00	-134.48	0.00	134.48	3308.08	1654.04	5518.52	2725.39		0.03	-0.02	0.033
14.00	-35.31	-1.27	0.00	-131.92	0.00	131.92	3290.88	1645.44	5440.53	2686.87		0.04	-0.03	0.033
14.17	-35.27	-1.27	0.00	-131.70	0.00	131.70	3289.41	1644.70	5433.91	2683.60		0.04	-0.03	0.030
16.00	-34.85	-1.26	0.00	-129.38	0.00	129.38	3273.46	1636.73	5362.70	2648.44		0.06	-0.03	0.030
17.50	-34.51	-1.25	0.00	-127.48	0.00	127.48	3260.25	1630.12	5304.43	2619.66		0.07	-0.04	0.032
18.00	-34.40	-1.25	0.00	-126.86	0.00	126.86	3255.82	1627.91	5285.03	2610.08		0.07	-0.04	0.032
20.00	-33.95	-1.24	0.00	-124.35	0.00	124.35	3237.96	1618.98	5207.54	2571.81		0.09	-0.04	0.032
20.50	-33.18	-1.22	0.00	-123.73	0.00	123.73	3233.46	1616.73	5188.20	2562.26		0.09	-0.04	0.027
22.00	-32.84	-1.21	0.00	-121.90	0.00	121.90	3219.87	1609.94	5130.24	2533.63		0.10	-0.04	0.026
24.00	-32.40	-1.20	0.00	-119.47	0.00	119.47	3201.57	1600.79	5053.13	2495.55		0.12	-0.05	0.026
26.00	-31.96	-1.19	0.00	-117.07	0.00	117.07	3183.05	1591.53	4976.22	2457.57		0.15	-0.05	0.026
28.00	-31.53	-1.18	0.00	-114.69	0.00	114.69	3164.31	1582.16	4899.54	2419.70		0.17	-0.06	0.026
30.00	-31.10	-1.17	0.00	-112.32	0.00	112.32	3145.35	1572.68	4823.07	2381.93		0.19	-0.06	0.025
32.00	-30.67	-1.16	0.00	-109.98	0.00	109.98	3126.18	1563.09	4746.84	2344.29		0.22	-0.06	0.025
34.00	-30.25	-1.15	0.00	-107.66	0.00	107.66	3106.78	1553.39	4670.86	2306.76		0.24	-0.07	0.025
36.00	-29.83	-1.14	0.00	-105.36	0.00	105.36	3087.16	1543.58	4595.12	2269.36		0.27	-0.07	0.024
37.00	-29.62	-1.13	0.00	-104.22	0.00	104.22	3077.27	1538.63	4557.36	2250.71		0.29	-0.07	0.034
38.00	-29.41	-1.13	0.00	-103.08	0.00	103.08	3067.32	1533.66	4519.66	2232.09		0.30	-0.07	0.033
40.00	-29.00	-1.12	0.00	-100.82	0.00	100.82	3047.27	1523.63	4444.46	2194.95		0.33	-0.08	0.033
42.00	-28.59	-1.11	0.00	-98.58	0.00	98.58	3026.99	1513.49	4369.56	2157.96		0.37	-0.08	0.033
43.36	-28.31	-1.10	0.00	-97.07	0.00	97.07	3013.08	1506.54	4318.79	2132.89		0.39	-0.09	0.023
43.50	-28.28	-1.10	0.00	-96.92	0.00	96.92	3011.64	1505.82	4313.57	2130.31		0.39	-0.09	0.023
44.00	-28.11	-1.10	0.00	-96.36	0.00	96.36	3006.49	1503.25	4294.94	2121.11		0.40	-0.09	0.023
46.00	-27.42	-1.08	0.00	-94.17	0.00	94.17	2985.78	1492.89	4220.63	2084.41		0.44	-0.09	0.022
48.00	-26.73	-1.05	0.00	-92.02	0.00	92.02	2964.84	1482.42	4146.63	2047.87		0.48	-0.09	0.022
48.50	-26.56	-1.05	0.00	-91.49	0.00	91.49	2330.75	1165.37	3323.66	1641.43		0.49	-0.10	0.024
50.00	-26.24	-1.04	0.00	-89.92	0.00	89.92	2320.40	1160.20	3282.84	1621.27		0.52	-0.10	0.025
52.00	-25.90	-1.03	0.00	-87.83	0.00	87.83	2306.40	1153.20	3228.50	1594.43		0.56	-0.10	0.025
52.50	-25.81	-1.03	0.00	-87.32	0.00	87.32	2302.87	1151.43	3214.93	1587.73		0.57	-0.10	0.020
54.00	-25.56	-1.02	0.00	-85.77	0.00	85.77	2292.19	1146.09	3174.27	1567.65		0.61	-0.10	0.020
54.17	-25.53	-1.02	0.00	-85.60	0.00	85.60	2290.97	1145.49	3169.67	1565.38		0.61	-0.11	0.028
56.00	-25.22	-1.02	0.00	-83.73	0.00	83.73	2277.76	1138.88	3120.17	1540.93		0.65	-0.11	0.027
58.00	-24.89	-1.01	0.00	-81.69	0.00	81.69	2263.10	1131.55	3066.20	1514.28		0.70	-0.11	0.027
60.00	-24.56	-1.00	0.00	-79.68	0.00	79.68	2248.23	1124.12	3012.38	1487.70		0.75	-0.12	0.026
62.00	-24.23	-0.99	0.00	-77.67	0.00	77.67	2233.14	1116.57	2958.71	1461.20		0.80	-0.12	0.026
64.00	-23.90	-0.99	0.00	-75.69	0.00	75.69	2217.83	1108.92	2905.21	1434.77		0.85	-0.13	0.026
64.17	-23.88	-0.99	0.00	-75.52	0.00	75.52	2216.52	1108.26	2900.67	1432.53		0.85	-0.13	0.020
66.00	-23.58	-0.98	0.00	-73.71	0.00	73.71	2202.30	1101.15	2851.88	1408.44		0.90	-0.13	0.019
68.00	-23.26	-0.98	0.00	-71.74	0.00	71.74	2186.55	1093.28	2798.74	1382.19		0.96	-0.13	0.019
69.50	-23.02	-0.98	0.00	-70.27	0.00	70.27	2174.60	1087.30	2759.01	1362.57		1.00	-0.13	0.026

Calculated Forces

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 31

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70.00	-22.95	-0.98	0.00	-69.79	0.00	69.79	2170.58	1085.29	2745.79	1356.04	1.01	-0.14	0.026
72.00	-22.63	-0.97	0.00	-67.84	0.00	67.84	2154.39	1077.20	2693.05	1329.99	1.07	-0.14	0.025
74.00	-22.32	-0.97	0.00	-65.89	0.00	65.89	2137.99	1068.99	2640.51	1304.05	1.13	-0.14	0.025
76.00	-22.01	-0.97	0.00	-63.94	0.00	63.94	2121.36	1060.68	2588.21	1278.22	1.19	-0.15	0.025
76.71	-21.91	-0.97	0.00	-63.25	0.00	63.25	2115.40	1057.70	2569.69	1269.07	1.21	-0.15	0.019
76.84	-21.89	-0.98	0.00	-63.12	0.00	63.12	2114.34	1057.17	2566.39	1267.45	1.22	-0.15	0.018
78.00	-21.60	-0.98	0.00	-61.99	0.00	61.99	2104.51	1052.26	2536.13	1252.50	1.25	-0.15	0.018
80.00	-21.10	-0.97	0.00	-60.04	0.00	60.04	2087.45	1043.72	2484.30	1226.90	1.32	-0.16	0.018
80.17	-21.06	-0.98	0.00	-59.87	0.00	59.87	2085.98	1042.99	2479.91	1224.73	1.32	-0.16	0.024
81.17	-20.81	-0.98	0.00	-58.90	0.00	58.90	1538.24	769.12	1857.13	917.17	1.36	-0.16	0.026
82.00	-20.71	-0.98	0.00	-58.09	0.00	58.09	1534.07	767.04	1842.56	909.97	1.38	-0.16	0.028
84.00	-20.45	-0.98	0.00	-56.14	0.00	56.14	1523.87	761.94	1807.49	892.65	1.45	-0.16	0.027
85.92	-20.21	-0.98	0.00	-54.26	0.00	54.26	1513.87	756.94	1773.86	876.04	1.52	-0.17	0.020
86.00	-20.20	-0.98	0.00	-54.18	0.00	54.18	1513.45	756.73	1772.46	875.35	1.52	-0.17	0.020
87.50	-20.02	-0.98	0.00	-52.72	0.00	52.72	1505.49	752.75	1746.23	862.40	1.57	-0.17	0.025
88.00	-19.96	-0.98	0.00	-52.23	0.00	52.23	1502.81	751.41	1737.49	858.08	1.59	-0.17	0.025
90.00	-19.71	-0.98	0.00	-50.27	0.00	50.27	1491.95	745.98	1702.59	840.84	1.66	-0.18	0.038
92.00	-19.47	-0.98	0.00	-48.31	0.00	48.31	1480.87	740.44	1667.76	823.65	1.74	-0.18	0.037
94.00	-19.23	-0.98	0.00	-46.35	0.00	46.35	1469.57	734.79	1633.03	806.49	1.82	-0.19	0.036
96.00	-18.99	-0.98	0.00	-44.38	0.00	44.38	1458.05	729.03	1598.39	789.39	1.90	-0.20	0.036
98.00	-18.75	-0.99	0.00	-42.42	0.00	42.42	1446.32	723.16	1563.86	772.33	1.98	-0.20	0.035
100.00	-18.52	-0.99	0.00	-40.45	0.00	40.45	1434.36	717.18	1529.45	755.34	2.07	-0.21	0.034
102.00	-18.29	-0.99	0.00	-38.47	0.00	38.47	1422.18	711.09	1495.16	738.41	2.16	-0.22	0.065
104.00	-18.06	-0.99	0.00	-36.50	0.00	36.50	1409.79	704.89	1461.02	721.54	2.25	-0.23	0.063
106.00	-17.83	-0.99	0.00	-34.51	0.00	34.51	1397.17	698.58	1427.02	704.75	2.35	-0.24	0.062
108.00	-17.61	-1.00	0.00	-32.52	0.00	32.52	1384.33	692.17	1393.17	688.04	2.45	-0.25	0.060
110.00	-17.39	-1.00	0.00	-30.53	0.00	30.53	1371.28	685.64	1359.50	671.40	2.56	-0.26	0.058
111.21	-17.25	-1.00	0.00	-29.31	0.00	29.31	1363.25	681.63	1339.15	661.36	2.63	-0.27	0.057
112.00	-17.12	-1.00	0.00	-28.53	0.00	28.53	1358.00	679.00	1326.00	654.86	2.67	-0.28	0.056
114.00	-16.78	-1.00	0.00	-26.52	0.00	26.52	1344.51	672.26	1292.68	638.41	2.79	-0.29	0.054
114.80	-16.65	-1.00	0.00	-25.72	0.00	25.72	898.25	449.12	876.91	433.07	2.84	-0.29	0.078
115.00	-10.07	-0.97	0.00	-25.52	0.00	25.52	897.59	448.79	874.90	432.08	2.85	-0.29	0.070
116.00	-9.99	-0.97	0.00	-24.55	0.00	24.55	894.32	447.16	865.01	427.20	2.92	-0.30	0.069
118.00	-9.84	-0.97	0.00	-22.61	0.00	22.61	887.61	443.81	845.23	417.43	3.04	-0.31	0.065
120.00	-9.69	-0.97	0.00	-20.66	0.00	20.66	880.69	440.34	825.45	407.66	3.18	-0.33	0.062
122.00	-9.55	-0.97	0.00	-18.71	0.00	18.71	873.54	436.77	805.67	397.89	3.32	-0.34	0.058
124.00	-9.40	-0.97	0.00	-16.76	0.00	16.76	866.18	433.09	785.90	388.13	3.46	-0.35	0.054
126.00	-6.77	-0.87	0.00	-14.82	0.00	14.82	858.60	429.30	766.16	378.38	3.61	-0.36	0.047
128.00	-6.64	-0.87	0.00	-13.07	0.00	13.07	850.80	425.40	746.46	368.65	3.77	-0.37	0.043
130.00	-6.51	-0.86	0.00	-11.34	0.00	11.34	842.77	421.39	726.80	358.94	3.92	-0.38	0.039
132.00	-6.37	-0.86	0.00	-9.61	0.00	9.61	834.53	417.27	707.19	349.25	4.09	-0.39	0.035
134.00	-6.24	-0.85	0.00	-7.90	0.00	7.90	826.07	413.04	687.65	339.60	4.25	-0.40	0.031
136.00	-6.12	-0.84	0.00	-6.20	0.00	6.20	817.39	408.69	668.18	329.99	4.42	-0.40	0.026
138.00	-2.14	-0.41	0.00	-4.52	0.00	4.52	808.49	404.24	648.79	320.41	4.59	-0.41	0.017
140.00	-2.04	-0.40	0.00	-3.70	0.00	3.70	799.37	399.68	629.50	310.89	4.76	-0.41	0.014
142.00	-1.95	-0.39	0.00	-2.91	0.00	2.91	790.03	395.01	610.32	301.41	4.94	-0.42	0.012
144.00	-1.85	-0.37	0.00	-2.14	0.00	2.14	780.47	390.24	591.24	291.99	5.11	-0.42	0.010
146.00	-1.76	-0.36	0.00	-1.39	0.00	1.39	770.69	385.35	572.29	282.63	5.29	-0.42	0.007
148.00	-1.67	-0.34	0.00	-0.68	0.00	0.68	760.69	380.35	553.47	273.34	5.46	-0.42	0.005
150.00	0.00	-0.33	0.00	0.00	0.00	0.00	750.48	375.24	534.80	264.12	5.64	-0.42	0.000

Seismic Segment Forces (Factored)

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 32	

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Load Case:	0.9D + 1.0E							**Iterations**	24
Gust Response Factor	1.10				**Sds**	0.19		**Ss**	0.18
Dead Load Factor	0.90	**Seismic Load Factor**	1.00		**Sd1**	0.10		**S1**	0.07
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.24		**SA**	0.02	**Seismic Importance Factor**		1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2 RB3 RB4	0.00	0.00	0.00	0.00	0.00	
1.00	RT3 RB5	174.77	0.00	0.01	0.00	1.18	
2.00		174.03	0.00	0.01	0.01	2.07	
4.00		345.84	0.00	0.03	0.01	6.65	
6.00		342.88	0.00	0.04	0.02	8.32	
8.00		339.93	0.01	0.05	0.03	9.46	
10.00		336.97	0.01	0.05	0.03	10.26	
12.00		334.01	0.01	0.06	0.03	10.82	
14.00		331.05	0.02	0.06	0.04	11.20	
14.17	RB6	28.00	0.02	0.06	0.04	0.95	
16.00		300.09	0.02	0.06	0.04	10.47	
17.50	RT5	244.13	0.03	0.07	0.04	8.68	
18.00		81.01	0.03	0.07	0.04	2.89	
20.00		322.18	0.03	0.07	0.04	11.72	
20.50	RT1 RT4 RB7	632.08	0.04	0.07	0.04	23.08	
22.00		239.14	0.04	0.07	0.04	8.82	
24.00		316.26	0.05	0.07	0.04	11.80	
26.00		313.30	0.06	0.07	0.04	11.82	
28.00		310.34	0.07	0.07	0.04	11.82	
30.00		307.38	0.08	0.07	0.04	11.82	
32.00		304.43	0.09	0.07	0.04	11.82	
34.00		301.47	0.10	0.07	0.04	11.82	
36.00		298.51	0.11	0.07	0.04	11.83	
37.00	RT7	148.14	0.11	0.07	0.04	5.90	
38.00		147.41	0.12	0.07	0.03	5.90	
40.00		292.59	0.13	0.07	0.03	11.83	
42.00		289.63	0.15	0.07	0.03	11.82	
43.36	RB8	195.26	0.16	0.07	0.03	8.02	
43.50	Bot - Section 2	20.02	0.16	0.07	0.03	0.82	
44.00		132.06	0.16	0.07	0.03	5.44	
46.00		524.85	0.18	0.07	0.03	21.74	
48.00		519.43	0.19	0.06	0.02	21.59	
48.50	Top - Section 1	129.01	0.20	0.06	0.02	5.36	
50.00	Appurtenance(s)	227.92	0.21	0.06	0.02	9.47	
52.00		233.74	0.23	0.06	0.02	9.66	
52.50	RB9	58.05	0.23	0.06	0.02	2.39	
54.00		173.23	0.24	0.06	0.02	7.07	
54.17	RT2 RT6	19.54	0.25	0.06	0.02	0.80	
56.00		209.27	0.26	0.05	0.02	8.36	
58.00		226.35	0.28	0.05	0.01	8.75	
60.00		223.88	0.30	0.04	0.01	8.26	
62.00		221.42	0.32	0.04	0.01	7.64	
64.00		218.95	0.34	0.03	0.01	6.88	
64.17	RB10	18.50	0.35	0.03	0.01	0.58	
66.00		197.99	0.37	0.03	0.01	5.47	
68.00		214.02	0.39	0.02	0.01	4.93	

Seismic Segment Forces (Factored)

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 33	

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69.50	RT8	158.90	0.41	0.02	0.01	3.03	
70.00	RT9 RB11	52.66	0.41	0.01	0.01	0.93	
72.00		209.09	0.44	0.01	0.01	2.42	
74.00		206.62	0.46	0.00	0.01	1.02	
76.00		204.16	0.49	-0.01	0.01	-0.43	
76.71	RB12	71.88	0.49	-0.01	0.01	-0.33	
76.84	Bot - Section 3	12.79	0.50	-0.01	0.01	-0.07	
78.00		212.43	0.51	-0.02	0.01	-1.97	
80.00		361.69	0.54	-0.03	0.01	-5.89	
80.17	RT10	30.54	0.54	-0.03	0.01	-0.52	
81.17	Top - Section 2	178.99	0.55	-0.04	0.01	-3.62	
82.00		66.36	0.56	-0.04	0.01	-1.52	
84.00		158.52	0.59	-0.05	0.01	-4.59	
85.92	RB13	150.32	0.62	-0.06	0.02	-5.11	
86.00		6.22	0.62	-0.06	0.02	-0.21	
87.50	RT11	116.12	0.64	-0.07	0.02	-4.36	
88.00		38.46	0.65	-0.07	0.02	-1.48	
90.00	RT12	152.60	0.68	-0.08	0.03	-6.40	
92.00		150.63	0.71	-0.09	0.03	-6.69	
94.00		148.66	0.74	-0.10	0.04	-6.84	
96.00		146.69	0.77	-0.11	0.05	-6.84	
98.00		144.71	0.81	-0.11	0.06	-6.72	
100.00	RT13	142.74	0.84	-0.12	0.07	-6.48	
102.00		140.77	0.87	-0.12	0.08	-6.12	
104.00		138.80	0.91	-0.12	0.09	-5.66	
106.00		136.82	0.94	-0.12	0.11	-5.10	
108.00		134.85	0.98	-0.11	0.12	-4.46	
110.00		132.88	1.02	-0.11	0.14	-3.73	
111.21	Bot - Section 4	79.65	1.04	-0.10	0.15	-1.96	
112.00		90.40	1.05	-0.09	0.16	-2.02	
114.00		227.44	1.09	-0.07	0.18	-3.60	
114.80	Top - Section 3	89.63	1.11	-0.07	0.19	-1.17	
115.00	Appurtenance(s)	5480.4	1.11	-0.06	0.19	-67.31	
116.00		48.33	1.13	-0.05	0.21	-0.41	
118.00		95.54	1.17	-0.02	0.23	-0.05	
120.00		94.06	1.21	0.01	0.26	0.77	
122.00		92.58	1.25	0.06	0.29	1.64	
124.00		91.10	1.29	0.11	0.33	2.55	
126.00	Appurtenance(s)	2160.0	1.33	0.17	0.37	84.44	
128.00		88.15	1.38	0.24	0.41	4.49	
130.00		86.67	1.42	0.32	0.45	5.51	
132.00		85.19	1.46	0.42	0.50	6.56	
134.00		83.71	1.51	0.52	0.55	7.64	
136.00		82.23	1.55	0.64	0.61	8.74	
138.00	Appurtenance(s)	3292.6	1.60	0.78	0.67	402.46	
140.00		79.27	1.65	0.93	0.73	11.02	
142.00		77.79	1.69	1.10	0.81	12.18	
144.00		76.31	1.74	1.29	0.88	13.35	
146.00		74.83	1.79	1.50	0.96	14.54	
148.00		73.35	1.84	1.73	1.05	15.73	
150.00	Appurtenance(s)	1391.8	1.89	1.98	1.14	327.71	
	Totals:	**28,866.2**				**1,143.0**	**Total Wind:** **36,000.5**

Seismic Base Shear was not tested because the override was selected - An Analysis is Required

Calculated Forces

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 34	

Tower Engineering Solutions

Load Case:	0.9D + 1.0E							**Iterations**	24
Gust Response Factor	1.10			**Sds**	0.19			**Ss**	0.18
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.10			**S1**	0.07
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.24	**SA**	0.02	**Seismic Importance Factor**			1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-28.95	-1.31	0.00	-148.43	0.00	148.43	3406.69	1703.35	5989.16	2957.82		0.00	0.00	0.035
1.00	-28.77	-1.31	0.00	-147.11	0.00	147.11	3398.78	1699.39	5949.79	2938.38		0.00	0.00	0.033
2.00	-28.59	-1.31	0.00	-145.80	0.00	145.80	3390.81	1695.40	5910.44	2918.95		0.00	0.00	0.033
4.00	-28.23	-1.31	0.00	-143.17	0.00	143.17	3374.70	1687.35	5831.83	2880.12		0.00	-0.01	0.032
6.00	-27.88	-1.30	0.00	-140.56	0.00	140.56	3358.38	1679.19	5753.31	2841.35		0.01	-0.01	0.032
8.00	-27.52	-1.29	0.00	-137.96	0.00	137.96	3341.83	1670.92	5674.92	2802.63		0.01	-0.02	0.032
10.00	-27.17	-1.29	0.00	-135.37	0.00	135.37	3325.07	1662.53	5596.65	2763.98		0.02	-0.02	0.032
12.00	-26.83	-1.28	0.00	-132.80	0.00	132.80	3308.08	1654.04	5518.52	2725.39		0.03	-0.02	0.031
14.00	-26.48	-1.27	0.00	-130.25	0.00	130.25	3290.88	1645.44	5440.53	2686.87		0.04	-0.03	0.031
14.17	-26.45	-1.27	0.00	-130.03	0.00	130.03	3289.41	1644.70	5433.91	2683.60		0.04	-0.03	0.029
16.00	-26.14	-1.26	0.00	-127.71	0.00	127.71	3273.46	1636.73	5362.70	2648.44		0.06	-0.03	0.028
17.50	-25.89	-1.25	0.00	-125.83	0.00	125.83	3260.25	1630.12	5304.43	2619.66		0.07	-0.04	0.030
18.00	-25.80	-1.25	0.00	-125.20	0.00	125.20	3255.82	1627.91	5285.03	2610.08		0.07	-0.04	0.030
20.00	-25.46	-1.24	0.00	-122.71	0.00	122.71	3237.96	1618.98	5207.54	2571.81		0.09	-0.04	0.030
20.50	-24.88	-1.21	0.00	-122.09	0.00	122.09	3233.46	1616.73	5188.20	2562.26		0.09	-0.04	0.025
22.00	-24.63	-1.21	0.00	-120.27	0.00	120.27	3219.87	1609.94	5130.24	2533.63		0.10	-0.04	0.025
24.00	-24.30	-1.20	0.00	-117.86	0.00	117.86	3201.57	1600.79	5053.13	2495.55		0.12	-0.05	0.025
26.00	-23.97	-1.18	0.00	-115.47	0.00	115.47	3183.05	1591.53	4976.22	2457.57		0.14	-0.05	0.024
28.00	-23.65	-1.17	0.00	-113.10	0.00	113.10	3164.31	1582.16	4899.54	2419.70		0.17	-0.05	0.024
30.00	-23.32	-1.16	0.00	-110.75	0.00	110.75	3145.35	1572.68	4823.07	2381.93		0.19	-0.06	0.024
32.00	-23.00	-1.15	0.00	-108.43	0.00	108.43	3126.18	1563.09	4746.84	2344.29		0.21	-0.06	0.024
34.00	-22.69	-1.14	0.00	-106.12	0.00	106.12	3106.78	1553.39	4670.86	2306.76		0.24	-0.06	0.023
36.00	-22.37	-1.13	0.00	-103.84	0.00	103.84	3087.16	1543.58	4595.12	2269.36		0.27	-0.07	0.023
37.00	-22.21	-1.13	0.00	-102.71	0.00	102.71	3077.27	1538.63	4557.36	2250.71		0.28	-0.07	0.032
38.00	-22.06	-1.12	0.00	-101.58	0.00	101.58	3067.32	1533.66	4519.66	2232.09		0.30	-0.07	0.031
40.00	-21.75	-1.11	0.00	-99.34	0.00	99.34	3047.27	1523.63	4444.46	2194.95		0.33	-0.08	0.031
42.00	-21.44	-1.10	0.00	-97.12	0.00	97.12	3026.99	1513.49	4369.56	2157.96		0.36	-0.08	0.031
43.36	-21.23	-1.09	0.00	-95.63	0.00	95.63	3013.08	1506.54	4318.79	2132.89		0.39	-0.09	0.022
43.50	-21.21	-1.09	0.00	-95.48	0.00	95.48	3011.64	1505.82	4313.57	2130.31		0.39	-0.09	0.022
44.00	-21.08	-1.09	0.00	-94.93	0.00	94.93	3006.49	1503.25	4294.94	2121.11		0.40	-0.09	0.022
46.00	-20.56	-1.06	0.00	-92.76	0.00	92.76	2985.78	1492.89	4220.63	2084.41		0.44	-0.09	0.021
48.00	-20.05	-1.04	0.00	-90.63	0.00	90.63	2964.84	1482.42	4146.63	2047.87		0.47	-0.09	0.021
48.50	-19.92	-1.04	0.00	-90.11	0.00	90.11	2330.75	1165.37	3323.66	1641.43		0.48	-0.09	0.023
50.00	-19.68	-1.03	0.00	-88.55	0.00	88.55	2320.40	1160.20	3282.84	1621.27		0.51	-0.10	0.024
52.00	-19.42	-1.02	0.00	-86.49	0.00	86.49	2306.40	1153.20	3228.50	1594.43		0.56	-0.10	0.023
52.50	-19.36	-1.02	0.00	-85.98	0.00	85.98	2302.87	1151.43	3214.93	1587.73		0.57	-0.10	0.019
54.00	-19.17	-1.01	0.00	-84.45	0.00	84.45	2292.19	1146.09	3174.27	1567.65		0.60	-0.10	0.019
54.17	-19.15	-1.01	0.00	-84.28	0.00	84.28	2290.97	1145.49	3169.67	1565.38		0.60	-0.10	0.026
56.00	-18.91	-1.00	0.00	-82.43	0.00	82.43	2277.76	1138.88	3120.17	1540.93		0.64	-0.11	0.026
58.00	-18.66	-1.00	0.00	-80.43	0.00	80.43	2263.10	1131.55	3066.20	1514.28		0.69	-0.11	0.025
60.00	-18.42	-0.99	0.00	-78.43	0.00	78.43	2248.23	1124.12	3012.38	1487.70		0.74	-0.12	0.025
62.00	-18.17	-0.98	0.00	-76.46	0.00	76.46	2233.14	1116.57	2958.71	1461.20		0.79	-0.12	0.025
64.00	-17.93	-0.97	0.00	-74.50	0.00	74.50	2217.83	1108.92	2905.21	1434.77		0.84	-0.12	0.024
64.17	-17.91	-0.97	0.00	-74.33	0.00	74.33	2216.52	1108.26	2900.67	1432.53		0.84	-0.12	0.019
66.00	-17.69	-0.97	0.00	-72.55	0.00	72.55	2202.30	1101.15	2851.88	1408.44		0.89	-0.13	0.018
68.00	-17.45	-0.96	0.00	-70.61	0.00	70.61	2186.55	1093.28	2798.74	1382.19		0.94	-0.13	0.018
69.50	-17.27	-0.96	0.00	-69.16	0.00	69.16	2174.60	1087.30	2759.01	1362.57		0.98	-0.13	0.024

Calculated Forces

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 35

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70.00	-17.21	-0.96	0.00	-68.68	0.00	68.68	2170.58	1085.29	2745.79	1356.04	1.00	-0.13	0.024
72.00	-16.97	-0.96	0.00	-66.76	0.00	66.76	2154.39	1077.20	2693.05	1329.99	1.05	-0.14	0.024
74.00	-16.74	-0.96	0.00	-64.84	0.00	64.84	2137.99	1068.99	2640.51	1304.05	1.11	-0.14	0.024
76.00	-16.51	-0.96	0.00	-62.92	0.00	62.92	2121.36	1060.68	2588.21	1278.22	1.17	-0.15	0.023
76.71	-16.43	-0.96	0.00	-62.24	0.00	62.24	2115.40	1057.70	2569.69	1269.07	1.20	-0.15	0.017
76.84	-16.41	-0.96	0.00	-62.11	0.00	62.11	2114.34	1057.17	2566.39	1267.45	1.20	-0.15	0.017
78.00	-16.20	-0.96	0.00	-61.00	0.00	61.00	2104.51	1052.26	2536.13	1252.50	1.24	-0.15	0.017
80.00	-15.82	-0.96	0.00	-59.08	0.00	59.08	2087.45	1043.72	2484.30	1226.90	1.30	-0.15	0.017
80.17	-15.79	-0.96	0.00	-58.91	0.00	58.91	2085.98	1042.99	2479.91	1224.73	1.30	-0.15	0.022
81.17	-15.61	-0.96	0.00	-57.95	0.00	57.95	1538.24	769.12	1857.13	917.17	1.34	-0.16	0.024
82.00	-15.53	-0.96	0.00	-57.16	0.00	57.16	1534.07	767.04	1842.56	909.97	1.36	-0.16	0.026
84.00	-15.34	-0.96	0.00	-55.23	0.00	55.23	1523.87	761.94	1807.49	892.65	1.43	-0.16	0.025
85.92	-15.16	-0.96	0.00	-53.39	0.00	53.39	1513.87	756.94	1773.86	876.04	1.50	-0.17	0.019
86.00	-15.15	-0.96	0.00	-53.31	0.00	53.31	1513.45	756.73	1772.46	875.35	1.50	-0.17	0.019
87.50	-15.01	-0.96	0.00	-51.87	0.00	51.87	1505.49	752.75	1746.23	862.40	1.55	-0.17	0.024
88.00	-14.97	-0.96	0.00	-51.39	0.00	51.39	1502.81	751.41	1737.49	858.08	1.57	-0.17	0.024
90.00	-14.78	-0.96	0.00	-49.46	0.00	49.46	1491.95	745.98	1702.59	840.84	1.64	-0.17	0.036
92.00	-14.60	-0.96	0.00	-47.54	0.00	47.54	1480.87	740.44	1667.76	823.65	1.72	-0.18	0.035
94.00	-14.42	-0.97	0.00	-45.61	0.00	45.61	1469.57	734.79	1633.03	806.49	1.79	-0.19	0.034
96.00	-14.24	-0.97	0.00	-43.67	0.00	43.67	1458.05	729.03	1598.39	789.39	1.87	-0.19	0.033
98.00	-14.06	-0.97	0.00	-41.74	0.00	41.74	1446.32	723.16	1563.86	772.33	1.95	-0.20	0.032
100.00	-13.89	-0.97	0.00	-39.81	0.00	39.81	1434.36	717.18	1529.45	755.34	2.04	-0.21	0.031
102.00	-13.72	-0.97	0.00	-37.87	0.00	37.87	1422.18	711.09	1495.16	738.41	2.13	-0.21	0.061
104.00	-13.54	-0.97	0.00	-35.93	0.00	35.93	1409.79	704.89	1461.02	721.54	2.22	-0.22	0.059
106.00	-13.37	-0.97	0.00	-33.98	0.00	33.98	1397.17	698.58	1427.02	704.75	2.32	-0.24	0.058
108.00	-13.21	-0.98	0.00	-32.03	0.00	32.03	1384.33	692.17	1393.17	688.04	2.42	-0.25	0.056
110.00	-13.04	-0.98	0.00	-30.08	0.00	30.08	1371.28	685.64	1359.50	671.40	2.52	-0.26	0.054
111.21	-12.94	-0.98	0.00	-28.89	0.00	28.89	1363.25	681.63	1339.15	661.36	2.59	-0.27	0.053
112.00	-12.84	-0.98	0.00	-28.12	0.00	28.12	1358.00	679.00	1326.00	654.86	2.64	-0.27	0.052
114.00	-12.59	-0.98	0.00	-26.16	0.00	26.16	1344.51	672.26	1292.68	638.41	2.75	-0.28	0.050
114.80	-12.49	-0.98	0.00	-25.38	0.00	25.38	898.25	449.12	876.91	433.07	2.80	-0.29	0.073
115.00	-7.55	-0.96	0.00	-25.18	0.00	25.18	897.59	448.79	874.90	432.08	2.81	-0.29	0.067
116.00	-7.49	-0.96	0.00	-24.22	0.00	24.22	894.32	447.16	865.01	427.20	2.87	-0.30	0.065
118.00	-7.38	-0.96	0.00	-22.31	0.00	22.31	887.61	443.81	845.23	417.43	3.00	-0.31	0.062
120.00	-7.27	-0.96	0.00	-20.39	0.00	20.39	880.69	440.34	825.45	407.66	3.13	-0.32	0.058
122.00	-7.16	-0.96	0.00	-18.47	0.00	18.47	873.54	436.77	805.67	397.89	3.27	-0.33	0.055
124.00	-7.05	-0.96	0.00	-16.55	0.00	16.55	866.18	433.09	785.90	388.13	3.41	-0.35	0.051
126.00	-5.08	-0.86	0.00	-14.64	0.00	14.64	858.60	429.30	766.16	378.38	3.56	-0.36	0.045
128.00	-4.98	-0.86	0.00	-12.92	0.00	12.92	850.80	425.40	746.46	368.65	3.71	-0.37	0.041
130.00	-4.88	-0.85	0.00	-11.20	0.00	11.20	842.77	421.39	726.80	358.94	3.87	-0.38	0.037
132.00	-4.78	-0.85	0.00	-9.50	0.00	9.50	834.53	417.27	707.19	349.25	4.03	-0.38	0.033
134.00	-4.68	-0.84	0.00	-7.81	0.00	7.81	826.07	413.04	687.65	339.60	4.19	-0.39	0.029
136.00	-4.59	-0.83	0.00	-6.13	0.00	6.13	817.39	408.69	668.18	329.99	4.36	-0.40	0.024
138.00	-1.60	-0.41	0.00	-4.48	0.00	4.48	808.49	404.24	648.79	320.41	4.52	-0.40	0.016
140.00	-1.53	-0.39	0.00	-3.67	0.00	3.67	799.37	399.68	629.50	310.89	4.69	-0.41	0.014
142.00	-1.46	-0.38	0.00	-2.88	0.00	2.88	790.03	395.01	610.32	301.41	4.87	-0.41	0.011
144.00	-1.39	-0.37	0.00	-2.11	0.00	2.11	780.47	390.24	591.24	291.99	5.04	-0.41	0.009
146.00	-1.32	-0.35	0.00	-1.38	0.00	1.38	770.69	385.35	572.29	282.63	5.21	-0.42	0.007
148.00	-1.25	-0.34	0.00	-0.67	0.00	0.67	760.69	380.35	553.47	273.34	5.39	-0.42	0.004
150.00	0.00	-0.33	0.00	0.00	0.00	0.00	750.48	375.24	534.80	264.12	5.56	-0.42	0.000

Wind Loading - Shaft

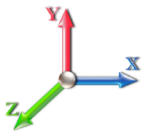
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 36	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2 RB3 RB4	1.00	0.85	7.442	8.19	205.21	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT3 RB5	1.00	0.85	7.442	8.19	204.35	1.000	0.000	1.00	3.702	3.70	30.3	0.0	174.8
2.00		1.00	0.85	7.442	8.19	203.49	1.000	0.000	1.00	3.686	3.69	30.2	0.0	174.0
4.00		1.00	0.85	7.442	8.19	201.78	1.000	0.000	2.00	7.326	7.33	60.0	0.0	345.8
6.00		1.00	0.85	7.442	8.19	200.06	1.000	0.000	2.00	7.264	7.26	59.5	0.0	342.9
8.00		1.00	0.85	7.442	8.19	198.34	1.000	0.000	2.00	7.202	7.20	59.0	0.0	339.9
10.00		1.00	0.85	7.442	8.19	196.62	1.000	0.000	2.00	7.140	7.14	58.4	0.0	337.0
12.00		1.00	0.85	7.442	8.19	194.90	1.000	0.000	2.00	7.078	7.08	57.9	0.0	334.0
14.00		1.00	0.85	7.442	8.19	193.19	1.000	0.000	2.00	7.016	7.02	57.4	0.0	331.1
14.17	RB6	1.00	0.85	7.442	8.19	193.04	1.000	0.000	0.17	0.593	0.59	4.9	0.0	28.0
16.00		1.00	0.86	7.534	8.29	192.65	1.000	0.000	1.83	6.360	6.36	52.7	0.0	300.1
17.50	RT5	1.00	0.88	7.677	8.45	193.16	1.000	0.000	1.50	5.174	5.17	43.7	0.0	244.1
18.00		1.00	0.88	7.723	8.50	193.30	1.000	0.000	0.50	1.717	1.72	14.6	0.0	81.0
20.00		1.00	0.90	7.896	8.69	193.69	1.000	0.000	2.00	6.829	6.83	59.3	0.0	322.2
20.50	RT1 RT4 RB7	1.00	0.91	7.937	8.73	193.75	1.000	0.000	0.50	1.698	1.70	14.8	0.0	80.1
22.00		1.00	0.92	8.056	8.86	193.85	1.000	0.000	1.50	5.070	5.07	44.9	0.0	239.1
24.00		1.00	0.94	8.205	9.03	193.83	1.000	0.000	2.00	6.705	6.71	60.5	0.0	316.3
26.00		1.00	0.95	8.345	9.18	193.65	1.000	0.000	2.00	6.643	6.64	61.0	0.0	313.3
28.00		1.00	0.97	8.476	9.32	193.33	1.000	0.000	2.00	6.581	6.58	61.4	0.0	310.3
30.00		1.00	0.98	8.600	9.46	192.90	1.000	0.000	2.00	6.519	6.52	61.7	0.0	307.4
32.00		1.00	1.00	8.717	9.59	192.35	1.000	0.000	2.00	6.457	6.46	61.9	0.0	304.4
34.00		1.00	1.01	8.829	9.71	191.71	1.000	0.000	2.00	6.395	6.39	62.1	0.0	301.5
36.00		1.00	1.02	8.936	9.83	190.99	1.000	0.000	2.00	6.332	6.33	62.2	0.0	298.5
37.00	RT7	1.00	1.03	8.988	9.89	190.59	1.000	0.000	1.00	3.143	3.14	31.1	0.0	148.1
38.00		1.00	1.03	9.039	9.94	190.18	1.000	0.000	1.00	3.127	3.13	31.1	0.0	147.4
40.00		1.00	1.04	9.137	10.05	189.31	1.000	0.000	2.00	6.208	6.21	62.4	0.0	292.6
42.00		1.00	1.05	9.231	10.15	188.37	1.000	0.000	2.00	6.146	6.15	62.4	0.0	289.6
43.36	RB8	1.00	1.06	9.293	10.22	187.70	1.000	0.000	1.36	4.144	4.14	42.4	0.0	195.3
43.50	Bot - Section 2	1.00	1.06	9.300	10.23	187.63	1.000	0.000	0.14	0.425	0.42	4.3	0.0	20.0
44.00		1.00	1.06	9.322	10.25	187.37	1.000	0.000	0.50	1.542	1.54	15.8	0.0	132.1
46.00		1.00	1.07	9.410	10.35	186.32	1.000	0.000	2.00	6.130	6.13	63.4	0.0	524.9
48.00		1.00	1.08	9.494	10.44	185.22	1.000	0.000	2.00	6.068	6.07	63.4	0.0	519.4
48.50	Top - Section 1	1.00	1.09	9.515	10.47	184.93	1.000	0.000	0.50	1.507	1.51	15.8	0.0	129.0
50.00	Appurtenance(s)	1.00	1.09	9.576	10.53	187.45	1.000	0.000	1.50	4.498	4.50	47.4	0.0	176.9
52.00		1.00	1.10	9.656	10.62	186.27	1.000	0.000	2.00	5.943	5.94	63.1	0.0	233.7
52.50	RB9	1.00	1.11	9.675	10.64	185.96	1.000	0.000	0.50	1.476	1.48	15.7	0.0	58.1
54.00		1.00	1.11	9.733	10.71	185.04	1.000	0.000	1.50	4.405	4.41	47.2	0.0	173.2
54.17	RT2 RT6	1.00	1.11	9.739	10.71	184.94	1.000	0.000	0.17	0.497	0.50	5.3	0.0	19.5
56.00		1.00	1.12	9.807	10.79	183.78	1.000	0.000	1.83	5.322	5.32	57.4	0.0	209.3
58.00		1.00	1.13	9.880	10.87	182.48	1.000	0.000	2.00	5.757	5.76	62.6	0.0	226.3
60.00		1.00	1.14	9.951	10.95	181.15	1.000	0.000	2.00	5.695	5.69	62.3	0.0	223.9
62.00		1.00	1.14	10.020	11.02	179.78	1.000	0.000	2.00	5.633	5.63	62.1	0.0	221.4
64.00		1.00	1.15	10.087	11.10	178.38	1.000	0.000	2.00	5.571	5.57	61.8	0.0	219.0
64.17	RB10	1.00	1.15	10.093	11.10	178.26	1.000	0.000	0.17	0.471	0.47	5.2	0.0	18.5
66.00		1.00	1.16	10.153	11.17	176.95	1.000	0.000	1.83	5.038	5.04	56.3	0.0	198.0
68.00		1.00	1.17	10.217	11.24	175.50	1.000	0.000	2.00	5.446	5.45	61.2	0.0	214.0
69.50	RT8	1.00	1.17	10.264	11.29	174.39	1.000	0.000	1.50	4.044	4.04	45.7	0.0	158.9

