



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@sbsite.com

February 17, 2022

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

Notice of Exempt Modification
3 Edmund Road, Newtown, CT 06470
41 25 15.24 N
-73 17 53.17 W
T-Mobile Site #: CT11259F_Anchor

Dear Ms. Bachman:

T-Mobile currently maintains nine (9) antennas at the 127-foot level of the existing 139-foot Monopole Tower at 3 Edmund Road in Newtown, CT. The tower is owned by SBA Infrastructure, LLC. The property is owned by 5-K Enterprises, Inc. T-Mobile intends to remove (6) 1900/2100MHz antennas replace with three (6) new 1900/2100/2500 MHz antennas. The total amount of antennas will remain at nine (9).

- **The new antennas would be installed at 128-foot level of the tower and will support 5G services.**

Planned Modifications:

TOWER

Remove:

- N/A

Remove and Replace:

- (3) Ericsson - AIR21 B2A/B4P – Panel (Remove) – (3) Ericsson Air6449 B41 2500 MHz (Replace)
- (3) Ericsson AIR32 KRD901146-1_B66A_B2A (remove) – (3) Commscope VV-65A-R1 antennas (replace)

Install New:

- (3) Ericsson 4460 B25+B66 RRUs
- (3) 1.9" Fiber

Existing Equipment to Remain:

- (3) RFS APXVAARR24_43-U-NA20
- (1) Low profile platform
- (3) Ericsson KRY 112 144/1 TMAs @127'
- (3) 1-5/8" Fiber
- (3) 4449 B71+B85 RRUs

Entitlements:

- (3) Ericsson 4449 B71+B12 RRUs
- (9) 1-5/8" coax

GROUND

Remove:

- (2) Nortel S8000 Equip. Cabinet & Assoc. Hardware

Install New:

- (1) 1" RGS Conduit for DC power from 6160 to fiber cabinet
- (1) 2" RGS conduit for power from existing PPC
- (1) 2" RGS conduit to connect 6160 and existing RBS6131 cabinet
- (1) 2" RGS conduit w/LBs for DC power
- Ericsson B160 Battery Cabinet
- (2) 2" RGS conduits for Alarm & Spare
- Ericsson 6160 Equip. Cabinet
- (1) 2" RGS conduit for AAV to Fiber Cabinet
- Slackbox to existing Ice bridge

Remain:

- (1) ½" Coax cable for GPS
- GPS antennas mounted existing Ice bridge
- T-Mobile conduits
- Emerson Nextend Compact 2416 Fiber Cabinet
- RBS 6131 Equip. Cabinet
- CIENA 3931 Service Delivery Switch
- Ice Bridge
- Conduits
- PPC
- 10'-1" x 10' concrete pad

This facility was originally approved by Council on December 22, 2003 under Docket 241. Approval was given for a 130' monopole, not to exceed a height of 130-feet above ground level. A recalculated RF report was to be provided when circumstances in operation would cause a change in power density. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of the facility, the facility was to be brought into compliance with such standards. The Certificate Holder was to permit public or private entities to share space on the proposed tower for fair consideration, or to provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. The Certificate Holder was also to provide reasonable space on the tower for no compensation for any municipal antennas, provided tower space was available and antennas were compatible with the structural integrity of the tower. Any obsolete antennas were to be removed within sixty days. There were no further post construction stipulations set. Petition 749 was later made to Council and on December 22, 2003 Council approved a 10' extension to the tower, for a height of 140'. The FAA determined the 140' tower would not require obstruction marking or lighting and there were no further post construction stipulations set. 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 Newtown's First Selectman, Daniel C. Rosenthal, and Deputy Director of Community Development, Christal Preszler, as well as to the property owner. (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 with certain modifications.

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@sbsite.com

Attachments



- cc: Daniel C. Rosenthal, First Selectman / with attachments
Town of Newtown, 3 Primrose Street, Newtown, CT 06470
- Christal Prezler, Deputy Director of Community Development / with attachments
Town of Newtown, 3 Primrose Street, Newtown, CT 06470
- 5-K Enterprises, Inc. / with attachments
99 Hanover Rd. Newtown CT 06470 (SBA address on file – the Town Property Card lists SBA corporate office address)

Exhibit List

Exhibit 1	Check Copy	X
Exhibit 2	Notification Receipts	x
Exhibit 3	Property Card	x
Exhibit 4	Property Map	x
Exhibit 5	Original Zoning Approval	CSC 12/22/03 Docket No. 241
Exhibit 6	Construction Drawings	Chappell Engineering Assoc. 1/25/22
Exhibit 7	Structural Analysis	TES 1/14/22
Exhibit 8	Mount Analysis	TES 1/5/22
Exhibit 10	EME Report	Centerline 2/11/22

EXHIBIT 1

Copy of Check

EXHIBIT 2

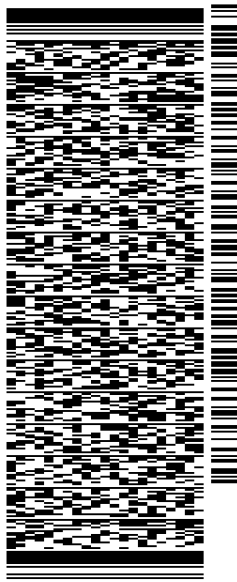
Mailing Labels

ORIGIN ID:BBFA (508) 614-0389
SHERRI KNAPIK
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 17FEB22
ACTWGT: 2.00 LB
CAD: 105843304/NET4460
BILL SENDER

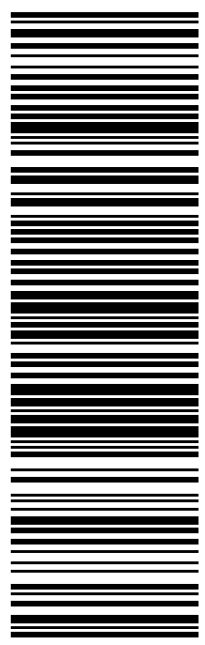
TO **MELANIE A. BACHMAN EXEC. DIR**
CONNECTICUT SITING COUNCIL
TEN FRANKLIN SQUARE

NEW BRITAIN CT 06051
(508) 251-0720 X.3807 REF: 105692009-6089
INV# PO: DEPT:



TRK# 7760 7078 1610
0201
FRI - 18 FEB 10:30A
PRIORITY OVERNIGHT

EB BDLA
06051
CT-US BDL



56D.J2027C/FE4A

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[Track Another Shipment](#) [Help](#)

776070781610


[ADD NICKNAME](#)
ON TIME

Scheduled delivery:
Friday, February 18, 2022 before 10:30 am



PICKED UP
WESTBOROUGH, MA

[GET STATUS UPDATES](#)

FROM
SBA COMMUNICATIONS CORPORATION
Sherri Knapik
134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Melanie A. Bachman Exec. Dir
Connecticut Siting Council
Ten Franklin Square
NEW BRITAIN, CT US 06051
508-251-0720

[MANAGE DELIVERY](#)
[Travel History](#)
[Shipment Facts](#)

Travel History

TIME ZONE
Local Scan Time



Thursday, February 17,
2022

11:59 AM

WESTBOROUGH, MA

Picked up
Tendered at FedEx Office

9:02 AM

Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER

776070781610

SERVICE

FedEx Priority Overnight

WEIGHT

2 lbs / 0.91 kgs

TOTAL PIECES

1

TOTAL SHIPMENT WEIGHT

2 lbs / 0.91 kgs

TERMS

Shipper

SHIPPER REFERENCE

10-56-92009-6089

PACKAGING

FedEx Pak

SPECIAL HANDLING SECTION

Deliver Weekday

ACTUAL PICK UP

2/17/22 [?](#)

SHIPMENT-FACTS.COD-DETAIL

\$0.00

STANDARD TRANSIT

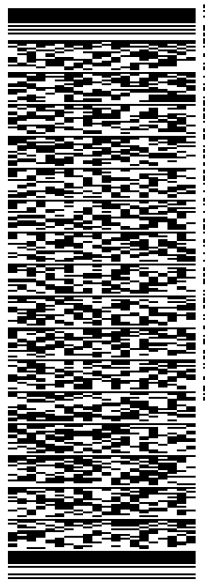
2/18/22 before 10:30 am [?](#)

ORIGIN ID:BFBA (508) 614-0389
SHERRI KNAPIK
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 17FEB22
ACTWGT: 1.00 LB
CAD: 105843304/NET4460
BILL SENDER

TO DANIEL C. ROSENTHAL
TOWN OF NEWTOWN
FIRST SELECTMAN
3 PROMROSE ST
NEWTOWN CT 06470
(508) 251-0720 X 3807
REF: 105692009-6089
PO: DEPT:

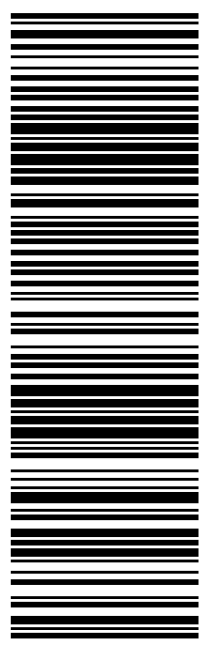
56D.J2027C/FE4A



J221022010501uv

TRK# 7760 7081 4351
0201
FRI - 18 FEB 10:30A
PRIORITY OVERNIGHT

EG DXRA
06470
CT-US SWF



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FROM
SBA COMMUNICATIONS CORPORATION
Sherri Knapik
134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Daniel C. Rosenthal
Town of Newtown
First Selectman
3 Promrose St
NEWTOWN, CT US 06470
508-251-0720

[MANAGE DELIVERY](#)
[Travel History](#)
[Shipment Facts](#)

Travel History

TIME ZONE
Local Scan Time



Thursday, February 17,
2022

11:59 AM

WESTBOROUGH, MA

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Tendered at FedEx Office

9:05 AM

Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER

776070814351

SERVICE

FedEx Priority Overnight

WEIGHT

0.5 lbs / 0.23 kgs

TOTAL PIECES

1

TOTAL SHIPMENT WEIGHT

0.5 lbs / 0.23 kgs

TERMS

Shipper

SHIPPER REFERENCE

10-56-92009-6089

PACKAGING

FedEx Envelope

SPECIAL HANDLING SECTION

Deliver Weekday

ACTUAL PICK UP

2/17/22

SHIPMENT-FACTS.COD-DETAIL

\$0.00

STANDARD TRANSIT

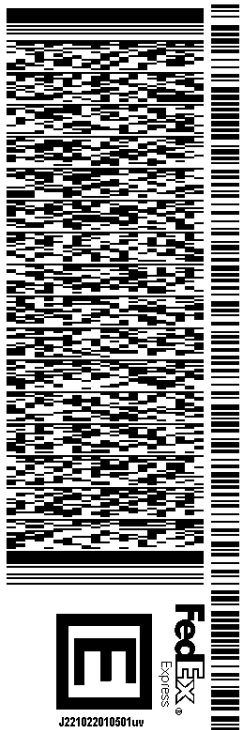
2/18/22 before 10:30 am

ORIGIN ID:BFPA (508) 614-0389
SHERRI KNAPIK
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 17FEB22
ACTWGT: 1.00 LB
CAD: 105843304/NET4460
BILL SENDER

TO
CHRISTAL PREZLER
TOWN OF NEWTOWN
DEPUTY DIR. OF COMM. DEVELOPMENT
3 PROMROSE ST
NEWTOWN CT 06470
(508) 251-0720 X.3807 REF: 105692009-6089
INV. DEPT:
PO:

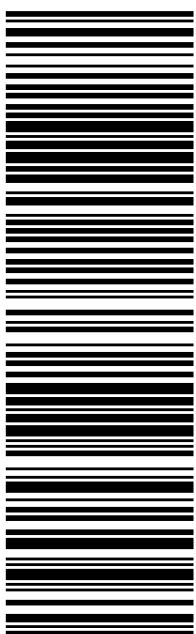
56D.J2027C/FE4A



TRK# 7760 7083 3162
0201
FRI - 18 FEB 10:30A
PRIORITY OVERNIGHT

EG DXRA

06470
CT-US SWF



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FedEx Tracking

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776070833162

[ADD NICKNAME](#)
ON TIME

Scheduled delivery:
Friday, February 18, 2022 before 10:30 am

PICKED UP
WESTBOROUGH, MA

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FROM
SBA COMMUNICATIONS CORPORATION
Sherri Knapik
134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Christal Prezler
Town of Newtown
Deputy Dir. of Comm. Development
3 Promrose St
NEWTOWN, CT US 06470
508-251-0720

[MANAGE DELIVERY](#)
[Travel History](#)
[Shipment Facts](#)

Travel History

TIME ZONE
Local Scan Time

Thursday, February 17,
2022

11:59 AM

WESTBOROUGH, MA

Picked up
Tendered at FedEx Office

9:06 AM

Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER

776070833162

SERVICE

FedEx Priority Overnight

WEIGHT

0.5 lbs / 0.23 kgs

TOTAL PIECES

1

TOTAL SHIPMENT WEIGHT

0.5 lbs / 0.23 kgs

TERMS

Shipper

SHIPPER REFERENCE

10-56-92009-6089

PACKAGING

FedEx Envelope

SPECIAL HANDLING SECTION

Deliver Weekday

ACTUAL PICK UP

2/17/22

SHIPMENT-FACTS.COD-DETAIL

\$0.00

STANDARD TRANSIT

2/18/22 before 10:30 am

ORIGIN ID:BFBA (508) 614-0389
SHERRI KNAPIK
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

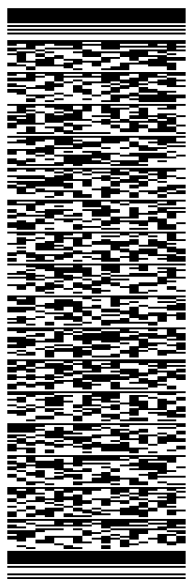
SHIP DATE: 17FEB22
ACTWGT: 1.00 LB
CAD: 105843304/NET4460
BILL SENDER

TO

5-K ENTERPRISES, INC.
99 HANOVER RD.