Wind Loading - Shaft

Structure: CT46134-A-SBA | **Code:** EIA/TIA-222-G | 10/28/2020

Site Name: Granby-n. Granby | **Exposure:** C

Height: 150.00 (ft) | **Crest Height:** 0.00

Base Elev: 0.000 (ft) | **Site Class:** D - Stiff Soil

Gh: 1.1 | **Topography:** 1 | **Struct Class:** II

Tower Engineering Solutions

70.00	RT9 RB11	1.00	1.17	10.279	11.31	174.01	1.000	0.000	0.50	1.340	1.34	15.2	0.0	52.7
72.00		1.00	1.18	10.340	11.37	172.51	1.000	0.000	2.00	5.322	5.32	60.5	0.0	209.1
74.00		1.00	1.19	10.400	11.44	170.97	1.000	0.000	2.00	5.260	5.26	60.2	0.0	206.6
76.00		1.00	1.19	10.459	11.50	169.42	1.000	0.000	2.00	5.198	5.20	59.8	0.0	204.2
76.71	RB12	1.00	1.20	10.479	11.53	168.86	1.000	0.000	0.71	1.830	1.83	21.1	0.0	71.9
76.84	Bot - Section 3	1.00	1.20	10.483	11.53	168.76	1.000	0.000	0.13	0.326	0.33	3.8	0.0	12.8
78.00		1.00	1.20	10.516	11.57	167.84	1.000	0.000	1.16	3.030	3.03	35.0	0.0	212.4
80.00		1.00	1.21	10.572	11.63	166.24	1.000	0.000	2.00	5.160	5.16	60.0	0.0	361.7
80.17	RT10	1.00	1.21	10.577	11.63	166.10	1.000	0.000	0.17	0.436	0.44	5.1	0.0	30.5
81.17	Top - Section 2	1.00	1.21	10.605	11.67	165.29	1.000	0.000	1.00	2.554	2.55	29.8	0.0	179.0
82.00		1.00	1.21	10.627	11.69	167.47	1.000	0.000	0.83	2.108	2.11	24.6	0.0	66.4
84.00		1.00	1.22	10.681	11.75	165.84	1.000	0.000	2.00	5.036	5.04	59.2	0.0	158.5
85.92	RB13	1.00	1.23	10.732	11.81	164.25	1.002 *	0.000	1.92	4.776	4.78	56.5	0.0	150.3
86.00		1.00	1.23	10.734	11.81	164.18	1.003 *	0.000	0.08	0.198	0.20	2.3	0.0	6.2
87.50	RT11	1.00	1.23	10.774	11.85	162.93	1.005 *	0.000	1.50	3.689	3.71	43.9	0.0	116.1
88.00		1.00	1.23	10.787	11.87	162.51	1.007 *	0.000	0.50	1.222	1.23	14.6	0.0	38.5
90.00	RT12	1.00	1.24	10.838	11.92	160.83	1.009 *	0.000	2.00	4.849	4.89	58.4	0.0	152.6
92.00		1.00	1.24	10.888	11.98	159.12	1.000	0.000	2.00	4.787	4.79	57.3	0.0	150.6
94.00		1.00	1.25	10.937	12.03	157.40	1.000	0.000	2.00	4.725	4.73	56.8	0.0	148.7
96.00		1.00	1.25	10.986	12.08	155.66	1.000	0.000	2.00	4.663	4.66	56.4	0.0	146.7
98.00		1.00	1.26	11.034	12.14	153.91	1.000	0.000	2.00	4.601	4.60	55.8	0.0	144.7
100.00	RT13	1.00	1.27	11.081	12.19	152.14	1.000	0.000	2.00	4.539	4.54	55.3	0.0	142.7
102.00		1.00	1.27	11.127	12.24	150.35	1.000	0.000	2.00	4.477	4.48	54.8	0.0	140.8
104.00		1.00	1.28	11.173	12.29	148.56	1.000	0.000	2.00	4.415	4.41	54.3	0.0	138.8
106.00		1.00	1.28	11.218	12.34	146.74	1.000	0.000	2.00	4.352	4.35	53.7	0.0	136.8
108.00		1.00	1.29	11.262	12.39	144.92	1.000	0.000	2.00	4.290	4.29	53.1	0.0	134.9
110.00		1.00	1.29	11.305	12.44	143.08	1.000	0.000	2.00	4.228	4.23	52.6	0.0	132.9
111.21	Bot - Section 4	1.00	1.29	11.331	12.46	141.96	1.000	0.000	1.21	2.535	2.53	31.6	0.0	79.7
112.00		1.00	1.30	11.348	12.48	141.23	1.000	0.000	0.79	1.657	1.66	20.7	0.0	90.4
114.00		1.00	1.30	11.391	12.53	139.37	1.000	0.000	2.00	4.169	4.17	52.2	0.0	227.4
114.80	Top - Section 3	1.00	1.30	11.407	12.55	138.63	1.000	0.000	0.80	1.643	1.64	20.6	0.0	89.6
115.00	Appurtenance(s)	1.00	1.30	11.412	12.55	140.65	1.000	0.000	0.20	0.418	0.42	5.2	0.0	9.9
116.00		1.00	1.31	11.432	12.58	139.71	1.000	0.000	1.00	2.046	2.05	25.7	0.0	48.3
118.00		1.00	1.31	11.474	12.62	137.83	1.000	0.000	2.00	4.044	4.04	51.0	0.0	95.5
120.00		1.00	1.32	11.514	12.67	135.94	1.000	0.000	2.00	3.982	3.98	50.4	0.0	94.1
122.00		1.00	1.32	11.554	12.71	134.04	1.000	0.000	2.00	3.920	3.92	49.8	0.0	92.6
124.00		1.00	1.32	11.594	12.75	132.12	1.000	0.000	2.00	3.858	3.86	49.2	0.0	91.1
126.00	Appurtenance(s)	1.00	1.33	11.633	12.80	130.20	1.000	0.000	2.00	3.796	3.80	48.6	0.0	89.6
128.00		1.00	1.33	11.672	12.84	128.26	1.000	0.000	2.00	3.734	3.73	47.9	0.0	88.1
130.00		1.00	1.34	11.710	12.88	126.31	1.000	0.000	2.00	3.672	3.67	47.3	0.0	86.7
132.00		1.00	1.34	11.748	12.92	124.36	1.000	0.000	2.00	3.610	3.61	46.6	0.0	85.2
134.00		1.00	1.35	11.785	12.96	122.39	1.000	0.000	2.00	3.548	3.55	46.0	0.0	83.7
136.00		1.00	1.35	11.822	13.00	120.42	1.000	0.000	2.00	3.485	3.49	45.3	0.0	82.2
138.00	Appurtenance(s)	1.00	1.35	11.858	13.04	118.44	1.000	0.000	2.00	3.423	3.42	44.7	0.0	80.7
140.00		1.00	1.36	11.894	13.08	116.44	1.000	0.000	2.00	3.361	3.36	44.0	0.0	79.3
142.00		1.00	1.36	11.930	13.12	114.44	1.000	0.000	2.00	3.299	3.30	43.3	0.0	77.8
144.00		1.00	1.37	11.965	13.16	112.43	1.000	0.000	2.00	3.237	3.24	42.6	0.0	76.3
146.00		1.00	1.37	12.000	13.20	110.41	1.000	0.000	2.00	3.175	3.17	41.9	0.0	74.8
148.00		1.00	1.37	12.034	13.24	108.39	1.000	0.000	2.00	3.113	3.11	41.2	0.0	73.4
150.00	Appurtenance(s)	1.00	1.38	12.068	13.27	106.35	1.000	0.000	2.00	3.051	3.05	40.5	0.0	71.9
								Totals:	**150.00**			**4,220.4**		**16,190.3**

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

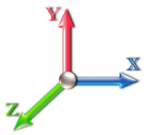
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 38	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	150.00	3' Yagi	1	12.068	13.275	1.00	1.00	2.98	10.00	0.000	0.000	39.56	0.00	0.00
2	150.00	10' Dipole	1	12.152	13.367	1.00	1.00	3.76	30.00	0.000	5.000	50.26	0.00	251.30
3	150.00	18' Omni	1	12.217	13.439	1.00	1.00	5.40	55.00	0.000	9.000	72.57	0.00	653.13
4	150.00	10' Omni	1	12.152	13.367	1.00	1.00	3.00	25.00	0.000	5.000	40.10	0.00	200.50
5	150.00	Low Profile Platform-flat	1	12.068	13.275	1.00	1.00	34.00	1200.00	0.000	0.000	451.35	0.00	0.00
6	138.00	LGP 21901	6	11.858	13.044	0.38	0.75	0.52	33.00	0.000	0.000	6.75	0.00	0.00
7	138.00	RRUS-11 700MHz	3	11.858	13.044	0.38	0.75	2.83	153.00	0.000	0.000	36.98	0.00	0.00
8	138.00	DMP65R-BU8DA	3	11.858	13.044	0.55	0.75	28.42	287.10	0.000	0.000	370.73	0.00	0.00
9	138.00	TT19-08BP111-001	6	11.858	13.044	0.38	0.75	1.44	96.00	0.000	0.000	18.78	0.00	0.00
10	138.00	7770.00	3	11.858	13.044	0.58	0.75	9.53	105.00	0.000	0.000	124.29	0.00	0.00
11	138.00	Low Profile Platform-flat	1	11.858	13.044	1.00	1.00	34.00	1200.00	0.000	0.000	443.50	0.00	0.00
12	138.00	B2 B66A 8843	3	11.858	13.044	0.38	0.75	1.84	210.00	0.000	0.000	24.07	0.00	0.00
13	138.00	HPA-65R-BU8A	3	11.858	13.044	0.67	0.75	22.43	162.00	0.000	0.000	292.55	0.00	0.00
14	138.00	4449 B5/B12	3	11.858	13.044	0.38	0.75	2.22	213.00	0.000	0.000	28.91	0.00	0.00
15	138.00	DC9-48-60-24-8C-EV	1	11.858	13.044	0.75	0.75	0.85	26.20	0.000	0.000	11.15	0.00	0.00
16	138.00	HRK12 (Handrail Kit)	1	11.858	13.044	1.00	1.00	6.75	261.72	0.000	0.000	88.05	0.00	0.00
17	138.00	PRK-1245 (kicker kit)	1	11.858	13.044	1.00	1.00	9.50	464.91	0.000	0.000	123.92	0.00	0.00
18	126.00	APXVSPP18-C-A20	3	11.633	12.797	0.40	0.80	9.62	171.00	0.000	0.000	123.15	0.00	0.00
19	126.00	ACU-A20-N	4	11.633	12.797	0.40	0.80	0.22	4.00	0.000	0.000	2.87	0.00	0.00
20	126.00	TD-RRH8x20-25	3	11.633	12.797	0.40	0.80	4.86	210.00	0.000	0.000	62.19	0.00	0.00
21	126.00	800 MHz	3	11.633	12.797	0.40	0.80	2.99	159.00	0.000	0.000	38.24	0.00	0.00
22	126.00	1900MHz	3	11.633	12.797	0.40	0.80	4.56	132.00	0.000	0.000	58.35	0.00	0.00
23	126.00	APXVTM14-C-120	3	11.633	12.797	0.62	0.80	11.87	168.00	0.000	0.000	151.88	0.00	0.00
24	126.00	Low Profile Platform-flat	1	11.633	12.797	1.00	1.00	34.00	1200.00	0.000	0.000	435.08	0.00	0.00
25	126.00	800MHz Filter	3	11.633	12.797	0.40	0.80	0.94	26.40	0.000	0.000	11.98	0.00	0.00
26	115.00	AIR32	4	11.412	12.553	0.68	0.75	17.73	528.80	0.000	0.000	222.60	0.00	0.00
27	115.00	Radio 4415 B25	4	11.412	12.553	0.38	0.75	2.79	185.20	0.000	0.000	35.02	0.00	0.00
28	115.00	F4P-12W	1	11.412	12.553	1.00	1.00	63.31	3100.00	0.000	0.000	794.72	0.00	0.00
29	115.00	F4P-HRK12	1	11.412	12.553	1.00	1.00	7.57	507.00	0.000	0.000	95.02	0.00	0.00
30	115.00	AIR6449 B41	4	11.412	12.553	0.53	0.75	12.03	412.00	0.000	0.000	151.07	0.00	0.00
31	115.00	APXVAARR24_43-U-NA2	4	11.412	12.553	0.61	0.75	49.18	396.00	0.000	0.000	617.39	0.00	0.00
32	115.00	KRY 112 489/2	4	11.412	12.553	0.38	0.75	0.96	61.60	0.000	0.000	12.05	0.00	0.00
33	115.00	Radio 4449 B71 + B12	4	11.412	12.553	0.38	0.75	2.47	280.00	0.000	0.000	31.07	0.00	0.00
34	50.00	GPS	1	9.576	10.534	1.00	1.00	0.01	1.00	0.000	0.000	0.11	0.00	0.00
35	50.00	Standoff	1	9.576	10.534	1.00	1.00	1.50	50.00	0.000	0.000	15.80	0.00	0.00
36	20.50	Splice Plate	2	7.937	8.731	0.94	1.00	7.20	552.00	0.000	0.000	62.87	0.00	0.00
							Totals:		**12,675.93**			**5,144.96**		

Total Applied Force Summary

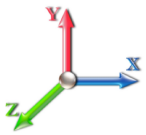
Structure:	CT46134-A-SBA		**Code:**	EIA/TIA-222-G	10/28/2020
Site Name:	Granby-n. Granby		**Exposure:**	C	
Height:	150.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 39

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		30.30	200.68	0.00	0.00
2.00		30.18	199.94	0.00	0.00
4.00		59.97	397.67	0.00	0.00
6.00		59.47	394.71	0.00	0.00
8.00		58.96	391.75	0.00	0.00
10.00		58.45	388.79	0.00	0.00
12.00		57.94	385.83	0.00	0.00
14.00		57.43	382.87	0.00	0.00
14.17		4.86	32.41	0.00	0.00
16.00		52.71	347.51	0.00	0.00
17.50		43.70	283.00	0.00	0.00
18.00		14.59	93.96	0.00	0.00
20.00		59.32	374.00	0.00	0.00
20.50	(2) attachments	77.69	645.04	0.00	0.00
22.00		44.93	278.00	0.00	0.00
24.00		60.52	368.08	0.00	0.00
26.00		60.98	365.12	0.00	0.00
28.00		61.36	362.17	0.00	0.00
30.00		61.67	359.21	0.00	0.00
32.00		61.91	356.25	0.00	0.00
34.00		62.11	353.29	0.00	0.00
36.00		62.25	350.33	0.00	0.00
37.00		31.07	174.06	0.00	0.00
38.00		31.09	173.32	0.00	0.00
40.00		62.40	344.42	0.00	0.00
42.00		62.41	341.46	0.00	0.00
43.36		42.36	230.50	0.00	0.00
43.50		4.35	23.65	0.00	0.00
44.00		15.81	145.02	0.00	0.00
46.00		63.45	576.68	0.00	0.00
48.00		63.37	571.26	0.00	0.00
48.50		15.78	141.97	0.00	0.00
50.00	(2) attachments	63.29	266.79	0.00	0.00
52.00		63.13	285.57	0.00	0.00
52.50		15.71	71.01	0.00	0.00
54.00		47.16	212.09	0.00	0.00
54.17		5.32	23.95	0.00	0.00
56.00		57.42	256.69	0.00	0.00
58.00		62.57	278.17	0.00	0.00
60.00		62.34	275.71	0.00	0.00
62.00		62.08	273.24	0.00	0.00
64.00		61.81	270.77	0.00	0.00
64.17		5.23	22.90	0.00	0.00
66.00		56.26	245.41	0.00	0.00
68.00		61.21	265.84	0.00	0.00
69.50		45.66	197.77	0.00	0.00

Total Applied Force Summary

Structure:	CT46134-A-SBA		**Code:**	EIA/TIA-222-G	10/28/2020
Site Name:	Granby-n. Granby		**Exposure:**	C	
Height:	150.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 40

Tower Engineering Solutions

70.00		15.15	65.61	0.00	0.00
72.00		60.54	260.91	0.00	0.00
74.00		60.18	258.45	0.00	0.00
76.00		59.80	255.98	0.00	0.00
76.71		21.10	90.28	0.00	0.00
76.84		3.76	16.07	0.00	0.00
78.00		35.05	242.57	0.00	0.00
80.00		60.01	413.52	0.00	0.00
80.17		5.07	34.94	0.00	0.00
81.17		29.79	204.91	0.00	0.00
82.00		24.64	87.87	0.00	0.00
84.00		59.17	210.34	0.00	0.00
85.92		56.47	200.07	0.00	0.00
86.00		2.34	8.30	0.00	0.00
87.50		43.94	154.98	0.00	0.00
88.00		14.60	51.41	0.00	0.00
90.00		58.35	204.43	0.00	0.00
92.00		57.34	202.45	0.00	0.00
94.00		56.85	200.48	0.00	0.00
96.00		56.35	198.51	0.00	0.00
98.00		55.84	196.54	0.00	0.00
100.00		55.32	194.57	0.00	0.00
102.00		54.79	192.59	0.00	0.00
104.00		54.25	190.62	0.00	0.00
106.00		53.71	188.65	0.00	0.00
108.00		53.15	186.68	0.00	0.00
110.00		52.58	184.70	0.00	0.00
111.21		31.60	111.09	0.00	0.00
112.00		20.68	110.79	0.00	0.00
114.00		52.23	279.26	0.00	0.00
114.80		20.62	110.28	0.00	0.00
115.00	(26) attachments	1964.18	5485.74	0.00	0.00
116.00		25.72	63.28	0.00	0.00
118.00		51.05	125.45	0.00	0.00
120.00		50.44	123.97	0.00	0.00
122.00		49.83	122.49	0.00	0.00
124.00		49.20	121.01	0.00	0.00
126.00	(23) attachments	932.31	2189.93	0.00	0.00
128.00		47.94	112.33	0.00	0.00
130.00		47.30	110.85	0.00	0.00
132.00		46.65	109.37	0.00	0.00
134.00		45.99	107.89	0.00	0.00
136.00		45.32	106.41	0.00	0.00
138.00	(34) attachments	1614.33	3316.86	0.00	0.00
140.00		43.98	81.27	0.00	0.00
142.00		43.29	79.79	0.00	0.00
144.00		42.60	78.31	0.00	0.00
146.00		41.91	76.83	0.00	0.00
148.00		41.20	75.35	0.00	0.00
150.00	(5) attachments	694.34	1393.87	0.00	1104.93
	Totals:	**9,365.37**	**32,167.68**	**0.00**	**1,104.93**

Linear Appurtenance Segment Forces (Factored)

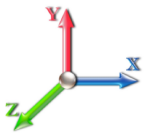
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 41	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.034	0.000	7.442	0.00	0.00
2.00	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.25	0.00	0.068	0.000	7.442	0.00	0.00
4.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.068	0.000	7.442	0.00	0.00
6.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.069	0.000	7.442	0.00	0.00
8.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.069	0.000	7.442	0.00	0.00
10.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.070	0.000	7.442	0.00	0.00
12.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.071	0.000	7.442	0.00	0.00
14.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.071	0.000	7.442	0.00	0.00
14.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.072	0.000	7.442	0.00	0.00
16.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	0.46	0.00	0.072	0.000	7.534	0.00	0.00
17.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.072	0.000	7.677	0.00	0.00
18.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.073	0.000	7.723	0.00	0.00
20.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.073	0.000	7.896	0.00	0.00
20.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.074	0.000	7.937	0.00	0.00
22.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.074	0.000	8.056	0.00	0.00
24.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.075	0.000	8.205	0.00	0.00
26.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.075	0.000	8.345	0.00	0.00
28.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.076	0.000	8.476	0.00	0.00
30.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.077	0.000	8.600	0.00	0.00
32.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.077	0.000	8.717	0.00	0.00
34.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.078	0.000	8.829	0.00	0.00
36.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.079	0.000	8.936	0.00	0.00
37.00	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.25	0.00	0.080	0.000	8.988	0.00	0.00
38.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.067	0.000	9.039	0.00	0.00
40.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.067	0.000	9.137	0.00	0.00
42.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.068	0.000	9.231	0.00	0.00
43.36	1.25" Reinforcing	Yes	1.36	0.000	2.50	0.28	0.00	0.068	0.000	9.293	0.00	0.00
43.50	1.5" Reinforcing Plate	Yes	0.10	0.000	3.00	0.03	0.00	0.078	0.000	9.300	0.00	0.00
43.50	1.25" Reinforcing	Yes	0.04	0.000	2.50	0.01	0.00	0.078	0.000	9.300	0.00	0.00
44.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.082	0.000	9.322	0.00	0.00
46.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.083	0.000	9.410	0.00	0.00
48.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.084	0.000	9.494	0.00	0.00
48.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.084	0.000	9.515	0.00	0.00
50.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.083	0.000	9.576	0.00	0.00
52.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.084	0.000	9.656	0.00	0.00
52.50	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.085	0.000	9.675	0.00	0.00
54.00	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.085	0.000	9.733	0.00	0.00
54.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.086	0.000	9.739	0.00	0.00
56.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	0.46	0.00	0.086	0.000	9.807	0.00	0.00
58.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.087	0.000	9.880	0.00	0.00
60.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.088	0.000	9.951	0.00	0.00
62.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.089	0.000	10.020	0.00	0.00
64.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.090	0.000	10.087	0.00	0.00
64.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.090	0.000	10.093	0.00	0.00
66.00	1.5" Reinforcing Plate	Yes	1.83	0.000	3.00	0.46	0.00	0.091	0.000	10.153	0.00	0.00
68.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.092	0.000	10.217	0.00	0.00
69.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.093	0.000	10.264	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

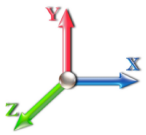
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 42	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
70.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.078	0.000	10.279	0.00	0.00
72.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.078	0.000	10.340	0.00	0.00
74.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.079	0.000	10.400	0.00	0.00
76.00	1.25" Reinforcing	Yes	2.00	0.000	2.50	0.42	0.00	0.080	0.000	10.459	0.00	0.00
76.71	1.5" Reinforcing Plate	Yes	0.01	0.000	3.00	0.00	0.00	0.081	0.000	10.479	0.00	0.00
76.71	1.25" Reinforcing	Yes	0.70	0.000	2.50	0.15	0.00	0.081	0.000	10.479	0.00	0.00
76.84	1.5" Reinforcing Plate	Yes	0.13	0.000	3.00	0.03	0.00	0.097	0.000	10.483	0.00	0.00
78.00	1.5" Reinforcing Plate	Yes	1.16	0.000	3.00	0.29	0.00	0.098	0.000	10.516	0.00	0.00
80.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.099	0.000	10.572	0.00	0.00
80.17	1.5" Reinforcing Plate	Yes	0.17	0.000	3.00	0.04	0.00	0.099	0.000	10.577	0.00	0.00
81.17	1.5" Reinforcing Plate	Yes	1.00	0.000	3.00	0.25	0.00	0.100	0.000	10.605	0.00	0.00
82.00	1.5" Reinforcing Plate	Yes	0.83	0.000	3.00	0.21	0.00	0.098	0.000	10.627	0.00	0.00
84.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.099	0.000	10.681	0.00	0.00
85.92	1.5" Reinforcing Plate	Yes	1.92	0.000	3.00	0.48	0.00	0.101	1.002	10.732	0.00	0.00
86.00	1.5" Reinforcing Plate	Yes	0.08	0.000	3.00	0.02	0.00	0.101	1.003	10.734	0.00	0.00
87.50	1.5" Reinforcing Plate	Yes	1.50	0.000	3.00	0.38	0.00	0.102	1.005	10.774	0.00	0.00
88.00	1.5" Reinforcing Plate	Yes	0.50	0.000	3.00	0.13	0.00	0.102	1.007	10.787	0.00	0.00
90.00	1.5" Reinforcing Plate	Yes	2.00	0.000	3.00	0.50	0.00	0.103	1.009	10.838	0.00	0.00
										Totals:	**0.0**	**0.0**

Calculated Forces

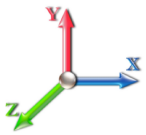
Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 43	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

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 Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-32.17	-9.37	0.00	-989.72	0.00	989.72	3406.69	1703.35	5989.16	2957.82	0.00	0.000	0.000	0.208
1.00	-31.96	-9.35	0.00	-980.36	0.00	980.36	3398.78	1699.39	5949.79	2938.38	0.00	-0.014	0.000	0.197
2.00	-31.76	-9.33	0.00	-971.01	0.00	971.01	3390.81	1695.40	5910.44	2918.95	0.01	-0.028	0.000	0.196
4.00	-31.36	-9.28	0.00	-952.36	0.00	952.36	3374.70	1687.35	5831.83	2880.12	0.02	-0.055	0.000	0.194
6.00	-30.96	-9.24	0.00	-933.80	0.00	933.80	3358.38	1679.19	5753.31	2841.35	0.05	-0.082	0.000	0.192
8.00	-30.56	-9.19	0.00	-915.33	0.00	915.33	3341.83	1670.92	5674.92	2802.63	0.09	-0.109	0.000	0.190
10.00	-30.17	-9.15	0.00	-896.94	0.00	896.94	3325.07	1662.53	5596.65	2763.98	0.14	-0.136	0.000	0.188
12.00	-29.78	-9.10	0.00	-878.65	0.00	878.65	3308.08	1654.04	5518.52	2725.39	0.21	-0.163	0.000	0.186
14.00	-29.40	-9.05	0.00	-860.45	0.00	860.45	3290.88	1645.44	5440.53	2686.87	0.28	-0.191	0.000	0.184
14.17	-29.36	-9.05	0.00	-858.91	0.00	858.91	3289.41	1644.70	5433.91	2683.60	0.29	-0.193	0.000	0.170
16.00	-29.01	-9.01	0.00	-842.35	0.00	842.35	3273.46	1636.73	5362.70	2648.44	0.37	-0.216	0.000	0.168
17.50	-28.73	-8.97	0.00	-828.84	0.00	828.84	3260.25	1630.12	5304.43	2619.66	0.44	-0.235	0.000	0.180
18.00	-28.63	-8.96	0.00	-824.35	0.00	824.35	3255.82	1627.91	5285.03	2610.08	0.46	-0.242	0.000	0.180
20.00	-28.25	-8.91	0.00	-806.43	0.00	806.43	3237.96	1618.98	5207.54	2571.81	0.57	-0.270	0.000	0.178
20.50	-27.61	-8.84	0.00	-801.97	0.00	801.97	3233.46	1616.73	5188.20	2562.26	0.60	-0.277	0.000	0.145
22.00	-27.33	-8.80	0.00	-788.72	0.00	788.72	3219.87	1609.94	5130.24	2533.63	0.69	-0.293	0.000	0.144
24.00	-26.95	-8.75	0.00	-771.12	0.00	771.12	3201.57	1600.79	5053.13	2495.55	0.82	-0.316	0.000	0.142
26.00	-26.59	-8.69	0.00	-753.63	0.00	753.63	3183.05	1591.53	4976.22	2457.57	0.95	-0.338	0.000	0.140
28.00	-26.22	-8.64	0.00	-736.24	0.00	736.24	3164.31	1582.16	4899.54	2419.70	1.10	-0.360	0.000	0.138
30.00	-25.86	-8.59	0.00	-718.96	0.00	718.96	3145.35	1572.68	4823.07	2381.93	1.26	-0.383	0.000	0.136
32.00	-25.50	-8.53	0.00	-701.79	0.00	701.79	3126.18	1563.09	4746.84	2344.29	1.42	-0.405	0.000	0.134
34.00	-25.14	-8.48	0.00	-684.72	0.00	684.72	3106.78	1553.39	4670.86	2306.76	1.60	-0.427	0.000	0.132
36.00	-24.79	-8.42	0.00	-667.77	0.00	667.77	3087.16	1543.58	4595.12	2269.36	1.78	-0.450	0.000	0.130
37.00	-24.62	-8.39	0.00	-659.35	0.00	659.35	3077.27	1538.63	4557.36	2250.71	1.87	-0.461	0.000	0.180
38.00	-24.44	-8.37	0.00	-650.95	0.00	650.95	3067.32	1533.66	4519.66	2232.09	1.97	-0.476	0.000	0.178
40.00	-24.09	-8.32	0.00	-634.21	0.00	634.21	3047.27	1523.63	4444.46	2194.95	2.18	-0.507	0.000	0.176
42.00	-23.75	-8.26	0.00	-617.58	0.00	617.58	3026.99	1513.49	4369.56	2157.96	2.40	-0.538	0.000	0.173
43.36	-23.51	-8.22	0.00	-606.34	0.00	606.34	3013.08	1506.54	4318.79	2132.89	2.55	-0.559	0.000	0.123
43.50	-23.49	-8.22	0.00	-605.19	0.00	605.19	3011.64	1505.82	4313.57	2130.31	2.57	-0.560	0.000	0.123
44.00	-23.34	-8.21	0.00	-601.08	0.00	601.08	3006.49	1503.25	4294.94	2121.11	2.63	-0.566	0.000	0.120
46.00	-22.76	-8.15	0.00	-584.66	0.00	584.66	2985.78	1492.89	4220.63	2084.41	2.87	-0.587	0.000	0.118
48.00	-22.19	-8.08	0.00	-568.37	0.00	568.37	2964.84	1482.42	4146.63	2047.87	3.12	-0.609	0.000	0.116
48.50	-22.05	-8.07	0.00	-564.32	0.00	564.32	2330.75	1165.37	3323.66	1641.43	3.19	-0.614	0.000	0.127
50.00	-21.78	-8.01	0.00	-552.22	0.00	552.22	2320.40	1160.20	3282.84	1621.27	3.38	-0.630	0.000	0.131
52.00	-21.49	-7.95	0.00	-536.20	0.00	536.20	2306.40	1153.20	3228.50	1594.43	3.65	-0.653	0.000	0.128
52.50	-21.42	-7.94	0.00	-532.22	0.00	532.22	2302.87	1151.43	3214.93	1587.73	3.72	-0.658	0.000	0.106
54.00	-21.21	-7.89	0.00	-520.31	0.00	520.31	2292.19	1146.09	3174.27	1567.65	3.93	-0.672	0.000	0.104
54.17	-21.18	-7.89	0.00	-518.97	0.00	518.97	2290.97	1145.49	3169.67	1565.38	3.95	-0.674	0.000	0.142
56.00	-20.92	-7.84	0.00	-504.54	0.00	504.54	2277.76	1138.88	3120.17	1540.93	4.22	-0.696	0.000	0.139
58.00	-20.64	-7.78	0.00	-488.86	0.00	488.86	2263.10	1131.55	3066.20	1514.28	4.51	-0.721	0.000	0.136
60.00	-20.36	-7.72	0.00	-473.30	0.00	473.30	2248.23	1124.12	3012.38	1487.70	4.82	-0.746	0.000	0.133
62.00	-20.09	-7.67	0.00	-457.85	0.00	457.85	2233.14	1116.57	2958.71	1461.20	5.14	-0.770	0.000	0.130
64.00	-19.82	-7.61	0.00	-442.52	0.00	442.52	2217.83	1108.92	2905.21	1434.77	5.47	-0.794	0.000	0.127
64.17	-19.79	-7.60	0.00	-441.23	0.00	441.23	2216.52	1108.26	2900.67	1432.53	5.49	-0.796	0.000	0.097
66.00	-19.55	-7.55	0.00	-427.31	0.00	427.31	2202.30	1101.15	2851.88	1408.44	5.80	-0.813	0.000	0.095
68.00	-19.28	-7.49	0.00	-412.21	0.00	412.21	2186.55	1093.28	2798.74	1382.19	6.15	-0.831	0.000	0.093
69.50	-19.08	-7.44	0.00	-400.98	0.00	400.98	2174.60	1087.30	2759.01	1362.57	6.41	-0.845	0.000	0.125
70.00	-19.01	-7.43	0.00	-397.26	0.00	397.26	2170.58	1085.29	2745.79	1356.04	6.50	-0.851	0.000	0.125

Calculated Forces

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 44

Tower Engineering Solutions

72.00	-18.75	-7.38	0.00	-382.39	0.00	382.39	2154.39	1077.20	2693.05	1329.99	6.86	-0.876	0.000	0.121
74.00	-18.49	-7.32	0.00	-367.63	0.00	367.63	2137.99	1068.99	2640.51	1304.05	7.23	-0.900	0.000	0.118
76.00	-18.23	-7.26	0.00	-352.99	0.00	352.99	2121.36	1060.68	2588.21	1278.22	7.62	-0.924	0.000	0.115
76.71	-18.14	-7.24	0.00	-347.84	0.00	347.84	2115.40	1057.70	2569.69	1269.07	7.75	-0.933	0.000	0.086
76.84	-18.13	-7.24	0.00	-346.92	0.00	346.92	2114.34	1057.17	2566.39	1267.45	7.78	-0.934	0.000	0.086
78.00	-17.88	-7.20	0.00	-338.50	0.00	338.50	2104.51	1052.26	2536.13	1252.50	8.01	-0.944	0.000	0.083
80.00	-17.47	-7.14	0.00	-324.09	0.00	324.09	2087.45	1043.72	2484.30	1226.90	8.41	-0.961	0.000	0.080
80.17	-17.43	-7.14	0.00	-322.88	0.00	322.88	2085.98	1042.99	2479.91	1224.73	8.44	-0.963	0.000	0.107
81.17	-17.23	-7.11	0.00	-315.74	0.00	315.74	1538.24	769.12	1857.13	917.17	8.64	-0.975	0.000	0.118
82.00	-17.14	-7.09	0.00	-309.84	0.00	309.84	1534.07	767.04	1842.56	909.97	8.81	-0.984	0.000	0.124
84.00	-16.92	-7.03	0.00	-295.67	0.00	295.67	1523.87	761.94	1807.49	892.65	9.23	-1.008	0.000	0.120
85.92	-16.72	-6.97	0.00	-282.17	0.00	282.17	1513.87	756.94	1773.86	876.04	9.64	-1.030	0.000	0.088
86.00	-16.72	-6.97	0.00	-281.62	0.00	281.62	1513.45	756.73	1772.46	875.35	9.66	-1.031	0.000	0.088
87.50	-16.56	-6.93	0.00	-271.16	0.00	271.16	1505.49	752.75	1746.23	862.40	9.98	-1.044	0.000	0.110
88.00	-16.51	-6.92	0.00	-267.69	0.00	267.69	1502.81	751.41	1737.49	858.08	10.09	-1.050	0.000	0.109
90.00	-16.30	-6.86	0.00	-253.86	0.00	253.86	1491.95	745.98	1702.59	840.84	10.54	-1.072	0.000	0.163
92.00	-16.10	-6.81	0.00	-240.13	0.00	240.13	1480.87	740.44	1667.76	823.65	11.00	-1.106	0.000	0.156
94.00	-15.89	-6.76	0.00	-226.51	0.00	226.51	1469.57	734.79	1633.03	806.49	11.47	-1.138	0.000	0.150
96.00	-15.69	-6.71	0.00	-212.99	0.00	212.99	1458.05	729.03	1598.39	789.39	11.95	-1.170	0.000	0.143
98.00	-15.49	-6.66	0.00	-199.58	0.00	199.58	1446.32	723.16	1563.86	772.33	12.45	-1.201	0.000	0.136
100.00	-15.30	-6.60	0.00	-186.27	0.00	186.27	1434.36	717.18	1529.45	755.34	12.96	-1.231	0.000	0.129
102.00	-15.10	-6.56	0.00	-173.06	0.00	173.06	1422.18	711.09	1495.16	738.41	13.48	-1.260	0.000	0.245
104.00	-14.90	-6.51	0.00	-159.95	0.00	159.95	1409.79	704.89	1461.02	721.54	14.02	-1.315	0.000	0.232
106.00	-14.71	-6.47	0.00	-146.92	0.00	146.92	1397.17	698.58	1427.02	704.75	14.58	-1.369	0.000	0.219
108.00	-14.52	-6.42	0.00	-133.99	0.00	133.99	1384.33	692.17	1393.17	688.04	15.16	-1.420	0.000	0.205
110.00	-14.33	-6.37	0.00	-121.14	0.00	121.14	1371.28	685.64	1359.50	671.40	15.77	-1.468	0.000	0.191
111.21	-14.22	-6.35	0.00	-113.41	0.00	113.41	1363.25	681.63	1339.15	661.36	16.15	-1.496	0.000	0.182
112.00	-14.11	-6.33	0.00	-108.42	0.00	108.42	1358.00	679.00	1326.00	654.86	16.40	-1.514	0.000	0.176
114.00	-13.82	-6.28	0.00	-95.76	0.00	95.76	1344.51	672.26	1292.68	638.41	17.04	-1.556	0.000	0.160
114.80	-13.71	-6.26	0.00	-90.76	0.00	90.76	898.25	449.12	876.91	433.07	17.30	-1.573	0.000	0.225
115.00	-8.28	-4.14	0.00	-89.48	0.00	89.48	897.59	448.79	874.90	432.08	17.37	-1.577	0.000	0.216
116.00	-8.22	-4.12	0.00	-85.34	0.00	85.34	894.32	447.16	865.01	427.20	17.70	-1.601	0.000	0.209
118.00	-8.09	-4.07	0.00	-77.10	0.00	77.10	887.61	443.81	845.23	417.43	18.38	-1.648	0.000	0.194
120.00	-7.97	-4.03	0.00	-68.95	0.00	68.95	880.69	440.34	825.45	407.66	19.08	-1.692	0.000	0.178
122.00	-7.84	-3.98	0.00	-60.90	0.00	60.90	873.54	436.77	805.67	397.89	19.80	-1.733	0.000	0.162
124.00	-7.72	-3.93	0.00	-52.94	0.00	52.94	866.18	433.09	785.90	388.13	20.53	-1.770	0.000	0.145
126.00	-5.56	-2.93	0.00	-45.08	0.00	45.08	858.60	429.30	766.16	378.38	21.28	-1.804	0.000	0.126
128.00	-5.45	-2.88	0.00	-39.22	0.00	39.22	850.80	425.40	746.46	368.65	22.04	-1.835	0.000	0.113
130.00	-5.34	-2.84	0.00	-33.45	0.00	33.45	842.77	421.39	726.80	358.94	22.82	-1.863	0.000	0.100
132.00	-5.23	-2.79	0.00	-27.78	0.00	27.78	834.53	417.27	707.19	349.25	23.61	-1.887	0.000	0.086
134.00	-5.12	-2.74	0.00	-22.21	0.00	22.21	826.07	413.04	687.65	339.60	24.40	-1.909	0.000	0.072
136.00	-5.01	-2.69	0.00	-16.73	0.00	16.73	817.39	408.69	668.18	329.99	25.20	-1.926	0.000	0.057
138.00	-1.75	-0.97	0.00	-11.35	0.00	11.35	808.49	404.24	648.79	320.41	26.01	-1.940	0.000	0.038
140.00	-1.67	-0.92	0.00	-9.41	0.00	9.41	799.37	399.68	629.50	310.89	26.83	-1.950	0.000	0.032
142.00	-1.60	-0.87	0.00	-7.57	0.00	7.57	790.03	395.01	610.32	301.41	27.65	-1.959	0.000	0.027
144.00	-1.52	-0.83	0.00	-5.82	0.00	5.82	780.47	390.24	591.24	291.99	28.47	-1.966	0.000	0.022
146.00	-1.44	-0.79	0.00	-4.16	0.00	4.16	770.69	385.35	572.29	282.63	29.29	-1.972	0.000	0.017
148.00	-1.37	-0.74	0.00	-2.59	0.00	2.59	760.69	380.35	553.47	273.34	30.12	-1.977	0.000	0.011
150.00	0.00	-0.69	0.00	-1.10	0.00	1.10	750.48	375.24	534.80	264.12	30.95	-1.979	0.000	0.004

Final Analysis Summary

Structure:	CT46134-A-SBA	**Code:**	EIA/TIA-222-G	10/28/2020	
Site Name:	Granby-n. Granby	**Exposure:**	C		
Height:	150.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 45	

Tower Engineering Solutions

Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.6W 93 mph Wind	36.0	0.00	38.58	0.00	0.00	3824.45
1.2D + 1.0Di + 1.0Wi 50 mph Wind	10.6	0.00	71.68	0.00	0.00	1244.60
1.2D + 1.0E	1.3	0.00	38.60	0.00	0.00	150.13
0.9D + 1.0E	1.3	0.00	28.95	0.00	0.00	148.43
1.0D + 1.0W 60 mph Wind	9.4	0.00	32.17	0.00	0.00	989.72

Max Stresses

Load Case	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)	Elev (ft)	Stress Ratio
1.2D + 1.6W 93 mph Wind	-16.15	-25.40	0.00	-669.86	0.00	-669.86	1422.18	711.09	1495.16	738.41	102.00	0.920
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-39.95	-8.83	0.00	-242.06	0.00	-242.06	1422.18	711.09	1495.16	738.41	102.00	0.356
1.2D + 1.0E	-16.65	-1.00	0.00	-25.72	0.00	-25.72	898.25	449.12	876.91	433.07	114.80	0.078
0.9D + 1.0E	-12.49	-0.98	0.00	-25.38	0.00	-25.38	898.25	449.12	876.91	433.07	114.80	0.073
1.0D + 1.0W 60 mph Wind	-15.10	-6.56	0.00	-173.06	0.00	-173.06	1422.18	711.09	1495.16	738.41	102.00	0.245

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	Lower Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Upper Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Max Member Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
0.0	20.5	(1) PLT-7.25"x1.25(1.25hole)	293.7	5.29	37.1	354.7	37.1	10	13	258.5	37.1	7	13	354.73	499.7	450.00	0.788
0.0	54.2	(2) PLT-7.25"x1.25(1.25hole)	-473.6	-8.52	37.1	402.8	37.1	11	13	240.4	37.1	7	13	433.32	499.7	450.00	0.963
0.0	1.0	(1) SOL-1 3/4" William R71	-223.1	-2.68	25.3	125.6	25.3	5	0	282.3	25.3			125.58	288.5	298.82	0.435
0.0	20.5	(2) PLT-6.5x1.5(31mm Hole)	-310.5	-4.66	37.1	372.3	37.1	11	12	337.5	37.1	10	11	372.34	429.2	386.10	0.964
1.0	17.5	(1) LNP-LP6X125-B-20T	-235.5	-5.65	25.3	282.3	25.3			243.1	25.3	10	10	282.27	395.0	360.94	0.782
14.2	54.2	(1) PLT-7.25"x1.25(1.25hole)	473.6	8.52	37.1	313.6	37.1	9	13	240.4	37.1	7	13	433.32	499.7	450.00	0.963
20.5	37.0	(3) PLT-5.75x1.5(31mm Hole)	316.7	5.70	37.1	324.7	37.1	9	11	299.1	37.1	9	11	324.68	376.1	331.26	0.980
43.4	69.5	(3) PLT-5.75x1.5(31mm Hole)	414.0	7.45	37.1	287.9	37.1	8	11	208.6	37.1	6	9	314.13	376.1	331.26	0.948
52.5	70.0	(3) LNP-LP6X100-G-20TC	306.4	7.35	25.3	160.2	25.3	7	8	196.5	25.3			215.44	297.8	288.75	0.746
64.2	80.2	(3) PLT-6"X1-1/4"(1.25" Hole	-397.6	-7.16	37.1	190.5	37.1	6	11	164.3	37.1	5	11	248.88	413.6	356.25	0.699
70.0	87.5	(3) LNP-LP6X100-G-20CT	352.4	8.46	25.3	196.5	25.3			127.0	25.3	6	8	196.53	297.8	288.75	0.681
76.7	90.0	(3) PLT-4.75x1.5(31mm Hole)	426.6	10.24	37.1	166.1	37.1	5	8	189.3	37.1	6	7	219.64	303.1	258.13	0.851
85.9	100.0	(3) PLT-5"x1-1/4"(1.25"Hole)	-615.1	-14.76	37.1	137.2	37.1	4	9	208.1	37.1	6	9	256.38	329.1	281.25	0.912

Monopole Mat Foundation Design

			Date: 10/28/2020
Customer Name:	T-Mobile	**EIA/TIA Standard:**	EIA-222-G
Site Name:		**Structure Height (Ft.):**	150
Site Number:	CT46134-A-SBA	**Engineer Name:**	J. Tibbetts
Engr. Number:	99092	**Engineer Login ID:**	

Foundation Info Obtained from: Drawings/Calculations

Structure Type: Monopole

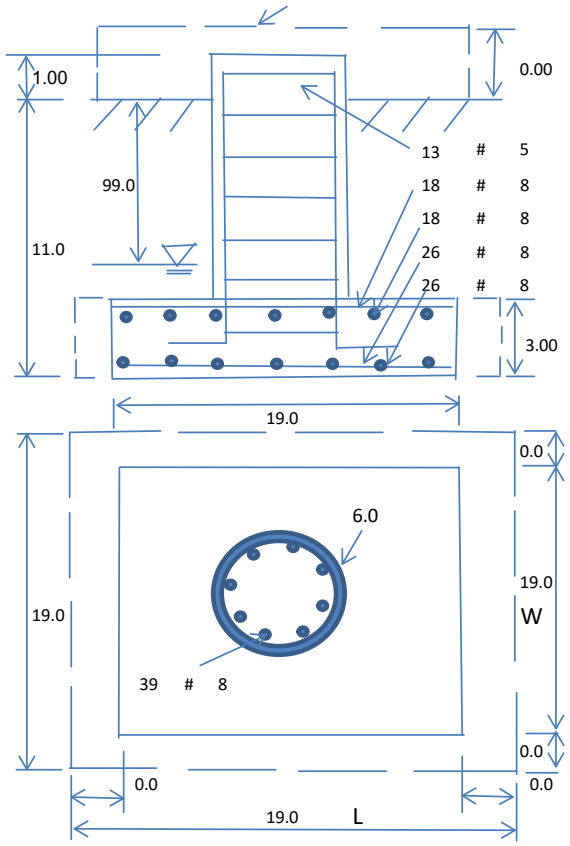
Analysis or Design? Analysis

Base Reactions (Factored):

Axial Load (Kips):	38.6	Shear Force (Kips):	36.0
Uplift Force (Kips):	0.0	Moment (Kips-ft):	3824.5
Allowable overstress %:	5.0%		

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	6.0	Depth of Base BG (ft.):	11.0
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft):	3.00
Length of Pad (ft.):	19	Width of Pad (ft.):	19
Final Length of pad (ft)	19.0	Final width of pad (ft):	19.0



Material Properties and Reabr Info:

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	8	Tie / Stirrup Size #:	5	
Qty. of Vertical Rebars:	39	Tie Spacing (in):	11.5	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):	26	Qty. of Rebar in Pad (W):	26

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	18	Qty. of Rebar in Pad (W):	18
Apply 1.35 factor for e/w Per G:	1.35		

Soil Design Parameters:

Soil Unit Weight (pcf):	110.0	Soil Buoyant Weight:	37.6	Pcf		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	12000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	Yes	Reduction factor on the maximum soil bearing pressure:			1.00	

Foundation Analysis and Design: Uplift Strength Reduction Factor: 0.75 — Compression Strength Reduction Factor: 0.75

Total Dry Soil Volume (cu. Ft.):	2661.81	Total Dry Soil Weight (Kips):	292.80
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	292.80	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	1337.47	Total Dry Concrete Weight (Kips):	200.62
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	200.62	Total Vertical Load on Base (Kips):	532.02

Check Soil Capacities:

					Load/ Capacity Ratio	
Calculated Maxium Net Soil Pressure under the base (psf):	6738	<	Allowable Factored Soil Bearing (psf):	9000	0.75	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	4585.4	>	Design Factored Momont (kips-ft):	3801	0.83	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.21	OK!				

Check the capacities of Reinforceing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75			
Strength reduction factor (Axial compresion):	0.65	Wind Load Factor on Concrete Design:	1.00			
				Load/ Capacity Ratio		
(1) Concrete Pier:						
Vertical Steel Rebar Area (sq. in./each):	0.79		Tie / Stirrup Area (sq. in./each):	0.31		
Calculated Moment Capacity (Mn,Kips-Ft):	4258.7	>	Design Factored Moment (Mu, Kips-F	4148.5	0.97	OK!
Calculated Shear Capacity (Kips):	572.6	>	Design Factored Shear (Kips):	36.0	0.06	OK!
Calculated Tension Capacity (Tn, Kips):	1663.7	>	Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	7143.9	>	Design Factored Axial Load (Pu Kips):	38.6	0.01	OK!
Moment & Axial Strength Combination:	0.97	OK!	Check Tie Spacing (Design/Required):		0.9583	OK!
Pier Reinforcement Ratio:	0.008		Reinforcement Ratio is satisfied per ACI			
(2).Concrete Pad:						
One-Way Design Shear Capacity (L-Direction, Kips):	703.0	>	One-Way Factored Shear (L-D. Kips):	252.7	0.36	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	703.0	>	One-Way Factored Shear (W-D., Kips)	252.7	0.36	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	571.8	>	One-Way Factored Shear (C-C, Kips):	254.6	0.45	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0028	OK!	Lower Steel Pad Reinf. Ratio (W-Direc	0.0028		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	2930.5	>	Moment at Bottom (L-Dir. K-Ft):	1070.7	0.37	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	2930.5	>	Moment at Bottom (W-Dir. K-Ft):	1070.7	0.37	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	4114.5	>	Moment at Bottom (C-C Dir. K-Ft):	1514.2	0.37	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0019	OK!	Upper Steel Reinf. Ratio (W-Dir.):	0.0019		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	2044.5	>	Moment at the top (L-Dir K-Ft):	530.9	0.26	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	2044.5	>	Moment at the top (W-Dir K-Ft):	530.9	0.26	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	2877.0	>	Moment at the top (C-C Dir. K-Ft):	501.0	0.17	OK!
(3).Check Punching Shear Capacity due to Moment in the Pier:						
Moment transferred by punching shear:	1529.8	k-ft.	Max. factored shear stress v_{u_CD}:		7.4	Psi
Max. factored shear stress v_{u_AB}:	12.9	Psi	Factored shear Strength ϕv_n:		189.7	Psi
Max. factored shear stress v_u:	12.9	Psi	Check Usage of Punching Shear Capacity:		0.07	OK!

EXHIBIT 8

Tower Engineering Solutions
Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Antenna Mount Analysis Report

Existing 150-Ft Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT46134-A-SBA / Granby-n. Granby

Customer Site Name: Granby-n. Granby

Carrier Name: T-Mobile (App#: 113978, V2)

Carrier Site ID / Name: CT11281B / Granby/Rt. 20

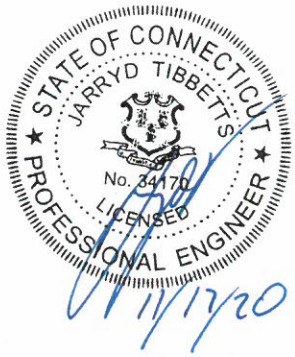
Site Location: 15 North Granby Road

Granby, Connecticut

Hartford County

Latitude: 41.953583

Longitude: -72.793722



Analysis Result:

Max Structural Usage: 56.1% [Pass]

Report Prepared By : Mariana Franco

Introduction

The purpose of this report is to summarize the analysis results on the (1) SitePro1 F4P-12W platform with F4P-HRK12 handrail at 115.00' elevation to support the proposed antenna configuration. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Mount Drawings	Drawings by SitePro
Antenna Loading	SBA Application #: 113978, v2
Modification Drawings	n/a

Analysis Criteria

Basic Wind Speed Used in the Analysis: V_{ULT} = 120.0 mph (3-Sec. Gust) / Equivalent to
V_{ASD} = 93 mph (3-Sec. Gust)
Basic Wind Speed with Ice: 50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed: 60 mph +0" Radial ice
Standard/Codes: ANSI/TIA/EIA 222-G
Exposure Category: C
Structure Class: II
Topographic Category: 1
Crest Height (Ft): 0

The site is a Risk Category II structure per IBC Table 1604.5. This site does not support emergency communication equipment for first responders such as fire departments, police, hospitals, ambulance services or any of the facilities listed for Risk Categories III and IV. The scope of work detailed in this structural analysis does not include items that are a part of emergency service as the 911 or essential facility service of an emergency response system.

Mount Information

(1) SitePro1 F4P-12W platform with F4P-HRK12 handrail at 115.00' elevation

Final Antenna Configuration

4 Ericsson AIR32 KRD901146-1_B66A_B2A (Octa)
4 RFS APXVAARR24_43-U-NA20 (Octa)
4 Ericsson AIR6449 B41
4 Ericsson KRY 112 489/2
4 Ericsson Radio 4449 B71 + B85
4 Ericsson 4415 B25

In addition to the proposed equipment loading, a 500 lb serviceability load was also considered in this analysis in accordance with TIA requirements.

Analysis Results

Our calculations have determined that under design wind load the existing mounts will be structurally adequate to support the proposed antenna configuration. The maximum structural usage is 56.1%, which occurs in the mount pipe. The proposed equipment must be installed as stipulated in the Final Antenna Configuration section of this report. The analysis results are void if the proposed equipment is not installed in accordance with this report.

Attachments

1. Mount Photos
2. Antenna Placement Diagram
3. Analysis Calculations

Standard Conditions

1. The loading configuration as analyzed in this report is as provided from the customer. Any deviation from this design shall be communicated to TES to verify deviation will not adversely impact the analysis.

2. The analysis is based on the presumption that the antenna mount members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.

3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion. The mount analysis is not a condition assessment of the mount.

4. The mount analysis was performed in accordance with the loading provided, and if applicable the modification required to support the additional loading.

5. If the mount is modified, installation must adhere to the configuration communicated in the modification drawings.

6. The modification drawings are not intended to convey means or methods. These are the responsibility of the installing contractor.

7. Rigging plan review is available if the contractor requires for a construction class IV or other if required. Review fee would apply.

8. The mount modification package was created based upon information provided for the mount loading. The underlying tower is assumed to provide support and sufficient rigidity to support the mount loads as a tower analysis was not part of the mount analysis.

9. TES is not responsible for modifications to climbing facilities unless communicated to TES in writing.

Structure: CT46134-A-SBA - Granby-n. Granby

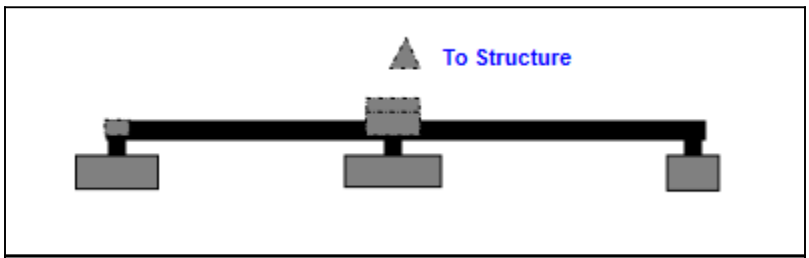
Sector: A

Structure Type: Monopole

Mount Elev: 115.00

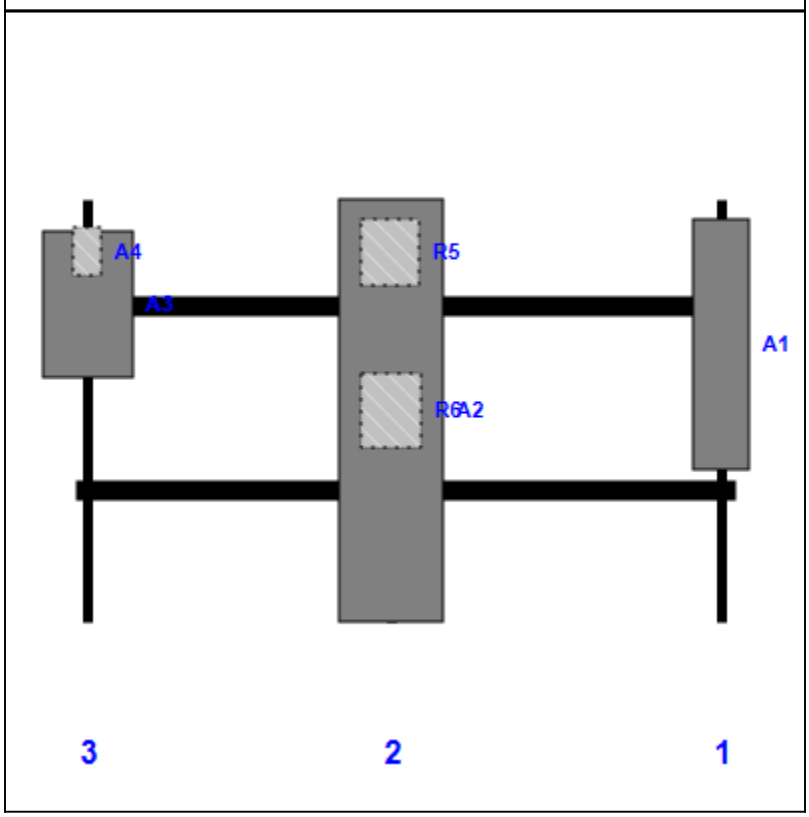
11/17/2020

Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	AIR32 KRD901146-1_B66A_B2A (Octa)	57.00	12.90	147.00	1	a	Front	33.00			
A2	APXVAARR24_43-U-NA20 (Octa)	95.90	24.00	72.00	2	a	Front	48.00			
R5	Radio 4449 B71 + B85	15.00	13.20	72.00	2	a	Behind	12.00			
R6	4415 B25	16.50	13.50	72.00	2	a	Behind	48.00			
A3	AIR6449 B41	33.10	20.50	3.00	3	a	Front	24.00			
A4	KRY 112 489/2	11.00	6.10	3.00	3	a	Behind	12.00			
MP1	AIR32 KRD901146-1_B66A_B2A (Octa)	57.00	12.90		Member						
MP2	APXVAARR24_43-U-NA20 (Octa)	95.90	24.00		Member						
MP3	AIR6449 B41	33.10	20.50		Member						
MP3	KRY 112 489/2	11.00	6.10		Member						
MP2	Radio 4449 B71 + B85	15.00	13.20		Member						
MP2	4415 B25	16.50	13.50		Member						

Structure: CT46134-A-SBA - Granby-n. Granby

Sector: B

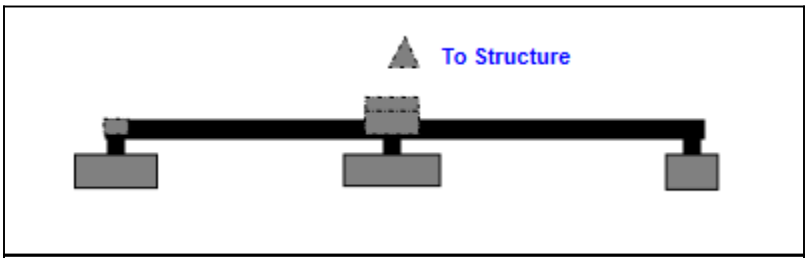
Structure Type: Monopole

Mount Elev: 115.00

11/17/2020

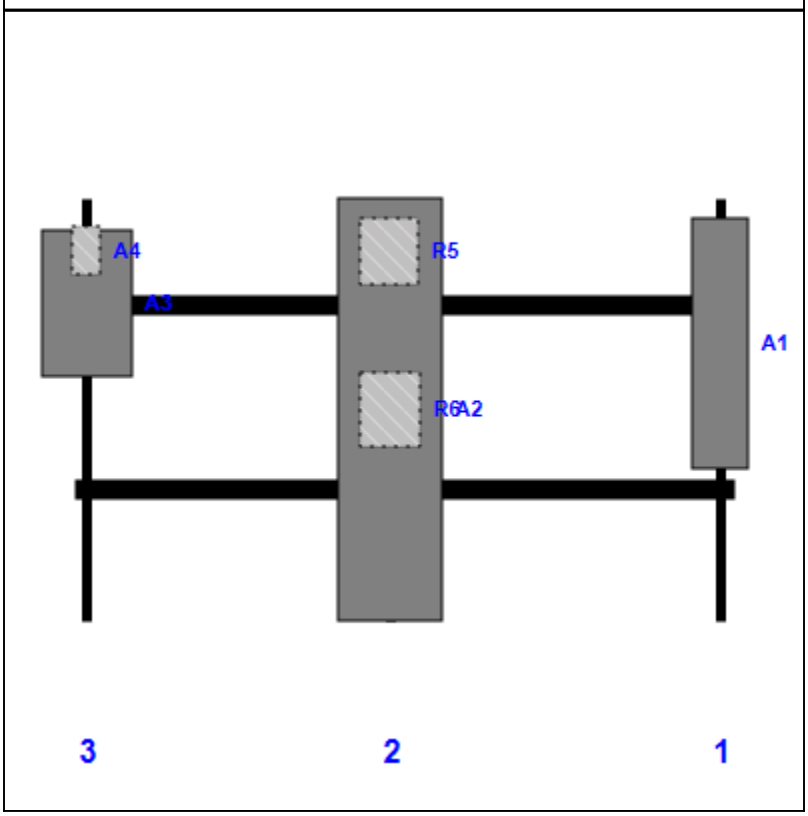
Tower Engineering Solutions

Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	AIR32 KRD901146-1_B66A_B2A (Octa)	57.00	12.90	147.00	1	a	Front	33.00			
A2	APXVAARR24_43-U-NA20 (Octa)	95.90	24.00	72.00	2	a	Front	48.00			
R5	Radio 4449 B71 + B85	15.00	13.20	72.00	2	a	Behind	12.00			
R6	4415 B25	16.50	13.50	72.00	2	a	Behind	48.00			
A3	AIR6449 B41	33.10	20.50	3.00	3	a	Front	24.00			
A4	KRY 112 489/2	11.00	6.10	3.00	3	a	Behind	12.00			

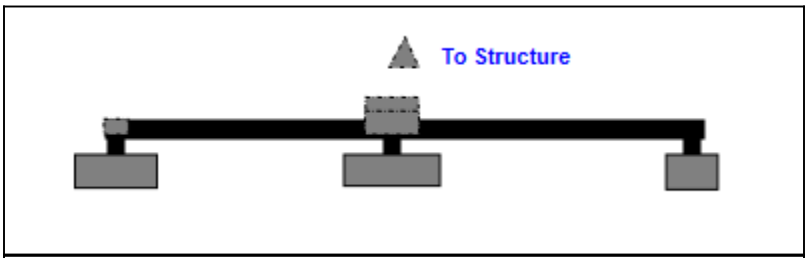
Structure: CT46134-A-SBA - Granby-n. Granby

Sector: C
Structure Type: Monopole
Mount Elev: 115.00

11/17/2020

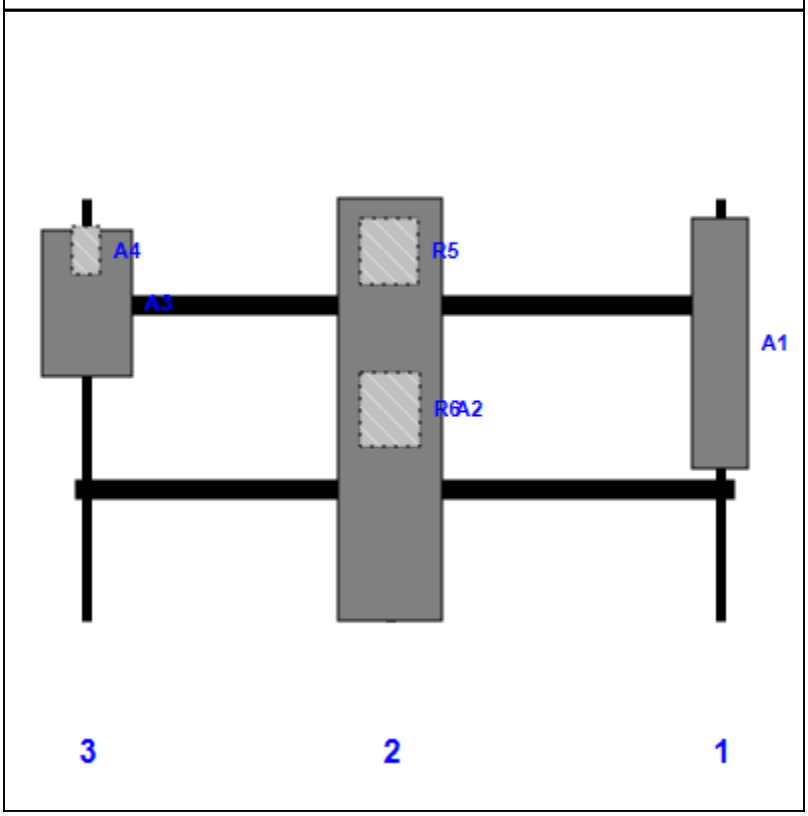
Tower Engineering Solutions

Plan View



Front View

Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	AIR32 KRD901146-1_B66A_B2A (Octa)	57.00	12.90	147.00	1	a	Front	33.00			
A2	APXVAARR24_43-U-NA20 (Octa)	95.90	24.00	72.00	2	a	Front	48.00			
R5	Radio 4449 B71 + B85	15.00	13.20	72.00	2	a	Behind	12.00			
R6	4415 B25	16.50	13.50	72.00	2	a	Behind	48.00			
A3	AIR6449 B41	33.10	20.50	3.00	3	a	Front	24.00			
A4	KRY 112 489/2	11.00	6.10	3.00	3	a	Behind	12.00			

Structure: CT46134-A-SBA - Granby-n. Granby

Sector: D

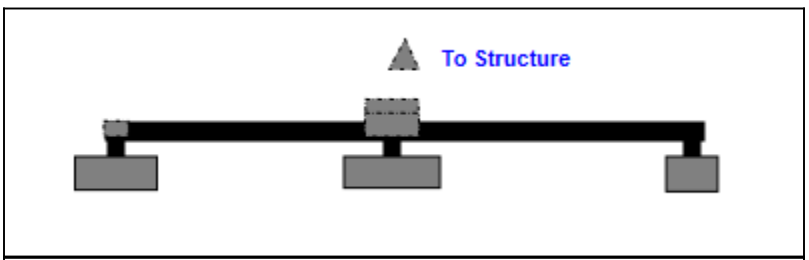
Structure Type: Monopole

Mount Elev: 115.00

11/17/2020

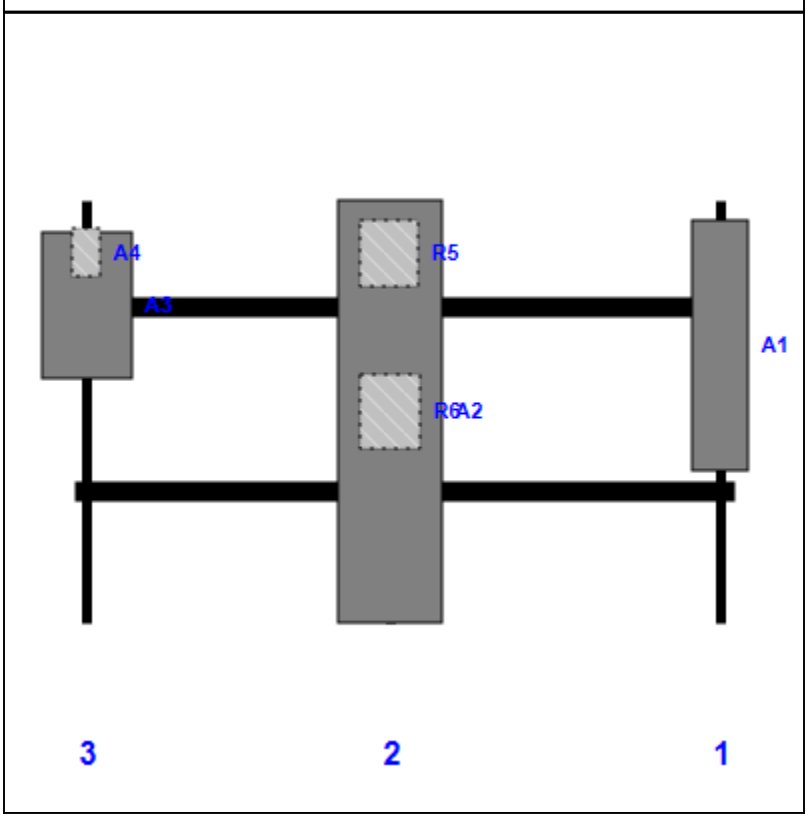
Tower Engineering Solutions

Plan View

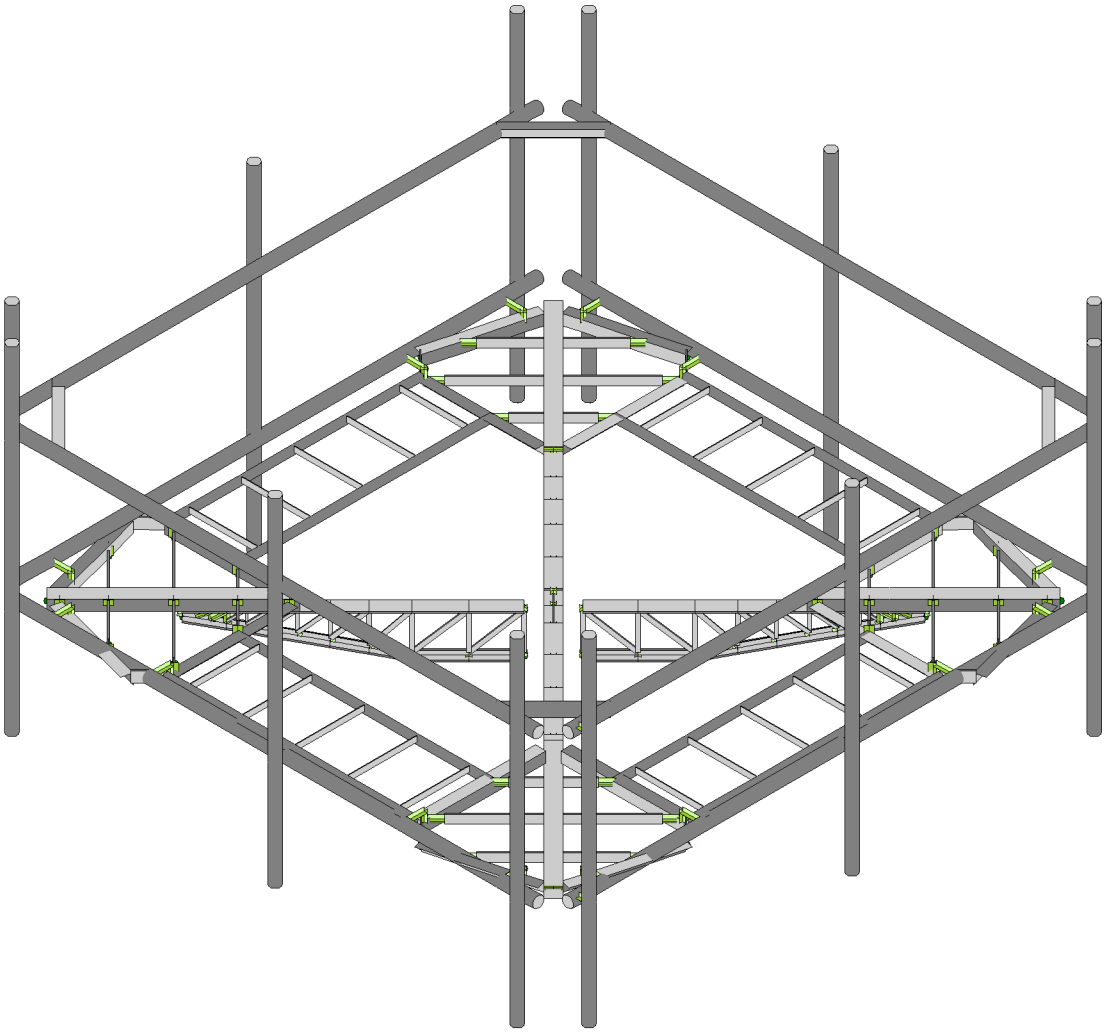


Front View

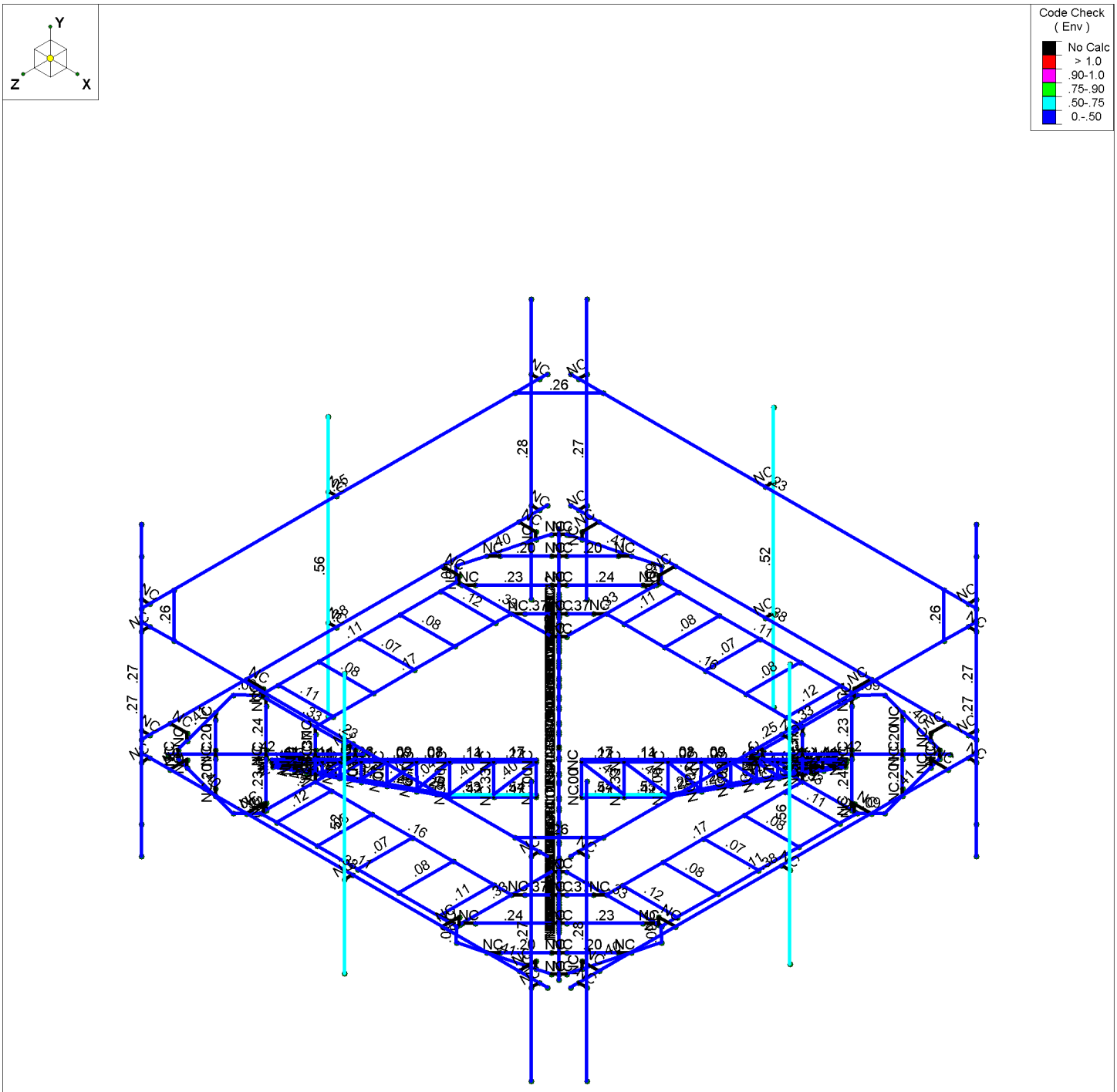
Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	AIR32 KRD901146-1_B66A_B2A (Octa)	57.00	12.90	147.00	1	a	Front	33.00			
A2	APXVAARR24_43-U-NA20 (Octa)	95.90	24.00	72.00	2	a	Front	48.00			
R5	Radio 4449 B71 + B85	15.00	13.20	72.00	2	a	Behind	12.00			
R6	4415 B25	16.50	13.50	72.00	2	a	Behind	48.00			
A3	AIR6449 B41	33.10	20.50	3.00	3	a	Front	24.00			
A4	KRY 112 489/2	11.00	6.10	3.00	3	a	Behind	12.00			

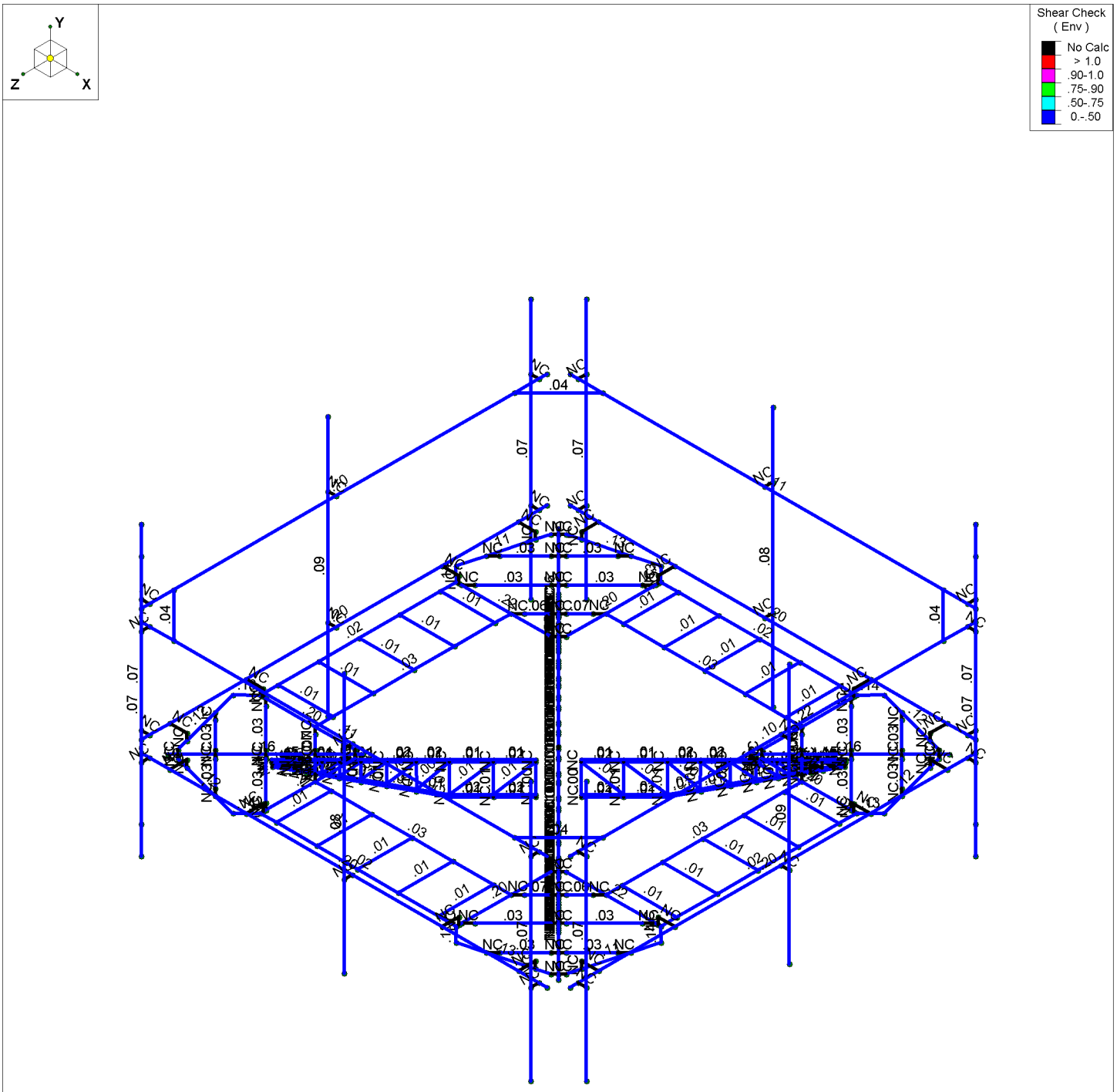


Tower Engineering Solutio...	CT46134-A-SBA_MT_LO_Loads Only_G	SK - 1
JET		Nov 17, 2020 at 11:08 AM
TES Project No. 99818		CT46134-A-SBA_99818_G_RISA_L...