NEWTOWN CT 06470

(508) 251-0720 X.3807 REF: 105692009-6089
INV# PO: DEPT:

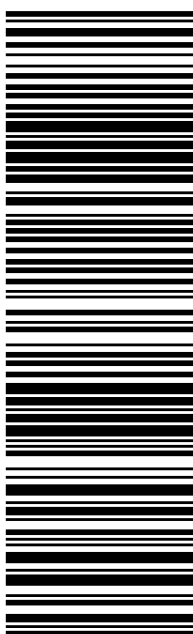


56D.J2027C/FE4A

TRK# 7760 7085 5580
0201
FRI - 18 FEB 10:30A
PRIORITY OVERNIGHT

EG DXRA

06470
CT-US SWF



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FedEx Tracking

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776070855580


[ADD NICKNAME](#)

ON TIME

Scheduled delivery:
Friday, February 18, 2022 before 12:00 pm



PICKED UP
WESTBOROUGH, MA

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FROM
SBA COMMUNICATIONS CORPORATION
Sherri Knapik
134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
5-K Enterprises, Inc.
99 Hanover Rd.
NEWTOWN, CT US 06470
508-251-0720

[MANAGE DELIVERY](#)
[Travel History](#)
[Shipment Facts](#)

Travel History

TIME ZONE
Local Scan Time



Thursday, February 17,
2022

11:59 AM

WESTBOROUGH, MA

Picked up
Tendered at FedEx Office

9:08 AM

Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER

776070855580

SERVICE

FedEx Priority Overnight

WEIGHT

0.5 lbs / 0.23 kgs

TOTAL PIECES

1

TOTAL SHIPMENT WEIGHT

0.5 lbs / 0.23 kgs

TERMS

Shipper

SHIPPER REFERENCE

10-56-92009-6089

PACKAGING

FedEx Envelope

SPECIAL HANDLING SECTION

Deliver Weekday

ACTUAL PICK UP

2/17/22

SHIPMENT-FACTS.COD-DETAIL

\$0.00

STANDARD TRANSIT

2/18/22 before 12:00 pm

EXHIBIT 3

Property Card

3 EDMOND ROAD

Location 3 EDMOND ROAD

M/B/L 27/ 6/ 11/ /

Acct# 00927598

Owner 5K ENTERPRISES INC

Assessment \$1,363,810

Appraisal \$1,948,300

PID 6168

Building Count 2

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$1,408,500	\$539,800	\$1,948,300

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$985,950	\$377,860	\$1,363,810

Owner of Record

Owner 5K ENTERPRISES INC
Co-Owner
Address 99 HANOVER ROAD
NEWTOWN, CT 06470

Sale Price \$875,000
Book & Page 890/ 525
Sale Date 10/20/2006
Instrument 00

Ownership History

Ownership History				
Owner	Sale Price	Book & Page	Instrument	Sale Date
5K ENTERPRISES INC	\$875,000	890/ 525	00	10/20/2006

Building Information

Building 1 : Section 1

Year Built: 2007
Living Area: 9,000

Building Attributes	
Field	Description
STYLE	Ind/Office
MODEL	Ind/Comm

Grade	C+
Stories:	1
Occupancy	6
Exterior Wall 1	Pre-Fin Metal
Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Enamel Metal
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	None
Bldg Use	IND WHSES
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	HEAT/AC SPLIT
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	NONE
Rooms/Prtns	LIGHT
Wall Height	25
% Comn Wall	

Building Photo



(<http://images.vgsi.com/photos/NewtownCTPhotos/\00\02\09\45.jpg>)

Building Layout



(http://images.vgsi.com/photos/NewtownCTPhotos//Sketches/6168_6168.jj)

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	9,000	9,000
		9,000	9,000

Building 2 : Section 1

Year Built: 2010
Living Area: 13,524

Building Attributes : Bldg 2 of 2	
Field	Description
STYLE	Ind/Office
MODEL	Ind/Comm
Grade	C+
Stories:	1
Occupancy	3
Exterior Wall 1	Pre-Fin Metal

Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Enamel Metal
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	None
Bldg Use	IND WHSES
Total Rooms	
Total Bedrms	
Total Baths	
1st Floor Use:	
Heat/AC	NONE
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	NONE
Rooms/Prtns	LIGHT
Wall Height	25
% Comn Wall	

Building Photo



(<http://images.vgsi.com/photos/NewtownCTPhotos/\00\02\09\47.jpg>)

Building Layout



(http://images.vgsi.com/photos/NewtownCTPhotos//Sketches/6168_20796)

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	13,524	13,524
		13,524	13,524

Extra Features

Extra Features				<u>Legend</u>
Code	Description	Size	Value	Bldg #
A/C	Air Conditioning	600 UNITS	\$1,090	1

Land

Land Use

Use Code 4010
 Description IND WHSES
 Zone M-5

Land Line Valuation

Size (Acres) 22.98
 Frontage
 Depth

Neighborhood C100
Alt Land Appr No
Category

Assessed Value \$377,860
Appraised Value \$539,800

Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
LT1	Lights			3 UNITS	\$1,240	1

Valuation History

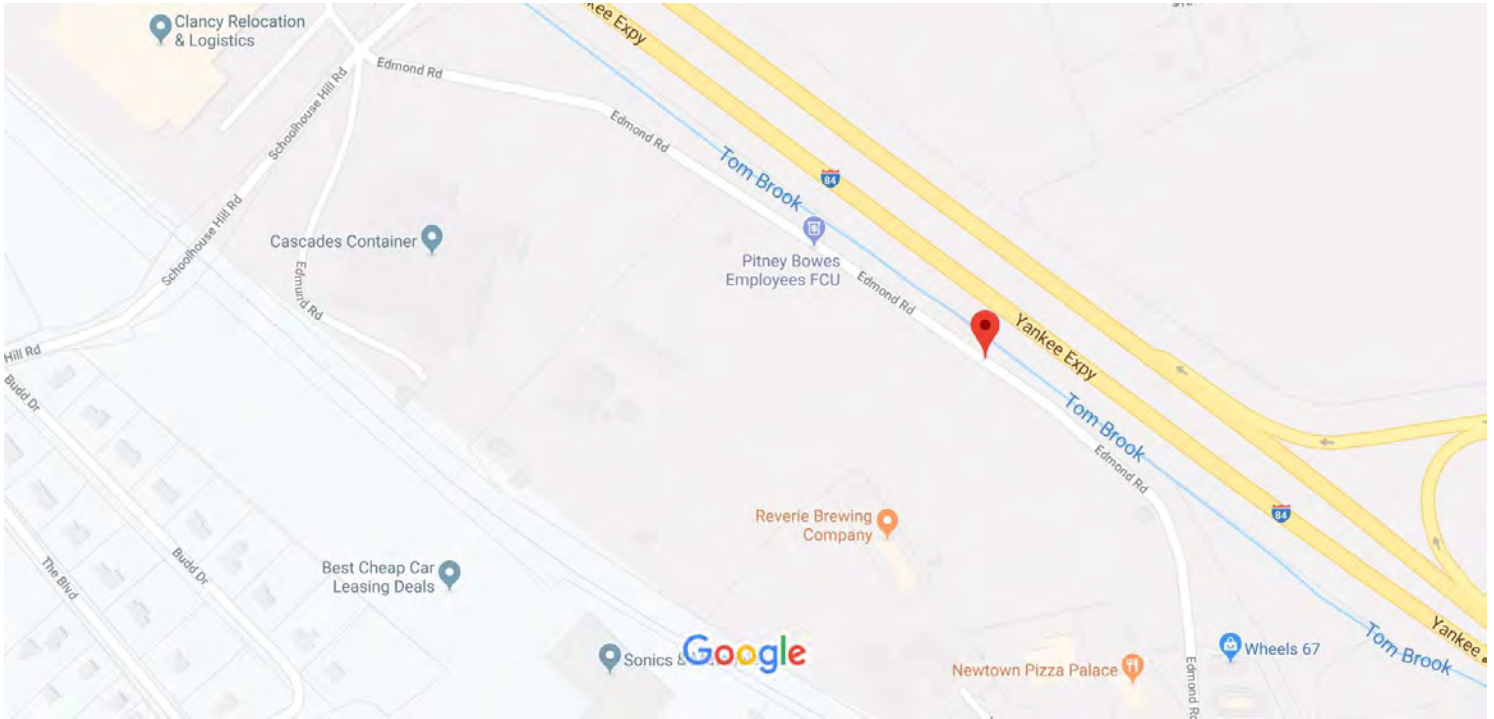
Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$1,408,500	\$539,800	\$1,948,300
2019	\$1,408,500	\$539,800	\$1,948,300
2018	\$1,408,500	\$539,800	\$1,948,300

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$985,950	\$377,860	\$1,363,810
2019	\$985,950	\$377,860	\$1,363,810
2018	\$985,950	\$377,860	\$1,363,810

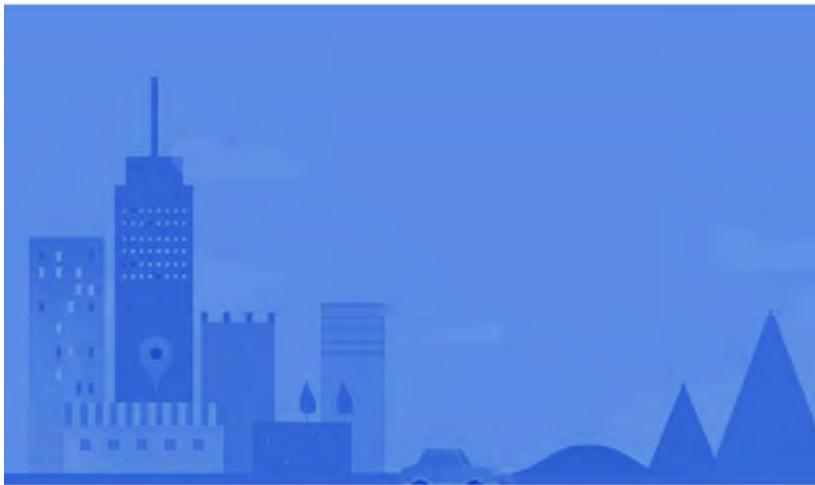
EXHIBIT 4

Property Map

Google Maps Edmond Rd



Map data ©2019 200 ft



Edmond Rd

Newtown, CT 06470



Directions



Save



Nearby



Send to your phone



Share

EXHIBIT 5

Zoning Documents

DOCKET NO. 241 - Omnipoint Facilities Network 2, LLC, } Connecticut
application for a Certificate of Environmental Compatibility and }
Public Need for the construction, maintenance and operation of a } Siting
wireless telecommunications facility at 79 Church Hill Road or 3 }
Edmond Road, Newtown, Connecticut. } Council

December 22, 2003

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Omnipoint Facilities Network 2, LLC d/b/a T-Mobile USA Inc. for the construction, maintenance and operation of a wireless telecommunications facility at 3 Edmond Road, Newtown, Connecticut. The Council denies certification of the site at 79 Church Hill Road, Newtown, Connecticut.