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

Tower Engineering Solutio...	CT46134-A-SBA_MT_LO_Loads Only_G	SK - 2
JET		Nov 17, 2020 at 11:09 AM
TES Project No. 99818		CT46134-A-SBA_99818_G_RISA_L...



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

Tower Engineering Solutio...	CT46134-A-SBA_MT_LO_Loads Only_G	SK - 3
JET		Nov 17, 2020 at 11:09 AM
TES Project No. 99818		CT46134-A-SBA_99818_G_RISA_L...

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					36			
2	Antenna Di	None					36			
3	Antenna W Front	None					36			
4	Antenna Wi Front	None					36			
5	Antenna W Side	None					36			
6	Antenna Wi Side	None					36			
7	Service Lm1	None					1			
8	Service Lm2	None					1			
9	Structure D	None		-1						
10	Structure Di	None						280		
11	Structure W Front	None						280		
12	Structure Wi Front	None						280		
13	Structure W Side	None						280		
14	Structure Wi Side	None						280		

Load Combinations

	Description	So..	P...	S...	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac...
1	1.2D+1.6W (Front)	Yes	Y		1	1.2	9	1.2	3	1.6	11	1.6												
2	1.2D+1.6W (Back)	Yes	Y		1	1.2	9	1.2	3	-1.6	11	-1.6												
3	1.2D+1.6W (Left)	Yes	Y		1	1.2	9	1.2	5	1.6	13	1.6												
4	1.2D+1.6W (Right)	Yes	Y		1	1.2	9	1.2	5	-1.6	13	-1.6												
5	1.2D+1.0Di+1.0Wi (Front)	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	1	12	1								
6	1.2D+1.0Di+1.0Wi (Back)	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	-1	12	-1								
7	1.2D+1.0Di+1.0Wi (Left)	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	1	14	1								
8	1.2D+1.0Di+1.0Wi (Right)	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	-1	14	-1								
9	1.2D+1.5L1+.16W (Mai...	Yes	Y		1	1.2	9	1.2	7	1.5	3	.16	11	.16										
10	1.2D+1.5L2+.16W (Mai...	Yes	Y		1	1.2	9	1.2	8	1.5	3	.16	11	.16										
11	1.4D	Yes	Y		1	1.4	9	1.4																

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenn Mou...	PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
2	Support rail	PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
3	SR END CO..	WT4x2.25x0...	Beam	W_Tee	A36 Gr.36	Typical	2.344	2.01	1.304	.111

Hot Rolled Steel Properties

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

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E..Density[k/ft...		Yield[ksi]	Ry	Fu[ksi]	Rt
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Aluminum Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[...	Table B.4	kt	Ftu[ksi]	Fty[ksi]	Fcy[ksi]	Fsu[ksi]	Ct
1	3003-H14	10100	3787.5	.33	1.3	.173	Table B...	1	19	16	13	12	141
2	6061-T6	10100	3787.5	.33	1.3	.173	Table B...	1	38	35	35	24	141
3	6063-T5	10100	3787.5	.33	1.3	.173	Table B...	1	22	16	16	13	141
4	6063-T6	10100	3787.5	.33	1.3	.173	Table B...	1	30	25	25	19	141
5	5052-H34	10200	3787.5	.33	1.3	.173	Table B...	1	34	26	24	20	141
6	6061-T6 W	10100	3787.5	.33	1.3	.173	Table B...	1	24	15	15	15	141