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

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of T-Mobile USA Inc., AT&T wireless PCS LLC, and other entities, both public and private, but such tower shall not exceed a height of 130 feet above ground level.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) a detailed site development plan that depicts the location of the access road, compound, tower, utility line, erosion and sedimentation control features, extent of site clearing and grading, and landscaping. Erosion and sedimentation controls shall be consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; and
 - b) specifications for the tower, tower foundation, antennas, equipment building, and security fence.
3. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of electromagnetic radio frequency power density is submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. The Certificate Holder shall provide reasonable space on the tower for no compensation for any municipal antennas, provided tower space is available and such antennas are compatible with the structural integrity of the tower.
6. If the facility does not initially provide wireless services within one year of completion of construction or ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
7. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.
8. Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Hartford Courant, The News-Times, and The Newtown Bee.

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

The parties and intervenors to this proceeding are:

Applicant

Omnipoint Facilities Network 2, L.L.C.,
A Subsidiary of T-Mobile, USA, Inc.

Its Representative

Stephen J. Humes, Esq.
LeBoeuf, Lamb, Greene & MacRae, L.L.P.
Goodwin Square
225 Asylum Street
Hartford, CT 06103

Intervenor

AT&T Wireless PCS, LLC
d/b/a AT&T Wireless

Its Representative

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

Intervenor

The Honorable Julia Wasserman
State Representative - 106th District
P.O. Box 848, 113 Walnut Tree Hill Road
Sandy Hook, CT 06482

Intervenor

Zoltan Csillag and Julia Nable
10 Walnut Tree Hill Road
Sandy Hook, CT 06482

Party

Town of Newtown

Its Representative

Its Representative

Steven R. Smart, Esq.
Riefberg, Smart, Donohue & NeJame, P. C.
17 Downs Street
Danbury, CT 06810

Its Representative

Monte E. Frank, Esq.
Cohen and Wolf, P.C.
158 Deer Hill Avenue
Danbury, CT 06810

Connecticut Siting Council

Staff Reports

Petition No. 749
Nextel Communications, Inc.
3 Edmond Road, Newtown
Staff Report

On December 1, 2005, Nextel Communications, Inc. (Nextel) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the extension of an approved wireless telecommunications tower located at 3 Edmond Road in Newtown, Connecticut. On December 12, 2005, Council member Edward S. Wilensky and Council staff member Robert Mercier met with Nextel representatives Christopher B. Fisher, Marc Anderson, and Yvan Joseph at the site to review this petition.

Nextel proposes to place a 10-foot extension on a 130-foot monopole owned by Optasite. The facility was approved by the Council on December 22, 2003, and is currently under construction. The 130-foot tower has been erected. Nextel proposes to mount an antenna platform supporting 12 panel antennas at a centerline height 137 feet above ground level (agl). The overall height of the facility with antennas would be 140 feet agl.

During the docket proceeding, T-Mobile originally proposed to construct a 150-foot monopole at the site; however, the Council determined a tower height of 130 feet would be sufficient to meet the coverage needs of T-Mobile. During the docket decision process, visual impacts of a 150-foot tower were assessed and determined to be insignificant by the Council. A tower design that could support a tower extension to 150 feet was included in the Development and Management Plan approved by the Council.

Nextel would install a 12-foot by 20-foot equipment shelter within the 50-foot by 50-foot compound. No expansion of the compound is necessary.

The Federal Aviation Administration determined the 140-foot tower would not require obstruction marking or lighting.

EXHIBIT 6

Construction Drawings

SPECIAL CONSTRUCTION NOTE:
 GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT T-MOBILE'S RAD/VERTICAL EQUIPMENT SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).

CT259/OPTNEWTON_RL#1

3 EDMOND ROAD
 NEWTON, CT 06470
 FAIRFIELD COUNTY

SITE NO.: CT11259F

SITE TYPE: 139'± MONOPOLE

RF DESIGN GUIDELINE: 67D5A998E OUTDOOR

SCOPE OF WORK

REMOVE:

- 6 ANTENNAS
- 3 TMAs
- 2 S8000 CABINETS
- ALL COAX CABLES

INSTALL:

- 6 ANTENNAS
- 3 RRU's
- 1 B160 BATTERY CABINET
- 1 G160 CABINET
- 1 SLACKBOX
- 3 HYBRID CABLES

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.

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

GENERAL NOTES

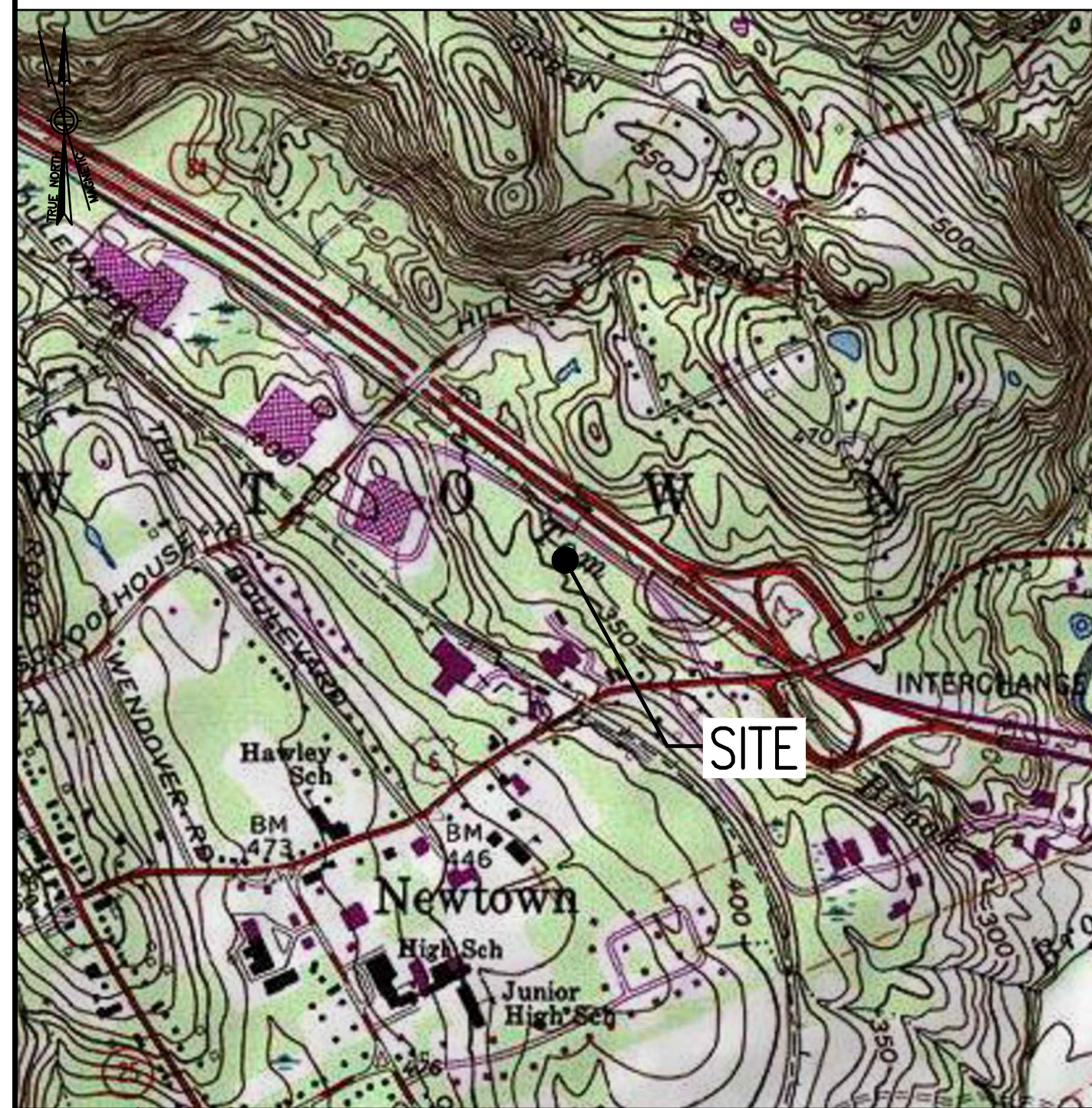
1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT 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 EXCLUDE 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 OWNERS 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

MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. TAKE EXIT 58 TOWARD I-90 WEST. TAKE EXIT 78 TOWARD I-84. TAKE EXIT 10 FOR US-6 WEST TOWARD SANDY HOOK/NEWTON. TURN RIGHT ONTO US-6 WEST. TURN RIGHT. SITE IS LOCATED ON THE RIGHT HAND SIDE.

SHEET INDEX

SHT. NO.	DESCRIPTION	VER.
T-1	TITLE SHEET	1
GN-1	GENERAL NOTES	1
A-1	COMPOUND & EQUIPMENT PLAN	1
A-2	TOWER ELEVATIONS & ANTENNA PLAN	1
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:	CT11259F
SITE NAME:	TORRINGTON/RT 202/RT 183
SBA SITE NUMBER:	CT13060-A
SBA SITE NAME:	NEWTOWN 2
SITE ADDRESS:	3 EDMOND ROAD NEWTON, CT 06470
PROPERTY OWNER:	5K ENTERPRISES INC. 99 HANOVER ROAD NEWTON, CT 06470
TOWER OWNER:	SBA INFRASTRUCTURE, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	FAIRFIELD
ZONING DISTRICT:	B-2 (BUSINESS)
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	139'±
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
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.41.420899° N.41° 25' 15.24" LONGITUDE W.73.298102° W.73° 17' 53.17"

SPECIAL ZONING NOTE:

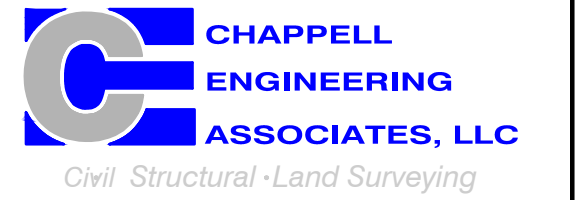
BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE 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

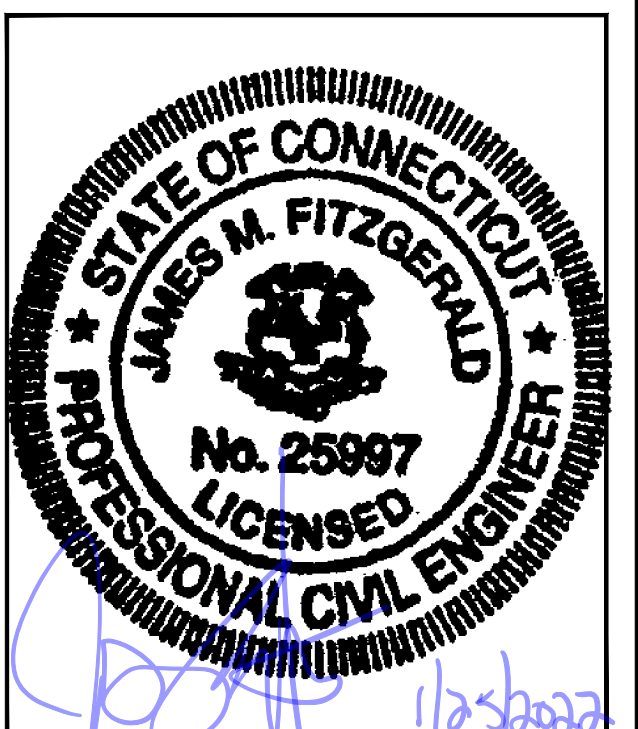
15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 (508) 286-2700



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



R.K. EXECUTIVE CENTRE
 201 BOSTON POST ROAD WEST, SUITE 101
 MARLBOROUGH, MA 01752
 (508) 481-7400
 www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	01/25/22	ISSUED FOR CONSTRUCTION	JRV
0	01/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11259F

SITE ADDRESS:
 3 EDMOND ROAD
 NEWTON, CT 06470

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

GENERAL NOTES:

- 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
- 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.
- 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.
- 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.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- 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.
- 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.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.
- 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.
- 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.
- CONSTRUCTION SHALL COMPLY WITH ALL T-MOBILE STANDARDS AND SPECIFICATIONS.
- 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.
- 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.
- 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:

- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 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.
- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- 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.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 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.
- 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.
- 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.
- THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T-MOBILE SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

- 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.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS
- 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, UNDO.
- 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 LARGER2 IN.
#5 AND SMALLER & WWF1½ IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
SLAB AND WALL¾ IN.
BEAMS AND COLUMNS½ IN.
- A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- 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.
- 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.
- 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.
- 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:

- 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".
- 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.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾") AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ¾" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL
- ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
- COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
- 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.
- 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.
- 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:

- HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

- FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T-MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.
- COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.
- 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:

- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLE TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- 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.
- 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.
- 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).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- 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.
- 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.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- 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.
- 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).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- 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.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- 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.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- 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.
- 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.
- 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.
- 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.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 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.
- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

**T-MOBILE
NORTHEAST LLC**

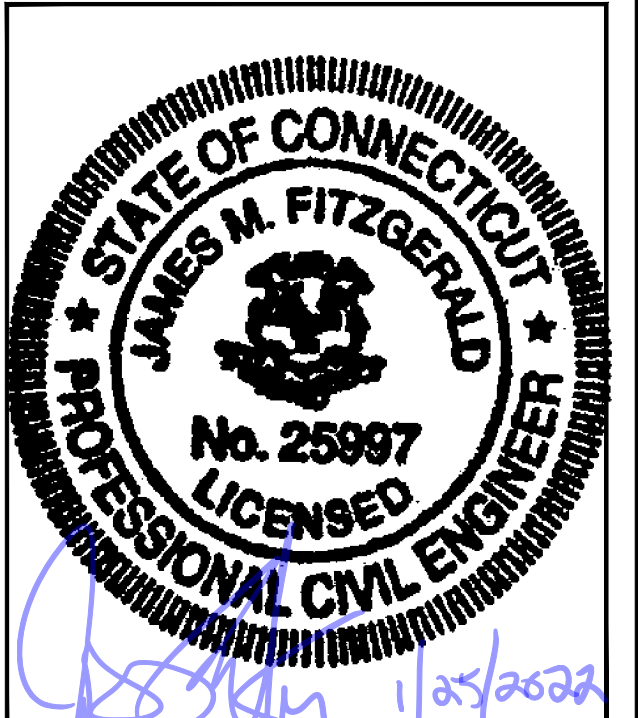
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APPROVED BY: JMT

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0	01/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11259F

SITE ADDRESS:
3 EDMOND ROAD
NEWTON, CT 06470

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

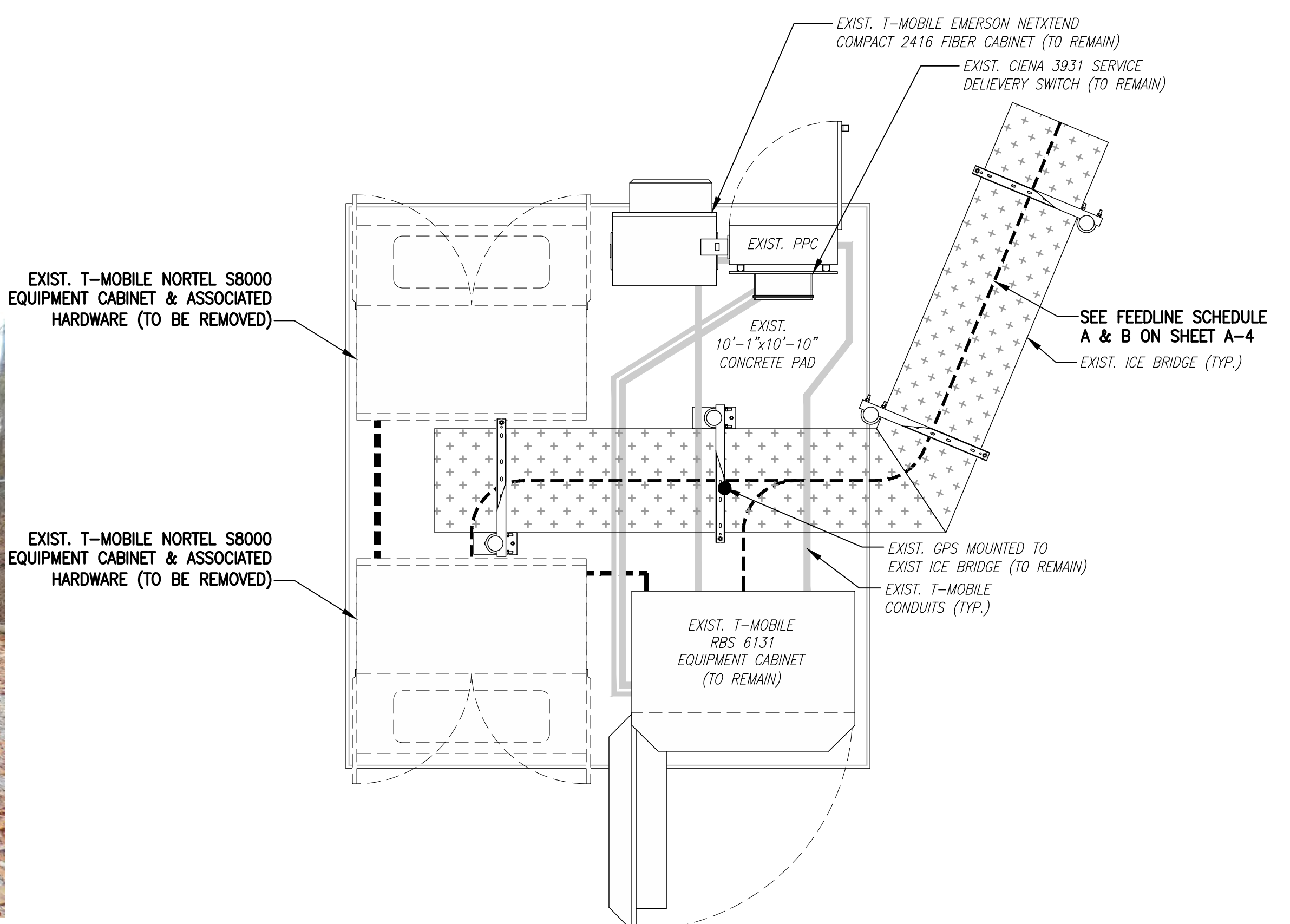
GN-1

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.

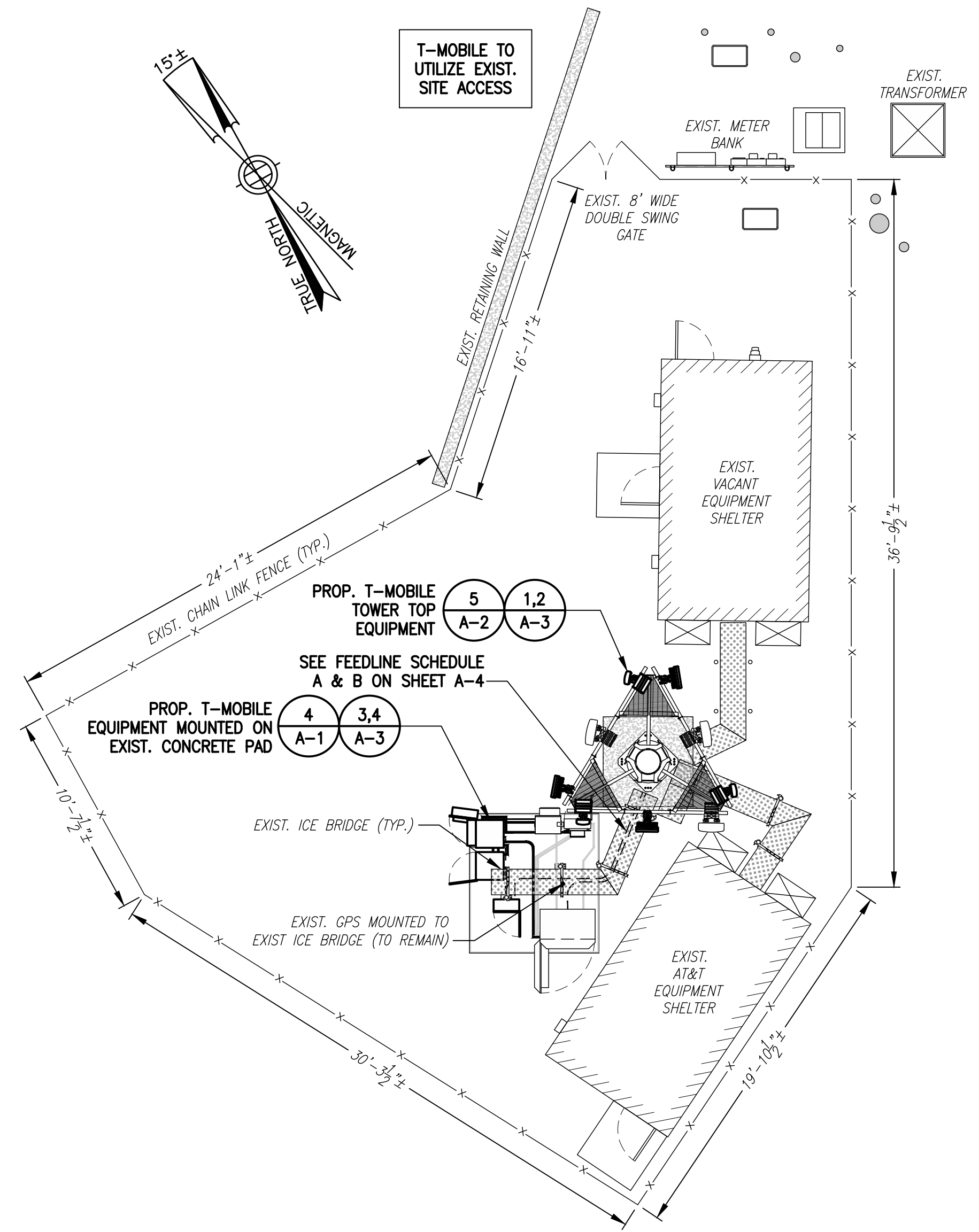
SPECIAL CONSTRUCTION NOTE:
 GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT T-MOBILE'S RAD/VERTICAL EQUIPMENT SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).



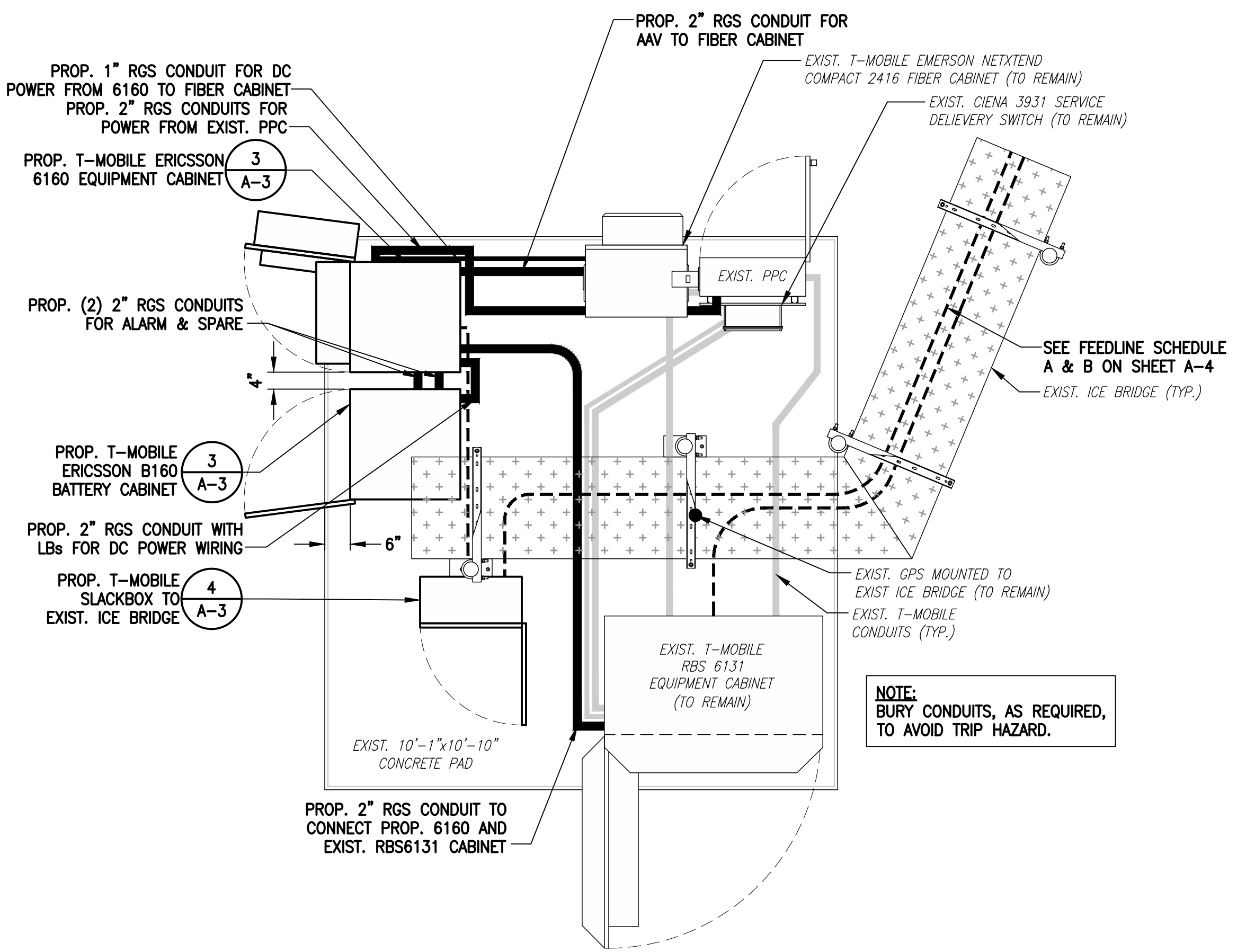
EXISTING EQUIPMENT PHOTO 2
 SCALE: N.T.S. A-1