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	MP3D	N450	N454			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
2	MP3C	N442	N446			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
3	MP3B	N458	N462			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
4	MP3A	N434	N438			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
5	MP2D	N453	N457			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
6	MP2C	N445	N449			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
7	MP2B	N461	N465			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
8	MP2A	N437	N441			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
9	MP1D	N452	N456			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
10	MP1C	N444	N448			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
11	MP1B	N460	N464			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
12	MP1A	N436	N440			Antenn Mount ...	Beam	Pipe	A53 Gr.B	Typical
13	M528	N540A	N539A		270	SR END CON...	Beam	W_Tee	A36 Gr.36	Typical
14	M527	N538A	N537		270	SR END CON...	Beam	W_Tee	A36 Gr.36	Typical
15	M526	N536	N535		270	SR END CON...	Beam	W_Tee	A36 Gr.36	Typical
16	M525	N534	N541A		270	SR END CON...	Beam	W_Tee	A36 Gr.36	Typical
17	M524	N542	N543			Support rail	Beam	Pipe	A53 Gr.B	Typical
18	M523	N546	N550			RIGID	None	None	RIGID	Typical
19	M522	N547	N551			RIGID	None	None	RIGID	Typical
20	M520	N544	N548			RIGID	None	None	RIGID	Typical
21	M519	N473	N540			RIGID	None	None	RIGID	Typical
22	M518	N472	N541			RIGID	None	None	RIGID	Typical
23	M516	N470	N538			RIGID	None	None	RIGID	Typical
24	M515	N522	N523			Support rail	Beam	Pipe	A53 Gr.B	Typical
25	M514	N526	N530			RIGID	None	None	RIGID	Typical
26	M513	N527	N531			RIGID	None	None	RIGID	Typical
27	M511	N524	N528			RIGID	None	None	RIGID	Typical
28	M510	N469	N520			RIGID	None	None	RIGID	Typical
29	M509	N468	N521			RIGID	None	None	RIGID	Typical
30	M507	N466	N518			RIGID	None	None	RIGID	Typical
31	M506	N502	N503			Support rail	Beam	Pipe	A53 Gr.B	Typical
32	M505	N506	N510			RIGID	None	None	RIGID	Typical
33	M504	N507	N511			RIGID	None	None	RIGID	Typical
34	M502	N504	N508			RIGID	None	None	RIGID	Typical
35	M501	N477	N500			RIGID	None	None	RIGID	Typical
36	M500	N476	N501			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
37	M498	N474	N498			RIGID	None	None	RIGID	Typical
38	M497	N482	N483			Support rail	Beam	Pipe	A53 Gr.B	Typical
39	M496	N486	N490			RIGID	None	None	RIGID	Typical
40	M495	N487	N491			RIGID	None	None	RIGID	Typical
41	M493	N484	N488			RIGID	None	None	RIGID	Typical
42	M492	N432	N480			RIGID	None	None	RIGID	Typical
43	M491	N433	N481			RIGID	None	None	RIGID	Typical
44	M489	N430	N478			RIGID	None	None	RIGID	Typical
45	M472	N428	N429			PL3/16x1.5	Beam	RECT	A992	Typical
46	M471	N426	N427			PL3/16x1.5	Beam	RECT	A992	Typical
47	M470	N424	N425			PL3/16x1.5	Beam	RECT	A992	Typical
48	M469	N422	N423			PL3/16x1.5	Beam	RECT	A992	Typical
49	M468	N420	N421			PL3/16x1.5	Beam	RECT	A992	Typical
50	M467	N114	N225			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
51	M466	N120	N229			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
52	M465	N418	N419			PL3/16x1.5	Beam	RECT	A992	Typical
53	M464	N416	N417			PL3/16x1.5	Beam	RECT	A992	Typical
54	M463	N414	N415			PL3/16x1.5	Beam	RECT	A992	Typical
55	M462	N412	N413			PL3/16x1.5	Beam	RECT	A992	Typical
56	M461	N410	N411			PL3/16x1.5	Beam	RECT	A992	Typical
57	M460	N17	N128			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
58	M459	N23	N132			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
59	M458	N408	N409			PL3/16x1.5	Beam	RECT	A992	Typical
60	M457	N406	N407			PL3/16x1.5	Beam	RECT	A992	Typical
61	M456	N404	N405			PL3/16x1.5	Beam	RECT	A992	Typical
62	M455	N402	N403			PL3/16x1.5	Beam	RECT	A992	Typical
63	M454	N400	N401			PL3/16x1.5	Beam	RECT	A992	Typical
64	M453	N308	N31			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
65	M452	N314	N35			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
66	M451	N398	N399			PL3/16x1.5	Beam	RECT	A992	Typical
67	M450	N396	N397			PL3/16x1.5	Beam	RECT	A992	Typical
68	M449	N394	N395			PL3/16x1.5	Beam	RECT	A992	Typical
69	M448	N392	N393			PL3/16x1.5	Beam	RECT	A992	Typical
70	M447	N390	N391			PL3/16x1.5	Beam	RECT	A992	Typical
71	M446	N211	N322			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
72	M445	N217	N326			PIPE_1.5	Beam	Pipe	A53 Gr.B	Typical
73	M444	N263	N279			RIGID	None	None	RIGID	Typical
74	M443	N264	N292			RIGID	None	None	RIGID	Typical
75	M442	N70	N98			RIGID	None	None	RIGID	Typical
76	M441	N69	N85			RIGID	None	None	RIGID	Typical
77	M440	N359	N387			RIGID	None	None	RIGID	Typical
78	M439	N358	N374			RIGID	None	None	RIGID	Typical
79	M438	N167	N195			RIGID	None	None	RIGID	Typical
80	M437	N166	N182			RIGID	None	None	RIGID	Typical
81	M436	N313	N314		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
82	M435	N335	N336			RIGID	None	None	RIGID	Typical
83	M434	N341	N311			RIGID	None	None	RIGID	Typical
84	M433	N386	N340			RIGID	None	None	RIGID	Typical
85	M432	N367	N365		90	PL3/8x4	Beam	RECT	A992	Typical
86	M431	N373	N371			PL3/8x1	Beam	RECT	A992	Typical
87	M430	N358	N356			PL3/8x1	Beam	RECT	A992	Typical
88	M429	N351	N350		90	PL1/2x4	Beam	RECT	A992	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
89	M428	N376	N373			PL3/8x1	Beam	RECT	A992	Typical
90	M427	N375	N358			PL3/8x1	Beam	RECT	A992	Typical
91	M426	N344	N351		90	PL1/2x4	Beam	RECT	A992	Typical
92	M425	N377	N367		90	PL3/8x4	Beam	RECT	A992	Typical
93	M424	N379	N381			RIGID	None	None	RIGID	Typical
94	M423	N383	N385			RIGID	None	None	RIGID	Typical
95	M422	N384	N382			RIGID	None	None	RIGID	Typical
96	M421	N380	N378			RIGID	None	None	RIGID	Typical
97	M420	N378	N382		90	PL1/2x4	Beam	RECT	A992	Typical
98	M419	N342	N378		90	PL1/2x4	Beam	RECT	A992	Typical
99	M418	N385	N384		45	PL3/8x1	Beam	RECT	A992	Typical
100	M417	N381	N384			PL3/8x1	Beam	RECT	A992	Typical
101	M416	N381	N380		45	PL3/8x1	Beam	RECT	A992	Typical
102	M415	N360	N380			PL3/8x1	Beam	RECT	A992	Typical
103	M414	N380	N384			PL3/8x1	Beam	RECT	A992	Typical
104	M413	N346	N380			PL3/8x1	Beam	RECT	A992	Typical
105	M412	N381	N385			PL3/8x1	Beam	RECT	A992	Typical
106	M411	N360	N381			PL3/8x1	Beam	RECT	A992	Typical
107	M410	N379	N383		90	PL3/8x4	Beam	RECT	A992	Typical
108	M409	N345	N379		90	PL3/8x4	Beam	RECT	A992	Typical
109	M408	N374	N359			RIGID	None	None	RIGID	Typical
110	M407	N373	N358			RIGID	None	None	RIGID	Typical
111	M406	N373	N357			PL3/8x5/8	Beam	RECT	A992	Typical
112	M405	N372	N357		45	PL3/8x5/8	Beam	RECT	A992	Typical
113	M404	N372	N356			PL3/8x3/4	Beam	RECT	A992	Typical
114	M403	N371	N356		45	PL3/8x3/4	Beam	RECT	A992	Typical
115	M402	N371	N355			PL3/8x3/4	Beam	RECT	A992	Typical
116	M401	N370	N355		45	PL3/8x7/8	Beam	RECT	A992	Typical
117	M400	N370	N354			PL3/8x7/8	Beam	RECT	A992	Typical
118	M399	N361	N354		45	PL3/8x7/8	Beam	RECT	A992	Typical
119	M398	N353	N361			PL3/8x1	Beam	RECT	A992	Typical
120	M397	N369	N353			PL3/8x1	Beam	RECT	A992	Typical
121	M396	N346	N369			PL3/8x1	Beam	RECT	A992	Typical
122	M395	N376	N375			RIGID	None	None	RIGID	Typical
123	M394	N360	N346			PL3/8x1	Beam	RECT	A992	Typical
124	M393	N369	N360			PL3/8x1	Beam	RECT	A992	Typical
125	M392	N361	N369			PL3/8x1	Beam	RECT	A992	Typical
126	M391	N371	N361			PL3/8x1	Beam	RECT	A992	Typical
127	M390	N353	N346			PL3/8x1	Beam	RECT	A992	Typical
128	M389	N354	N353			PL3/8x1	Beam	RECT	A992	Typical
129	M388	N356	N354			PL3/8x1	Beam	RECT	A992	Typical
130	M387	N362	N345		90	PL3/8x4	Beam	RECT	A992	Typical
131	M386	N364	N362		90	PL3/8x4	Beam	RECT	A992	Typical
132	M385	N365	N364		90	PL3/8x4	Beam	RECT	A992	Typical
133	M384	N347	N342		90	PL1/2x4	Beam	RECT	A992	Typical
134	M383	N348	N347		90	PL1/2x4	Beam	RECT	A992	Typical
135	M382	N350	N348		90	PL1/2x4	Beam	RECT	A992	Typical
136	M381	N345	N360			RIGID	None	None	RIGID	Typical
137	M380	N362	N369			RIGID	None	None	RIGID	Typical
138	M379	N364	N361			RIGID	None	None	RIGID	Typical
139	M378	N363	N370			RIGID	None	None	RIGID	Typical
140	M377	N365	N371			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
141	M376	N366	N372			RIGID	None	None	RIGID	Typical
142	M375	N367	N373			RIGID	None	None	RIGID	Typical
143	M374	N368	N374			RIGID	None	None	RIGID	Typical
144	M373	N377	N376			RIGID	None	None	RIGID	Typical
145	M372	N375	N344			RIGID	None	None	RIGID	Typical
146	M371	N359	N352			RIGID	None	None	RIGID	Typical
147	M370	N358	N351			RIGID	None	None	RIGID	Typical
148	M369	N357	N343			RIGID	None	None	RIGID	Typical
149	M368	N356	N350			RIGID	None	None	RIGID	Typical
150	M367	N355	N349			RIGID	None	None	RIGID	Typical
151	M366	N354	N348			RIGID	None	None	RIGID	Typical
152	M365	N353	N347			RIGID	None	None	RIGID	Typical
153	M364	N346	N342			RIGID	None	None	RIGID	Typical
154	M363	N319	N316			PL1/2x2.375	Beam	RECT	A992	Typical
155	M362	N321	N318			PL1/2x2.375	Beam	RECT	A992	Typical
156	M361	N320	N317			PL1/2x2.375	Beam	RECT	A992	Typical
157	M360	N305	N300			PL1/2x2.375	Beam	RECT	A992	Typical
158	M359	N307	N304			PL1/2x2.375	Beam	RECT	A992	Typical
159	M358	N306	N303			PL1/2x2.375	Beam	RECT	A992	Typical
160	M357	N314	N331			PL3/8x3	Beam	RECT	A992	Typical
161	M356	N326	N330			PL3/8x3	Beam	RECT	A992	Typical
162	M355	N296	N297		90	HSS4x3x4	Beam	Tube	A53 Gr.B	Typical
163	M354	N315	N331		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
164	M353	N327	N330		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
165	M352	N325	N326		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
166	M351	N339	N337			RIGID	None	None	RIGID	Typical
167	M350	N338	N339			RIGID	None	None	RIGID	Typical
168	M349	N334	N335			RIGID	None	None	RIGID	Typical
169	M348	N333	N2			RIGID	None	None	RIGID	Typical
170	M347	N332	N333			RIGID	None	None	RIGID	Typical
171	M346	N329	N1			RIGID	None	None	RIGID	Typical
172	M345	N328	N329			RIGID	None	None	RIGID	Typical
173	M344	N312	N327			RIGID	None	None	RIGID	Typical
174	M343	N311	N325			RIGID	None	None	RIGID	Typical
175	M342	N318	N324			RIGID	None	None	RIGID	Typical
176	M341	N317	N323			RIGID	None	None	RIGID	Typical
177	M340	N316	N322			RIGID	None	None	RIGID	Typical
178	M339	N302	N321			RIGID	None	None	RIGID	Typical
179	M338	N301	N320			RIGID	None	None	RIGID	Typical
180	M337	N299	N319			RIGID	None	None	RIGID	Typical
181	M336	N312	N315			RIGID	None	None	RIGID	Typical
182	M335	N311	N313			RIGID	None	None	RIGID	Typical
183	M334	N304	N310			RIGID	None	None	RIGID	Typical
184	M333	N303	N309			RIGID	None	None	RIGID	Typical
185	M332	N300	N308			RIGID	None	None	RIGID	Typical
186	M331	N302	N307			RIGID	None	None	RIGID	Typical
187	M330	N301	N306			RIGID	None	None	RIGID	Typical
188	M329	N299	N305			RIGID	None	None	RIGID	Typical
189	M328	N294	N295			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical
190	M327	N216	N217		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
191	M326	N240	N241			RIGID	None	None	RIGID	Typical
192	M325	N246	N214			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
193	M324	N291	N245			RIGID	None	None	RIGID	Typical
194	M323	N272	N270		90	PL3/8x4	Beam	RECT	A992	Typical
195	M322	N278	N276			PL3/8x1	Beam	RECT	A992	Typical
196	M321	N263	N261			PL3/8x1	Beam	RECT	A992	Typical
197	M320	N256	N255		90	PL1/2x4	Beam	RECT	A992	Typical
198	M319	N281	N278			PL3/8x1	Beam	RECT	A992	Typical
199	M318	N280	N263			PL3/8x1	Beam	RECT	A992	Typical
200	M317	N249	N256		90	PL1/2x4	Beam	RECT	A992	Typical
201	M316	N282	N272		90	PL3/8x4	Beam	RECT	A992	Typical
202	M315	N284	N286			RIGID	None	None	RIGID	Typical
203	M314	N288	N290			RIGID	None	None	RIGID	Typical
204	M313	N289	N287			RIGID	None	None	RIGID	Typical
205	M312	N285	N283			RIGID	None	None	RIGID	Typical
206	M311	N283	N287		90	PL1/2x4	Beam	RECT	A992	Typical
207	M310	N247	N283		90	PL1/2x4	Beam	RECT	A992	Typical
208	M309	N290	N289		135	PL3/8x1	Beam	RECT	A992	Typical
209	M308	N286	N289			PL3/8x1	Beam	RECT	A992	Typical
210	M307	N286	N285		135	PL3/8x1	Beam	RECT	A992	Typical
211	M306	N265	N285			PL3/8x1	Beam	RECT	A992	Typical
212	M305	N285	N289			PL3/8x1	Beam	RECT	A992	Typical
213	M304	N251	N285			PL3/8x1	Beam	RECT	A992	Typical
214	M303	N286	N290			PL3/8x1	Beam	RECT	A992	Typical
215	M302	N265	N286			PL3/8x1	Beam	RECT	A992	Typical
216	M301	N284	N288		90	PL3/8x4	Beam	RECT	A992	Typical
217	M300	N250	N284		90	PL3/8x4	Beam	RECT	A992	Typical
218	M299	N279	N264			RIGID	None	None	RIGID	Typical
219	M298	N278	N263			RIGID	None	None	RIGID	Typical
220	M297	N278	N262			PL3/8x5/8	Beam	RECT	A992	Typical
221	M296	N277	N262		135	PL3/8x5/8	Beam	RECT	A992	Typical
222	M295	N277	N261			PL3/8x3/4	Beam	RECT	A992	Typical
223	M294	N276	N261		135	PL3/8x3/4	Beam	RECT	A992	Typical
224	M293	N276	N260			PL3/8x3/4	Beam	RECT	A992	Typical
225	M292	N275	N260		135	PL3/8x7/8	Beam	RECT	A992	Typical
226	M291	N275	N259			PL3/8x7/8	Beam	RECT	A992	Typical
227	M290	N266	N259		135	PL3/8x7/8	Beam	RECT	A992	Typical
228	M289	N258	N266			PL3/8x1	Beam	RECT	A992	Typical
229	M288	N274	N258			PL3/8x1	Beam	RECT	A992	Typical
230	M287	N251	N274			PL3/8x1	Beam	RECT	A992	Typical
231	M286	N281	N280			RIGID	None	None	RIGID	Typical
232	M285	N265	N251			PL3/8x1	Beam	RECT	A992	Typical
233	M284	N274	N265			PL3/8x1	Beam	RECT	A992	Typical
234	M283	N266	N274			PL3/8x1	Beam	RECT	A992	Typical
235	M282	N276	N266			PL3/8x1	Beam	RECT	A992	Typical
236	M281	N258	N251			PL3/8x1	Beam	RECT	A992	Typical
237	M280	N259	N258			PL3/8x1	Beam	RECT	A992	Typical
238	M279	N261	N259			PL3/8x1	Beam	RECT	A992	Typical
239	M278	N267	N250		90	PL3/8x4	Beam	RECT	A992	Typical
240	M277	N269	N267		90	PL3/8x4	Beam	RECT	A992	Typical
241	M276	N270	N269		90	PL3/8x4	Beam	RECT	A992	Typical
242	M275	N252	N247		90	PL1/2x4	Beam	RECT	A992	Typical
243	M274	N253	N252		90	PL1/2x4	Beam	RECT	A992	Typical
244	M273	N255	N253		90	PL1/2x4	Beam	RECT	A992	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
245	M272	N250	N265			RIGID	None	None	RIGID	Typical
246	M271	N267	N274			RIGID	None	None	RIGID	Typical
247	M270	N269	N266			RIGID	None	None	RIGID	Typical
248	M269	N268	N275			RIGID	None	None	RIGID	Typical
249	M268	N270	N276			RIGID	None	None	RIGID	Typical
250	M267	N271	N277			RIGID	None	None	RIGID	Typical
251	M266	N272	N278			RIGID	None	None	RIGID	Typical
252	M265	N273	N279			RIGID	None	None	RIGID	Typical
253	M264	N282	N281			RIGID	None	None	RIGID	Typical
254	M263	N280	N249			RIGID	None	None	RIGID	Typical
255	M262	N264	N257			RIGID	None	None	RIGID	Typical
256	M261	N263	N256			RIGID	None	None	RIGID	Typical
257	M260	N262	N248			RIGID	None	None	RIGID	Typical
258	M259	N261	N255			RIGID	None	None	RIGID	Typical
259	M258	N260	N254			RIGID	None	None	RIGID	Typical
260	M257	N259	N253			RIGID	None	None	RIGID	Typical
261	M256	N258	N252			RIGID	None	None	RIGID	Typical
262	M255	N251	N247			RIGID	None	None	RIGID	Typical
263	M254	N222	N219			PL1/2x2.375	Beam	RECT	A992	Typical
264	M253	N224	N221			PL1/2x2.375	Beam	RECT	A992	Typical
265	M252	N223	N220			PL1/2x2.375	Beam	RECT	A992	Typical
266	M251	N208	N203			PL1/2x2.375	Beam	RECT	A992	Typical
267	M250	N210	N207			PL1/2x2.375	Beam	RECT	A992	Typical
268	M249	N209	N206			PL1/2x2.375	Beam	RECT	A992	Typical
269	M248	N217	N236			PL3/8x3	Beam	RECT	A992	Typical
270	M247	N229	N235			PL3/8x3	Beam	RECT	A992	Typical
271	M246	N199	N200		90	HSS4x3x4	Beam	Tube	A53 Gr.B	Typical
272	M245	N218	N236		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
273	M244	N230	N235		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
274	M243	N228	N229		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
275	M242	N244	N242			RIGID	None	None	RIGID	Typical
276	M241	N243	N244			RIGID	None	None	RIGID	Typical
277	M240	N239	N240			RIGID	None	None	RIGID	Typical
278	M239	N238	N234			RIGID	None	None	RIGID	Typical
279	M238	N237	N238			RIGID	None	None	RIGID	Typical
280	M237	N232	N233			RIGID	None	None	RIGID	Typical
281	M236	N231	N232			RIGID	None	None	RIGID	Typical
282	M235	N215	N230			RIGID	None	None	RIGID	Typical
283	M234	N214	N228			RIGID	None	None	RIGID	Typical
284	M233	N221	N227			RIGID	None	None	RIGID	Typical
285	M232	N220	N226			RIGID	None	None	RIGID	Typical
286	M231	N219	N225			RIGID	None	None	RIGID	Typical
287	M230	N205	N224			RIGID	None	None	RIGID	Typical
288	M229	N204	N223			RIGID	None	None	RIGID	Typical
289	M228	N202	N222			RIGID	None	None	RIGID	Typical
290	M227	N215	N218			RIGID	None	None	RIGID	Typical
291	M226	N214	N216			RIGID	None	None	RIGID	Typical
292	M225	N207	N213			RIGID	None	None	RIGID	Typical
293	M224	N206	N212			RIGID	None	None	RIGID	Typical
294	M223	N203	N211			RIGID	None	None	RIGID	Typical
295	M222	N205	N210			RIGID	None	None	RIGID	Typical
296	M221	N204	N209			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
297	M220	N202	N208			RIGID	None	None	RIGID	Typical
298	M219	N197	N198			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical
299	M218	N119	N120		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
300	M217	N143	N144			RIGID	None	None	RIGID	Typical
301	M216	N149	N117			RIGID	None	None	RIGID	Typical
302	M215	N194	N148			RIGID	None	None	RIGID	Typical
303	M214	N175	N173		90	PL3/8x4	Beam	RECT	A992	Typical
304	M213	N181	N179			PL3/8x1	Beam	RECT	A992	Typical
305	M212	N166	N164			PL3/8x1	Beam	RECT	A992	Typical
306	M211	N159	N158		90	PL1/2x4	Beam	RECT	A992	Typical
307	M210	N184	N181			PL3/8x1	Beam	RECT	A992	Typical
308	M209	N183	N166			PL3/8x1	Beam	RECT	A992	Typical
309	M208	N152	N159		90	PL1/2x4	Beam	RECT	A992	Typical
310	M207	N185	N175		90	PL3/8x4	Beam	RECT	A992	Typical
311	M206	N187	N189			RIGID	None	None	RIGID	Typical
312	M205	N191	N193			RIGID	None	None	RIGID	Typical
313	M204	N192	N190			RIGID	None	None	RIGID	Typical
314	M203	N188	N186			RIGID	None	None	RIGID	Typical
315	M202	N186	N190		90	PL1/2x4	Beam	RECT	A992	Typical
316	M201	N150	N186		90	PL1/2x4	Beam	RECT	A992	Typical
317	M200	N193	N192		45	PL3/8x1	Beam	RECT	A992	Typical
318	M199	N189	N192			PL3/8x1	Beam	RECT	A992	Typical
319	M198	N189	N188		45	PL3/8x1	Beam	RECT	A992	Typical
320	M197	N168	N188			PL3/8x1	Beam	RECT	A992	Typical
321	M196	N188	N192			PL3/8x1	Beam	RECT	A992	Typical
322	M195	N154	N188			PL3/8x1	Beam	RECT	A992	Typical
323	M194	N189	N193			PL3/8x1	Beam	RECT	A992	Typical
324	M193	N168	N189			PL3/8x1	Beam	RECT	A992	Typical
325	M192	N187	N191		90	PL3/8x4	Beam	RECT	A992	Typical
326	M191	N153	N187		90	PL3/8x4	Beam	RECT	A992	Typical
327	M190	N182	N167			RIGID	None	None	RIGID	Typical
328	M189	N181	N166			RIGID	None	None	RIGID	Typical
329	M188	N181	N165			PL3/8x5/8	Beam	RECT	A992	Typical
330	M187	N180	N165		45	PL3/8x5/8	Beam	RECT	A992	Typical
331	M186	N180	N164			PL3/8x3/4	Beam	RECT	A992	Typical
332	M185	N179	N164		45	PL3/8x3/4	Beam	RECT	A992	Typical
333	M184	N179	N163			PL3/8x3/4	Beam	RECT	A992	Typical
334	M183	N178	N163		45	PL3/8x7/8	Beam	RECT	A992	Typical
335	M182	N178	N162			PL3/8x7/8	Beam	RECT	A992	Typical
336	M181	N169	N162		45	PL3/8x7/8	Beam	RECT	A992	Typical
337	M180	N161	N169			PL3/8x1	Beam	RECT	A992	Typical
338	M179	N177	N161			PL3/8x1	Beam	RECT	A992	Typical
339	M178	N154	N177			PL3/8x1	Beam	RECT	A992	Typical
340	M177	N184	N183			RIGID	None	None	RIGID	Typical
341	M176	N168	N154			PL3/8x1	Beam	RECT	A992	Typical
342	M175	N177	N168			PL3/8x1	Beam	RECT	A992	Typical
343	M174	N169	N177			PL3/8x1	Beam	RECT	A992	Typical
344	M173	N179	N169			PL3/8x1	Beam	RECT	A992	Typical
345	M172	N161	N154			PL3/8x1	Beam	RECT	A992	Typical
346	M171	N162	N161			PL3/8x1	Beam	RECT	A992	Typical
347	M170	N164	N162			PL3/8x1	Beam	RECT	A992	Typical
348	M169	N170	N153		90	PL3/8x4	Beam	RECT	A992	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
349	M168	N172	N170		90	PL3/8x4	Beam	RECT	A992	Typical
350	M167	N173	N172		90	PL3/8x4	Beam	RECT	A992	Typical
351	M166	N155	N150		90	PL1/2x4	Beam	RECT	A992	Typical
352	M165	N156	N155		90	PL1/2x4	Beam	RECT	A992	Typical
353	M164	N158	N156		90	PL1/2x4	Beam	RECT	A992	Typical
354	M163	N153	N168			RIGID	None	None	RIGID	Typical
355	M162	N170	N177			RIGID	None	None	RIGID	Typical
356	M161	N172	N169			RIGID	None	None	RIGID	Typical
357	M160	N171	N178			RIGID	None	None	RIGID	Typical
358	M159	N173	N179			RIGID	None	None	RIGID	Typical
359	M158	N174	N180			RIGID	None	None	RIGID	Typical
360	M157	N175	N181			RIGID	None	None	RIGID	Typical
361	M156	N176	N182			RIGID	None	None	RIGID	Typical
362	M155	N185	N184			RIGID	None	None	RIGID	Typical
363	M154	N183	N152			RIGID	None	None	RIGID	Typical
364	M153	N167	N160			RIGID	None	None	RIGID	Typical
365	M152	N166	N159			RIGID	None	None	RIGID	Typical
366	M151	N165	N151			RIGID	None	None	RIGID	Typical
367	M150	N164	N158			RIGID	None	None	RIGID	Typical
368	M149	N163	N157			RIGID	None	None	RIGID	Typical
369	M148	N162	N156			RIGID	None	None	RIGID	Typical
370	M147	N161	N155			RIGID	None	None	RIGID	Typical
371	M146	N154	N150			RIGID	None	None	RIGID	Typical
372	M145	N125	N122			PL1/2x2.375	Beam	RECT	A992	Typical
373	M144	N127	N124			PL1/2x2.375	Beam	RECT	A992	Typical
374	M143	N126	N123			PL1/2x2.375	Beam	RECT	A992	Typical
375	M142	N111	N106			PL1/2x2.375	Beam	RECT	A992	Typical
376	M141	N113	N110			PL1/2x2.375	Beam	RECT	A992	Typical
377	M140	N112	N109			PL1/2x2.375	Beam	RECT	A992	Typical
378	M139	N120	N139			PL3/8x3	Beam	RECT	A992	Typical
379	M138	N132	N138			PL3/8x3	Beam	RECT	A992	Typical
380	M137	N102	N103		90	HSS4x3x4	Beam	Tube	A53 Gr.B	Typical
381	M136	N121	N139		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
382	M135	N133	N138		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
383	M134	N131	N132		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
384	M133	N147	N145			RIGID	None	None	RIGID	Typical
385	M132	N146	N147			RIGID	None	None	RIGID	Typical
386	M131	N142	N143			RIGID	None	None	RIGID	Typical
387	M130	N141	N137			RIGID	None	None	RIGID	Typical
388	M129	N140	N141			RIGID	None	None	RIGID	Typical
389	M128	N135	N136			RIGID	None	None	RIGID	Typical
390	M127	N134	N135			RIGID	None	None	RIGID	Typical
391	M126	N118	N133			RIGID	None	None	RIGID	Typical
392	M125	N117	N131			RIGID	None	None	RIGID	Typical
393	M124	N124	N130			RIGID	None	None	RIGID	Typical
394	M123	N123	N129			RIGID	None	None	RIGID	Typical
395	M122	N122	N128			RIGID	None	None	RIGID	Typical
396	M121	N108	N127			RIGID	None	None	RIGID	Typical
397	M120	N107	N126			RIGID	None	None	RIGID	Typical
398	M119	N105	N125			RIGID	None	None	RIGID	Typical
399	M118	N118	N121			RIGID	None	None	RIGID	Typical
400	M117	N117	N119			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
401	M116	N110	N116			RIGID	None	None	RIGID	Typical
402	M115	N109	N115			RIGID	None	None	RIGID	Typical
403	M114	N106	N114			RIGID	None	None	RIGID	Typical
404	M113	N108	N113			RIGID	None	None	RIGID	Typical
405	M112	N107	N112			RIGID	None	None	RIGID	Typical
406	M111	N105	N111			RIGID	None	None	RIGID	Typical
407	M110	N100	N101			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical
408	M109	N22	N23		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
409	M108	N46	N47			RIGID	None	None	RIGID	Typical
410	M107	N52	N20			RIGID	None	None	RIGID	Typical
411	M106	N97	N51			RIGID	None	None	RIGID	Typical
412	M105	N78	N76		90	PL3/8x4	Beam	RECT	A992	Typical
413	M104	N84	N82			PL3/8x1	Beam	RECT	A992	Typical
414	M103	N69	N67			PL3/8x1	Beam	RECT	A992	Typical
415	M102	N62	N61		90	PL1/2x4	Beam	RECT	A992	Typical
416	M101	N87	N84			PL3/8x1	Beam	RECT	A992	Typical
417	M100	N86	N69			PL3/8x1	Beam	RECT	A992	Typical
418	M99	N55	N62		90	PL1/2x4	Beam	RECT	A992	Typical
419	M98	N88	N78		90	PL3/8x4	Beam	RECT	A992	Typical
420	M97	N90	N92			RIGID	None	None	RIGID	Typical
421	M96	N94	N96			RIGID	None	None	RIGID	Typical
422	M95	N95	N93			RIGID	None	None	RIGID	Typical
423	M94	N91	N89			RIGID	None	None	RIGID	Typical
424	M93	N89	N93		90	PL1/2x4	Beam	RECT	A992	Typical
425	M92	N53	N89		90	PL1/2x4	Beam	RECT	A992	Typical
426	M91	N96	N95		135	PL3/8x1	Beam	RECT	A992	Typical
427	M90	N92	N95			PL3/8x1	Beam	RECT	A992	Typical
428	M89	N92	N91		135	PL3/8x1	Beam	RECT	A992	Typical
429	M88	N71	N91			PL3/8x1	Beam	RECT	A992	Typical
430	M87	N91	N95			PL3/8x1	Beam	RECT	A992	Typical
431	M86	N57	N91			PL3/8x1	Beam	RECT	A992	Typical
432	M85	N92	N96			PL3/8x1	Beam	RECT	A992	Typical
433	M84	N71	N92			PL3/8x1	Beam	RECT	A992	Typical
434	M83	N90	N94		90	PL3/8x4	Beam	RECT	A992	Typical
435	M82	N56	N90		90	PL3/8x4	Beam	RECT	A992	Typical
436	M81	N85	N70			RIGID	None	None	RIGID	Typical
437	M80	N84	N69			RIGID	None	None	RIGID	Typical
438	M79	N84	N68			PL3/8x5/8	Beam	RECT	A992	Typical
439	M78	N83	N68		135	PL3/8x5/8	Beam	RECT	A992	Typical
440	M77	N83	N67			PL3/8x3/4	Beam	RECT	A992	Typical
441	M76	N82	N67		135	PL3/8x3/4	Beam	RECT	A992	Typical
442	M75	N82	N66			PL3/8x3/4	Beam	RECT	A992	Typical
443	M74	N81	N66		135	PL3/8x7/8	Beam	RECT	A992	Typical
444	M73	N81	N65			PL3/8x7/8	Beam	RECT	A992	Typical
445	M72	N72	N65		135	PL3/8x7/8	Beam	RECT	A992	Typical
446	M71	N64	N72			PL3/8x1	Beam	RECT	A992	Typical
447	M70	N80	N64			PL3/8x1	Beam	RECT	A992	Typical
448	M69	N57	N80			PL3/8x1	Beam	RECT	A992	Typical
449	M68	N87	N86			RIGID	None	None	RIGID	Typical
450	M67	N71	N57			PL3/8x1	Beam	RECT	A992	Typical
451	M66	N80	N71			PL3/8x1	Beam	RECT	A992	Typical
452	M65	N72	N80			PL3/8x1	Beam	RECT	A992	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
453	M64	N82	N72			PL3/8x1	Beam	RECT	A992	Typical
454	M63	N64	N57			PL3/8x1	Beam	RECT	A992	Typical
455	M62	N65	N64			PL3/8x1	Beam	RECT	A992	Typical
456	M61	N67	N65			PL3/8x1	Beam	RECT	A992	Typical
457	M60	N73	N56		90	PL3/8x4	Beam	RECT	A992	Typical
458	M59	N75	N73		90	PL3/8x4	Beam	RECT	A992	Typical
459	M58	N76	N75		90	PL3/8x4	Beam	RECT	A992	Typical
460	M57	N58	N53		90	PL1/2x4	Beam	RECT	A992	Typical
461	M56	N59	N58		90	PL1/2x4	Beam	RECT	A992	Typical
462	M55	N61	N59		90	PL1/2x4	Beam	RECT	A992	Typical
463	M54	N56	N71			RIGID	None	None	RIGID	Typical
464	M53	N73	N80			RIGID	None	None	RIGID	Typical
465	M52	N75	N72			RIGID	None	None	RIGID	Typical
466	M51	N74	N81			RIGID	None	None	RIGID	Typical
467	M50	N76	N82			RIGID	None	None	RIGID	Typical
468	M49	N77	N83			RIGID	None	None	RIGID	Typical
469	M48	N78	N84			RIGID	None	None	RIGID	Typical
470	M47	N79	N85			RIGID	None	None	RIGID	Typical
471	M46	N88	N87			RIGID	None	None	RIGID	Typical
472	M45	N86	N55			RIGID	None	None	RIGID	Typical
473	M44	N70	N63			RIGID	None	None	RIGID	Typical
474	M43	N69	N62			RIGID	None	None	RIGID	Typical
475	M42	N68	N54			RIGID	None	None	RIGID	Typical
476	M41	N67	N61			RIGID	None	None	RIGID	Typical
477	M40	N66	N60			RIGID	None	None	RIGID	Typical
478	M39	N65	N59			RIGID	None	None	RIGID	Typical
479	M38	N64	N58			RIGID	None	None	RIGID	Typical
480	M37	N57	N53			RIGID	None	None	RIGID	Typical
481	M36	N28	N25			PL1/2x2.375	Beam	RECT	A992	Typical
482	M35	N30	N27			PL1/2x2.375	Beam	RECT	A992	Typical
483	M34	N29	N26			PL1/2x2.375	Beam	RECT	A992	Typical
484	M33	N14	N9			PL1/2x2.375	Beam	RECT	A992	Typical
485	M32	N16	N13			PL1/2x2.375	Beam	RECT	A992	Typical
486	M31	N15	N12			PL1/2x2.375	Beam	RECT	A992	Typical
487	M30	N23	N42			PL3/8x3	Beam	RECT	A992	Typical
488	M29	N35	N41			PL3/8x3	Beam	RECT	A992	Typical
489	M28	N5	N6		90	HSS4x3x4	Beam	Tube	A53 Gr.B	Typical
490	M27	N24	N42		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
491	M26	N36	N41		180	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
492	M25	N34	N35		90	L3x3x6	Beam	Single Angle	A36 Gr.36	Typical
493	M24	N50	N48			RIGID	None	None	RIGID	Typical
494	M23	N49	N50			RIGID	None	None	RIGID	Typical
495	M22	N45	N46			RIGID	None	None	RIGID	Typical
496	M21	N44	N40			RIGID	None	None	RIGID	Typical
497	M20	N43	N44			RIGID	None	None	RIGID	Typical
498	M19	N38	N39			RIGID	None	None	RIGID	Typical
499	M18	N37	N38			RIGID	None	None	RIGID	Typical
500	M17	N21	N36			RIGID	None	None	RIGID	Typical
501	M16	N20	N34			RIGID	None	None	RIGID	Typical
502	M15	N27	N33			RIGID	None	None	RIGID	Typical
503	M14	N26	N32			RIGID	None	None	RIGID	Typical
504	M13	N25	N31			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
505	M12	N11	N30			RIGID	None	None	RIGID	Typical
506	M11	N10	N29			RIGID	None	None	RIGID	Typical
507	M10	N8	N28			RIGID	None	None	RIGID	Typical
508	M9	N21	N24			RIGID	None	None	RIGID	Typical
509	M8	N20	N22			RIGID	None	None	RIGID	Typical
510	M7	N13	N19			RIGID	None	None	RIGID	Typical
511	M6	N12	N18			RIGID	None	None	RIGID	Typical
512	M5	N9	N17			RIGID	None	None	RIGID	Typical
513	M4	N11	N16			RIGID	None	None	RIGID	Typical
514	M3	N10	N15			RIGID	None	None	RIGID	Typical
515	M2	N8	N14			RIGID	None	None	RIGID	Typical
516	M1	N3	N4			PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
1	MP3D						Yes			None
2	MP3C						Yes			None
3	MP3B						Yes			None
4	MP3A						Yes			None
5	MP2D						Yes			None
6	MP2C						Yes			None
7	MP2B						Yes			None
8	MP2A						Yes			None
9	MP1D						Yes			None
10	MP1C						Yes			None
11	MP1B						Yes			None
12	MP1A						Yes			None
13	M528						Yes			None
14	M527						Yes			None
15	M526						Yes			None
16	M525						Yes			None
17	M524						Yes			None
18	M523						Yes			None
19	M522						Yes			None
20	M520						Yes			None
21	M519						Yes			None
22	M518						Yes			None
23	M516						Yes			None
24	M515						Yes			None
25	M514						Yes			None
26	M513						Yes			None
27	M511						Yes			None
28	M510						Yes			None
29	M509						Yes			None
30	M507						Yes			None
31	M506						Yes			None
32	M505						Yes			None
33	M504						Yes			None
34	M502						Yes			None
35	M501						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
36	M500						Yes			None
37	M498						Yes			None
38	M497						Yes			None
39	M496						Yes			None
40	M495						Yes			None
41	M493						Yes			None
42	M492						Yes			None
43	M491						Yes			None
44	M489						Yes			None
45	M472						Yes			None
46	M471						Yes			None
47	M470						Yes			None
48	M469						Yes			None
49	M468						Yes			None
50	M467	OOOXOO	OOOXOO				Yes			None
51	M466	OOOXOO	OOOXOO				Yes			None
52	M465						Yes			None
53	M464						Yes			None
54	M463						Yes			None
55	M462						Yes			None
56	M461						Yes			None
57	M460	OOOXOO	OOOXOO				Yes			None
58	M459	OOOXOO	OOOXOO				Yes			None
59	M458						Yes			None
60	M457						Yes			None
61	M456						Yes			None
62	M455						Yes			None
63	M454						Yes			None
64	M453	OOOXOO	OOOXOO				Yes			None
65	M452	OOOXOO	OOOXOO				Yes			None
66	M451						Yes			None
67	M450						Yes			None
68	M449						Yes			None
69	M448						Yes			None
70	M447						Yes			None
71	M446	OOOXOO	OOOXOO				Yes			None
72	M445	OOOXOO	OOOXOO				Yes			None
73	M444						Yes			None
74	M443						Yes			None
75	M442						Yes			None
76	M441						Yes			None
77	M440						Yes			None
78	M439						Yes			None
79	M438						Yes			None
80	M437						Yes			None
81	M436						Yes			None
82	M435						Yes			None
83	M434						Yes			None
84	M433						Yes			None
85	M432						Yes			None
86	M431						Yes			None
87	M430						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
88	M429						Yes			None
89	M428						Yes			None
90	M427						Yes			None
91	M426						Yes			None
92	M425						Yes			None
93	M424						Yes			None
94	M423						Yes			None
95	M422						Yes			None
96	M421						Yes			None
97	M420						Yes			None
98	M419						Yes			None
99	M418						Yes			None
100	M417						Yes			None
101	M416						Yes			None
102	M415						Yes			None
103	M414						Yes			None
104	M413						Yes			None
105	M412						Yes			None
106	M411						Yes			None
107	M410						Yes			None
108	M409						Yes			None
109	M408						Yes			None
110	M407						Yes			None
111	M406						Yes			None
112	M405						Yes			None
113	M404						Yes			None
114	M403						Yes			None
115	M402						Yes			None
116	M401						Yes			None
117	M400						Yes			None
118	M399						Yes			None
119	M398						Yes			None
120	M397						Yes			None
121	M396						Yes			None
122	M395						Yes			None
123	M394						Yes			None
124	M393						Yes			None
125	M392						Yes			None
126	M391						Yes			None
127	M390						Yes			None
128	M389						Yes			None
129	M388						Yes			None
130	M387						Yes			None
131	M386						Yes			None
132	M385						Yes			None
133	M384						Yes			None
134	M383						Yes			None
135	M382						Yes			None
136	M381						Yes			None
137	M380						Yes			None
138	M379						Yes			None
139	M378						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
140	M377						Yes			None
141	M376						Yes			None
142	M375						Yes			None
143	M374						Yes			None
144	M373						Yes			None
145	M372						Yes			None
146	M371						Yes			None
147	M370						Yes			None
148	M369						Yes			None
149	M368						Yes			None
150	M367						Yes			None
151	M366						Yes			None
152	M365						Yes			None
153	M364						Yes			None
154	M363						Yes			None
155	M362						Yes			None
156	M361						Yes			None
157	M360						Yes			None
158	M359						Yes			None
159	M358						Yes			None
160	M357						Yes			None
161	M356						Yes			None
162	M355						Yes			None
163	M354						Yes			None
164	M353						Yes			None
165	M352						Yes			None
166	M351						Yes			None
167	M350		OOOXOO				Yes			None
168	M349		OOOXOO				Yes			None
169	M348						Yes			None
170	M347		OOOXOO				Yes			None
171	M346						Yes			None
172	M345		OOOXOO				Yes			None
173	M344						Yes			None
174	M343						Yes			None
175	M342						Yes			None
176	M341						Yes			None
177	M340						Yes			None
178	M339						Yes			None
179	M338						Yes			None
180	M337						Yes			None
181	M336						Yes			None
182	M335						Yes			None
183	M334						Yes			None
184	M333						Yes			None
185	M332						Yes			None
186	M331						Yes			None
187	M330						Yes			None
188	M329						Yes			None
189	M328						Yes			None
190	M327						Yes			None
191	M326						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
192	M325						Yes			None
193	M324						Yes			None
194	M323						Yes			None
195	M322						Yes			None
196	M321						Yes			None
197	M320						Yes			None
198	M319						Yes			None
199	M318						Yes			None
200	M317						Yes			None
201	M316						Yes			None
202	M315						Yes			None
203	M314						Yes			None
204	M313						Yes			None
205	M312						Yes			None
206	M311						Yes			None
207	M310						Yes			None
208	M309						Yes			None
209	M308						Yes			None
210	M307						Yes			None
211	M306						Yes			None
212	M305						Yes			None
213	M304						Yes			None
214	M303						Yes			None
215	M302						Yes			None
216	M301						Yes			None
217	M300						Yes			None
218	M299						Yes			None
219	M298						Yes			None
220	M297						Yes			None
221	M296						Yes			None
222	M295						Yes			None
223	M294						Yes			None
224	M293						Yes			None
225	M292						Yes			None
226	M291						Yes			None
227	M290						Yes			None
228	M289						Yes			None
229	M288						Yes			None
230	M287						Yes			None
231	M286						Yes			None
232	M285						Yes			None
233	M284						Yes			None
234	M283						Yes			None
235	M282						Yes			None
236	M281						Yes			None
237	M280						Yes			None
238	M279						Yes			None
239	M278						Yes			None
240	M277						Yes			None
241	M276						Yes			None
242	M275						Yes			None
243	M274						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
244	M273						Yes			None
245	M272						Yes			None
246	M271						Yes			None
247	M270						Yes			None
248	M269						Yes			None
249	M268						Yes			None
250	M267						Yes			None
251	M266						Yes			None
252	M265						Yes			None
253	M264						Yes			None
254	M263						Yes			None
255	M262						Yes			None
256	M261						Yes			None
257	M260						Yes			None
258	M259						Yes			None
259	M258						Yes			None
260	M257						Yes			None
261	M256						Yes			None
262	M255						Yes			None
263	M254						Yes			None
264	M253						Yes			None
265	M252						Yes			None
266	M251						Yes			None
267	M250						Yes			None
268	M249						Yes			None
269	M248						Yes			None
270	M247						Yes			None
271	M246						Yes			None
272	M245						Yes			None
273	M244						Yes			None
274	M243						Yes			None
275	M242						Yes			None
276	M241		OOOXOO				Yes			None
277	M240		OOOXOO				Yes			None
278	M239						Yes			None
279	M238		OOOXOO				Yes			None
280	M237						Yes			None
281	M236		OOOXOO				Yes			None
282	M235						Yes			None
283	M234						Yes			None
284	M233						Yes			None
285	M232						Yes			None
286	M231						Yes			None
287	M230						Yes			None
288	M229						Yes			None
289	M228						Yes			None
290	M227						Yes			None
291	M226						Yes			None
292	M225						Yes			None
293	M224						Yes			None
294	M223						Yes			None
295	M222						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
296	M221						Yes			None
297	M220						Yes			None
298	M219						Yes			None
299	M218						Yes			None
300	M217						Yes			None
301	M216						Yes			None
302	M215						Yes			None
303	M214						Yes			None
304	M213						Yes			None
305	M212						Yes			None
306	M211						Yes			None
307	M210						Yes			None
308	M209						Yes			None
309	M208						Yes			None
310	M207						Yes			None
311	M206						Yes			None
312	M205						Yes			None
313	M204						Yes			None
314	M203						Yes			None
315	M202						Yes			None
316	M201						Yes			None
317	M200						Yes			None
318	M199						Yes			None
319	M198						Yes			None
320	M197						Yes			None
321	M196						Yes			None
322	M195						Yes			None
323	M194						Yes			None
324	M193						Yes			None
325	M192						Yes			None
326	M191						Yes			None
327	M190						Yes			None
328	M189						Yes			None
329	M188						Yes			None
330	M187						Yes			None
331	M186						Yes			None
332	M185						Yes			None
333	M184						Yes			None
334	M183						Yes			None
335	M182						Yes			None
336	M181						Yes			None
337	M180						Yes			None
338	M179						Yes			None
339	M178						Yes			None
340	M177						Yes			None
341	M176						Yes			None
342	M175						Yes			None
343	M174						Yes			None
344	M173						Yes			None
345	M172						Yes			None
346	M171						Yes			None
347	M170						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
348	M169						Yes			None
349	M168						Yes			None
350	M167						Yes			None
351	M166						Yes			None
352	M165						Yes			None
353	M164						Yes			None
354	M163						Yes			None
355	M162						Yes			None
356	M161						Yes			None
357	M160						Yes			None
358	M159						Yes			None
359	M158						Yes			None
360	M157						Yes			None
361	M156						Yes			None
362	M155						Yes			None
363	M154						Yes			None
364	M153						Yes			None
365	M152						Yes			None
366	M151						Yes			None
367	M150						Yes			None
368	M149						Yes			None
369	M148						Yes			None
370	M147						Yes			None
371	M146						Yes			None
372	M145						Yes			None
373	M144						Yes			None
374	M143						Yes			None
375	M142						Yes			None
376	M141						Yes			None
377	M140						Yes			None
378	M139						Yes			None
379	M138						Yes			None
380	M137						Yes			None
381	M136						Yes			None
382	M135						Yes			None
383	M134						Yes			None
384	M133						Yes			None
385	M132		OOOXOO				Yes			None
386	M131		OOOXOO				Yes			None
387	M130						Yes			None
388	M129		OOOXOO				Yes			None
389	M128						Yes			None
390	M127		OOOXOO				Yes			None
391	M126						Yes			None
392	M125						Yes			None
393	M124						Yes			None
394	M123						Yes			None
395	M122						Yes			None
396	M121						Yes			None
397	M120						Yes			None
398	M119						Yes			None
399	M118						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
400	M117						Yes			None
401	M116						Yes			None
402	M115						Yes			None
403	M114						Yes			None
404	M113						Yes			None
405	M112						Yes			None
406	M111						Yes			None
407	M110						Yes			None
408	M109						Yes			None
409	M108						Yes			None
410	M107						Yes			None
411	M106						Yes			None
412	M105						Yes			None
413	M104						Yes			None
414	M103						Yes			None
415	M102						Yes			None
416	M101						Yes			None
417	M100						Yes			None
418	M99						Yes			None
419	M98						Yes			None
420	M97						Yes			None
421	M96						Yes			None
422	M95						Yes			None
423	M94						Yes			None
424	M93						Yes			None
425	M92						Yes			None
426	M91						Yes			None
427	M90						Yes			None
428	M89						Yes			None
429	M88						Yes			None
430	M87						Yes			None
431	M86						Yes			None
432	M85						Yes			None
433	M84						Yes			None
434	M83						Yes			None
435	M82						Yes			None
436	M81						Yes			None
437	M80						Yes			None
438	M79						Yes			None
439	M78						Yes			None
440	M77						Yes			None
441	M76						Yes			None
442	M75						Yes			None
443	M74						Yes			None
444	M73						Yes			None
445	M72						Yes			None
446	M71						Yes			None
447	M70						Yes			None
448	M69						Yes			None
449	M68						Yes			None
450	M67						Yes			None
451	M66						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
452	M65						Yes			None
453	M64						Yes			None
454	M63						Yes			None
455	M62						Yes			None
456	M61						Yes			None
457	M60						Yes			None
458	M59						Yes			None
459	M58						Yes			None
460	M57						Yes			None
461	M56						Yes			None
462	M55						Yes			None
463	M54						Yes			None
464	M53						Yes			None
465	M52						Yes			None
466	M51						Yes			None
467	M50						Yes			None
468	M49						Yes			None
469	M48						Yes			None
470	M47						Yes			None
471	M46						Yes			None
472	M45						Yes			None
473	M44						Yes			None
474	M43						Yes			None
475	M42						Yes			None
476	M41						Yes			None
477	M40						Yes			None
478	M39						Yes			None
479	M38						Yes			None
480	M37						Yes			None
481	M36						Yes			None
482	M35						Yes			None
483	M34						Yes			None
484	M33						Yes			None
485	M32						Yes			None
486	M31						Yes			None
487	M30						Yes			None
488	M29						Yes			None
489	M28						Yes			None
490	M27						Yes			None
491	M26						Yes			None
492	M25						Yes			None
493	M24						Yes			None
494	M23		OOOXOO				Yes			None
495	M22		OOOXOO				Yes			None
496	M21						Yes			None
497	M20		OOOXOO				Yes			None
498	M19						Yes			None
499	M18		OOOXOO				Yes			None
500	M17						Yes			None
501	M16						Yes			None
502	M15						Yes			None
503	M14						Yes			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Analysis ...	Inactive	Seismic Design ...
504	M13						Yes			None
505	M12						Yes			None
506	M11						Yes			None
507	M10						Yes			None
508	M9						Yes			None
509	M8						Yes			None
510	M7						Yes			None
511	M6						Yes			None
512	M5						Yes			None
513	M4						Yes			None
514	M3						Yes			None
515	M2						Yes			None
516	M1						Yes			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-torq...	Kyy	Kzz	Cb	Funct...
1	MP3D	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
2	MP3C	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
3	MP3B	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
4	MP3A	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
5	MP2D	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
6	MP2C	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
7	MP2B	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
8	MP2A	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
9	MP1D	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
10	MP1C	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
11	MP1B	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
12	MP1A	Antenn Mount Pipes	8			Lbyy			2.1	2.1		Lateral
13	M528	SR END CONNECTION	1.916			Lbyy						Lateral
14	M527	SR END CONNECTION	1.916			Lbyy						Lateral
15	M526	SR END CONNECTION	1.916			Lbyy						Lateral
16	M525	SR END CONNECTION	1.916			Lbyy						Lateral
17	M524	Support rail	12.5			Lbyy						Lateral
18	M515	Support rail	12.5			Lbyy						Lateral
19	M506	Support rail	12.5			Lbyy						Lateral
20	M497	Support rail	12.5			Lbyy						Lateral
21	M472	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
22	M471	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
23	M470	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
24	M469	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
25	M468	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
26	M467	PIPE_1.5	6.034			Lbyy						Lateral
27	M466	PIPE_1.5	6.034			Lbyy						Lateral
28	M465	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
29	M464	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
30	M463	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
31	M462	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
32	M461	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
33	M460	PIPE_1.5	6.034			Lbyy						Lateral
34	M459	PIPE_1.5	6.034			Lbyy						Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-torq...	Kyy	Kzz	Cb	Funct...
35	M458	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
36	M457	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
37	M456	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
38	M455	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
39	M454	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
40	M453	PIPE_1.5	6.034			Lbyy						Lateral
41	M452	PIPE_1.5	6.034			Lbyy						Lateral
42	M451	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
43	M450	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
44	M449	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
45	M448	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
46	M447	PL3/16x1.5	1.687	.833	.833	Lbyy						Lateral
47	M446	PIPE_1.5	6.034			Lbyy						Lateral
48	M445	PIPE_1.5	6.034			Lbyy						Lateral
49	M436	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
50	M432	PL3/8x4	.741						.65	.65		Lateral
51	M431	PL3/8x1	.741						.65	.65		Lateral
52	M430	PL3/8x1	.725						.65	.65		Lateral
53	M429	PL1/2x4	.725						.65	.65		Lateral
54	M428	PL3/8x1	.759						.65	.65		Lateral
55	M427	PL3/8x1	.761						.65	.65		Lateral
56	M426	PL1/2x4	.761						.65	.65		Lateral
57	M425	PL3/8x4	.748						.65	.65		Lateral
58	M420	PL1/2x4	.917						.65	.65		Lateral
59	M419	PL1/2x4	.958						.65	.65		Lateral
60	M418	PL3/8x1	.871						.65	.65		Lateral
61	M417	PL3/8x1	1.264						.65	.65		Lateral
62	M416	PL3/8x1	.871						.65	.65		Lateral
63	M415	PL3/8x1	1.294						.65	.65		Lateral
64	M414	PL3/8x1	.917						.65	.65		Lateral
65	M413	PL3/8x1	.958						.65	.65		Lateral
66	M412	PL3/8x1	.917						.65	.65		Lateral
67	M411	PL3/8x1	.957						.65	.65		Lateral
68	M410	PL3/8x4	.917						.65	.65		Lateral
69	M409	PL3/8x4	.958						.65	.65		Lateral
70	M406	PL3/8x5/8	.397						.65	.65		Lateral
71	M405	PL3/8x5/8	.288						.65	.65		Lateral
72	M404	PL3/8x3/4	.487						.65	.65		Lateral
73	M403	PL3/8x3/4	.37						.65	.65		Lateral
74	M402	PL3/8x3/4	.595						.65	.65		Lateral
75	M401	PL3/8x7/8	.467						.65	.65		Lateral
76	M400	PL3/8x7/8	.727						.65	.65		Lateral
77	M399	PL3/8x7/8	.583						.65	.65		Lateral
78	M398	PL3/8x1	.872						.65	.65		Lateral
79	M397	PL3/8x1	.719						.65	.65		Lateral
80	M396	PL3/8x1	1.013						.65	.65		Lateral
81	M394	PL3/8x1	.871						.65	.65		Lateral
82	M393	PL3/8x1	.731						.65	.65		Lateral
83	M392	PL3/8x1	.667						.65	.65		Lateral
84	M391	PL3/8x1	1.045						.65	.65		Lateral
85	M390	PL3/8x1	.718						.65	.65		Lateral
86	M389	PL3/8x1	.648						.65	.65		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-torq...	Kyy	Kzz	Cb	Funct...
87	M388	PL3/8x1	1.023						.65	.65		Lateral
88	M387	PL3/8x4	.742						.65	.65		Lateral
89	M386	PL3/8x4	.667						.65	.65		Lateral
90	M385	PL3/8x4	1.045						.65	.65		Lateral
91	M384	PL1/2x4	.718						.65	.65		Lateral
92	M383	PL1/2x4	.648						.65	.65		Lateral
93	M382	PL1/2x4	1.023						.65	.65		Lateral
94	M363	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
95	M362	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
96	M361	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
97	M360	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
98	M359	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
99	M358	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
100	M357	PL3/8x3	.605			Lbyy			.65	.65		Lateral
101	M356	PL3/8x3	.605			Lbyy			.65	.65		Lateral
102	M355	HSS4x3x4	4.244			Lbyy			1	1		Lateral
103	M354	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
104	M353	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
105	M352	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
106	M328	PIPE_2.5	12.5			Lbyy			.65	.65		Lateral
107	M327	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
108	M323	PL3/8x4	.741						.65	.65		Lateral
109	M322	PL3/8x1	.741						.65	.65		Lateral
110	M321	PL3/8x1	.725						.65	.65		Lateral
111	M320	PL1/2x4	.725						.65	.65		Lateral
112	M319	PL3/8x1	.759						.65	.65		Lateral
113	M318	PL3/8x1	.761						.65	.65		Lateral
114	M317	PL1/2x4	.761						.65	.65		Lateral
115	M316	PL3/8x4	.748						.65	.65		Lateral
116	M311	PL1/2x4	.917						.65	.65		Lateral
117	M310	PL1/2x4	.958						.65	.65		Lateral
118	M309	PL3/8x1	.871						.65	.65		Lateral
119	M308	PL3/8x1	1.264						.65	.65		Lateral
120	M307	PL3/8x1	.871						.65	.65		Lateral
121	M306	PL3/8x1	1.294						.65	.65		Lateral
122	M305	PL3/8x1	.917						.65	.65		Lateral
123	M304	PL3/8x1	.958						.65	.65		Lateral
124	M303	PL3/8x1	.917						.65	.65		Lateral
125	M302	PL3/8x1	.957						.65	.65		Lateral
126	M301	PL3/8x4	.917						.65	.65		Lateral
127	M300	PL3/8x4	.958						.65	.65		Lateral
128	M297	PL3/8x5/8	.397						.65	.65		Lateral
129	M296	PL3/8x5/8	.288						.65	.65		Lateral
130	M295	PL3/8x3/4	.487						.65	.65		Lateral
131	M294	PL3/8x3/4	.37						.65	.65		Lateral
132	M293	PL3/8x3/4	.595						.65	.65		Lateral
133	M292	PL3/8x7/8	.467						.65	.65		Lateral
134	M291	PL3/8x7/8	.727						.65	.65		Lateral
135	M290	PL3/8x7/8	.583						.65	.65		Lateral
136	M289	PL3/8x1	.872						.65	.65		Lateral
137	M288	PL3/8x1	.719						.65	.65		Lateral
138	M287	PL3/8x1	1.013						.65	.65		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-torq...	Kyy	Kzz	Cb	Funct...
139	M285	PL3/8x1	.871						.65	.65		Lateral
140	M284	PL3/8x1	.731						.65	.65		Lateral
141	M283	PL3/8x1	.667						.65	.65		Lateral
142	M282	PL3/8x1	1.045						.65	.65		Lateral
143	M281	PL3/8x1	.718						.65	.65		Lateral
144	M280	PL3/8x1	.648						.65	.65		Lateral
145	M279	PL3/8x1	1.023						.65	.65		Lateral
146	M278	PL3/8x4	.742						.65	.65		Lateral
147	M277	PL3/8x4	.667						.65	.65		Lateral
148	M276	PL3/8x4	1.045						.65	.65		Lateral
149	M275	PL1/2x4	.718						.65	.65		Lateral
150	M274	PL1/2x4	.648						.65	.65		Lateral
151	M273	PL1/2x4	1.023						.65	.65		Lateral
152	M254	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
153	M253	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
154	M252	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
155	M251	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
156	M250	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
157	M249	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
158	M248	PL3/8x3	.605			Lbyy			.65	.65		Lateral
159	M247	PL3/8x3	.605			Lbyy			.65	.65		Lateral
160	M246	HSS4x3x4	4.244			Lbyy			1	1		Lateral
161	M245	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
162	M244	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
163	M243	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
164	M219	PIPE_2.5	12.5			Lbyy			.65	.65		Lateral
165	M218	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
166	M214	PL3/8x4	.741						.65	.65		Lateral
167	M213	PL3/8x1	.741						.65	.65		Lateral
168	M212	PL3/8x1	.725						.65	.65		Lateral
169	M211	PL1/2x4	.725						.65	.65		Lateral
170	M210	PL3/8x1	.759						.65	.65		Lateral
171	M209	PL3/8x1	.761						.65	.65		Lateral
172	M208	PL1/2x4	.761						.65	.65		Lateral
173	M207	PL3/8x4	.748						.65	.65		Lateral
174	M202	PL1/2x4	.917						.65	.65		Lateral
175	M201	PL1/2x4	.958						.65	.65		Lateral
176	M200	PL3/8x1	.871						.65	.65		Lateral
177	M199	PL3/8x1	1.264						.65	.65		Lateral
178	M198	PL3/8x1	.871						.65	.65		Lateral
179	M197	PL3/8x1	1.294						.65	.65		Lateral
180	M196	PL3/8x1	.917						.65	.65		Lateral
181	M195	PL3/8x1	.958						.65	.65		Lateral
182	M194	PL3/8x1	.917						.65	.65		Lateral
183	M193	PL3/8x1	.957						.65	.65		Lateral
184	M192	PL3/8x4	.917						.65	.65		Lateral
185	M191	PL3/8x4	.958						.65	.65		Lateral
186	M188	PL3/8x5/8	.397						.65	.65		Lateral
187	M187	PL3/8x5/8	.288						.65	.65		Lateral
188	M186	PL3/8x3/4	.487						.65	.65		Lateral
189	M185	PL3/8x3/4	.37						.65	.65		Lateral
190	M184	PL3/8x3/4	.595						.65	.65		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-torq...	Kyy	Kzz	Cb	Funct...
191	M183	PL3/8x7/8	.467						.65	.65		Lateral
192	M182	PL3/8x7/8	.727						.65	.65		Lateral
193	M181	PL3/8x7/8	.583						.65	.65		Lateral
194	M180	PL3/8x1	.872						.65	.65		Lateral
195	M179	PL3/8x1	.719						.65	.65		Lateral
196	M178	PL3/8x1	1.013						.65	.65		Lateral
197	M176	PL3/8x1	.871						.65	.65		Lateral
198	M175	PL3/8x1	.731						.65	.65		Lateral
199	M174	PL3/8x1	.667						.65	.65		Lateral
200	M173	PL3/8x1	1.045						.65	.65		Lateral
201	M172	PL3/8x1	.718						.65	.65		Lateral
202	M171	PL3/8x1	.648						.65	.65		Lateral
203	M170	PL3/8x1	1.023						.65	.65		Lateral
204	M169	PL3/8x4	.742						.65	.65		Lateral
205	M168	PL3/8x4	.667						.65	.65		Lateral
206	M167	PL3/8x4	1.045						.65	.65		Lateral
207	M166	PL1/2x4	.718						.65	.65		Lateral
208	M165	PL1/2x4	.648						.65	.65		Lateral
209	M164	PL1/2x4	1.023						.65	.65		Lateral
210	M145	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
211	M144	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
212	M143	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
213	M142	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
214	M141	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
215	M140	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
216	M139	PL3/8x3	.605			Lbyy			.65	.65		Lateral
217	M138	PL3/8x3	.605			Lbyy			.65	.65		Lateral
218	M137	HSS4x3x4	4.244			Lbyy			1	1		Lateral
219	M136	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
220	M135	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
221	M134	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
222	M110	PIPE_2.5	12.5			Lbyy			.65	.65		Lateral
223	M109	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
224	M105	PL3/8x4	.741						.65	.65		Lateral
225	M104	PL3/8x1	.741						.65	.65		Lateral
226	M103	PL3/8x1	.725						.65	.65		Lateral
227	M102	PL1/2x4	.725						.65	.65		Lateral
228	M101	PL3/8x1	.759						.65	.65		Lateral
229	M100	PL3/8x1	.761						.65	.65		Lateral
230	M99	PL1/2x4	.761						.65	.65		Lateral
231	M98	PL3/8x4	.748						.65	.65		Lateral
232	M93	PL1/2x4	.917						.65	.65		Lateral
233	M92	PL1/2x4	.958						.65	.65		Lateral
234	M91	PL3/8x1	.871						.65	.65		Lateral
235	M90	PL3/8x1	1.264						.65	.65		Lateral
236	M89	PL3/8x1	.871						.65	.65		Lateral
237	M88	PL3/8x1	1.294						.65	.65		Lateral
238	M87	PL3/8x1	.917						.65	.65		Lateral
239	M86	PL3/8x1	.958						.65	.65		Lateral
240	M85	PL3/8x1	.917						.65	.65		Lateral
241	M84	PL3/8x1	.957						.65	.65		Lateral
242	M83	PL3/8x4	.917						.65	.65		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp bo...	L-torq...	Kyy	Kzz	Cb	Funct...
243	M82	PL3/8x4	.958						.65	.65		Lateral
244	M79	PL3/8x5/8	.397						.65	.65		Lateral
245	M78	PL3/8x5/8	.288						.65	.65		Lateral
246	M77	PL3/8x3/4	.487						.65	.65		Lateral
247	M76	PL3/8x3/4	.37						.65	.65		Lateral
248	M75	PL3/8x3/4	.595						.65	.65		Lateral
249	M74	PL3/8x7/8	.467						.65	.65		Lateral
250	M73	PL3/8x7/8	.727						.65	.65		Lateral
251	M72	PL3/8x7/8	.583						.65	.65		Lateral
252	M71	PL3/8x1	.872						.65	.65		Lateral
253	M70	PL3/8x1	.719						.65	.65		Lateral
254	M69	PL3/8x1	1.013						.65	.65		Lateral
255	M67	PL3/8x1	.871						.65	.65		Lateral
256	M66	PL3/8x1	.731						.65	.65		Lateral
257	M65	PL3/8x1	.667						.65	.65		Lateral
258	M64	PL3/8x1	1.045						.65	.65		Lateral
259	M63	PL3/8x1	.718						.65	.65		Lateral
260	M62	PL3/8x1	.648						.65	.65		Lateral
261	M61	PL3/8x1	1.023						.65	.65		Lateral
262	M60	PL3/8x4	.742						.65	.65		Lateral
263	M59	PL3/8x4	.667						.65	.65		Lateral
264	M58	PL3/8x4	1.045						.65	.65		Lateral
265	M57	PL1/2x4	.718						.65	.65		Lateral
266	M56	PL1/2x4	.648						.65	.65		Lateral
267	M55	PL1/2x4	1.023						.65	.65		Lateral
268	M36	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
269	M35	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
270	M34	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
271	M33	PL1/2x2.375	.583	.5	.5	Lbyy			.65	.65		Lateral
272	M32	PL1/2x2.375	1.124	.5	.5	Lbyy			.65	.65		Lateral
273	M31	PL1/2x2.375	1.659	.5	.5	Lbyy			.65	.65		Lateral
274	M30	PL3/8x3	.605			Lbyy			.65	.65		Lateral
275	M29	PL3/8x3	.605			Lbyy			.65	.65		Lateral
276	M28	HSS4x3x4	4.244			Lbyy			1	1		Lateral
277	M27	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
278	M26	L3x3x6	2.386	Segment	Segment	Lbyy			.65	.65		Lateral
279	M25	L3x3x6	2.914	Segment	Segment	Lbyy			.65	.65		Lateral
280	M1	PIPE_2.5	12.5			Lbyy			.65	.65		Lateral

Member Distributed Loads (BLC 10 : Structure Di)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
1	MP3D	Y	-14.232	-14.232	0	%100
2	MP3C	Y	-14.232	-14.232	0	%100
3	MP3B	Y	-14.232	-14.232	0	%100
4	MP3A	Y	-14.232	-14.232	0	%100
5	MP2D	Y	-14.232	-14.232	0	%100
6	MP2C	Y	-14.232	-14.232	0	%100
7	MP2B	Y	-14.232	-14.232	0	%100
8	MP2A	Y	-14.232	-14.232	0	%100
9	MP1D	Y	-14.232	-14.232	0	%100

Member Distributed Loads (BLC 10 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
10	MP1C	Y	-14.232	-14.232	0	%100
11	MP1B	Y	-14.232	-14.232	0	%100
12	MP1A	Y	-14.232	-14.232	0	%100
13	M528	Y	-15.669	-15.669	0	%100
14	M527	Y	-15.669	-15.669	0	%100
15	M526	Y	-15.669	-15.669	0	%100
16	M525	Y	-15.669	-15.669	0	%100
17	M524	Y	-14.232	-14.232	0	%100
18	M515	Y	-14.232	-14.232	0	%100
19	M506	Y	-14.232	-14.232	0	%100
20	M497	Y	-14.232	-14.232	0	%100
21	M472	Y	-6.968	-6.968	0	%100
22	M471	Y	-6.968	-6.968	0	%100
23	M470	Y	-6.968	-6.968	0	%100
24	M469	Y	-6.968	-6.968	0	%100
25	M468	Y	-6.968	-6.968	0	%100
26	M467	Y	-11.533	-11.533	0	%100
27	M466	Y	-11.533	-11.533	0	%100
28	M465	Y	-6.968	-6.968	0	%100
29	M464	Y	-6.968	-6.968	0	%100
30	M463	Y	-6.968	-6.968	0	%100
31	M462	Y	-6.968	-6.968	0	%100
32	M461	Y	-6.968	-6.968	0	%100
33	M460	Y	-11.533	-11.533	0	%100
34	M459	Y	-11.533	-11.533	0	%100
35	M458	Y	-6.968	-6.968	0	%100
36	M457	Y	-6.968	-6.968	0	%100
37	M456	Y	-6.968	-6.968	0	%100
38	M455	Y	-6.968	-6.968	0	%100
39	M454	Y	-6.968	-6.968	0	%100
40	M453	Y	-11.533	-11.533	0	%100
41	M452	Y	-11.533	-11.533	0	%100
42	M451	Y	-6.968	-6.968	0	%100
43	M450	Y	-6.968	-6.968	0	%100
44	M449	Y	-6.968	-6.968	0	%100
45	M448	Y	-6.968	-6.968	0	%100
46	M447	Y	-6.968	-6.968	0	%100
47	M446	Y	-11.533	-11.533	0	%100
48	M445	Y	-11.533	-11.533	0	%100
49	M436	Y	-14.568	-14.568	0	%100
50	M432	Y	-15.697	-15.697	0	%100
51	M431	Y	-10.41	-10.41	0	%100
52	M430	Y	-10.41	-10.41	0	%100
53	M429	Y	-15.918	-15.918	0	%100
54	M428	Y	-10.41	-10.41	0	%100
55	M427	Y	-10.41	-10.41	0	%100
56	M426	Y	-15.918	-15.918	0	%100
57	M425	Y	-15.697	-15.697	0	%100
58	M420	Y	-15.918	-15.918	0	%100
59	M419	Y	-15.918	-15.918	0	%100
60	M418	Y	-10.41	-10.41	0	%100
61	M417	Y	-10.41	-10.41	0	%100