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



COMPOUND PLAN 1
 SCALE: 1" = 8'-0" A-1



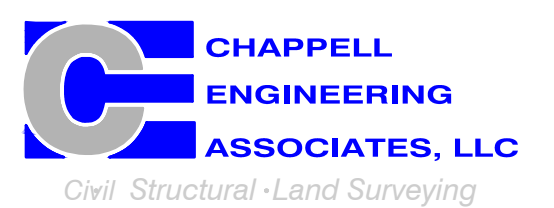
PROPOSED EQUIPMENT PLAN 4
 SCALE: 1/2" = 1'-0" A-1

T-MOBILE NORTHEAST LLC

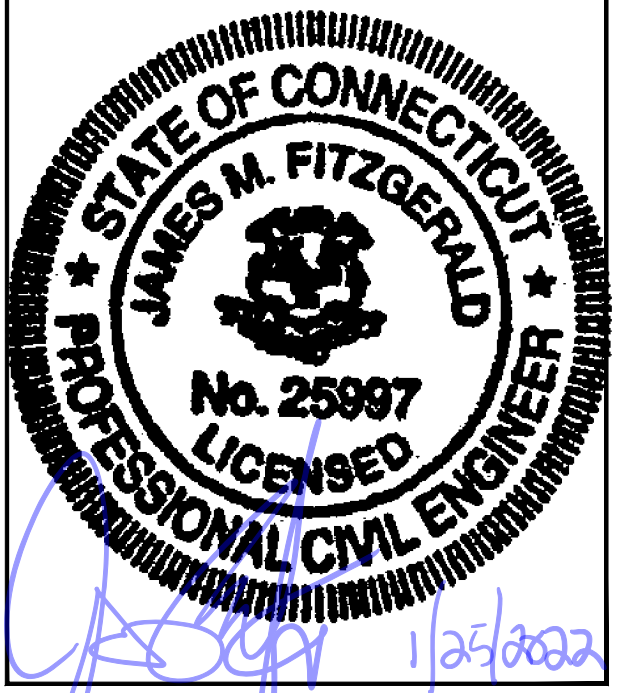
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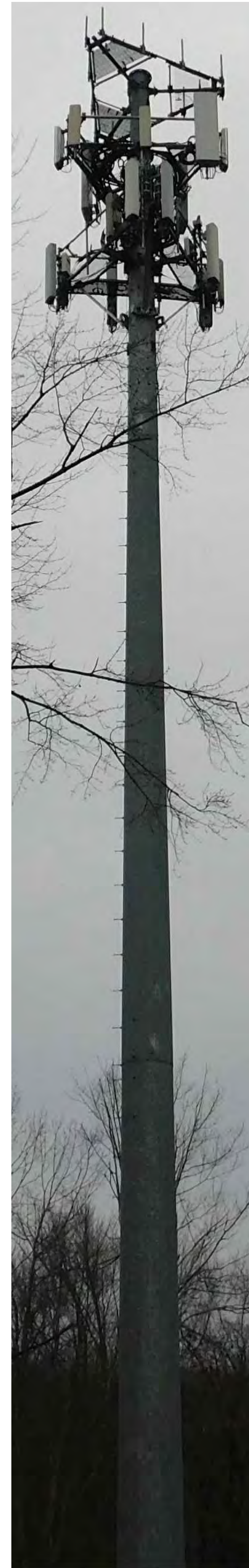
SHEET TITLE
COMPOUND & EQUIPMENT PLANS

SHEET NUMBER
A-1

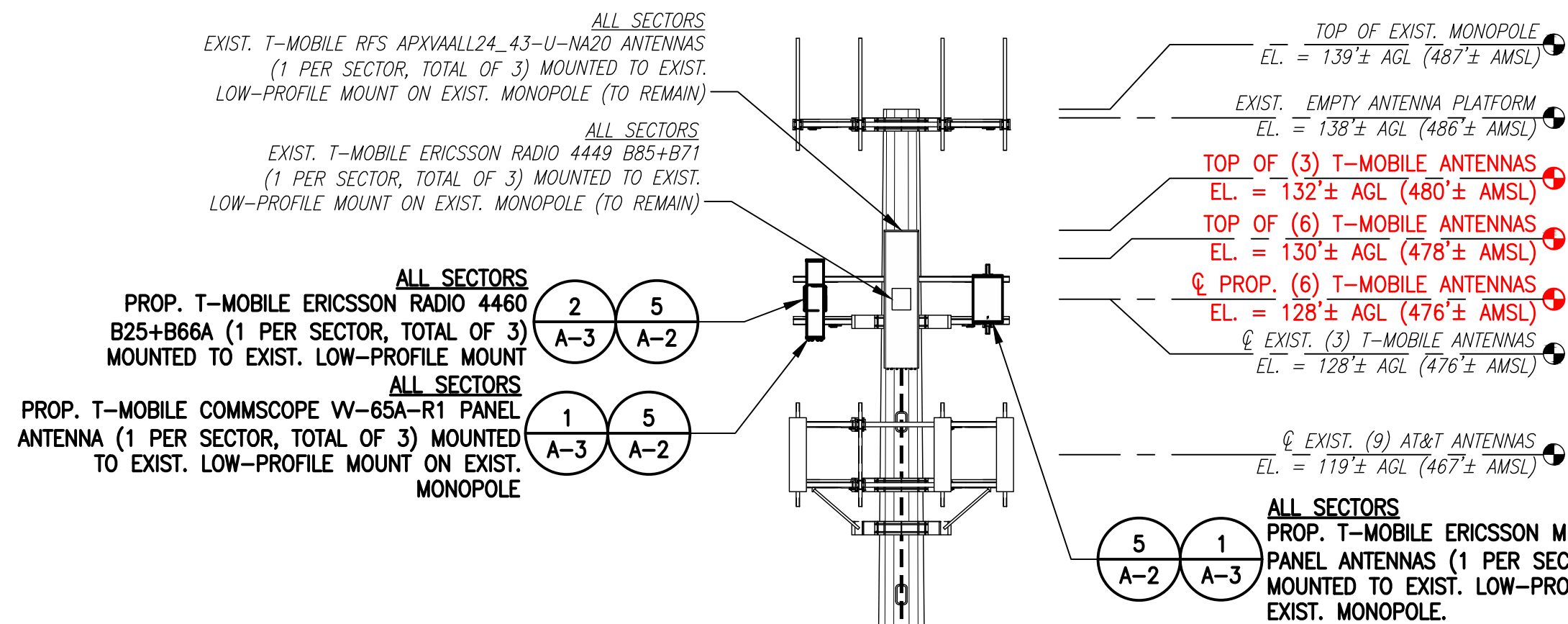
RAD CENTER NOTE:
T-MOBILE RAD CENTER SHOWN IN RED TEXT BASED ON SBA-PROVIDED CO-LOCATION APPLICATION, EQUIPMENT DATABASE, AND STRUCTURAL ANALYSIS. THE SBA-PROVIDED ANTENNA RAD CENTER SHALL SUPERSEDE ANY CONFLICTING INFORMATION DERIVED FROM THE T-MOBILE RFDS.

SPECIAL CONSTRUCTION NOTE:
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT T-MOBILE'S RAD/VERTICAL EQUIPMENT SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).

SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
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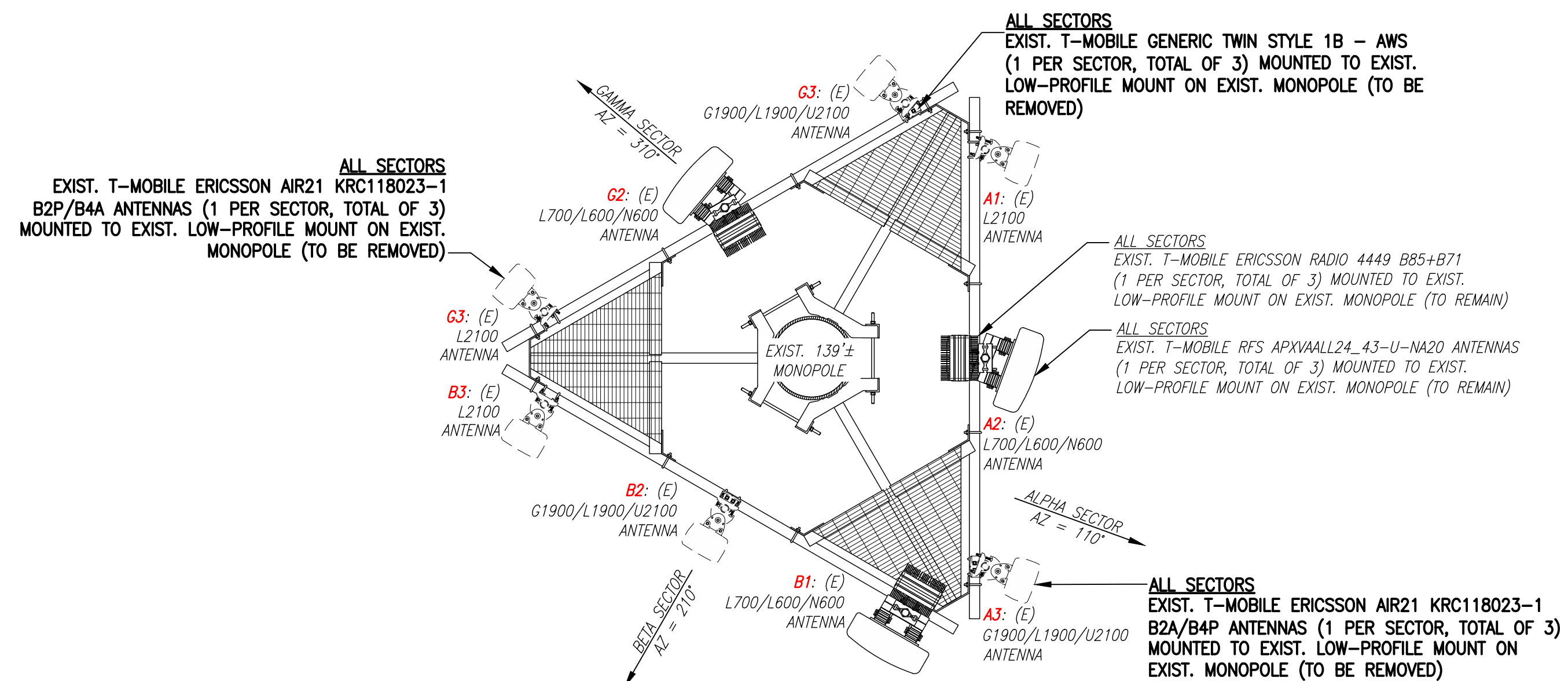
EXISTING TOWER PHOTO
SCALE: N.T.S.