Member Distributed Loads (BLC 10 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
62	M416	Y	-10.41	-10.41	0	%100
63	M415	Y	-10.41	-10.41	0	%100
64	M414	Y	-10.41	-10.41	0	%100
65	M413	Y	-10.41	-10.41	0	%100
66	M412	Y	-10.41	-10.41	0	%100
67	M411	Y	-10.41	-10.41	0	%100
68	M410	Y	-15.697	-15.697	0	%100
69	M409	Y	-15.697	-15.697	0	%100
70	M406	Y	-9.749	-9.749	0	%100
71	M405	Y	-9.749	-9.749	0	%100
72	M404	Y	-9.97	-9.97	0	%100
73	M403	Y	-9.97	-9.97	0	%100
74	M402	Y	-9.97	-9.97	0	%100
75	M401	Y	-10.19	-10.19	0	%100
76	M400	Y	-10.19	-10.19	0	%100
77	M399	Y	-10.19	-10.19	0	%100
78	M398	Y	-10.41	-10.41	0	%100
79	M397	Y	-10.41	-10.41	0	%100
80	M396	Y	-10.41	-10.41	0	%100
81	M394	Y	-10.41	-10.41	0	%100
82	M393	Y	-10.41	-10.41	0	%100
83	M392	Y	-10.41	-10.41	0	%100
84	M391	Y	-10.41	-10.41	0	%100
85	M390	Y	-10.41	-10.41	0	%100
86	M389	Y	-10.41	-10.41	0	%100
87	M388	Y	-10.41	-10.41	0	%100
88	M387	Y	-15.697	-15.697	0	%100
89	M386	Y	-15.697	-15.697	0	%100
90	M385	Y	-15.697	-15.697	0	%100
91	M384	Y	-15.918	-15.918	0	%100
92	M383	Y	-15.918	-15.918	0	%100
93	M382	Y	-15.918	-15.918	0	%100
94	M363	Y	-13.054	-13.054	0	%100
95	M362	Y	-13.054	-13.054	0	%100
96	M361	Y	-13.054	-13.054	0	%100
97	M360	Y	-13.054	-13.054	0	%100
98	M359	Y	-13.054	-13.054	0	%100
99	M358	Y	-13.054	-13.054	0	%100
100	M357	Y	-13.935	-13.935	0	%100
101	M356	Y	-13.935	-13.935	0	%100
102	M355	Y	-20.324	-20.324	0	%100
103	M354	Y	-14.568	-14.568	0	%100
104	M353	Y	-14.568	-14.568	0	%100
105	M352	Y	-14.568	-14.568	0	%100
106	M328	Y	-14.232	-14.232	0	%100
107	M327	Y	-14.568	-14.568	0	%100
108	M323	Y	-15.697	-15.697	0	%100
109	M322	Y	-10.41	-10.41	0	%100
110	M321	Y	-10.41	-10.41	0	%100
111	M320	Y	-15.918	-15.918	0	%100
112	M319	Y	-10.41	-10.41	0	%100
113	M318	Y	-10.41	-10.41	0	%100

Member Distributed Loads (BLC 10 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
114	M317	Y	-15.918	-15.918	0	%100
115	M316	Y	-15.697	-15.697	0	%100
116	M311	Y	-15.918	-15.918	0	%100
117	M310	Y	-15.918	-15.918	0	%100
118	M309	Y	-10.41	-10.41	0	%100
119	M308	Y	-10.41	-10.41	0	%100
120	M307	Y	-10.41	-10.41	0	%100
121	M306	Y	-10.41	-10.41	0	%100
122	M305	Y	-10.41	-10.41	0	%100
123	M304	Y	-10.41	-10.41	0	%100
124	M303	Y	-10.41	-10.41	0	%100
125	M302	Y	-10.41	-10.41	0	%100
126	M301	Y	-15.697	-15.697	0	%100
127	M300	Y	-15.697	-15.697	0	%100
128	M297	Y	-9.749	-9.749	0	%100
129	M296	Y	-9.749	-9.749	0	%100
130	M295	Y	-9.97	-9.97	0	%100
131	M294	Y	-9.97	-9.97	0	%100
132	M293	Y	-9.97	-9.97	0	%100
133	M292	Y	-10.19	-10.19	0	%100
134	M291	Y	-10.19	-10.19	0	%100
135	M290	Y	-10.19	-10.19	0	%100
136	M289	Y	-10.41	-10.41	0	%100
137	M288	Y	-10.41	-10.41	0	%100
138	M287	Y	-10.41	-10.41	0	%100
139	M285	Y	-10.41	-10.41	0	%100
140	M284	Y	-10.41	-10.41	0	%100
141	M283	Y	-10.41	-10.41	0	%100
142	M282	Y	-10.41	-10.41	0	%100
143	M281	Y	-10.41	-10.41	0	%100
144	M280	Y	-10.41	-10.41	0	%100
145	M279	Y	-10.41	-10.41	0	%100
146	M278	Y	-15.697	-15.697	0	%100
147	M277	Y	-15.697	-15.697	0	%100
148	M276	Y	-15.697	-15.697	0	%100
149	M275	Y	-15.918	-15.918	0	%100
150	M274	Y	-15.918	-15.918	0	%100
151	M273	Y	-15.918	-15.918	0	%100
152	M254	Y	-13.054	-13.054	0	%100
153	M253	Y	-13.054	-13.054	0	%100
154	M252	Y	-13.054	-13.054	0	%100
155	M251	Y	-13.054	-13.054	0	%100
156	M250	Y	-13.054	-13.054	0	%100
157	M249	Y	-13.054	-13.054	0	%100
158	M248	Y	-13.935	-13.935	0	%100
159	M247	Y	-13.935	-13.935	0	%100
160	M246	Y	-20.324	-20.324	0	%100
161	M245	Y	-14.568	-14.568	0	%100
162	M244	Y	-14.568	-14.568	0	%100
163	M243	Y	-14.568	-14.568	0	%100
164	M219	Y	-14.232	-14.232	0	%100
165	M218	Y	-14.568	-14.568	0	%100

Member Distributed Loads (BLC 10 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
166	M214	Y	-15.697	-15.697	0	%100
167	M213	Y	-10.41	-10.41	0	%100
168	M212	Y	-10.41	-10.41	0	%100
169	M211	Y	-15.918	-15.918	0	%100
170	M210	Y	-10.41	-10.41	0	%100
171	M209	Y	-10.41	-10.41	0	%100
172	M208	Y	-15.918	-15.918	0	%100
173	M207	Y	-15.697	-15.697	0	%100
174	M202	Y	-15.918	-15.918	0	%100
175	M201	Y	-15.918	-15.918	0	%100
176	M200	Y	-10.41	-10.41	0	%100
177	M199	Y	-10.41	-10.41	0	%100
178	M198	Y	-10.41	-10.41	0	%100
179	M197	Y	-10.41	-10.41	0	%100
180	M196	Y	-10.41	-10.41	0	%100
181	M195	Y	-10.41	-10.41	0	%100
182	M194	Y	-10.41	-10.41	0	%100
183	M193	Y	-10.41	-10.41	0	%100
184	M192	Y	-15.697	-15.697	0	%100
185	M191	Y	-15.697	-15.697	0	%100
186	M188	Y	-9.749	-9.749	0	%100
187	M187	Y	-9.749	-9.749	0	%100
188	M186	Y	-9.97	-9.97	0	%100
189	M185	Y	-9.97	-9.97	0	%100
190	M184	Y	-9.97	-9.97	0	%100
191	M183	Y	-10.19	-10.19	0	%100
192	M182	Y	-10.19	-10.19	0	%100
193	M181	Y	-10.19	-10.19	0	%100
194	M180	Y	-10.41	-10.41	0	%100
195	M179	Y	-10.41	-10.41	0	%100
196	M178	Y	-10.41	-10.41	0	%100
197	M176	Y	-10.41	-10.41	0	%100
198	M175	Y	-10.41	-10.41	0	%100
199	M174	Y	-10.41	-10.41	0	%100
200	M173	Y	-10.41	-10.41	0	%100
201	M172	Y	-10.41	-10.41	0	%100
202	M171	Y	-10.41	-10.41	0	%100
203	M170	Y	-10.41	-10.41	0	%100
204	M169	Y	-15.697	-15.697	0	%100
205	M168	Y	-15.697	-15.697	0	%100
206	M167	Y	-15.697	-15.697	0	%100
207	M166	Y	-15.918	-15.918	0	%100
208	M165	Y	-15.918	-15.918	0	%100
209	M164	Y	-15.918	-15.918	0	%100
210	M145	Y	-13.054	-13.054	0	%100
211	M144	Y	-13.054	-13.054	0	%100
212	M143	Y	-13.054	-13.054	0	%100
213	M142	Y	-13.054	-13.054	0	%100
214	M141	Y	-13.054	-13.054	0	%100
215	M140	Y	-13.054	-13.054	0	%100
216	M139	Y	-13.935	-13.935	0	%100
217	M138	Y	-13.935	-13.935	0	%100

Member Distributed Loads (BLC 10 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
218	M137	Y	-20.324	-20.324	0	%100
219	M136	Y	-14.568	-14.568	0	%100
220	M135	Y	-14.568	-14.568	0	%100
221	M134	Y	-14.568	-14.568	0	%100
222	M110	Y	-14.232	-14.232	0	%100
223	M109	Y	-14.568	-14.568	0	%100
224	M105	Y	-15.697	-15.697	0	%100
225	M104	Y	-10.41	-10.41	0	%100
226	M103	Y	-10.41	-10.41	0	%100
227	M102	Y	-15.918	-15.918	0	%100
228	M101	Y	-10.41	-10.41	0	%100
229	M100	Y	-10.41	-10.41	0	%100
230	M99	Y	-15.918	-15.918	0	%100
231	M98	Y	-15.697	-15.697	0	%100
232	M93	Y	-15.918	-15.918	0	%100
233	M92	Y	-15.918	-15.918	0	%100
234	M91	Y	-10.41	-10.41	0	%100
235	M90	Y	-10.41	-10.41	0	%100
236	M89	Y	-10.41	-10.41	0	%100
237	M88	Y	-10.41	-10.41	0	%100
238	M87	Y	-10.41	-10.41	0	%100
239	M86	Y	-10.41	-10.41	0	%100
240	M85	Y	-10.41	-10.41	0	%100
241	M84	Y	-10.41	-10.41	0	%100
242	M83	Y	-15.697	-15.697	0	%100
243	M82	Y	-15.697	-15.697	0	%100
244	M79	Y	-9.749	-9.749	0	%100
245	M78	Y	-9.749	-9.749	0	%100
246	M77	Y	-9.97	-9.97	0	%100
247	M76	Y	-9.97	-9.97	0	%100
248	M75	Y	-9.97	-9.97	0	%100
249	M74	Y	-10.19	-10.19	0	%100
250	M73	Y	-10.19	-10.19	0	%100
251	M72	Y	-10.19	-10.19	0	%100
252	M71	Y	-10.41	-10.41	0	%100
253	M70	Y	-10.41	-10.41	0	%100
254	M69	Y	-10.41	-10.41	0	%100
255	M67	Y	-10.41	-10.41	0	%100
256	M66	Y	-10.41	-10.41	0	%100
257	M65	Y	-10.41	-10.41	0	%100
258	M64	Y	-10.41	-10.41	0	%100
259	M63	Y	-10.41	-10.41	0	%100
260	M62	Y	-10.41	-10.41	0	%100
261	M61	Y	-10.41	-10.41	0	%100
262	M60	Y	-15.697	-15.697	0	%100
263	M59	Y	-15.697	-15.697	0	%100
264	M58	Y	-15.697	-15.697	0	%100
265	M57	Y	-15.918	-15.918	0	%100
266	M56	Y	-15.918	-15.918	0	%100
267	M55	Y	-15.918	-15.918	0	%100
268	M36	Y	-13.054	-13.054	0	%100
269	M35	Y	-13.054	-13.054	0	%100

Member Distributed Loads (BLC 10 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
270	M34	Y	-13.054	-13.054	0	%100
271	M33	Y	-13.054	-13.054	0	%100
272	M32	Y	-13.054	-13.054	0	%100
273	M31	Y	-13.054	-13.054	0	%100
274	M30	Y	-13.935	-13.935	0	%100
275	M29	Y	-13.935	-13.935	0	%100
276	M28	Y	-20.324	-20.324	0	%100
277	M27	Y	-14.568	-14.568	0	%100
278	M26	Y	-14.568	-14.568	0	%100
279	M25	Y	-14.568	-14.568	0	%100
280	M1	Y	-14.232	-14.232	0	%100

Member Distributed Loads (BLC 11 : Structure W Front)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
1	MP3D	PZ	-8.67	-8.67	0	%100
2	MP3C	PZ	-8.67	-8.67	0	%100
3	MP3B	PZ	-8.67	-8.67	0	%100
4	MP3A	PZ	-8.67	-8.67	0	%100
5	MP2D	PZ	-8.67	-8.67	0	%100
6	MP2C	PZ	-8.67	-8.67	0	%100
7	MP2B	PZ	-8.67	-8.67	0	%100
8	MP2A	PZ	-8.67	-8.67	0	%100
9	MP1D	PZ	-8.67	-8.67	0	%100
10	MP1C	PZ	-8.67	-8.67	0	%100
11	MP1B	PZ	-8.67	-8.67	0	%100
12	MP1A	PZ	-8.67	-8.67	0	%100
13	M528	PZ	-20.105	-20.105	0	%100
14	M527	PZ	-20.105	-20.105	0	%100
15	M526	PZ	-20.105	-20.105	0	%100
16	M525	PZ	-20.105	-20.105	0	%100
17	M524	PZ	-8.67	-8.67	0	%100
18	M515	PZ	-8.67	-8.67	0	%100
19	M506	PZ	-8.67	-8.67	0	%100
20	M497	PZ	-8.67	-8.67	0	%100
21	M472	PZ	-7.54	-7.54	0	%100
22	M471	PZ	-7.54	-7.54	0	%100
23	M470	PZ	-7.54	-7.54	0	%100
24	M469	PZ	-7.54	-7.54	0	%100
25	M468	PZ	-7.54	-7.54	0	%100
26	M467	PZ	-5.73	-5.73	0	%100
27	M466	PZ	-5.73	-5.73	0	%100
28	M465	PZ	-7.54	-7.54	0	%100
29	M464	PZ	-7.54	-7.54	0	%100
30	M463	PZ	-7.54	-7.54	0	%100
31	M462	PZ	-7.54	-7.54	0	%100
32	M461	PZ	-7.54	-7.54	0	%100
33	M460	PZ	-5.73	-5.73	0	%100
34	M459	PZ	-5.73	-5.73	0	%100
35	M458	PZ	-7.54	-7.54	0	%100
36	M457	PZ	-7.54	-7.54	0	%100
37	M456	PZ	-7.54	-7.54	0	%100

Member Distributed Loads (BLC 11 : Structure W Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
38	M455	PZ	-7.54	-7.54	0	%100
39	M454	PZ	-7.54	-7.54	0	%100
40	M453	PZ	-5.73	-5.73	0	%100
41	M452	PZ	-5.73	-5.73	0	%100
42	M451	PZ	-7.54	-7.54	0	%100
43	M450	PZ	-7.54	-7.54	0	%100
44	M449	PZ	-7.54	-7.54	0	%100
45	M448	PZ	-7.54	-7.54	0	%100
46	M447	PZ	-7.54	-7.54	0	%100
47	M446	PZ	-5.73	-5.73	0	%100
48	M445	PZ	-5.73	-5.73	0	%100
49	M436	PZ	-15.079	-15.079	0	%100
50	M432	PZ	-20.105	-20.105	0	%100
51	M431	PZ	-5.026	-5.026	0	%100
52	M430	PZ	-5.026	-5.026	0	%100
53	M429	PZ	-20.105	-20.105	0	%100
54	M428	PZ	-5.026	-5.026	0	%100
55	M427	PZ	-5.026	-5.026	0	%100
56	M426	PZ	-20.105	-20.105	0	%100
57	M425	PZ	-20.105	-20.105	0	%100
58	M420	PZ	-20.105	-20.105	0	%100
59	M419	PZ	-20.105	-20.105	0	%100
60	M418	PZ	-5.026	-5.026	0	%100
61	M417	PZ	-5.026	-5.026	0	%100
62	M416	PZ	-5.026	-5.026	0	%100
63	M415	PZ	-5.026	-5.026	0	%100
64	M414	PZ	-5.026	-5.026	0	%100
65	M413	PZ	-5.026	-5.026	0	%100
66	M412	PZ	-5.026	-5.026	0	%100
67	M411	PZ	-5.026	-5.026	0	%100
68	M410	PZ	-20.105	-20.105	0	%100
69	M409	PZ	-20.105	-20.105	0	%100
70	M406	PZ	-3.141	-3.141	0	%100
71	M405	PZ	-3.141	-3.141	0	%100
72	M404	PZ	-3.77	-3.77	0	%100
73	M403	PZ	-3.77	-3.77	0	%100
74	M402	PZ	-3.77	-3.77	0	%100
75	M401	PZ	-4.398	-4.398	0	%100
76	M400	PZ	-4.398	-4.398	0	%100
77	M399	PZ	-4.398	-4.398	0	%100
78	M398	PZ	-5.026	-5.026	0	%100
79	M397	PZ	-5.026	-5.026	0	%100
80	M396	PZ	-5.026	-5.026	0	%100
81	M394	PZ	-5.026	-5.026	0	%100
82	M393	PZ	-5.026	-5.026	0	%100
83	M392	PZ	-5.026	-5.026	0	%100
84	M391	PZ	-5.026	-5.026	0	%100
85	M390	PZ	-5.026	-5.026	0	%100
86	M389	PZ	-5.026	-5.026	0	%100
87	M388	PZ	-5.026	-5.026	0	%100
88	M387	PZ	-20.105	-20.105	0	%100
89	M386	PZ	-20.105	-20.105	0	%100

Member Distributed Loads (BLC 11 : Structure W Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
90	M385	PZ	-20.105	-20.105	0	%100
91	M384	PZ	-20.105	-20.105	0	%100
92	M383	PZ	-20.105	-20.105	0	%100
93	M382	PZ	-20.105	-20.105	0	%100
94	M363	PZ	-11.938	-11.938	0	%100
95	M362	PZ	-11.938	-11.938	0	%100
96	M361	PZ	-11.938	-11.938	0	%100
97	M360	PZ	-11.938	-11.938	0	%100
98	M359	PZ	-11.938	-11.938	0	%100
99	M358	PZ	-11.938	-11.938	0	%100
100	M357	PZ	-15.079	-15.079	0	%100
101	M356	PZ	-15.079	-15.079	0	%100
102	M355	PZ	-20.105	-20.105	0	%100
103	M354	PZ	-15.079	-15.079	0	%100
104	M353	PZ	-15.079	-15.079	0	%100
105	M352	PZ	-15.079	-15.079	0	%100
106	M328	PZ	-8.67	-8.67	0	%100
107	M327	PZ	-15.079	-15.079	0	%100
108	M323	PZ	-20.105	-20.105	0	%100
109	M322	PZ	-5.026	-5.026	0	%100
110	M321	PZ	-5.026	-5.026	0	%100
111	M320	PZ	-20.105	-20.105	0	%100
112	M319	PZ	-5.026	-5.026	0	%100
113	M318	PZ	-5.026	-5.026	0	%100
114	M317	PZ	-20.105	-20.105	0	%100
115	M316	PZ	-20.105	-20.105	0	%100
116	M311	PZ	-20.105	-20.105	0	%100
117	M310	PZ	-20.105	-20.105	0	%100
118	M309	PZ	-5.026	-5.026	0	%100
119	M308	PZ	-5.026	-5.026	0	%100
120	M307	PZ	-5.026	-5.026	0	%100
121	M306	PZ	-5.026	-5.026	0	%100
122	M305	PZ	-5.026	-5.026	0	%100
123	M304	PZ	-5.026	-5.026	0	%100
124	M303	PZ	-5.026	-5.026	0	%100
125	M302	PZ	-5.026	-5.026	0	%100
126	M301	PZ	-20.105	-20.105	0	%100
127	M300	PZ	-20.105	-20.105	0	%100
128	M297	PZ	-3.141	-3.141	0	%100
129	M296	PZ	-3.141	-3.141	0	%100
130	M295	PZ	-3.77	-3.77	0	%100
131	M294	PZ	-3.77	-3.77	0	%100
132	M293	PZ	-3.77	-3.77	0	%100
133	M292	PZ	-4.398	-4.398	0	%100
134	M291	PZ	-4.398	-4.398	0	%100
135	M290	PZ	-4.398	-4.398	0	%100
136	M289	PZ	-5.026	-5.026	0	%100
137	M288	PZ	-5.026	-5.026	0	%100
138	M287	PZ	-5.026	-5.026	0	%100
139	M285	PZ	-5.026	-5.026	0	%100
140	M284	PZ	-5.026	-5.026	0	%100
141	M283	PZ	-5.026	-5.026	0	%100

Member Distributed Loads (BLC 11 : Structure W Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
142	M282	PZ	-5.026	-5.026	0	%100
143	M281	PZ	-5.026	-5.026	0	%100
144	M280	PZ	-5.026	-5.026	0	%100
145	M279	PZ	-5.026	-5.026	0	%100
146	M278	PZ	-20.105	-20.105	0	%100
147	M277	PZ	-20.105	-20.105	0	%100
148	M276	PZ	-20.105	-20.105	0	%100
149	M275	PZ	-20.105	-20.105	0	%100
150	M274	PZ	-20.105	-20.105	0	%100
151	M273	PZ	-20.105	-20.105	0	%100
152	M254	PZ	-11.938	-11.938	0	%100
153	M253	PZ	-11.938	-11.938	0	%100
154	M252	PZ	-11.938	-11.938	0	%100
155	M251	PZ	-11.938	-11.938	0	%100
156	M250	PZ	-11.938	-11.938	0	%100
157	M249	PZ	-11.938	-11.938	0	%100
158	M248	PZ	-15.079	-15.079	0	%100
159	M247	PZ	-15.079	-15.079	0	%100
160	M246	PZ	-20.105	-20.105	0	%100
161	M245	PZ	-15.079	-15.079	0	%100
162	M244	PZ	-15.079	-15.079	0	%100
163	M243	PZ	-15.079	-15.079	0	%100
164	M219	PZ	-8.67	-8.67	0	%100
165	M218	PZ	-15.079	-15.079	0	%100
166	M214	PZ	-20.105	-20.105	0	%100
167	M213	PZ	-5.026	-5.026	0	%100
168	M212	PZ	-5.026	-5.026	0	%100
169	M211	PZ	-20.105	-20.105	0	%100
170	M210	PZ	-5.026	-5.026	0	%100
171	M209	PZ	-5.026	-5.026	0	%100
172	M208	PZ	-20.105	-20.105	0	%100
173	M207	PZ	-20.105	-20.105	0	%100
174	M202	PZ	-20.105	-20.105	0	%100
175	M201	PZ	-20.105	-20.105	0	%100
176	M200	PZ	-5.026	-5.026	0	%100
177	M199	PZ	-5.026	-5.026	0	%100
178	M198	PZ	-5.026	-5.026	0	%100
179	M197	PZ	-5.026	-5.026	0	%100
180	M196	PZ	-5.026	-5.026	0	%100
181	M195	PZ	-5.026	-5.026	0	%100
182	M194	PZ	-5.026	-5.026	0	%100
183	M193	PZ	-5.026	-5.026	0	%100
184	M192	PZ	-20.105	-20.105	0	%100
185	M191	PZ	-20.105	-20.105	0	%100
186	M188	PZ	-3.141	-3.141	0	%100
187	M187	PZ	-3.141	-3.141	0	%100
188	M186	PZ	-3.77	-3.77	0	%100
189	M185	PZ	-3.77	-3.77	0	%100
190	M184	PZ	-3.77	-3.77	0	%100
191	M183	PZ	-4.398	-4.398	0	%100
192	M182	PZ	-4.398	-4.398	0	%100
193	M181	PZ	-4.398	-4.398	0	%100

Member Distributed Loads (BLC 11 : Structure W Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
194	M180	PZ	-5.026	-5.026	0	%100
195	M179	PZ	-5.026	-5.026	0	%100
196	M178	PZ	-5.026	-5.026	0	%100
197	M176	PZ	-5.026	-5.026	0	%100
198	M175	PZ	-5.026	-5.026	0	%100
199	M174	PZ	-5.026	-5.026	0	%100
200	M173	PZ	-5.026	-5.026	0	%100
201	M172	PZ	-5.026	-5.026	0	%100
202	M171	PZ	-5.026	-5.026	0	%100
203	M170	PZ	-5.026	-5.026	0	%100
204	M169	PZ	-20.105	-20.105	0	%100
205	M168	PZ	-20.105	-20.105	0	%100
206	M167	PZ	-20.105	-20.105	0	%100
207	M166	PZ	-20.105	-20.105	0	%100
208	M165	PZ	-20.105	-20.105	0	%100
209	M164	PZ	-20.105	-20.105	0	%100
210	M145	PZ	-11.938	-11.938	0	%100
211	M144	PZ	-11.938	-11.938	0	%100
212	M143	PZ	-11.938	-11.938	0	%100
213	M142	PZ	-11.938	-11.938	0	%100
214	M141	PZ	-11.938	-11.938	0	%100
215	M140	PZ	-11.938	-11.938	0	%100
216	M139	PZ	-15.079	-15.079	0	%100
217	M138	PZ	-15.079	-15.079	0	%100
218	M137	PZ	-20.105	-20.105	0	%100
219	M136	PZ	-15.079	-15.079	0	%100
220	M135	PZ	-15.079	-15.079	0	%100
221	M134	PZ	-15.079	-15.079	0	%100
222	M110	PZ	-8.67	-8.67	0	%100
223	M109	PZ	-15.079	-15.079	0	%100
224	M105	PZ	-20.105	-20.105	0	%100
225	M104	PZ	-5.026	-5.026	0	%100
226	M103	PZ	-5.026	-5.026	0	%100
227	M102	PZ	-20.105	-20.105	0	%100
228	M101	PZ	-5.026	-5.026	0	%100
229	M100	PZ	-5.026	-5.026	0	%100
230	M99	PZ	-20.105	-20.105	0	%100
231	M98	PZ	-20.105	-20.105	0	%100
232	M93	PZ	-20.105	-20.105	0	%100
233	M92	PZ	-20.105	-20.105	0	%100
234	M91	PZ	-5.026	-5.026	0	%100
235	M90	PZ	-5.026	-5.026	0	%100
236	M89	PZ	-5.026	-5.026	0	%100
237	M88	PZ	-5.026	-5.026	0	%100
238	M87	PZ	-5.026	-5.026	0	%100
239	M86	PZ	-5.026	-5.026	0	%100
240	M85	PZ	-5.026	-5.026	0	%100
241	M84	PZ	-5.026	-5.026	0	%100
242	M83	PZ	-20.105	-20.105	0	%100
243	M82	PZ	-20.105	-20.105	0	%100
244	M79	PZ	-3.141	-3.141	0	%100
245	M78	PZ	-3.141	-3.141	0	%100

Member Distributed Loads (BLC 11 : Structure W Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
246	M77	PZ	-3.77	-3.77	0	%100
247	M76	PZ	-3.77	-3.77	0	%100
248	M75	PZ	-3.77	-3.77	0	%100
249	M74	PZ	-4.398	-4.398	0	%100
250	M73	PZ	-4.398	-4.398	0	%100
251	M72	PZ	-4.398	-4.398	0	%100
252	M71	PZ	-5.026	-5.026	0	%100
253	M70	PZ	-5.026	-5.026	0	%100
254	M69	PZ	-5.026	-5.026	0	%100
255	M67	PZ	-5.026	-5.026	0	%100
256	M66	PZ	-5.026	-5.026	0	%100
257	M65	PZ	-5.026	-5.026	0	%100
258	M64	PZ	-5.026	-5.026	0	%100
259	M63	PZ	-5.026	-5.026	0	%100
260	M62	PZ	-5.026	-5.026	0	%100
261	M61	PZ	-5.026	-5.026	0	%100
262	M60	PZ	-20.105	-20.105	0	%100
263	M59	PZ	-20.105	-20.105	0	%100
264	M58	PZ	-20.105	-20.105	0	%100
265	M57	PZ	-20.105	-20.105	0	%100
266	M56	PZ	-20.105	-20.105	0	%100
267	M55	PZ	-20.105	-20.105	0	%100
268	M36	PZ	-11.938	-11.938	0	%100
269	M35	PZ	-11.938	-11.938	0	%100
270	M34	PZ	-11.938	-11.938	0	%100
271	M33	PZ	-11.938	-11.938	0	%100
272	M32	PZ	-11.938	-11.938	0	%100
273	M31	PZ	-11.938	-11.938	0	%100
274	M30	PZ	-15.079	-15.079	0	%100
275	M29	PZ	-15.079	-15.079	0	%100
276	M28	PZ	-20.105	-20.105	0	%100
277	M27	PZ	-15.079	-15.079	0	%100
278	M26	PZ	-15.079	-15.079	0	%100
279	M25	PZ	-15.079	-15.079	0	%100
280	M1	PZ	-8.67	-8.67	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
1	MP3D	PZ	-6.457	-6.457	0	%100
2	MP3C	PZ	-6.457	-6.457	0	%100
3	MP3B	PZ	-6.457	-6.457	0	%100
4	MP3A	PZ	-6.457	-6.457	0	%100
5	MP2D	PZ	-6.457	-6.457	0	%100
6	MP2C	PZ	-6.457	-6.457	0	%100
7	MP2B	PZ	-6.457	-6.457	0	%100
8	MP2A	PZ	-6.457	-6.457	0	%100
9	MP1D	PZ	-6.457	-6.457	0	%100
10	MP1C	PZ	-6.457	-6.457	0	%100
11	MP1B	PZ	-6.457	-6.457	0	%100
12	MP1A	PZ	-6.457	-6.457	0	%100
13	M528	PZ	-9.762	-9.762	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
14	M527	PZ	-9.762	-9.762	0	%100
15	M526	PZ	-9.762	-9.762	0	%100
16	M525	PZ	-9.762	-9.762	0	%100
17	M524	PZ	-6.457	-6.457	0	%100
18	M515	PZ	-6.457	-6.457	0	%100
19	M506	PZ	-6.457	-6.457	0	%100
20	M497	PZ	-6.457	-6.457	0	%100
21	M472	PZ	-6.13	-6.13	0	%100
22	M471	PZ	-6.13	-6.13	0	%100
23	M470	PZ	-6.13	-6.13	0	%100
24	M469	PZ	-6.13	-6.13	0	%100
25	M468	PZ	-6.13	-6.13	0	%100
26	M467	PZ	-5.607	-5.607	0	%100
27	M466	PZ	-5.607	-5.607	0	%100
28	M465	PZ	-6.13	-6.13	0	%100
29	M464	PZ	-6.13	-6.13	0	%100
30	M463	PZ	-6.13	-6.13	0	%100
31	M462	PZ	-6.13	-6.13	0	%100
32	M461	PZ	-6.13	-6.13	0	%100
33	M460	PZ	-5.607	-5.607	0	%100
34	M459	PZ	-5.607	-5.607	0	%100
35	M458	PZ	-6.13	-6.13	0	%100
36	M457	PZ	-6.13	-6.13	0	%100
37	M456	PZ	-6.13	-6.13	0	%100
38	M455	PZ	-6.13	-6.13	0	%100
39	M454	PZ	-6.13	-6.13	0	%100
40	M453	PZ	-5.607	-5.607	0	%100
41	M452	PZ	-5.607	-5.607	0	%100
42	M451	PZ	-6.13	-6.13	0	%100
43	M450	PZ	-6.13	-6.13	0	%100
44	M449	PZ	-6.13	-6.13	0	%100
45	M448	PZ	-6.13	-6.13	0	%100
46	M447	PZ	-6.13	-6.13	0	%100
47	M446	PZ	-5.607	-5.607	0	%100
48	M445	PZ	-5.607	-5.607	0	%100
49	M436	PZ	-8.309	-8.309	0	%100
50	M432	PZ	-9.762	-9.762	0	%100
51	M431	PZ	-5.403	-5.403	0	%100
52	M430	PZ	-5.403	-5.403	0	%100
53	M429	PZ	-9.762	-9.762	0	%100
54	M428	PZ	-5.403	-5.403	0	%100
55	M427	PZ	-5.403	-5.403	0	%100
56	M426	PZ	-9.762	-9.762	0	%100
57	M425	PZ	-9.762	-9.762	0	%100
58	M420	PZ	-9.762	-9.762	0	%100
59	M419	PZ	-9.762	-9.762	0	%100
60	M418	PZ	-5.403	-5.403	0	%100
61	M417	PZ	-5.403	-5.403	0	%100
62	M416	PZ	-5.403	-5.403	0	%100
63	M415	PZ	-5.403	-5.403	0	%100
64	M414	PZ	-5.403	-5.403	0	%100
65	M413	PZ	-5.403	-5.403	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
66	M412	PZ	-5.403	-5.403	0	%100
67	M411	PZ	-5.403	-5.403	0	%100
68	M410	PZ	-9.762	-9.762	0	%100
69	M409	PZ	-9.762	-9.762	0	%100
70	M406	PZ	-4.859	-4.859	0	%100
71	M405	PZ	-4.859	-4.859	0	%100
72	M404	PZ	-5.04	-5.04	0	%100
73	M403	PZ	-5.04	-5.04	0	%100
74	M402	PZ	-5.04	-5.04	0	%100
75	M401	PZ	-5.222	-5.222	0	%100
76	M400	PZ	-5.222	-5.222	0	%100
77	M399	PZ	-5.222	-5.222	0	%100
78	M398	PZ	-5.403	-5.403	0	%100
79	M397	PZ	-5.403	-5.403	0	%100
80	M396	PZ	-5.403	-5.403	0	%100
81	M394	PZ	-5.403	-5.403	0	%100
82	M393	PZ	-5.403	-5.403	0	%100
83	M392	PZ	-5.403	-5.403	0	%100
84	M391	PZ	-5.403	-5.403	0	%100
85	M390	PZ	-5.403	-5.403	0	%100
86	M389	PZ	-5.403	-5.403	0	%100
87	M388	PZ	-5.403	-5.403	0	%100
88	M387	PZ	-9.762	-9.762	0	%100
89	M386	PZ	-9.762	-9.762	0	%100
90	M385	PZ	-9.762	-9.762	0	%100
91	M384	PZ	-9.762	-9.762	0	%100
92	M383	PZ	-9.762	-9.762	0	%100
93	M382	PZ	-9.762	-9.762	0	%100
94	M363	PZ	-7.401	-7.401	0	%100
95	M362	PZ	-7.401	-7.401	0	%100
96	M361	PZ	-7.401	-7.401	0	%100
97	M360	PZ	-7.401	-7.401	0	%100
98	M359	PZ	-7.401	-7.401	0	%100
99	M358	PZ	-7.401	-7.401	0	%100
100	M357	PZ	-8.309	-8.309	0	%100
101	M356	PZ	-8.309	-8.309	0	%100
102	M355	PZ	-9.762	-9.762	0	%100
103	M354	PZ	-8.309	-8.309	0	%100
104	M353	PZ	-8.309	-8.309	0	%100
105	M352	PZ	-8.309	-8.309	0	%100
106	M328	PZ	-6.457	-6.457	0	%100
107	M327	PZ	-8.309	-8.309	0	%100
108	M323	PZ	-9.762	-9.762	0	%100
109	M322	PZ	-5.403	-5.403	0	%100
110	M321	PZ	-5.403	-5.403	0	%100
111	M320	PZ	-9.762	-9.762	0	%100
112	M319	PZ	-5.403	-5.403	0	%100
113	M318	PZ	-5.403	-5.403	0	%100
114	M317	PZ	-9.762	-9.762	0	%100
115	M316	PZ	-9.762	-9.762	0	%100
116	M311	PZ	-9.762	-9.762	0	%100
117	M310	PZ	-9.762	-9.762	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
118	M309	PZ	-5.403	-5.403	0	%100
119	M308	PZ	-5.403	-5.403	0	%100
120	M307	PZ	-5.403	-5.403	0	%100
121	M306	PZ	-5.403	-5.403	0	%100
122	M305	PZ	-5.403	-5.403	0	%100
123	M304	PZ	-5.403	-5.403	0	%100
124	M303	PZ	-5.403	-5.403	0	%100
125	M302	PZ	-5.403	-5.403	0	%100
126	M301	PZ	-9.762	-9.762	0	%100
127	M300	PZ	-9.762	-9.762	0	%100
128	M297	PZ	-4.859	-4.859	0	%100
129	M296	PZ	-4.859	-4.859	0	%100
130	M295	PZ	-5.04	-5.04	0	%100
131	M294	PZ	-5.04	-5.04	0	%100
132	M293	PZ	-5.04	-5.04	0	%100
133	M292	PZ	-5.222	-5.222	0	%100
134	M291	PZ	-5.222	-5.222	0	%100
135	M290	PZ	-5.222	-5.222	0	%100
136	M289	PZ	-5.403	-5.403	0	%100
137	M288	PZ	-5.403	-5.403	0	%100
138	M287	PZ	-5.403	-5.403	0	%100
139	M285	PZ	-5.403	-5.403	0	%100
140	M284	PZ	-5.403	-5.403	0	%100
141	M283	PZ	-5.403	-5.403	0	%100
142	M282	PZ	-5.403	-5.403	0	%100
143	M281	PZ	-5.403	-5.403	0	%100
144	M280	PZ	-5.403	-5.403	0	%100
145	M279	PZ	-5.403	-5.403	0	%100
146	M278	PZ	-9.762	-9.762	0	%100
147	M277	PZ	-9.762	-9.762	0	%100
148	M276	PZ	-9.762	-9.762	0	%100
149	M275	PZ	-9.762	-9.762	0	%100
150	M274	PZ	-9.762	-9.762	0	%100
151	M273	PZ	-9.762	-9.762	0	%100
152	M254	PZ	-7.401	-7.401	0	%100
153	M253	PZ	-7.401	-7.401	0	%100
154	M252	PZ	-7.401	-7.401	0	%100
155	M251	PZ	-7.401	-7.401	0	%100
156	M250	PZ	-7.401	-7.401	0	%100
157	M249	PZ	-7.401	-7.401	0	%100
158	M248	PZ	-8.309	-8.309	0	%100
159	M247	PZ	-8.309	-8.309	0	%100
160	M246	PZ	-9.762	-9.762	0	%100
161	M245	PZ	-8.309	-8.309	0	%100
162	M244	PZ	-8.309	-8.309	0	%100
163	M243	PZ	-8.309	-8.309	0	%100
164	M219	PZ	-6.457	-6.457	0	%100
165	M218	PZ	-8.309	-8.309	0	%100
166	M214	PZ	-9.762	-9.762	0	%100
167	M213	PZ	-5.403	-5.403	0	%100
168	M212	PZ	-5.403	-5.403	0	%100
169	M211	PZ	-9.762	-9.762	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
170	M210	PZ	-5.403	-5.403	0	%100
171	M209	PZ	-5.403	-5.403	0	%100
172	M208	PZ	-9.762	-9.762	0	%100
173	M207	PZ	-9.762	-9.762	0	%100
174	M202	PZ	-9.762	-9.762	0	%100
175	M201	PZ	-9.762	-9.762	0	%100
176	M200	PZ	-5.403	-5.403	0	%100
177	M199	PZ	-5.403	-5.403	0	%100
178	M198	PZ	-5.403	-5.403	0	%100
179	M197	PZ	-5.403	-5.403	0	%100
180	M196	PZ	-5.403	-5.403	0	%100
181	M195	PZ	-5.403	-5.403	0	%100
182	M194	PZ	-5.403	-5.403	0	%100
183	M193	PZ	-5.403	-5.403	0	%100
184	M192	PZ	-9.762	-9.762	0	%100
185	M191	PZ	-9.762	-9.762	0	%100
186	M188	PZ	-4.859	-4.859	0	%100
187	M187	PZ	-4.859	-4.859	0	%100
188	M186	PZ	-5.04	-5.04	0	%100
189	M185	PZ	-5.04	-5.04	0	%100
190	M184	PZ	-5.04	-5.04	0	%100
191	M183	PZ	-5.222	-5.222	0	%100
192	M182	PZ	-5.222	-5.222	0	%100
193	M181	PZ	-5.222	-5.222	0	%100
194	M180	PZ	-5.403	-5.403	0	%100
195	M179	PZ	-5.403	-5.403	0	%100
196	M178	PZ	-5.403	-5.403	0	%100
197	M176	PZ	-5.403	-5.403	0	%100
198	M175	PZ	-5.403	-5.403	0	%100
199	M174	PZ	-5.403	-5.403	0	%100
200	M173	PZ	-5.403	-5.403	0	%100
201	M172	PZ	-5.403	-5.403	0	%100
202	M171	PZ	-5.403	-5.403	0	%100
203	M170	PZ	-5.403	-5.403	0	%100
204	M169	PZ	-9.762	-9.762	0	%100
205	M168	PZ	-9.762	-9.762	0	%100
206	M167	PZ	-9.762	-9.762	0	%100
207	M166	PZ	-9.762	-9.762	0	%100
208	M165	PZ	-9.762	-9.762	0	%100
209	M164	PZ	-9.762	-9.762	0	%100
210	M145	PZ	-7.401	-7.401	0	%100
211	M144	PZ	-7.401	-7.401	0	%100
212	M143	PZ	-7.401	-7.401	0	%100
213	M142	PZ	-7.401	-7.401	0	%100
214	M141	PZ	-7.401	-7.401	0	%100
215	M140	PZ	-7.401	-7.401	0	%100
216	M139	PZ	-8.309	-8.309	0	%100
217	M138	PZ	-8.309	-8.309	0	%100
218	M137	PZ	-9.762	-9.762	0	%100
219	M136	PZ	-8.309	-8.309	0	%100
220	M135	PZ	-8.309	-8.309	0	%100
221	M134	PZ	-8.309	-8.309	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
222	M110	PZ	-6.457	-6.457	0	%100
223	M109	PZ	-8.309	-8.309	0	%100
224	M105	PZ	-9.762	-9.762	0	%100
225	M104	PZ	-5.403	-5.403	0	%100
226	M103	PZ	-5.403	-5.403	0	%100
227	M102	PZ	-9.762	-9.762	0	%100
228	M101	PZ	-5.403	-5.403	0	%100
229	M100	PZ	-5.403	-5.403	0	%100
230	M99	PZ	-9.762	-9.762	0	%100
231	M98	PZ	-9.762	-9.762	0	%100
232	M93	PZ	-9.762	-9.762	0	%100
233	M92	PZ	-9.762	-9.762	0	%100
234	M91	PZ	-5.403	-5.403	0	%100
235	M90	PZ	-5.403	-5.403	0	%100
236	M89	PZ	-5.403	-5.403	0	%100
237	M88	PZ	-5.403	-5.403	0	%100
238	M87	PZ	-5.403	-5.403	0	%100
239	M86	PZ	-5.403	-5.403	0	%100
240	M85	PZ	-5.403	-5.403	0	%100
241	M84	PZ	-5.403	-5.403	0	%100
242	M83	PZ	-9.762	-9.762	0	%100
243	M82	PZ	-9.762	-9.762	0	%100
244	M79	PZ	-4.859	-4.859	0	%100
245	M78	PZ	-4.859	-4.859	0	%100
246	M77	PZ	-5.04	-5.04	0	%100
247	M76	PZ	-5.04	-5.04	0	%100
248	M75	PZ	-5.04	-5.04	0	%100
249	M74	PZ	-5.222	-5.222	0	%100
250	M73	PZ	-5.222	-5.222	0	%100
251	M72	PZ	-5.222	-5.222	0	%100
252	M71	PZ	-5.403	-5.403	0	%100
253	M70	PZ	-5.403	-5.403	0	%100
254	M69	PZ	-5.403	-5.403	0	%100
255	M67	PZ	-5.403	-5.403	0	%100
256	M66	PZ	-5.403	-5.403	0	%100
257	M65	PZ	-5.403	-5.403	0	%100
258	M64	PZ	-5.403	-5.403	0	%100
259	M63	PZ	-5.403	-5.403	0	%100
260	M62	PZ	-5.403	-5.403	0	%100
261	M61	PZ	-5.403	-5.403	0	%100
262	M60	PZ	-9.762	-9.762	0	%100
263	M59	PZ	-9.762	-9.762	0	%100
264	M58	PZ	-9.762	-9.762	0	%100
265	M57	PZ	-9.762	-9.762	0	%100
266	M56	PZ	-9.762	-9.762	0	%100
267	M55	PZ	-9.762	-9.762	0	%100
268	M36	PZ	-7.401	-7.401	0	%100
269	M35	PZ	-7.401	-7.401	0	%100
270	M34	PZ	-7.401	-7.401	0	%100
271	M33	PZ	-7.401	-7.401	0	%100
272	M32	PZ	-7.401	-7.401	0	%100
273	M31	PZ	-7.401	-7.401	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
274	M30	PZ	-8.309	-8.309	0	%100
275	M29	PZ	-8.309	-8.309	0	%100
276	M28	PZ	-9.762	-9.762	0	%100
277	M27	PZ	-8.309	-8.309	0	%100
278	M26	PZ	-8.309	-8.309	0	%100
279	M25	PZ	-8.309	-8.309	0	%100
280	M1	PZ	-6.457	-6.457	0	%100