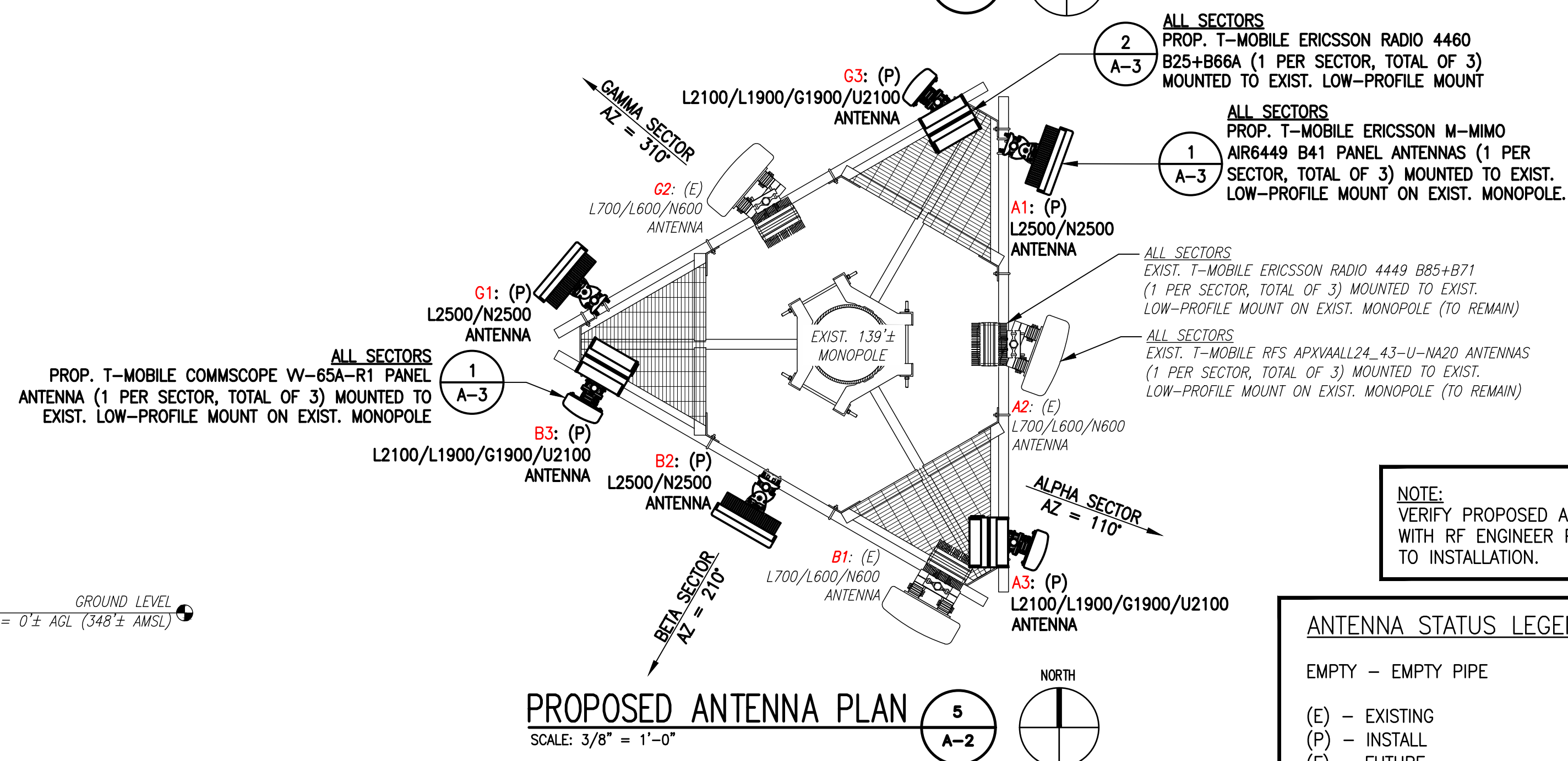
TOWER ELEVATION
SCALE: 1" = 8'-0"



EXISTING ANTENNA PHOTO
SCALE: N.T.S.



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



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

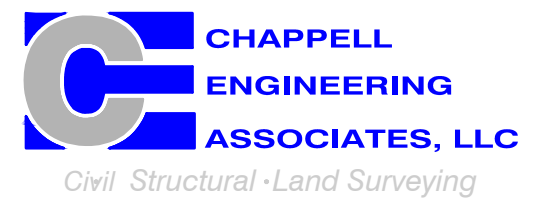
ANTENNA STATUS LEGEND:
EMPTY - EMPTY PIPE
(E) - EXISTING
(P) - INSTALL
(F) - FUTURE

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NORTHEAST LLC**

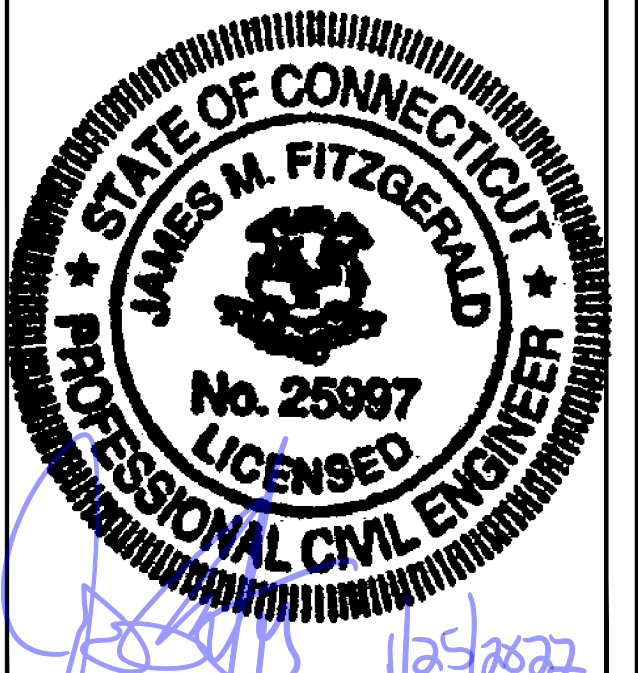
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SHEET TITLE
**TOWER ELEVATIONS &
ANTENNA PLANS**

SHEET NUMBER
A-2

**T-MOBILE
NORTHEAST LLC**

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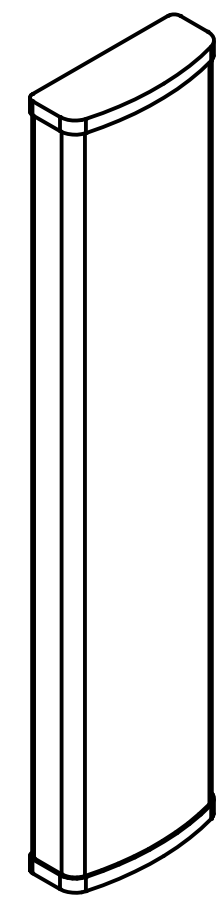
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SHEET TITLE
SITE DETAILS

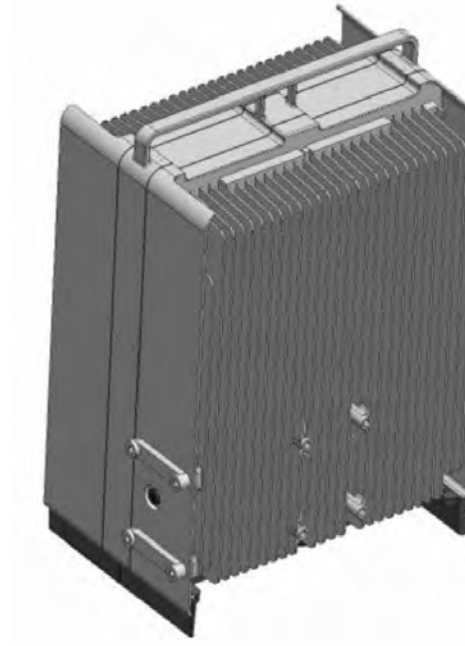
SHEET NUMBER
A-3



COMMSCOPE VV-65A-R1 ANTENNA
DIMENSIONS: 54.7"H x 12.1"W x 4.6"D
WEIGHT: 23.8 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

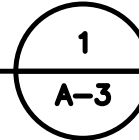


ERICSSON M-MIMO AIR6449 B41 ANTENNA
DIMENSIONS: 33.1"H x 20.5"W x 8.3"D
WEIGHT: 103.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

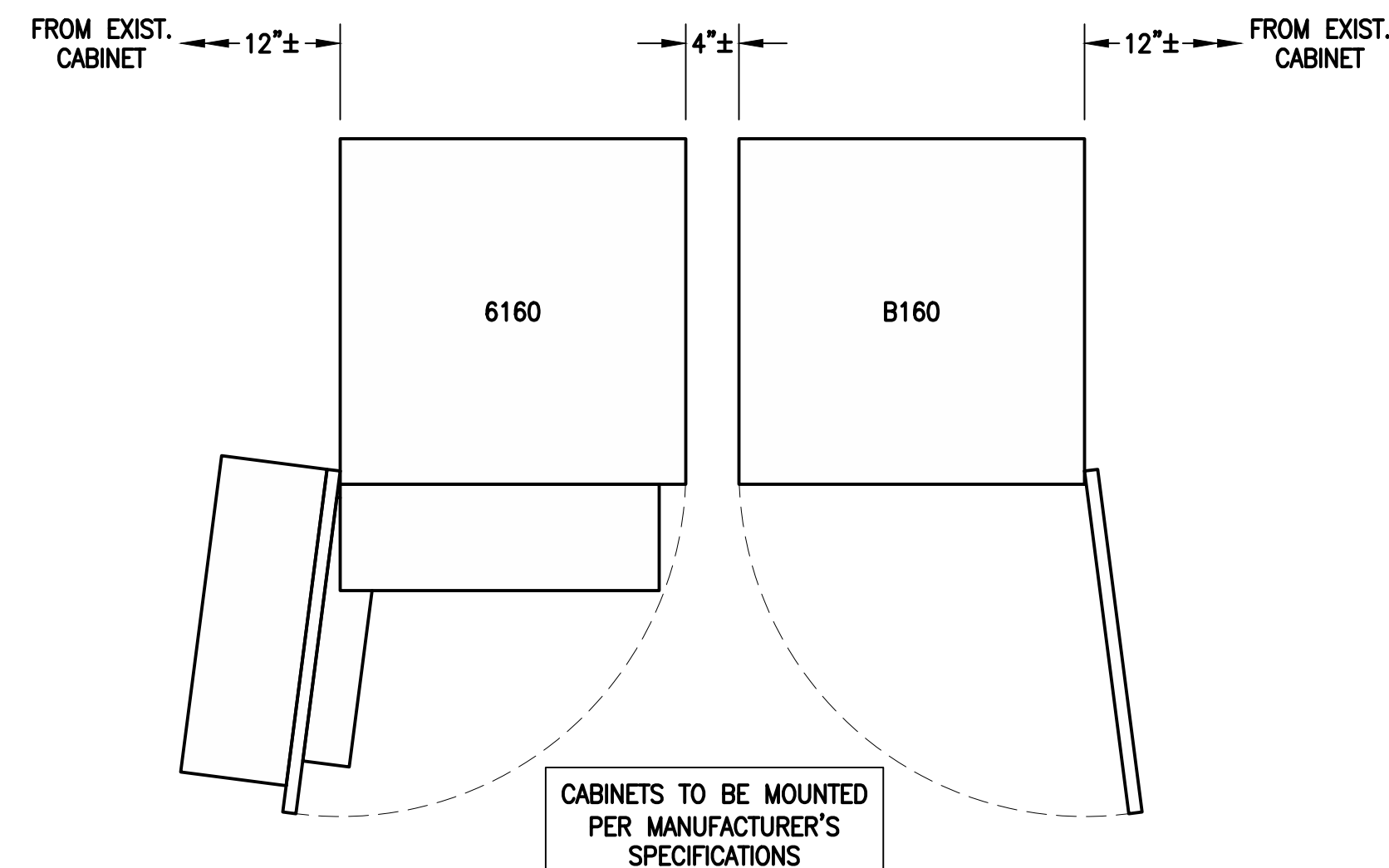
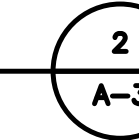


ERICSSON RADIO 4460 B25+B66
DIMENSIONS: 17.0"H x 15.1"W x 11.9"D
WEIGHT: 104.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

ANTENNA DETAILS
SCALE: N.T.S.



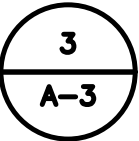
RADIO DETAILS
SCALE: N.T.S.



ERICSSON 6160 SITE SUPPORT CABINET
DIMENSIONS: 63.25"H x 26.0"W x 34.0"D
WEIGHT: 680.0 lbs
QUANTITY: TOTAL OF 1

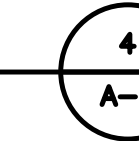
ERICSSON B160 BATTERY CABINET
DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
WEIGHT: 1771.0 lbs
QUANTITY: TOTAL OF 1

EQUIPMENT DETAIL
SCALE: N.T.S.



SLACKBOX - HOFFMAN 32FH91 NEMA 3R ENCLOSURE
DIMENSIONS: 24.0"H x 24.0"W x 12.0"D
QUANTITY: TOTAL OF 1

SSC DETAILS
SCALE: N.T.S.



FINAL ANTENNA CONFIGURATION								
SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	SIGNAL CABLES
ALPHA	A1 ERICSSON M-MIMO AIR6449 B41	128'± AGL	110°	0°	2°	L2500/N2500	-	(3) 1-5/8" (6x12) HCS FIBER CABLE (3) 2" (6x24) HCS FIBER CABLES
	A2 RFS APXVAALL24_43-U-NA20	128'± AGL	110°	0°	2°	L700/L600/N600	RADIO 4449 B71+BB5	
	A3 COMMSCOPE WV-65A-R1	128'± AGL	110°	0°	2°	L2100/L1900/G1900/U2100	RADIO 4460 B25+B66	
BETA	B1 RFS APXVAALL24_43-U-NA20	128'± AGL	240°	0°	2°	L700/L600/N600	RADIO 4449 B71+BB5	
	B2 ERICSSON M-MIMO AIR6449 B41	128'± AGL	240°	0°	2°	L2500/N2500	-	
	B3 COMMSCOPE WV-65A-R1	128'± AGL	240°	0°	2°	L2100/L1900/G1900/U2100	RADIO 4460 B25+B66	
GAMMA	G1 ERICSSON M-MIMO AIR6449 B41	128'± AGL	350°	0°	2°	L2500/N2500	-	
	G2 RFS APXVAALL24_43-U-NA20	128'± AGL	350°	0°	2°	L700/L600/N600	RADIO 4449 B71+BB5	
	G3 COMMSCOPE WV-65A-R1	128'± AGL	350°	0°	2°	L2100/L1900/G1900/U2100	RADIO 4460 B25+B66	

CABLE NOTE: ALL EXISTING 1-5/8" COAX CABLES TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV6 - 12/10/21

FEEDLINE SCHEDULE		
SCHEDULE	FEEDLINES	LOCATION
A	EXISTING TO REMAIN: (1) 1/2" COAX CABLE FOR GPS ANTENNA (3) 1-5/8" (6x12) HCS FIBER CABLE EXISTING TO BE REMOVED: ALL 1-5/8" COAX CABLES	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (3) 2" (6x24) HCS FIBER CABLES	

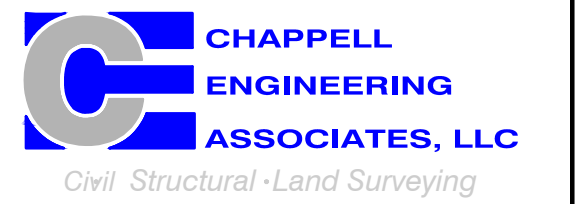
NOTE: EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.

T-MOBILE NORTHEAST LLC

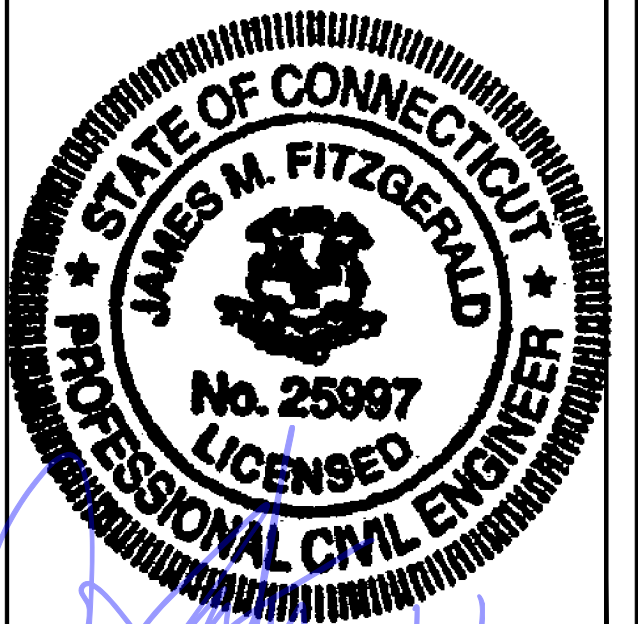
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
(508) 286-2700



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



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	01/25/22	ISSUED FOR CONSTRUCTION	JRV
0	01/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11259F

SITE ADDRESS:
3 EDMOND ROAD
NEWTON, CT 06470

SHEET TITLE
**ANTENNA &
FEEDLINE CHARTS**

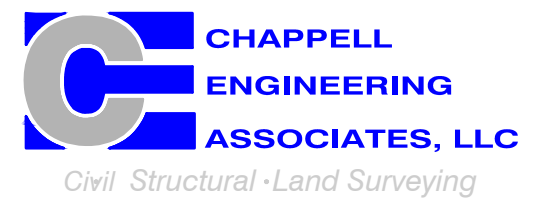
SHEET NUMBER
A-4

T-MOBILE
NORTHEAST LLC

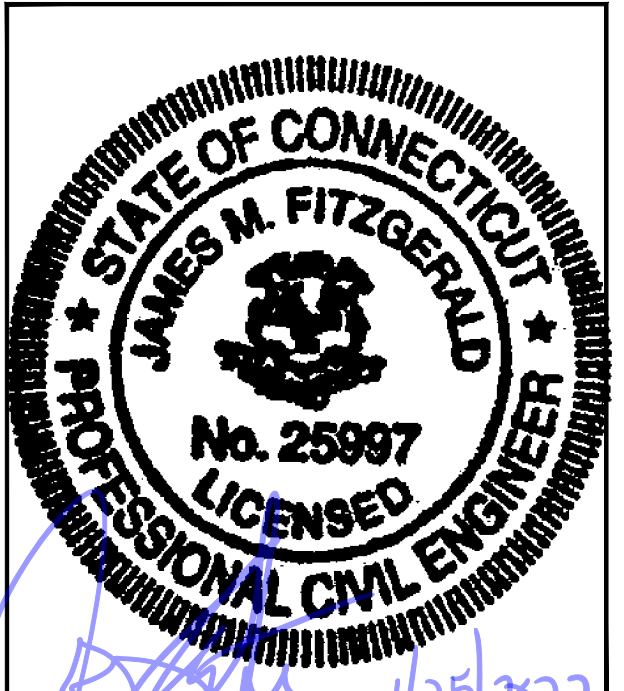
15 COMMERCE WAY, SUITE B
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CHECKED BY: JMT
APPROVED BY: JMT

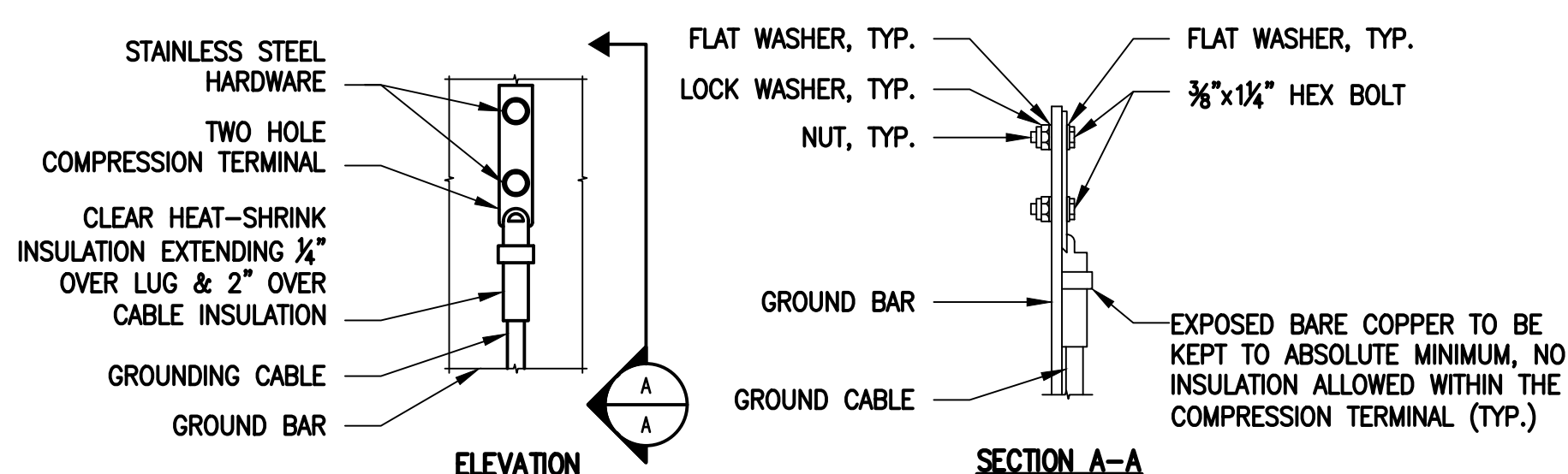
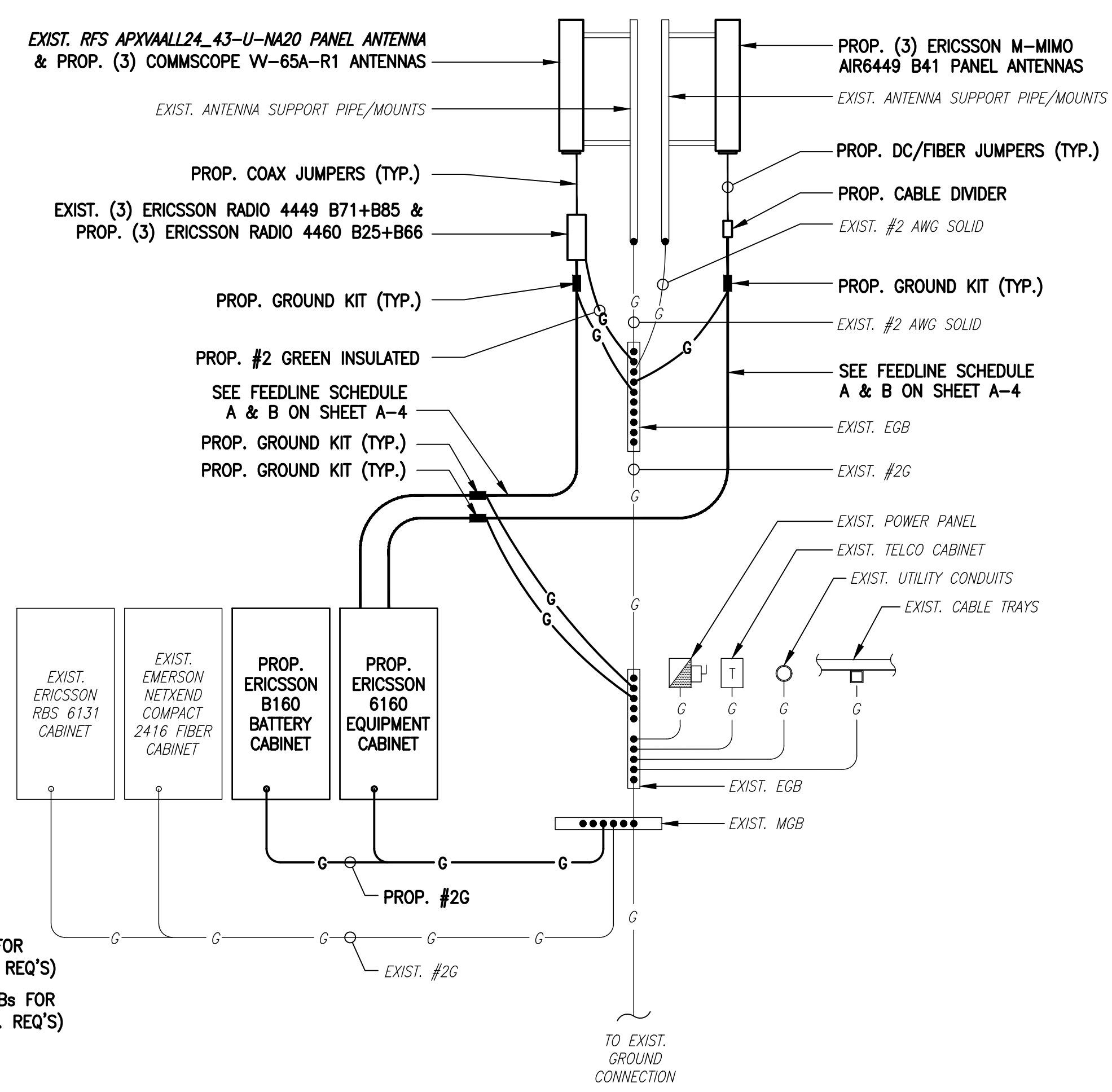
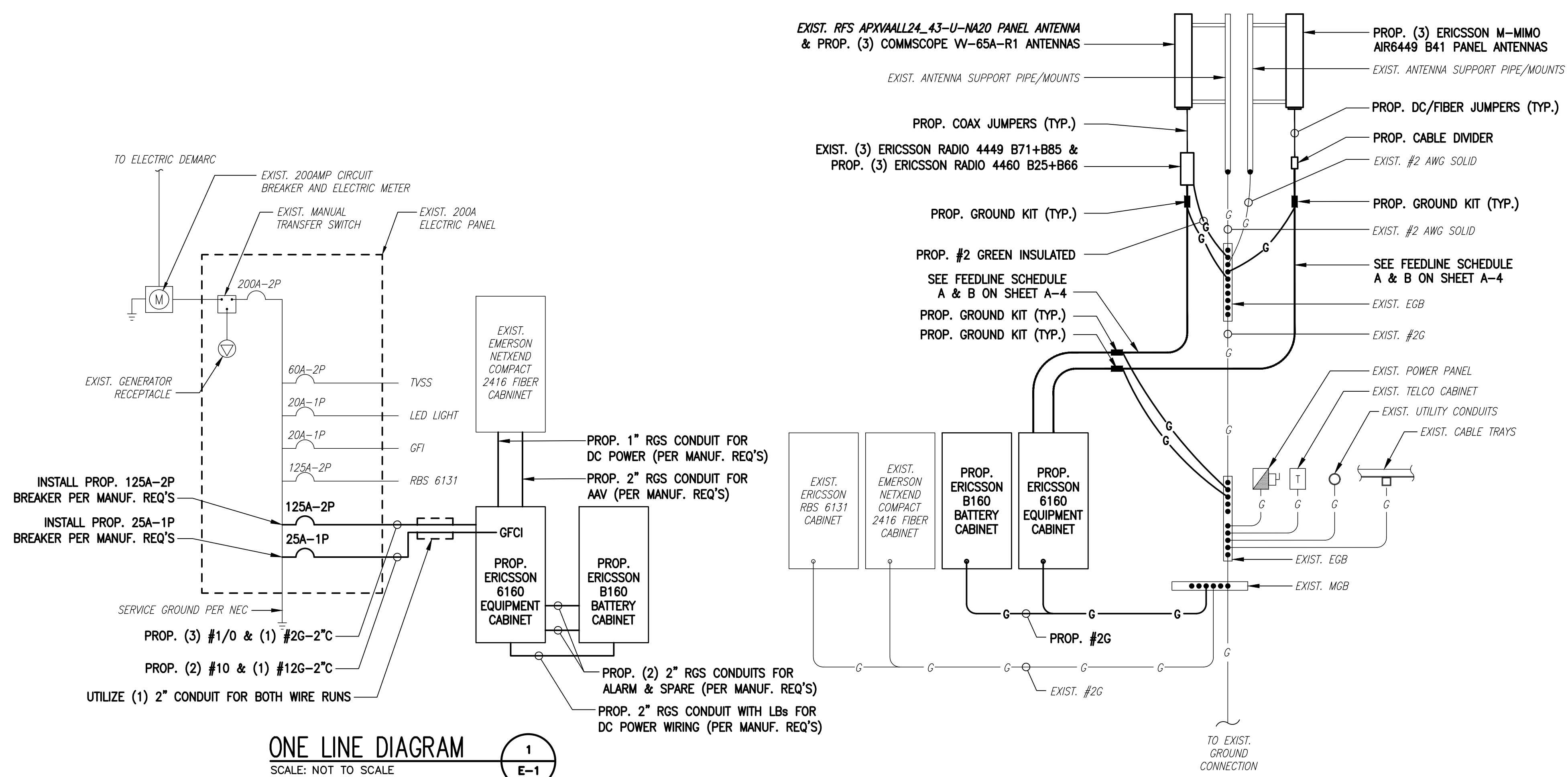
SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	01/25/22	ISSUED FOR CONSTRUCTION	JRV
0	01/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11259F