Member Distributed Loads (BLC 13 : Structure W Side)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
1	MP3D	PX	8.67	8.67	0	%100
2	MP3C	PX	8.67	8.67	0	%100
3	MP3B	PX	8.67	8.67	0	%100
4	MP3A	PX	8.67	8.67	0	%100
5	MP2D	PX	8.67	8.67	0	%100
6	MP2C	PX	8.67	8.67	0	%100
7	MP2B	PX	8.67	8.67	0	%100
8	MP2A	PX	8.67	8.67	0	%100
9	MP1D	PX	8.67	8.67	0	%100
10	MP1C	PX	8.67	8.67	0	%100
11	MP1B	PX	8.67	8.67	0	%100
12	MP1A	PX	8.67	8.67	0	%100
13	M528	PX	20.105	20.105	0	%100
14	M527	PX	20.105	20.105	0	%100
15	M526	PX	20.105	20.105	0	%100
16	M525	PX	20.105	20.105	0	%100
17	M524	PX	8.67	8.67	0	%100
18	M515	PX	8.67	8.67	0	%100
19	M506	PX	8.67	8.67	0	%100
20	M497	PX	8.67	8.67	0	%100
21	M472	PX	7.54	7.54	0	%100
22	M471	PX	7.54	7.54	0	%100
23	M470	PX	7.54	7.54	0	%100
24	M469	PX	7.54	7.54	0	%100
25	M468	PX	7.54	7.54	0	%100
26	M467	PX	5.73	5.73	0	%100
27	M466	PX	5.73	5.73	0	%100
28	M465	PX	7.54	7.54	0	%100
29	M464	PX	7.54	7.54	0	%100
30	M463	PX	7.54	7.54	0	%100
31	M462	PX	7.54	7.54	0	%100
32	M461	PX	7.54	7.54	0	%100
33	M460	PX	5.73	5.73	0	%100
34	M459	PX	5.73	5.73	0	%100
35	M458	PX	7.54	7.54	0	%100
36	M457	PX	7.54	7.54	0	%100
37	M456	PX	7.54	7.54	0	%100
38	M455	PX	7.54	7.54	0	%100
39	M454	PX	7.54	7.54	0	%100
40	M453	PX	5.73	5.73	0	%100
41	M452	PX	5.73	5.73	0	%100

Member Distributed Loads (BLC 13 : Structure W Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
42	M451	PX	7.54	7.54	0	%100
43	M450	PX	7.54	7.54	0	%100
44	M449	PX	7.54	7.54	0	%100
45	M448	PX	7.54	7.54	0	%100
46	M447	PX	7.54	7.54	0	%100
47	M446	PX	5.73	5.73	0	%100
48	M445	PX	5.73	5.73	0	%100
49	M436	PX	15.079	15.079	0	%100
50	M432	PX	20.105	20.105	0	%100
51	M431	PX	5.026	5.026	0	%100
52	M430	PX	5.026	5.026	0	%100
53	M429	PX	20.105	20.105	0	%100
54	M428	PX	5.026	5.026	0	%100
55	M427	PX	5.026	5.026	0	%100
56	M426	PX	20.105	20.105	0	%100
57	M425	PX	20.105	20.105	0	%100
58	M420	PX	20.105	20.105	0	%100
59	M419	PX	20.105	20.105	0	%100
60	M418	PX	5.026	5.026	0	%100
61	M417	PX	5.026	5.026	0	%100
62	M416	PX	5.026	5.026	0	%100
63	M415	PX	5.026	5.026	0	%100
64	M414	PX	5.026	5.026	0	%100
65	M413	PX	5.026	5.026	0	%100
66	M412	PX	5.026	5.026	0	%100
67	M411	PX	5.026	5.026	0	%100
68	M410	PX	20.105	20.105	0	%100
69	M409	PX	20.105	20.105	0	%100
70	M406	PX	3.141	3.141	0	%100
71	M405	PX	3.141	3.141	0	%100
72	M404	PX	3.77	3.77	0	%100
73	M403	PX	3.77	3.77	0	%100
74	M402	PX	3.77	3.77	0	%100
75	M401	PX	4.398	4.398	0	%100
76	M400	PX	4.398	4.398	0	%100
77	M399	PX	4.398	4.398	0	%100
78	M398	PX	5.026	5.026	0	%100
79	M397	PX	5.026	5.026	0	%100
80	M396	PX	5.026	5.026	0	%100
81	M394	PX	5.026	5.026	0	%100
82	M393	PX	5.026	5.026	0	%100
83	M392	PX	5.026	5.026	0	%100
84	M391	PX	5.026	5.026	0	%100
85	M390	PX	5.026	5.026	0	%100
86	M389	PX	5.026	5.026	0	%100
87	M388	PX	5.026	5.026	0	%100
88	M387	PX	20.105	20.105	0	%100
89	M386	PX	20.105	20.105	0	%100
90	M385	PX	20.105	20.105	0	%100
91	M384	PX	20.105	20.105	0	%100
92	M383	PX	20.105	20.105	0	%100
93	M382	PX	20.105	20.105	0	%100

Member Distributed Loads (BLC 13 : Structure W Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
94	M363	PX	11.938	11.938	0	%100
95	M362	PX	11.938	11.938	0	%100
96	M361	PX	11.938	11.938	0	%100
97	M360	PX	11.938	11.938	0	%100
98	M359	PX	11.938	11.938	0	%100
99	M358	PX	11.938	11.938	0	%100
100	M357	PX	15.079	15.079	0	%100
101	M356	PX	15.079	15.079	0	%100
102	M355	PX	20.105	20.105	0	%100
103	M354	PX	15.079	15.079	0	%100
104	M353	PX	15.079	15.079	0	%100
105	M352	PX	15.079	15.079	0	%100
106	M328	PX	8.67	8.67	0	%100
107	M327	PX	15.079	15.079	0	%100
108	M323	PX	20.105	20.105	0	%100
109	M322	PX	5.026	5.026	0	%100
110	M321	PX	5.026	5.026	0	%100
111	M320	PX	20.105	20.105	0	%100
112	M319	PX	5.026	5.026	0	%100
113	M318	PX	5.026	5.026	0	%100
114	M317	PX	20.105	20.105	0	%100
115	M316	PX	20.105	20.105	0	%100
116	M311	PX	20.105	20.105	0	%100
117	M310	PX	20.105	20.105	0	%100
118	M309	PX	5.026	5.026	0	%100
119	M308	PX	5.026	5.026	0	%100
120	M307	PX	5.026	5.026	0	%100
121	M306	PX	5.026	5.026	0	%100
122	M305	PX	5.026	5.026	0	%100
123	M304	PX	5.026	5.026	0	%100
124	M303	PX	5.026	5.026	0	%100
125	M302	PX	5.026	5.026	0	%100
126	M301	PX	20.105	20.105	0	%100
127	M300	PX	20.105	20.105	0	%100
128	M297	PX	3.141	3.141	0	%100
129	M296	PX	3.141	3.141	0	%100
130	M295	PX	3.77	3.77	0	%100
131	M294	PX	3.77	3.77	0	%100
132	M293	PX	3.77	3.77	0	%100
133	M292	PX	4.398	4.398	0	%100
134	M291	PX	4.398	4.398	0	%100
135	M290	PX	4.398	4.398	0	%100
136	M289	PX	5.026	5.026	0	%100
137	M288	PX	5.026	5.026	0	%100
138	M287	PX	5.026	5.026	0	%100
139	M285	PX	5.026	5.026	0	%100
140	M284	PX	5.026	5.026	0	%100
141	M283	PX	5.026	5.026	0	%100
142	M282	PX	5.026	5.026	0	%100
143	M281	PX	5.026	5.026	0	%100
144	M280	PX	5.026	5.026	0	%100
145	M279	PX	5.026	5.026	0	%100

Member Distributed Loads (BLC 13 : Structure W Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
146	M278	PX	20.105	20.105	0	%100
147	M277	PX	20.105	20.105	0	%100
148	M276	PX	20.105	20.105	0	%100
149	M275	PX	20.105	20.105	0	%100
150	M274	PX	20.105	20.105	0	%100
151	M273	PX	20.105	20.105	0	%100
152	M254	PX	11.938	11.938	0	%100
153	M253	PX	11.938	11.938	0	%100
154	M252	PX	11.938	11.938	0	%100
155	M251	PX	11.938	11.938	0	%100
156	M250	PX	11.938	11.938	0	%100
157	M249	PX	11.938	11.938	0	%100
158	M248	PX	15.079	15.079	0	%100
159	M247	PX	15.079	15.079	0	%100
160	M246	PX	20.105	20.105	0	%100
161	M245	PX	15.079	15.079	0	%100
162	M244	PX	15.079	15.079	0	%100
163	M243	PX	15.079	15.079	0	%100
164	M219	PX	8.67	8.67	0	%100
165	M218	PX	15.079	15.079	0	%100
166	M214	PX	20.105	20.105	0	%100
167	M213	PX	5.026	5.026	0	%100
168	M212	PX	5.026	5.026	0	%100
169	M211	PX	20.105	20.105	0	%100
170	M210	PX	5.026	5.026	0	%100
171	M209	PX	5.026	5.026	0	%100
172	M208	PX	20.105	20.105	0	%100
173	M207	PX	20.105	20.105	0	%100
174	M202	PX	20.105	20.105	0	%100
175	M201	PX	20.105	20.105	0	%100
176	M200	PX	5.026	5.026	0	%100
177	M199	PX	5.026	5.026	0	%100
178	M198	PX	5.026	5.026	0	%100
179	M197	PX	5.026	5.026	0	%100
180	M196	PX	5.026	5.026	0	%100
181	M195	PX	5.026	5.026	0	%100
182	M194	PX	5.026	5.026	0	%100
183	M193	PX	5.026	5.026	0	%100
184	M192	PX	20.105	20.105	0	%100
185	M191	PX	20.105	20.105	0	%100
186	M188	PX	3.141	3.141	0	%100
187	M187	PX	3.141	3.141	0	%100
188	M186	PX	3.77	3.77	0	%100
189	M185	PX	3.77	3.77	0	%100
190	M184	PX	3.77	3.77	0	%100
191	M183	PX	4.398	4.398	0	%100
192	M182	PX	4.398	4.398	0	%100
193	M181	PX	4.398	4.398	0	%100
194	M180	PX	5.026	5.026	0	%100
195	M179	PX	5.026	5.026	0	%100
196	M178	PX	5.026	5.026	0	%100
197	M176	PX	5.026	5.026	0	%100

Member Distributed Loads (BLC 13 : Structure W Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
198	M175	PX	5.026	5.026	0	%100
199	M174	PX	5.026	5.026	0	%100
200	M173	PX	5.026	5.026	0	%100
201	M172	PX	5.026	5.026	0	%100
202	M171	PX	5.026	5.026	0	%100
203	M170	PX	5.026	5.026	0	%100
204	M169	PX	20.105	20.105	0	%100
205	M168	PX	20.105	20.105	0	%100
206	M167	PX	20.105	20.105	0	%100
207	M166	PX	20.105	20.105	0	%100
208	M165	PX	20.105	20.105	0	%100
209	M164	PX	20.105	20.105	0	%100
210	M145	PX	11.938	11.938	0	%100
211	M144	PX	11.938	11.938	0	%100
212	M143	PX	11.938	11.938	0	%100
213	M142	PX	11.938	11.938	0	%100
214	M141	PX	11.938	11.938	0	%100
215	M140	PX	11.938	11.938	0	%100
216	M139	PX	15.079	15.079	0	%100
217	M138	PX	15.079	15.079	0	%100
218	M137	PX	20.105	20.105	0	%100
219	M136	PX	15.079	15.079	0	%100
220	M135	PX	15.079	15.079	0	%100
221	M134	PX	15.079	15.079	0	%100
222	M110	PX	8.67	8.67	0	%100
223	M109	PX	15.079	15.079	0	%100
224	M105	PX	20.105	20.105	0	%100
225	M104	PX	5.026	5.026	0	%100
226	M103	PX	5.026	5.026	0	%100
227	M102	PX	20.105	20.105	0	%100
228	M101	PX	5.026	5.026	0	%100
229	M100	PX	5.026	5.026	0	%100
230	M99	PX	20.105	20.105	0	%100
231	M98	PX	20.105	20.105	0	%100
232	M93	PX	20.105	20.105	0	%100
233	M92	PX	20.105	20.105	0	%100
234	M91	PX	5.026	5.026	0	%100
235	M90	PX	5.026	5.026	0	%100
236	M89	PX	5.026	5.026	0	%100
237	M88	PX	5.026	5.026	0	%100
238	M87	PX	5.026	5.026	0	%100
239	M86	PX	5.026	5.026	0	%100
240	M85	PX	5.026	5.026	0	%100
241	M84	PX	5.026	5.026	0	%100
242	M83	PX	20.105	20.105	0	%100
243	M82	PX	20.105	20.105	0	%100
244	M79	PX	3.141	3.141	0	%100
245	M78	PX	3.141	3.141	0	%100
246	M77	PX	3.77	3.77	0	%100
247	M76	PX	3.77	3.77	0	%100
248	M75	PX	3.77	3.77	0	%100
249	M74	PX	4.398	4.398	0	%100

Member Distributed Loads (BLC 13 : Structure W Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
250	M73	PX	4.398	4.398	0	%100
251	M72	PX	4.398	4.398	0	%100
252	M71	PX	5.026	5.026	0	%100
253	M70	PX	5.026	5.026	0	%100
254	M69	PX	5.026	5.026	0	%100
255	M67	PX	5.026	5.026	0	%100
256	M66	PX	5.026	5.026	0	%100
257	M65	PX	5.026	5.026	0	%100
258	M64	PX	5.026	5.026	0	%100
259	M63	PX	5.026	5.026	0	%100
260	M62	PX	5.026	5.026	0	%100
261	M61	PX	5.026	5.026	0	%100
262	M60	PX	20.105	20.105	0	%100
263	M59	PX	20.105	20.105	0	%100
264	M58	PX	20.105	20.105	0	%100
265	M57	PX	20.105	20.105	0	%100
266	M56	PX	20.105	20.105	0	%100
267	M55	PX	20.105	20.105	0	%100
268	M36	PX	11.938	11.938	0	%100
269	M35	PX	11.938	11.938	0	%100
270	M34	PX	11.938	11.938	0	%100
271	M33	PX	11.938	11.938	0	%100
272	M32	PX	11.938	11.938	0	%100
273	M31	PX	11.938	11.938	0	%100
274	M30	PX	15.079	15.079	0	%100
275	M29	PX	15.079	15.079	0	%100
276	M28	PX	20.105	20.105	0	%100
277	M27	PX	15.079	15.079	0	%100
278	M26	PX	15.079	15.079	0	%100
279	M25	PX	15.079	15.079	0	%100
280	M1	PX	8.67	8.67	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
1	MP3D	PX	6.457	6.457	0	%100
2	MP3C	PX	6.457	6.457	0	%100
3	MP3B	PX	6.457	6.457	0	%100
4	MP3A	PX	6.457	6.457	0	%100
5	MP2D	PX	6.457	6.457	0	%100
6	MP2C	PX	6.457	6.457	0	%100
7	MP2B	PX	6.457	6.457	0	%100
8	MP2A	PX	6.457	6.457	0	%100
9	MP1D	PX	6.457	6.457	0	%100
10	MP1C	PX	6.457	6.457	0	%100
11	MP1B	PX	6.457	6.457	0	%100
12	MP1A	PX	6.457	6.457	0	%100
13	M528	PX	9.762	9.762	0	%100
14	M527	PX	9.762	9.762	0	%100
15	M526	PX	9.762	9.762	0	%100
16	M525	PX	9.762	9.762	0	%100
17	M524	PX	6.457	6.457	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
18	M515	PX	6.457	6.457	0	%100
19	M506	PX	6.457	6.457	0	%100
20	M497	PX	6.457	6.457	0	%100
21	M472	PX	6.13	6.13	0	%100
22	M471	PX	6.13	6.13	0	%100
23	M470	PX	6.13	6.13	0	%100
24	M469	PX	6.13	6.13	0	%100
25	M468	PX	6.13	6.13	0	%100
26	M467	PX	5.607	5.607	0	%100
27	M466	PX	5.607	5.607	0	%100
28	M465	PX	6.13	6.13	0	%100
29	M464	PX	6.13	6.13	0	%100
30	M463	PX	6.13	6.13	0	%100
31	M462	PX	6.13	6.13	0	%100
32	M461	PX	6.13	6.13	0	%100
33	M460	PX	5.607	5.607	0	%100
34	M459	PX	5.607	5.607	0	%100
35	M458	PX	6.13	6.13	0	%100
36	M457	PX	6.13	6.13	0	%100
37	M456	PX	6.13	6.13	0	%100
38	M455	PX	6.13	6.13	0	%100
39	M454	PX	6.13	6.13	0	%100
40	M453	PX	5.607	5.607	0	%100
41	M452	PX	5.607	5.607	0	%100
42	M451	PX	6.13	6.13	0	%100
43	M450	PX	6.13	6.13	0	%100
44	M449	PX	6.13	6.13	0	%100
45	M448	PX	6.13	6.13	0	%100
46	M447	PX	6.13	6.13	0	%100
47	M446	PX	5.607	5.607	0	%100
48	M445	PX	5.607	5.607	0	%100
49	M436	PX	8.309	8.309	0	%100
50	M432	PX	9.762	9.762	0	%100
51	M431	PX	5.403	5.403	0	%100
52	M430	PX	5.403	5.403	0	%100
53	M429	PX	9.762	9.762	0	%100
54	M428	PX	5.403	5.403	0	%100
55	M427	PX	5.403	5.403	0	%100
56	M426	PX	9.762	9.762	0	%100
57	M425	PX	9.762	9.762	0	%100
58	M420	PX	9.762	9.762	0	%100
59	M419	PX	9.762	9.762	0	%100
60	M418	PX	5.403	5.403	0	%100
61	M417	PX	5.403	5.403	0	%100
62	M416	PX	5.403	5.403	0	%100
63	M415	PX	5.403	5.403	0	%100
64	M414	PX	5.403	5.403	0	%100
65	M413	PX	5.403	5.403	0	%100
66	M412	PX	5.403	5.403	0	%100
67	M411	PX	5.403	5.403	0	%100
68	M410	PX	9.762	9.762	0	%100
69	M409	PX	9.762	9.762	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
70	M406	PX	4.859	4.859	0	%100
71	M405	PX	4.859	4.859	0	%100
72	M404	PX	5.04	5.04	0	%100
73	M403	PX	5.04	5.04	0	%100
74	M402	PX	5.04	5.04	0	%100
75	M401	PX	5.222	5.222	0	%100
76	M400	PX	5.222	5.222	0	%100
77	M399	PX	5.222	5.222	0	%100
78	M398	PX	5.403	5.403	0	%100
79	M397	PX	5.403	5.403	0	%100
80	M396	PX	5.403	5.403	0	%100
81	M394	PX	5.403	5.403	0	%100
82	M393	PX	5.403	5.403	0	%100
83	M392	PX	5.403	5.403	0	%100
84	M391	PX	5.403	5.403	0	%100
85	M390	PX	5.403	5.403	0	%100
86	M389	PX	5.403	5.403	0	%100
87	M388	PX	5.403	5.403	0	%100
88	M387	PX	9.762	9.762	0	%100
89	M386	PX	9.762	9.762	0	%100
90	M385	PX	9.762	9.762	0	%100
91	M384	PX	9.762	9.762	0	%100
92	M383	PX	9.762	9.762	0	%100
93	M382	PX	9.762	9.762	0	%100
94	M363	PX	7.401	7.401	0	%100
95	M362	PX	7.401	7.401	0	%100
96	M361	PX	7.401	7.401	0	%100
97	M360	PX	7.401	7.401	0	%100
98	M359	PX	7.401	7.401	0	%100
99	M358	PX	7.401	7.401	0	%100
100	M357	PX	8.309	8.309	0	%100
101	M356	PX	8.309	8.309	0	%100
102	M355	PX	9.762	9.762	0	%100
103	M354	PX	8.309	8.309	0	%100
104	M353	PX	8.309	8.309	0	%100
105	M352	PX	8.309	8.309	0	%100
106	M328	PX	6.457	6.457	0	%100
107	M327	PX	8.309	8.309	0	%100
108	M323	PX	9.762	9.762	0	%100
109	M322	PX	5.403	5.403	0	%100
110	M321	PX	5.403	5.403	0	%100
111	M320	PX	9.762	9.762	0	%100
112	M319	PX	5.403	5.403	0	%100
113	M318	PX	5.403	5.403	0	%100
114	M317	PX	9.762	9.762	0	%100
115	M316	PX	9.762	9.762	0	%100
116	M311	PX	9.762	9.762	0	%100
117	M310	PX	9.762	9.762	0	%100
118	M309	PX	5.403	5.403	0	%100
119	M308	PX	5.403	5.403	0	%100
120	M307	PX	5.403	5.403	0	%100
121	M306	PX	5.403	5.403	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
122	M305	PX	5.403	5.403	0	%100
123	M304	PX	5.403	5.403	0	%100
124	M303	PX	5.403	5.403	0	%100
125	M302	PX	5.403	5.403	0	%100
126	M301	PX	9.762	9.762	0	%100
127	M300	PX	9.762	9.762	0	%100
128	M297	PX	4.859	4.859	0	%100
129	M296	PX	4.859	4.859	0	%100
130	M295	PX	5.04	5.04	0	%100
131	M294	PX	5.04	5.04	0	%100
132	M293	PX	5.04	5.04	0	%100
133	M292	PX	5.222	5.222	0	%100
134	M291	PX	5.222	5.222	0	%100
135	M290	PX	5.222	5.222	0	%100
136	M289	PX	5.403	5.403	0	%100
137	M288	PX	5.403	5.403	0	%100
138	M287	PX	5.403	5.403	0	%100
139	M285	PX	5.403	5.403	0	%100
140	M284	PX	5.403	5.403	0	%100
141	M283	PX	5.403	5.403	0	%100
142	M282	PX	5.403	5.403	0	%100
143	M281	PX	5.403	5.403	0	%100
144	M280	PX	5.403	5.403	0	%100
145	M279	PX	5.403	5.403	0	%100
146	M278	PX	9.762	9.762	0	%100
147	M277	PX	9.762	9.762	0	%100
148	M276	PX	9.762	9.762	0	%100
149	M275	PX	9.762	9.762	0	%100
150	M274	PX	9.762	9.762	0	%100
151	M273	PX	9.762	9.762	0	%100
152	M254	PX	7.401	7.401	0	%100
153	M253	PX	7.401	7.401	0	%100
154	M252	PX	7.401	7.401	0	%100
155	M251	PX	7.401	7.401	0	%100
156	M250	PX	7.401	7.401	0	%100
157	M249	PX	7.401	7.401	0	%100
158	M248	PX	8.309	8.309	0	%100
159	M247	PX	8.309	8.309	0	%100
160	M246	PX	9.762	9.762	0	%100
161	M245	PX	8.309	8.309	0	%100
162	M244	PX	8.309	8.309	0	%100
163	M243	PX	8.309	8.309	0	%100
164	M219	PX	6.457	6.457	0	%100
165	M218	PX	8.309	8.309	0	%100
166	M214	PX	9.762	9.762	0	%100
167	M213	PX	5.403	5.403	0	%100
168	M212	PX	5.403	5.403	0	%100
169	M211	PX	9.762	9.762	0	%100
170	M210	PX	5.403	5.403	0	%100
171	M209	PX	5.403	5.403	0	%100
172	M208	PX	9.762	9.762	0	%100
173	M207	PX	9.762	9.762	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
174	M202	PX	9.762	9.762	0	%100
175	M201	PX	9.762	9.762	0	%100
176	M200	PX	5.403	5.403	0	%100
177	M199	PX	5.403	5.403	0	%100
178	M198	PX	5.403	5.403	0	%100
179	M197	PX	5.403	5.403	0	%100
180	M196	PX	5.403	5.403	0	%100
181	M195	PX	5.403	5.403	0	%100
182	M194	PX	5.403	5.403	0	%100
183	M193	PX	5.403	5.403	0	%100
184	M192	PX	9.762	9.762	0	%100
185	M191	PX	9.762	9.762	0	%100
186	M188	PX	4.859	4.859	0	%100
187	M187	PX	4.859	4.859	0	%100
188	M186	PX	5.04	5.04	0	%100
189	M185	PX	5.04	5.04	0	%100
190	M184	PX	5.04	5.04	0	%100
191	M183	PX	5.222	5.222	0	%100
192	M182	PX	5.222	5.222	0	%100
193	M181	PX	5.222	5.222	0	%100
194	M180	PX	5.403	5.403	0	%100
195	M179	PX	5.403	5.403	0	%100
196	M178	PX	5.403	5.403	0	%100
197	M176	PX	5.403	5.403	0	%100
198	M175	PX	5.403	5.403	0	%100
199	M174	PX	5.403	5.403	0	%100
200	M173	PX	5.403	5.403	0	%100
201	M172	PX	5.403	5.403	0	%100
202	M171	PX	5.403	5.403	0	%100
203	M170	PX	5.403	5.403	0	%100
204	M169	PX	9.762	9.762	0	%100
205	M168	PX	9.762	9.762	0	%100
206	M167	PX	9.762	9.762	0	%100
207	M166	PX	9.762	9.762	0	%100
208	M165	PX	9.762	9.762	0	%100
209	M164	PX	9.762	9.762	0	%100
210	M145	PX	7.401	7.401	0	%100
211	M144	PX	7.401	7.401	0	%100
212	M143	PX	7.401	7.401	0	%100
213	M142	PX	7.401	7.401	0	%100
214	M141	PX	7.401	7.401	0	%100
215	M140	PX	7.401	7.401	0	%100
216	M139	PX	8.309	8.309	0	%100
217	M138	PX	8.309	8.309	0	%100
218	M137	PX	9.762	9.762	0	%100
219	M136	PX	8.309	8.309	0	%100
220	M135	PX	8.309	8.309	0	%100
221	M134	PX	8.309	8.309	0	%100
222	M110	PX	6.457	6.457	0	%100
223	M109	PX	8.309	8.309	0	%100
224	M105	PX	9.762	9.762	0	%100
225	M104	PX	5.403	5.403	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
226	M103	PX	5.403	5.403	0	%100
227	M102	PX	9.762	9.762	0	%100
228	M101	PX	5.403	5.403	0	%100
229	M100	PX	5.403	5.403	0	%100
230	M99	PX	9.762	9.762	0	%100
231	M98	PX	9.762	9.762	0	%100
232	M93	PX	9.762	9.762	0	%100
233	M92	PX	9.762	9.762	0	%100
234	M91	PX	5.403	5.403	0	%100
235	M90	PX	5.403	5.403	0	%100
236	M89	PX	5.403	5.403	0	%100
237	M88	PX	5.403	5.403	0	%100
238	M87	PX	5.403	5.403	0	%100
239	M86	PX	5.403	5.403	0	%100
240	M85	PX	5.403	5.403	0	%100
241	M84	PX	5.403	5.403	0	%100
242	M83	PX	9.762	9.762	0	%100
243	M82	PX	9.762	9.762	0	%100
244	M79	PX	4.859	4.859	0	%100
245	M78	PX	4.859	4.859	0	%100
246	M77	PX	5.04	5.04	0	%100
247	M76	PX	5.04	5.04	0	%100
248	M75	PX	5.04	5.04	0	%100
249	M74	PX	5.222	5.222	0	%100
250	M73	PX	5.222	5.222	0	%100
251	M72	PX	5.222	5.222	0	%100
252	M71	PX	5.403	5.403	0	%100
253	M70	PX	5.403	5.403	0	%100
254	M69	PX	5.403	5.403	0	%100
255	M67	PX	5.403	5.403	0	%100
256	M66	PX	5.403	5.403	0	%100
257	M65	PX	5.403	5.403	0	%100
258	M64	PX	5.403	5.403	0	%100
259	M63	PX	5.403	5.403	0	%100
260	M62	PX	5.403	5.403	0	%100
261	M61	PX	5.403	5.403	0	%100
262	M60	PX	9.762	9.762	0	%100
263	M59	PX	9.762	9.762	0	%100
264	M58	PX	9.762	9.762	0	%100
265	M57	PX	9.762	9.762	0	%100
266	M56	PX	9.762	9.762	0	%100
267	M55	PX	9.762	9.762	0	%100
268	M36	PX	7.401	7.401	0	%100
269	M35	PX	7.401	7.401	0	%100
270	M34	PX	7.401	7.401	0	%100
271	M33	PX	7.401	7.401	0	%100
272	M32	PX	7.401	7.401	0	%100
273	M31	PX	7.401	7.401	0	%100
274	M30	PX	8.309	8.309	0	%100
275	M29	PX	8.309	8.309	0	%100
276	M28	PX	9.762	9.762	0	%100
277	M27	PX	8.309	8.309	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side) (Continued)

	Member Label	Direction	Start Magnitud...	End Magnitud...	Start Location[...	End Location[ft,%]
278	M26	PX	8.309	8.309	0	%100
279	M25	PX	8.309	8.309	0	%100
280	M1	PX	6.457	6.457	0	%100

Member Area Loads

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

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	N93	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N94	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N190	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N191	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N287	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N288	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
7	N382	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N383	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	MP2B	PIPE_2.5	.561	5.474	1	.088	5.474		1	8059.847	50715	3.596	3.596	2...	H1-1b
2	MP2C	PIPE_2.5	.561	5.474	2	.088	5.474		2	8059.847	50715	3.596	3.596	2...	H1-1b
3	M194	PL3/8x1	.535	.917	6	.019	.917	y	8	11886.7...	16875	.128	.352	2...	H1-1a
4	M412	PL3/8x1	.535	.917	5	.019	.917	y	7	11886.7...	16875	.128	.352	2...	H1-1a
5	M303	PL3/8x1	.535	.917	6	.019	.917	y	6	11886.7...	16875	.128	.352	2...	H1-1a
6	M85	PL3/8x1	.535	.917	5	.019	.917	y	5	11886.7...	16875	.128	.352	2...	H1-1a
7	M302	PL3/8x1	.535	.957	6	.025	.957	y	6	11517.8...	16875	.128	.352	2...	H1-1a
8	M84	PL3/8x1	.535	.957	5	.025	.957	y	5	11517.8...	16875	.128	.352	2...	H1-1a
9	M193	PL3/8x1	.535	.957	6	.024	.957	y	8	11517.8...	16875	.128	.352	2...	H1-1a
10	M411	PL3/8x1	.535	.957	5	.024	.957	y	7	11517.8...	16875	.128	.352	2...	H1-1a
11	MP2D	PIPE_2.5	.522	5.474	3	.084	5.474		3	8059.847	50715	3.596	3.596	3	H1-1b
12	MP2A	PIPE_2.5	.522	5.474	4	.084	5.474		4	8059.847	50715	3.596	3.596	3	H1-1b
13	M192	PL3/8x4	.471	.917	6	.007	.917	y	4	49066.6...	67500	.527	5.625	1...	H1-1a
14	M410	PL3/8x4	.471	.917	5	.007	.917	y	3	49066.6...	67500	.527	5.625	1...	H1-1a
15	M301	PL3/8x4	.471	.917	7	.007	.917	y	2	49066.6...	67500	.527	5.625	1...	H1-1a
16	M83	PL3/8x4	.471	.917	8	.007	.917	y	1	49066.6...	67500	.527	5.625	1...	H1-1a
17	M191	PL3/8x4	.425	.958	6	.006	.958	y	4	47631.7...	67500	.527	5.625	2...	H1-1a
18	M409	PL3/8x4	.425	.958	5	.006	.958	y	3	47631.7...	67500	.527	5.625	2...	H1-1a
19	M300	PL3/8x4	.424	.958	7	.006	.958	y	2	47631.7...	67500	.527	5.625	2...	H1-1a
20	M82	PL3/8x4	.424	.958	8	.006	.958	y	1	47631.7...	67500	.527	5.625	2...	H1-1a
21	M246	HSS4x3x4	.422	1.452	6	.158	1.34	z	6	83040.4...	91665	8.19	10.001	1...	H1-1b
22	M28	HSS4x3x4	.422	1.452	5	.158	1.34	z	5	83040.4...	91665	8.19	10.001	1...	H1-1b
23	M137	HSS4x3x4	.421	1.452	8	.157	1.34	z	8	83040.4...	91665	8.19	10.001	1...	H1-1b
24	M355	HSS4x3x4	.421	1.452	7	.157	1.34	z	7	83040.4...	91665	8.19	10.001	1...	H1-1b
25	M317	PL1/2x4	.415	.58	6	.149	.52	z	6	79618.38	90000	.938	7.5	2...	H1-1b
26	M99	PL1/2x4	.415	.58	5	.149	.52	z	5	79618.38	90000	.938	7.5	2...	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
27	M208	PL1/2x4	.414	.58	8	.148	.52	z	8	79618.38	90000	.938	7.5	2...	H1-1b
28	M426	PL1/2x4	.414	.58	7	.148	.52	z	7	79618.38	90000	.938	7.5	2...	H1-1b
29	M135	L3x3x6	.407	0	8	.125	0	z	3	68266.7...	68364	2.307	5.322	1...	H2-1
30	M353	L3x3x6	.407	0	7	.125	0	z	4	68266.7...	68364	2.307	5.322	1...	H2-1
31	M244	L3x3x6	.406	0	6	.130	0	z	1	68266.7...	68364	2.307	5.322	1...	H2-1
32	M26	L3x3x6	.406	0	5	.130	0	z	2	68266.7...	68364	2.307	5.322	1...	H2-1
33	M308	PL3/8x1	.405	1.264	6	.007	1.264	y	6	8664.628	16875	.128	.352	2...	H1-1a
34	M90	PL3/8x1	.405	1.264	5	.007	1.264	y	5	8664.628	16875	.128	.352	2...	H1-1a
35	M199	PL3/8x1	.405	1.264	8	.007	1.264	y	8	8664.628	16875	.128	.352	2...	H1-1a
36	M417	PL3/8x1	.405	1.264	7	.007	1.264	y	7	8664.628	16875	.128	.352	2...	H1-1a
37	M306	PL3/8x1	.404	1.294	6	.007	1.294	y	6	8395.637	16875	.128	.352	2...	H1-1a
38	M88	PL3/8x1	.404	1.294	5	.007	1.294	y	5	8395.637	16875	.128	.352	2...	H1-1a
39	M197	PL3/8x1	.404	1.294	8	.007	1.294	y	8	8395.637	16875	.128	.352	2...	H1-1a
40	M415	PL3/8x1	.404	1.294	7	.007	1.294	y	7	8395.637	16875	.128	.352	2...	H1-1a
41	M245	L3x3x6	.404	0	7	.112	0	y	4	68266.7...	68364	2.307	5.322	1...	H2-1
42	M27	L3x3x6	.404	0	8	.112	0	y	3	68266.7...	68364	2.307	5.322	1...	H2-1
43	M136	L3x3x6	.403	0	6	.118	0	y	1	68266.7...	68364	2.307	5.322	1...	H2-1
44	M354	L3x3x6	.403	0	5	.118	0	y	2	68266.7...	68364	2.307	5.322	1...	H2-1
45	M188	PL3/8x5/8	.383	0	6	.010	.397	y	6	9969.054	10530	.082	.139	2...	H1-1a
46	M406	PL3/8x5/8	.383	0	5	.010	.397	y	5	9969.054	10530	.082	.139	2...	H1-1a
47	M297	PL3/8x5/8	.383	0	6	.010	.397	y	7	9969.054	10530	.082	.139	2...	H1-1a
48	M79	PL3/8x5/8	.383	0	5	.010	.397	y	8	9969.054	10530	.082	.139	2...	H1-1a
49	M1	PIPE 2.5	.378	6.579	8	.200	11.8...		8	29547.0...	50715	3.596	3.596	1...	H1-1b
50	M219	PIPE 2.5	.378	6.579	7	.200	11.8...		7	29547.0...	50715	3.596	3.596	1...	H1-1b
51	M110	PIPE 2.5	.377	6.579	6	.200	11.8...		6	29547.0...	50715	3.596	3.596	1...	H1-1b
52	M328	PIPE 2.5	.377	6.579	5	.200	11.8...		5	29547.0...	50715	3.596	3.596	1...	H1-1b
53	M213	PL3/8x1	.377	0	6	.081	.331	y	6	13425.1...	16875	.128	.352	2...	H1-1b
54	M431	PL3/8x1	.377	0	5	.081	.331	y	5	13425.1...	16875	.128	.352	2...	H1-1b
55	M322	PL3/8x1	.377	0	6	.081	.331	y	7	13425.1...	16875	.128	.352	2...	H1-1b
56	M104	PL3/8x1	.377	0	5	.081	.331	y	8	13425.1...	16875	.128	.352	2...	H1-1b
57	M251	PL1/2x2.375	.373	0	6	.063	0	y	7	50708.1...	53460	.555	2.644	1...	H1-1b
58	M33	PL1/2x2.375	.373	0	5	.063	0	y	8	50708.1...	53460	.555	2.644	1...	H1-1b
59	M142	PL1/2x2.375	.372	0	8	.063	0	y	6	50708.1...	53460	.555	2.644	1...	H1-1b
60	M360	PL1/2x2.375	.372	0	7	.063	0	y	5	50708.1...	53460	.555	2.644	1...	H1-1b
61	M145	PL1/2x2.375	.370	0	6	.068	0	y	8	50708.1...	53460	.555	2.644	1...	H1-1b
62	M363	PL1/2x2.375	.370	0	5	.068	0	y	7	50708.1...	53460	.555	2.644	1...	H1-1b
63	M254	PL1/2x2.375	.369	0	7	.069	0	y	6	50708.1...	53460	.555	2.644	1...	H1-1b
64	M36	PL1/2x2.375	.369	0	8	.069	0	y	5	50708.1...	53460	.555	2.644	1...	H1-1b
65	M187	PL3/8x5/8	.346	.288	6	.031	.288	y	6	10231.8...	10530	.082	.139	2...	H1-1a
66	M405	PL3/8x5/8	.346	.288	5	.031	.288	y	5	10231.8...	10530	.082	.139	2...	H1-1a
67	M296	PL3/8x5/8	.346	.288	6	.031	.288	y	7	10231.8...	10530	.082	.139	2...	H1-1a
68	M78	PL3/8x5/8	.346	.288	5	.031	.288	y	8	10231.8...	10530	.082	.139	2...	H1-1a
69	M282	PL3/8x1	.342	.468	6	.024	.468	y	7	10699.5...	16875	.128	.352	3...	H1-1a
70	M64	PL3/8x1	.342	.468	5	.024	.468	y	8	10699.5...	16875	.128	.352	3...	H1-1a
71	M173	PL3/8x1	.342	.468	6	.024	.468	y	6	10699.5...	16875	.128	.352	3...	H1-1a
72	M391	PL3/8x1	.342	.468	5	.024	.468	y	5	10699.5...	16875	.128	.352	3...	H1-1a
73	M218	L3x3x6	.332	0	5	.222	2.914	z	8	67393.8...	68364	2.307	5.322	1...	H2-1
74	M436	L3x3x6	.332	0	6	.222	2.914	z	7	67393.8...	68364	2.307	5.322	1...	H2-1
75	M327	L3x3x6	.331	0	8	.223	2.914	z	6	67393.8...	68364	2.307	5.322	1...	H2-1
76	M109	L3x3x6	.331	0	7	.223	2.914	z	5	67393.8...	68364	2.307	5.322	1...	H2-1
77	M243	L3x3x6	.330	1.227	6	.201	2.761	y	8	67393.8...	68364	2.307	5.322	1...	H2-1
78	M25	L3x3x6	.330	1.227	5	.201	2.761	y	7	67393.8...	68364	2.307	5.322	1...	H2-1

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
79	M134	L3x3x6	.329	1.227	8	.201	2.761	y	5	67393.8...	68364	2.307	5.322	1...	H2-1
80	M352	L3x3x6	.329	1.227	7	.201	2.761	y	6	67393.8...	68364	2.307	5.322	1...	H2-1
81	M307	PL3/8x1	.328	.871	6	.007	0	y	1	12300.7...	16875	.128	.352	1...	H1-1a
82	M89	PL3/8x1	.328	.871	5	.007	0	y	2	12300.7...	16875	.128	.352	1...	H1-1a
83	M198	PL3/8x1	.328	.871	8	.007	0	y	1	12300.7...	16875	.128	.352	1...	H1-1a
84	M416	PL3/8x1	.328	.871	7	.007	0	y	2	12300.7...	16875	.128	.352	1...	H1-1a
85	M167	PL3/8x4	.307	.468	6	.007	.495	y	1	44585.1...	67500	.527	5.625	1...	H1-1a
86	M385	PL3/8x4	.307	.468	5	.007	.495	y	2	44585.1...	67500	.527	5.625	1...	H1-1a
87	M276	PL3/8x4	.306	.468	7	.006	.495	y	4	44585.1...	67500	.527	5.625	1...	H1-1a
88	M58	PL3/8x4	.306	.468	8	.006	.495	y	3	44585.1...	67500	.527	5.625	1...	H1-1a
89	M186	PL3/8x3/4	.291	0	6	.003	.487	y	7	11454.1...	12645	.096	.199	1...	H1-1a
90	M404	PL3/8x3/4	.291	0	5	.003	.487	y	8	11454.1...	12645	.096	.199	1...	H1-1a
91	M295	PL3/8x3/4	.290	0	6	.003	.487	y	5	11454.1...	12645	.096	.199	1...	H1-1a
92	M77	PL3/8x3/4	.290	0	5	.003	.487	y	6	11454.1...	12645	.096	.199	1...	H1-1a
93	M284	PL3/8x1	.288	.731	6	.012	.731	y	8	13504.3...	16875	.128	.352	2...	H1-1a
94	M66	PL3/8x1	.288	.731	5	.012	.731	y	7	13504.3...	16875	.128	.352	2...	H1-1a
95	M175	PL3/8x1	.288	.731	6	.013	.731	y	5	13504.3...	16875	.128	.352	2...	H1-1a
96	M393	PL3/8x1	.288	.731	5	.013	.731	y	6	13504.3...	16875	.128	.352	2...	H1-1a
97	M169	PL3/8x4	.285	.742	6	.009	0	y	1	54763.8...	67500	.527	5.625	1...	H1-1a
98	M387	PL3/8x4	.285	.742	5	.009	0	y	2	54763.8...	67500	.527	5.625	1...	H1-1a
99	M278	PL3/8x4	.285	.742	7	.009	.742	y	1	54763.8...	67500	.527	5.625	1...	H1-1a
100	M60	PL3/8x4	.285	.742	8	.009	.742	y	2	54763.8...	67500	.527	5.625	1...	H1-1a
101	M184	PL3/8x3/4	.283	.595	6	.006	.595	y	6	10908.6...	12645	.096	.199	2...	H1-1a
102	M402	PL3/8x3/4	.283	.595	5	.006	.595	y	5	10908.6...	12645	.096	.199	2...	H1-1a
103	M293	PL3/8x3/4	.282	.595	7	.006	.595	y	7	10908.6...	12645	.096	.199	2...	H1-1a
104	M75	PL3/8x3/4	.282	.595	8	.006	.595	y	8	10908.6...	12645	.096	.199	2...	H1-1a
105	MP3C	PIPE_2.5	.275	5.474	5	.072	5.474		1	8059.847	50715	3.596	3.596	2...	H1-1b
106	MP3B	PIPE_2.5	.275	5.474	6	.072	5.474		2	8059.847	50715	3.596	3.596	2...	H1-1b
107	MP3A	PIPE_2.5	.275	5.474	7	.069	5.474		3	8059.847	50715	3.596	3.596	2...	H1-1b
108	MP3D	PIPE_2.5	.275	5.474	8	.069	5.474		4	8059.847	50715	3.596	3.596	2...	H1-1b
109	MP1B	PIPE_2.5	.271	5.474	5	.074	5.474		1	8059.847	50715	3.596	3.596	2...	H1-1b
110	MP1C	PIPE_2.5	.271	5.474	6	.074	5.474		2	8059.847	50715	3.596	3.596	2...	H1-1b
111	MP1D	PIPE_2.5	.270	5.474	7	.071	5.474		3	8059.847	50715	3.596	3.596	2...	H1-1b
112	MP1A	PIPE_2.5	.270	5.474	8	.071	5.474		4	8059.847	50715	3.596	3.596	2...	H1-1b
113	M55	PL1/2x4	.266	.35	1	.035	.35	z	1	72098.7...	90000	.938	7.5	1...	H1-1b
114	M273	PL1/2x4	.266	.35	2	.035	.35	z	2	72098.7...	90000	.938	7.5	1...	H1-1b
115	M164	PL1/2x4	.262	.35	2	.036	.35	z	2	72098.7...	90000	.938	7.5	1...	H1-1b
116	M382	PL1/2x4	.262	.35	1	.036	.35	z	1	72098.7...	90000	.938	7.5	1...	H1-1b
117	M527	WT4x2.25x0....	.260	1.916	2	.041	1.916	y	2	72241.2...	75945.6	4.263	1.792	1...	H1-1b
118	M525	WT4x2.25x0....	.260	1.916	1	.041	1.916	y	1	72241.2...	75945.6	4.263	1.792	1...	H1-1b
119	M528	WT4x2.25x0....	.257	0	2	.043	0	y	1	72241.2...	75945.6	4.263	1.792	1...	H1-1b
120	M526	WT4x2.25x0....	.257	0	1	.043	0	y	2	72241.2...	75945.6	4.263	1.792	1...	H1-1b
121	M168	PL3/8x4	.254	.667	6	.009	0	y	1	57024.4...	67500	.527	5.46	1...	H1-1a
122	M386	PL3/8x4	.254	.667	5	.009	0	y	2	57024.4...	67500	.527	5.46	1...	H1-1a
123	M277	PL3/8x4	.253	.667	7	.008	0	y	2	57024.4...	67500	.527	5.473	1...	H1-1a
124	M59	PL3/8x4	.253	.667	8	.008	0	y	1	57024.4...	67500	.527	5.473	1...	H1-1a
125	M524	PIPE_2.5	.252	6.25	1	.103	11.1...		4	14558.7...	50715	3.596	3.596	1...	H1-1b
126	M506	PIPE_2.5	.252	6.25	2	.103	11.1...		3	14558.7...	50715	3.596	3.596	1...	H1-1b
127	M283	PL3/8x1	.252	.667	6	.011	.667	y	1	14020.9...	16875	.128	.352	2...	H1-1a
128	M65	PL3/8x1	.252	.667	5	.011	.667	y	2	14020.9...	16875	.128	.352	2...	H1-1a
129	M174	PL3/8x1	.252	.667	8	.011	.667	y	1	14020.9...	16875	.128	.352	2...	H1-1a
130	M392	PL3/8x1	.252	.667	7	.011	.667	y	2	14020.9...	16875	.128	.352	2...	H1-1a

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
131	M252	PL1/2x2.375	.236	0	6	.031	0	y	7	50708.1...	53460	.555	2.644	1...	H1-1b
132	M34	PL1/2x2.375	.236	0	5	.031	0	y	8	50708.1...	53460	.555	2.644	1...	H1-1b
133	M143	PL1/2x2.375	.236	0	8	.031	0	y	6	50708.1...	53460	.555	2.644	1...	H1-1b
134	M361	PL1/2x2.375	.236	0	7	.031	0	y	5	50708.1...	53460	.555	2.644	1...	H1-1b
135	M212	PL3/8x1	.234	0	6	.056	.324	y	6	13553.9...	16875	.128	.352	2...	H1-1b
136	M430	PL3/8x1	.234	0	5	.056	.324	y	5	13553.9...	16875	.128	.352	2...	H1-1b
137	M321	PL3/8x1	.234	0	6	.056	.324	y	6	13553.9...	16875	.128	.352	2...	H1-1b
138	M103	PL3/8x1	.234	0	5	.056	.324	y	5	13553.9...	16875	.128	.352	2...	H1-1b
139	M515	PIPE_2.5	.234	6.25	3	.108	11.1...		1	14558.7...	50715	3.596	3.596	1...	H1-1b
140	M497	PIPE_2.5	.234	6.25	4	.108	11.1...		2	14558.7...	50715	3.596	3.596	1...	H1-1b
141	M249	PL1/2x2.375	.234	0	6	.031	0	y	6	50708.1...	53460	.555	2.644	1...	H1-1b
142	M31	PL1/2x2.375	.234	0	5	.031	0	y	5	50708.1...	53460	.555	2.644	1...	H1-1b
143	M140	PL1/2x2.375	.234	0	6	.031	0	y	8	50708.1...	53460	.555	2.644	1...	H1-1b
144	M358	PL1/2x2.375	.234	0	5	.031	0	y	7	50708.1...	53460	.555	2.644	1...	H1-1b
145	M305	PL3/8x1	.225	.917	6	.020	.917	y	6	11886.7...	16875	.128	.352	2...	H1-1b
146	M87	PL3/8x1	.225	.917	5	.020	.917	y	5	11886.7...	16875	.128	.352	2...	H1-1b
147	M196	PL3/8x1	.225	.917	6	.020	.917	y	8	11886.7...	16875	.128	.352	2...	H1-1b
148	M414	PL3/8x1	.225	.917	5	.020	.917	y	7	11886.7...	16875	.128	.352	2...	H1-1b
149	M253	PL1/2x2.375	.199	0	6	.033	0	y	7	50708.1...	53460	.555	2.644	1...	H1-1b
150	M35	PL1/2x2.375	.199	0	5	.033	0	y	8	50708.1...	53460	.555	2.644	1...	H1-1b
151	M144	PL1/2x2.375	.199	0	8	.033	0	y	6	50708.1...	53460	.555	2.644	1...	H1-1b
152	M362	PL1/2x2.375	.199	0	7	.033	0	y	5	50708.1...	53460	.555	2.644	1...	H1-1b
153	M294	PL3/8x3/4	.198	.37	6	.022	.37	y	7	11944.8...	12645	.096	.199	2...	H1-1b
154	M76	PL3/8x3/4	.198	.37	5	.022	.37	y	8	11944.8...	12645	.096	.199	2...	H1-1b
155	M185	PL3/8x3/4	.197	.37	8	.022	.37	y	6	11944.8...	12645	.096	.199	2...	H1-1b
156	M403	PL3/8x3/4	.197	.37	7	.022	.37	y	5	11944.8...	12645	.096	.199	2...	H1-1b
157	M141	PL1/2x2.375	.196	0	6	.034	0	y	8	50708.1...	53460	.555	2.644	1...	H1-1b
158	M359	PL1/2x2.375	.196	0	5	.034	0	y	7	50708.1...	53460	.555	2.644	1...	H1-1b
159	M250	PL1/2x2.375	.196	0	7	.034	0	y	6	50708.1...	53460	.555	2.644	1...	H1-1b
160	M32	PL1/2x2.375	.196	0	8	.034	0	y	5	50708.1...	53460	.555	2.644	1...	H1-1b
161	M323	PL3/8x4	.188	0	6	.010	.331	z	7	54814.7...	67500	.527	5.625	1...	H1-1b
162	M105	PL3/8x4	.188	0	5	.010	.331	z	8	54814.7...	67500	.527	5.625	1...	H1-1b
163	M214	PL3/8x4	.187	0	8	.010	.331	z	6	54814.7...	67500	.527	5.625	1...	H1-1b
164	M432	PL3/8x4	.187	0	7	.010	.331	z	5	54814.7...	67500	.527	5.625	1...	H1-1b
165	M311	PL1/2x4	.175	.917	6	.013	.917	y	2	75325.9...	90000	.938	7.5	1...	H1-1b
166	M93	PL1/2x4	.175	.917	5	.013	.917	y	1	75325.9...	90000	.938	7.5	1...	H1-1b
167	M202	PL1/2x4	.174	.917	8	.013	.917	y	1	75325.9...	90000	.938	7.5	1...	H1-1b
168	M420	PL1/2x4	.174	.917	7	.013	.917	y	2	75325.9...	90000	.938	7.5	1...	H1-1b
169	M279	PL3/8x1	.169	.458	6	.034	.458	y	6	10904.9...	16875	.128	.352	3...	H1-1b
170	M61	PL3/8x1	.169	.458	5	.034	.458	y	5	10904.9...	16875	.128	.352	3...	H1-1b
171	M170	PL3/8x1	.169	.458	6	.034	.458	y	8	10904.9...	16875	.128	.352	3...	H1-1b
172	M388	PL3/8x1	.169	.458	5	.034	.458	y	7	10904.9...	16875	.128	.352	3...	H1-1b
173	M446	PIPE_1.5	.165	0	6	.027	.635		5	11882.0...	23593.5	1.105	1.105	2...	H1-1b
174	M460	PIPE_1.5	.165	0	5	.027	.635		6	11882.0...	23593.5	1.105	1.105	2...	H1-1b
175	M467	PIPE_1.5	.165	0	5	.027	.635		7	11882.0...	23593.5	1.105	1.105	2...	H1-1b
176	M453	PIPE_1.5	.165	0	6	.027	.635		8	11882.0...	23593.5	1.105	1.105	2...	H1-1b
177	M210	PL3/8x1	.158	0	9	.065	.22	y	9	13274.2...	16875	.128	.352	3...	H1-1b
178	M304	PL3/8x1	.144	.958	6	.014	.958	y	6	11505.4...	16875	.128	.352	2...	H1-1b
179	M86	PL3/8x1	.144	.958	5	.014	.958	y	5	11505.4...	16875	.128	.352	2...	H1-1b
180	M195	PL3/8x1	.144	.958	6	.014	.958	y	8	11505.4...	16875	.128	.352	2...	H1-1b
181	M413	PL3/8x1	.144	.958	5	.014	.958	y	7	11505.4...	16875	.128	.352	2...	H1-1b
182	M211	PL1/2x4	.141	0	6	.011	.324	z	6	80518.8...	90000	.938	7.5	1...	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
183	M429	PL1/2x4	.141	0	5	.011	.324	z	5	80518.8...	90000	.938	7.5	1...	H1-1b
184	M320	PL1/2x4	.141	0	6	.011	.324	z	6	80518.8...	90000	.938	7.5	1...	H1-1b
185	M102	PL1/2x4	.141	0	5	.011	.324	z	5	80518.8...	90000	.938	7.5	1...	H1-1b
186	M465	PL3/16x1.5	.117	0	2	.014	1.687	y	6	1861.461	12656.25	.049	.348	1	H1-1b
187	M451	PL3/16x1.5	.117	0	1	.014	1.687	y	5	1861.461	12656.25	.049	.348	1	H1-1b
188	M458	PL3/16x1.5	.115	0	4	.014	1.687	y	8	1861.461	12656.25	.049	.348	1	H1-1b
189	M472	PL3/16x1.5	.115	0	3	.014	1.687	y	7	1861.461	12656.25	.049	.348	1	H1-1b
190	M452	PIPE_1.5	.115	6.034	1	.023	.635		8	11882.8...	23593.5	1.105	1.105	1...	H1-1b
191	M466	PIPE_1.5	.115	6.034	2	.023	.635		7	11882.8...	23593.5	1.105	1.105	1...	H1-1b
192	M461	PL3/16x1.5	.113	0	1	.012	1.687	y	5	1861.461	12656.25	.049	.348	1	H1-1b
193	M447	PL3/16x1.5	.113	0	2	.012	1.687	y	6	1861.461	12656.25	.049	.348	1	H1-1b
194	M468	PL3/16x1.5	.112	0	4	.012	1.687	y	8	1861.461	12656.25	.049	.348	1	H1-1b
195	M454	PL3/16x1.5	.112	0	3	.012	1.687	y	7	1861.461	12656.25	.049	.348	1	H1-1b
196	M310	PL1/2x4	.111	.958	6	.015	.958	y	2	74088.7...	90000	.938	7.5	1...	H1-1b
197	M92	PL1/2x4	.111	.958	5	.015	.958	y	1	74088.7...	90000	.938	7.5	1...	H1-1b
198	M445	PIPE_1.5	.111	6.034	3	.023	.635		5	11882.8...	23593.5	1.105	1.105	1...	H1-1b
199	M459	PIPE_1.5	.111	6.034	4	.023	.635		6	11882.8...	23593.5	1.105	1.105	1...	H1-1b
200	M201	PL1/2x4	.111	.958	8	.015	.958	y	1	74088.7...	90000	.938	7.5	1...	H1-1b
201	M419	PL1/2x4	.111	.958	7	.015	.958	y	2	74088.7...	90000	.938	7.5	1...	H1-1b
202	M29	PL3/8x3	.095	0	5	.127	.605	y	8	43970.45	50625	.394	3.165	2...	H1-1b
203	M247	PL3/8x3	.095	0	6	.127	.605	y	7	43970.45	50625	.394	3.165	2...	H1-1b
204	M138	PL3/8x3	.095	0	8	.128	.605	y	6	43970.45	50625	.394	3.165	2...	H1-1b
205	M356	PL3/8x3	.095	0	7	.128	.605	y	5	43970.45	50625	.394	3.165	2...	H1-1b
206	M274	PL1/2x4	.092	0	2	.015	.648	y	2	82340.5...	90000	.938	7.5	1...	H1-1b
207	M56	PL1/2x4	.092	0	1	.015	.648	y	1	82340.5...	90000	.938	7.5	1...	H1-1b
208	M357	PL3/8x3	.090	0	7	.139	.605	y	7	43970.45	50625	.394	3.165	2...	H1-1b
209	M139	PL3/8x3	.090	0	8	.139	.605	y	8	43970.45	50625	.394	3.165	2...	H1-1b
210	M30	PL3/8x3	.090	0	6	.140	.605	y	5	43970.45	50625	.394	3.165	2...	H1-1b
211	M248	PL3/8x3	.090	0	5	.140	.605	y	6	43970.45	50625	.394	3.165	2...	H1-1b
212	M165	PL1/2x4	.089	0	2	.015	.648	y	1	82340.5...	90000	.938	7.5	1...	H1-1b
213	M383	PL1/2x4	.089	0	1	.015	.648	y	2	82340.5...	90000	.938	7.5	1...	H1-1b
214	M450	PL3/16x1.5	.083	1.687	2	.007	0	y	5	1861.461	12656.25	.049	.348	1	H1-1b
215	M464	PL3/16x1.5	.083	1.687	1	.007	0	y	6	1861.461	12656.25	.049	.348	1	H1-1b
216	M471	PL3/16x1.5	.083	1.687	4	.007	0	y	7	1861.461	12656.25	.049	.348	1	H1-1b
217	M457	PL3/16x1.5	.083	1.687	3	.007	0	y	8	1861.461	12656.25	.049	.348	1	H1-1b
218	M207	PL3/8x4	.082	.472	10	.016	.472	z	10	54589.7...	67500	.527	5.625	2...	H1-1b
219	M448	PL3/16x1.5	.082	1.687	1	.006	0	y	6	1861.461	12656.25	.049	.348	1	H1-1b
220	M462	PL3/16x1.5	.082	1.687	2	.006	0	y	5	1861.461	12656.25	.049	.348	1	H1-1b
221	M469	PL3/16x1.5	.081	1.687	3	.006	0	y	8	1861.461	12656.25	.049	.348	1	H1-1b
222	M455	PL3/16x1.5	.081	1.687	4	.006	0	y	7	1861.461	12656.25	.049	.348	1	H1-1b
223	M275	PL1/2x4	.080	0	2	.015	.718	y	2	80682.6...	90000	.938	7.5	1...	H1-1b
224	M57	PL1/2x4	.080	0	1	.015	.718	y	1	80682.6...	90000	.938	7.5	1...	H1-1b
225	M166	PL1/2x4	.079	0	2	.015	.718	y	1	80682.6...	90000	.938	7.5	1...	H1-1b
226	M384	PL1/2x4	.079	0	1	.015	.718	y	2	80682.6...	90000	.938	7.5	1...	H1-1b
227	M399	PL3/8x7/8	.077	0	6	.010	0	y	2	13037.3...	14760	.116	.27	2.2	H1-1b*
228	M181	PL3/8x7/8	.077	0	5	.010	0	y	1	13037.3...	14760	.116	.27	2.2	H1-1b*
229	M290	PL3/8x7/8	.077	0	5	.010	0	y	4	13037.3...	14760	.116	.27	2.2	H1-1b*
230	M72	PL3/8x7/8	.077	0	6	.010	0	y	3	13037.3...	14760	.116	.27	2.2	H1-1b*
231	M292	PL3/8x7/8	.075	0	5	.008	0	y	8	13630.67	14760	.116	.27	2...	H1-1b
232	M74	PL3/8x7/8	.075	0	6	.008	0	y	7	13630.67	14760	.116	.27	2...	H1-1b
233	M401	PL3/8x7/8	.075	0	8	.008	0	y	6	13630.67	14760	.116	.27	2...	H1-1b
234	M183	PL3/8x7/8	.075	0	7	.008	0	y	5	13630.67	14760	.116	.27	2...	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
235	M62	PL3/8x1	.075	.648	2	.010	.648	y	3	14164.2...	16875	.128	.352	2...	H1-1b*
236	M280	PL3/8x1	.075	.648	1	.010	.648	y	4	14164.2...	16875	.128	.352	2...	H1-1b*
237	M389	PL3/8x1	.074	.648	2	.010	.648	y	2	14164.2...	16875	.128	.352	2...	H1-1b*
238	M171	PL3/8x1	.074	.648	1	.010	.648	y	1	14164.2...	16875	.128	.352	2...	H1-1b*
239	M63	PL3/8x1	.072	.718	2	.009	0	y	1	13608.2...	16875	.128	.352	2...	H1-1b*
240	M281	PL3/8x1	.072	.718	1	.009	0	y	2	13608.2...	16875	.128	.352	2...	H1-1b*
241	M390	PL3/8x1	.072	.718	2	.009	.718	y	2	13608.2...	16875	.128	.352	2...	H1-1b*
242	M172	PL3/8x1	.072	.718	1	.009	.718	y	1	13608.2...	16875	.128	.352	2...	H1-1b*
243	M449	PL3/16x1.5	.071	1.687	2	.005	0	y	5	1861.461	12656.25	.049	.348	1	H1-1b
244	M463	PL3/16x1.5	.071	1.687	1	.005	0	y	6	1861.461	12656.25	.049	.348	1	H1-1b
245	M470	PL3/16x1.5	.071	1.687	4	.005	0	y	7	1861.461	12656.25	.049	.348	1	H1-1b
246	M456	PL3/16x1.5	.071	1.687	3	.005	0	y	8	1861.461	12656.25	.049	.348	1	H1-1b
247	M397	PL3/8x1	.070	0	6	.011	0	y	2	13599.11	16875	.128	.352	2...	H1-1b*
248	M179	PL3/8x1	.070	0	5	.011	0	y	1	13599.11	16875	.128	.352	2...	H1-1b*
249	M288	PL3/8x1	.070	0	5	.010	0	y	1	13599.11	16875	.128	.352	2...	H1-1b*
250	M70	PL3/8x1	.070	0	6	.010	0	y	2	13599.11	16875	.128	.352	2...	H1-1b*
251	M291	PL3/8x7/8	.058	.727	5	.003	.727	y	4	12174.4...	14760	.116	.27	1...	H1-1b
252	M73	PL3/8x7/8	.058	.727	6	.003	.727	y	3	12174.4...	14760	.116	.27	1...	H1-1b
253	M400	PL3/8x7/8	.058	.727	8	.004	.727	y	2	12174.4...	14760	.116	.27	1...	H1-1b
254	M182	PL3/8x7/8	.058	.727	7	.004	.727	y	1	12174.4...	14760	.116	.27	1...	H1-1b
255	M394	PL3/8x1	.056	0	6	.009	0	y	2	12300.5...	16875	.128	.352	1...	H1-1b*
256	M176	PL3/8x1	.056	0	5	.009	0	y	1	12300.5...	16875	.128	.352	1...	H1-1b*
257	M285	PL3/8x1	.056	0	5	.009	0	y	2	12300.5...	16875	.128	.352	1...	H1-1b*
258	M67	PL3/8x1	.056	0	6	.009	0	y	1	12300.5...	16875	.128	.352	1...	H1-1b*
259	M289	PL3/8x1	.049	0	5	.003	0	y	4	12290.6...	16875	.128	.352	2...	H1-1b
260	M71	PL3/8x1	.049	0	6	.003	0	y	3	12290.6...	16875	.128	.352	2...	H1-1b
261	M398	PL3/8x1	.049	0	8	.003	0	y	2	12290.6...	16875	.128	.352	2...	H1-1b
262	M180	PL3/8x1	.049	0	7	.003	0	y	1	12290.6...	16875	.128	.352	2...	H1-1b
263	M209	PL3/8x1	.046	0	9	.008	.5	y	9	13257.11	16875	.128	.352	2...	H1-1b
264	M178	PL3/8x1	.042	.32	5	.004	0	y	2	10996.1...	16875	.128	.352	1...	H1-1b
265	M396	PL3/8x1	.042	.32	6	.004	0	y	1	10996.1...	16875	.128	.352	1...	H1-1b
266	M287	PL3/8x1	.042	.32	8	.003	0	y	2	10996.1...	16875	.128	.352	1...	H1-1b
267	M69	PL3/8x1	.042	.32	7	.003	0	y	1	10996.1...	16875	.128	.352	1...	H1-1b
268	M309	PL3/8x1	.004	0	2	.000	0	y	2	12300.7...	16875	.128	.352	2...	H1-1b
269	M91	PL3/8x1	.004	0	1	.000	0	y	1	12300.7...	16875	.128	.352	2...	H1-1b
270	M200	PL3/8x1	.004	0	2	.000	0	y	2	12300.7...	16875	.128	.352	2...	H1-1b
271	M418	PL3/8x1	.004	0	1	.000	0	y	1	12300.7...	16875	.128	.352	2...	H1-1b
272	M319	PL3/8x1	.003	.22	7	.002	.22	y	7	13274.2...	16875	.128	.352	2...	H1-1b
273	M101	PL3/8x1	.003	.22	8	.002	.22	y	5	13274.2...	16875	.128	.352	2...	H1-1b
274	M428	PL3/8x1	.003	.22	7	.002	.22	y	7	13274.2...	16875	.128	.352	2...	H1-1b
275	M318	PL3/8x1	.002	.5	7	.001	.5	y	7	13257.11	16875	.128	.352	2...	H1-1b
276	M100	PL3/8x1	.002	.5	8	.001	.5	y	8	13257.11	16875	.128	.352	2...	H1-1b
277	M427	PL3/8x1	.002	.5	7	.001	.5	y	7	13257.11	16875	.128	.352	2...	H1-1b
278	M316	PL3/8x4	.001	.472	7	.000	.472	y	3	54589.7...	67500	.527	5.625	2...	H1-1b
279	M425	PL3/8x4	.001	.472	7	.000	.472	y	3	54589.7...	67500	.527	5.625	2...	H1-1b
280	M98	PL3/8x4	.001	.472	8	.000	.472	y	2	54589.7...	67500	.527	5.625	2...	H1-1b

EXHIBIT 9

EBI Consulting

environmental | engineering | due diligence

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CT11281B

Granby/Rt 20
15 North Granby Road (Rt. 20)
Granby, Connecticut 06035

December 14, 2020

EBI Project Number: 6220006249

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**30.18%**

December 14, 2020

T-Mobile
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, Connecticut 06002

Emissions Analysis for Site: CT11281B - Granby/Rt 20

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **15 North Granby Road (Rt. 20)** in **Granby, Connecticut** 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 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu W/cm^2$). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits; therefore, it is necessary to report results and limits in terms of percent MPE rather than power density.

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 600 MHz and 700 MHz frequency bands are approximately 400 $\mu W/cm^2$ and 467 $\mu W/cm^2$, respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 11 GHz frequency bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report 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 done for the proposed T-Mobile Wireless antenna facility located at 15 North Granby Road (Rt. 20) in Granby, Connecticut 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 manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, 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.

For all calculations, all equipment was calculated using the following assumptions:

1) 2 LTE channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

2) 1 NR channel (600 MHz Band) was considered for each sector of the proposed installation. This Channel has a transmit power of 80 Watts.

3) 2 LTE channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

4) 4 GSM channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

5) 4 LTE channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

6) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

7) 1 LTE channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 120 Watts.

8) 1 NR channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 120 Watts.

9) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. 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. This is rarely the case, and if so, is never continuous.

10) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

11) The antennas used in this modeling are the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s) in Sector A, the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s) in Sector B, the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s) in Sector C, the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s) in Sector D. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, 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.

12) The antenna mounting height centerline of the proposed antennas is 115 feet above ground level (AGL).

13) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C	Sector:	D
Antenna #:	1	Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32
Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz
Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd
Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet
Channel Count:	8	Channel Count:	8	Channel Count:	8	Channel Count:	8
Total TX Power (W):	360 Watts	Total TX Power (W):	360 Watts	Total TX Power (W):	360 Watts	Total TX Power (W):	360 Watts
ERP (W):	12,841.53	ERP (W):	12,841.53	ERP (W):	12,841.53	ERP (W):	12,841.53
Antenna A1 MPE %:	**3.49%**	Antenna B1 MPE %:	**3.49%**	Antenna C1 MPE %:	**3.49%**	Antenna D1 MPE %:	**3.49%**
Antenna #:	**2**	Antenna #:	**2**	Antenna #:	**2**	Antenna #:	**2**
Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20
Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz
Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd
Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet
Channel Count:	7	Channel Count:	7	Channel Count:	7	Channel Count:	7
Total TX Power (W):	320 Watts	Total TX Power (W):	320 Watts	Total TX Power (W):	320 Watts	Total TX Power (W):	320 Watts
ERP (W):	8,466.41	ERP (W):	8,466.41	ERP (W):	8,466.41	ERP (W):	8,466.41
Antenna A2 MPE %:	**3.83%**	Antenna B2 MPE %:	**3.83%**	Antenna C2 MPE %:	**3.83%**	Antenna D2 MPE %:	**3.83%**
Antenna #:	**3**	Antenna #:	**3**	Antenna #:	**3**	Antenna #:	**3**
Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449
Frequency Bands:	2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz
Gain:	22.05 dBd / 22.05 dBd	Gain:	22.05 dBd / 22.05 dBd	Gain:	22.05 dBd / 22.05 dBd	Gain:	22.05 dBd / 22.05 dBd
Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet
Channel Count:	2	Channel Count:	2	Channel Count:	2	Channel Count:	2
Total TX Power (W):	240 Watts	Total TX Power (W):	240 Watts	Total TX Power (W):	240 Watts	Total TX Power (W):	240 Watts
ERP (W):	38,477.89	ERP (W):	38,477.89	ERP (W):	38,477.89	ERP (W):	38,477.89
Antenna A3 MPE %:	**10.46%**	Antenna B3 MPE %:	**10.46%**	Antenna C3 MPE %:	**10.46%**	Antenna D3 MPE %:	**10.46%**

Site Composite MPE %	
Carrier	**MPE %**
T-Mobile (Max at Sector A):	17.78%
AT&T	5.55%
Metro PCS	0.77%
Sprint	0.71%
Nextel	0.28%
VoiceStream	0.21%
Town	4.88%
Site Total MPE % :	30.18%

T-Mobile MPE % Per Sector	
T-Mobile Sector A Total:	17.78%
T-Mobile Sector B Total:	17.78%
T-Mobile Sector C Total:	17.78%
T-Mobile Sector D Total:	17.78%
Site Total MPE % :	30.18%

T-Mobile Maximum MPE Power Values (Sector A)

T-Mobile Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density (μW/cm²)	Frequency (MHz)	Allowable MPE (μW/cm²)	Calculated % MPE
T-Mobile 1900 MHz GSM	4	1028.30	115.0	11.18	1900 MHz GSM	1000	1.12%
T-Mobile 1900 MHz LTE	2	2056.61	115.0	11.18	1900 MHz LTE	1000	1.12%
T-Mobile 2100 MHz LTE	2	2307.55	115.0	12.55	2100 MHz LTE	1000	1.25%
T-Mobile 600 MHz LTE	2	591.73	115.0	3.22	600 MHz LTE	400	0.80%
T-Mobile 600 MHz NR	1	1577.94	115.0	4.29	600 MHz NR	400	1.07%
T-Mobile 700 MHz LTE	2	648.82	115.0	3.53	700 MHz LTE	467	0.76%
T-Mobile 1900 MHz LTE	2	2203.69	115.0	11.98	1900 MHz LTE	1000	1.20%
T-Mobile 2500 MHz LTE	1	19238.94	115.0	52.30	2500 MHz LTE	1000	5.23%
T-Mobile 2500 MHz NR	1	19238.94	115.0	52.30	2500 MHz NR	1000	5.23%
						Total:	**17.78%**

• NOTE: Totals may vary by approximately 0.01% due to summation of remainders in calculations.

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:	17.78%
Sector B:	17.78%
Sector C:	17.78%
Sector D:	17.78%
T-Mobile Maximum MPE % (Sector A):	17.78%
Site Total:	30.18%
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **30.18%** 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.

EXHIBIT 10

EXHIBIT 11

EXHIBIT 12