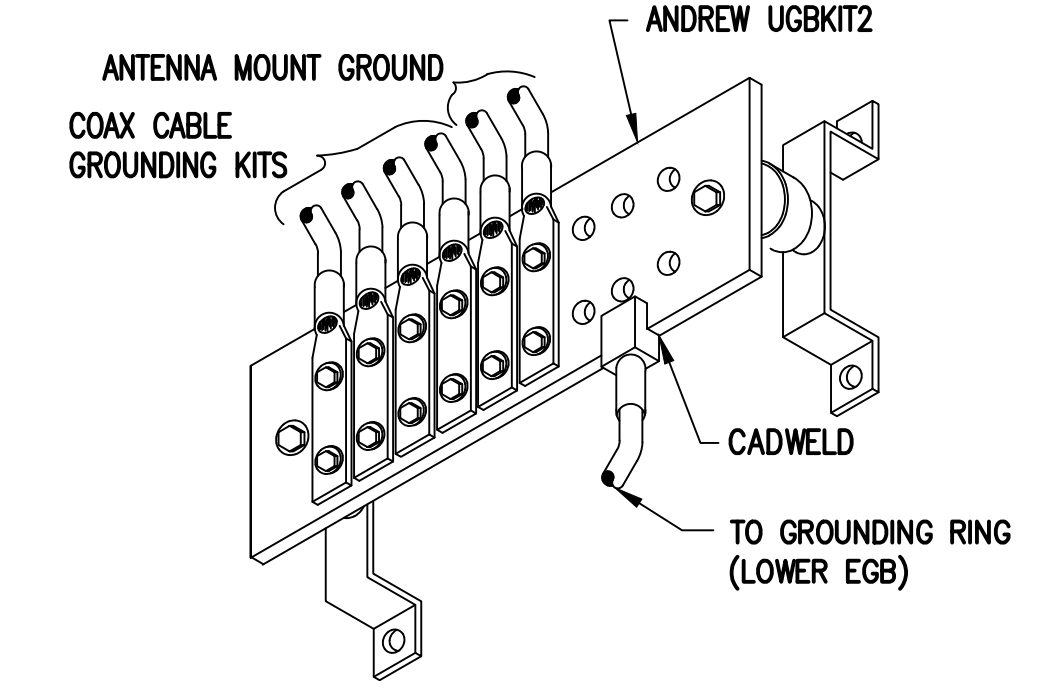
SITE ADDRESS:
3 EDMOND ROAD
NEWTON, CT 06470

SHEET TITLE
**ELECTRIC & GROUNDING
DETAILS**

SHEET NUMBER
E-1



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



ELECTRICAL AND GROUNDING NOTES

- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- 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.
- BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THININSULATION.
- 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.
- 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.
- 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.
- ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- PPC SUPPLIED BY PROJECT OWNER.
- 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".
- GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
- 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.
- 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.
- 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.
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- 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.
- CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MINIMUM RESISTANCE REQUIRED.
- CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE-OUT.

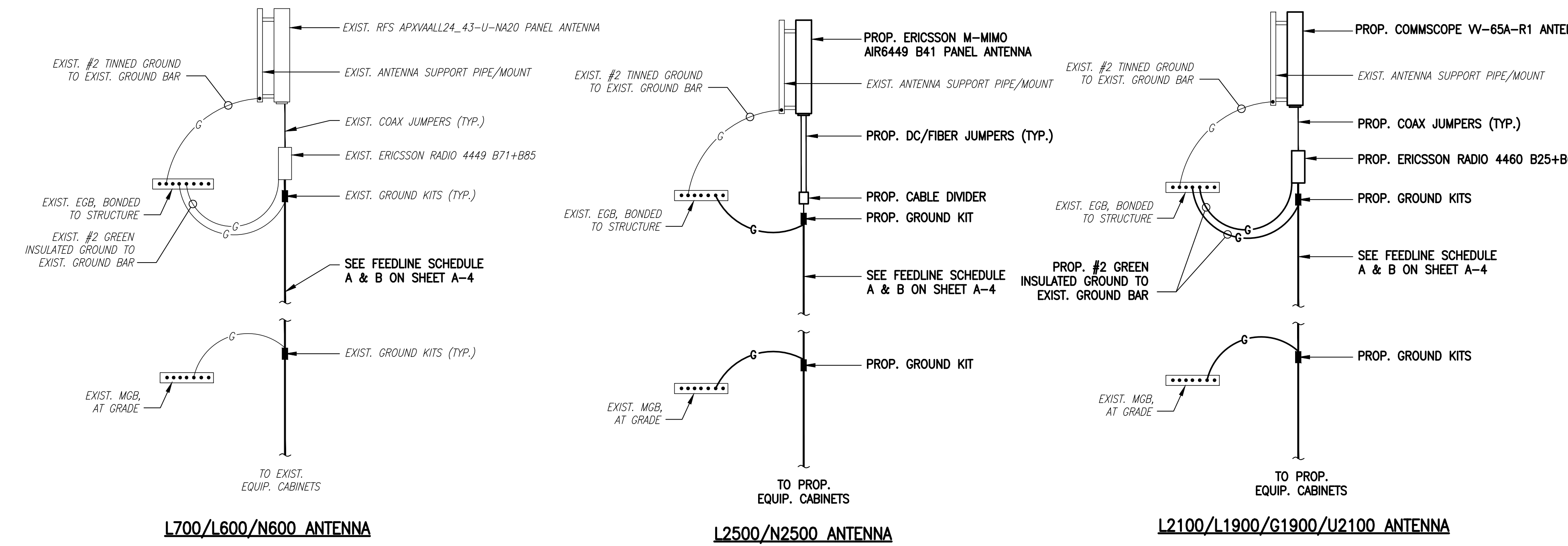


EXHIBIT 7

Structural Analysis



Tower Engineering Solutions

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

Structural Analysis Report

Existing 139 ft SABRE Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT13060-A

Customer Site Name: Newtown 2

Carrier Name: T-Mobile (App#: 183532, V#1)

Carrier Site ID / Name: CT11259F / Newtown

Site Location: 3 Edmund Road

Newtown, Connecticut

Fairfield County

Latitude: 41.420899

Longitude: -73.298102

Exp. 01/31/2024



Analysis Result:

Max Structural Usage: 67.6% [Pass]

01/14/2022

Max Foundation Usage: 55% [Pass]

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

Report Prepared By : Mariana Franco

Introduction

The purpose of this report is to summarize the analysis results on the 139 ft SABRE 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	Sabre Job #06-07285, dated 07/28/05
Foundation Drawing	Sabre Job #06-07285, dated 07/28/05
Geotechnical Report	Jaworski Geotech, Inc. Project #04125G, dated 01/30/04
Modification Drawings	N/A
Mount Analysis	TES Project Number: 121399 Dated: 1/05/22

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 $V_{ult} = 120.0$ mph (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 93.0$ mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" 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:	B
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_S = 0.208$, $S_1 = 0.066$

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
-	138.5		-	Empty Low Profile Platform	-	-
	127.0	3	Ericsson Air 21 B2A/B4P	Low Profile Platform w/ (1) Metrosite Support Rail Center Pipe Kit: MS-HRCP-35 (1) Metrosite Support Rail w/ End Connection: MS-HRECP-35 (3) Metrosite Mount Pipes: PST2375-8	(9) 1 5/8" (4) 1 5/8" Fiber	T-Mobile
		3	Ericsson Air 32 KRD901146-1_B66A_B2A			
		3	RFS APXVAARR24_43-U-NA20@ 125'			
		3	Ericsson KRY 112 144/1			
		3	Ericsson Radio 4449 B71+B12@ 125'			
7	119.0	6	Powerwave - 7770 - Panel	Low Profile Platform w/ Site Pro HRK12 Handrail Kit and PRK-1245L Mount Reinforcement Kit	(12) 1 5/8" (2) 1/2" Fiber (4) 3/4" DC (1) 2" Innerduct	AT&T
8		3	Quintel - QS66512-2 - Panel			
9		3	Cci - HPA-65R-BUU-H6 - Panel			
10		9	Powerwave - LGP21401 - TMA			
11		3	Powerwave - TT19-08BP-111-001 - TMA			
12		6	Kaelus - DBC0061F1V51-2 - Diplexer			
13		3	Ericsson - RRUS 32 B30 - RRU			
14		3	Ericsson - RRUS-11 - RRU			
15		3	Ericsson - RRUS-32 B2 - RRU			
16		2	Raycap - DC6-48-60-18-8F - SP			
16	109.0	3	Commscope FFVV-65B-R2 - Panel	(1) Commscope MC-PK8-DSH	(1) 1.75" Hybrid	Dish Wireless
17		3	Fujitsu TA08025-B605- RRH			
18		3	Fujitsu TA08025-B604- RRH			
19		1	Raycap RDIDC-9181-PF-48- OVP			

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
2	128.0	3	Ericsson AIR6449 B41 - Panel	Low Profile Platform w/ (1) Metrosite Support Rail Center Pipe Kit: MS- HRCP-35 (1) Metrosite Support Rail w/ End Connection: MS-HRECP-35 (3) Metrosite Mount Pipes: PST2375-8	(6) 1 5/8" (4) 1-5/8" Fiber (2) 1.9" Fiber	T-Mobile
3		3	Commscope VV-65A-R1 - Panel			
4		3	RFS APXVAALL24-43-U-NA20 - Panel			
5		3	Ericsson 4449 B71 + B85			
6		3	Ericsson 4460 B25 + B66			
7	127.0	3	Ericsson KRY 112 144/1			

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:	67.6%	61.8%	48.5%
Pass/Fail	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	2207.0	21.2	59.5

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.

Service Load 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 1.2064 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 ANSI/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 67.63% at 0.0ft

Structure: CT13060-A-SBA
Site Name: Newtown 2
Height: 139.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-G
Exposure: B
Gh: 1.1

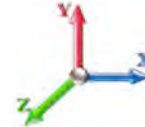
1/14/2022



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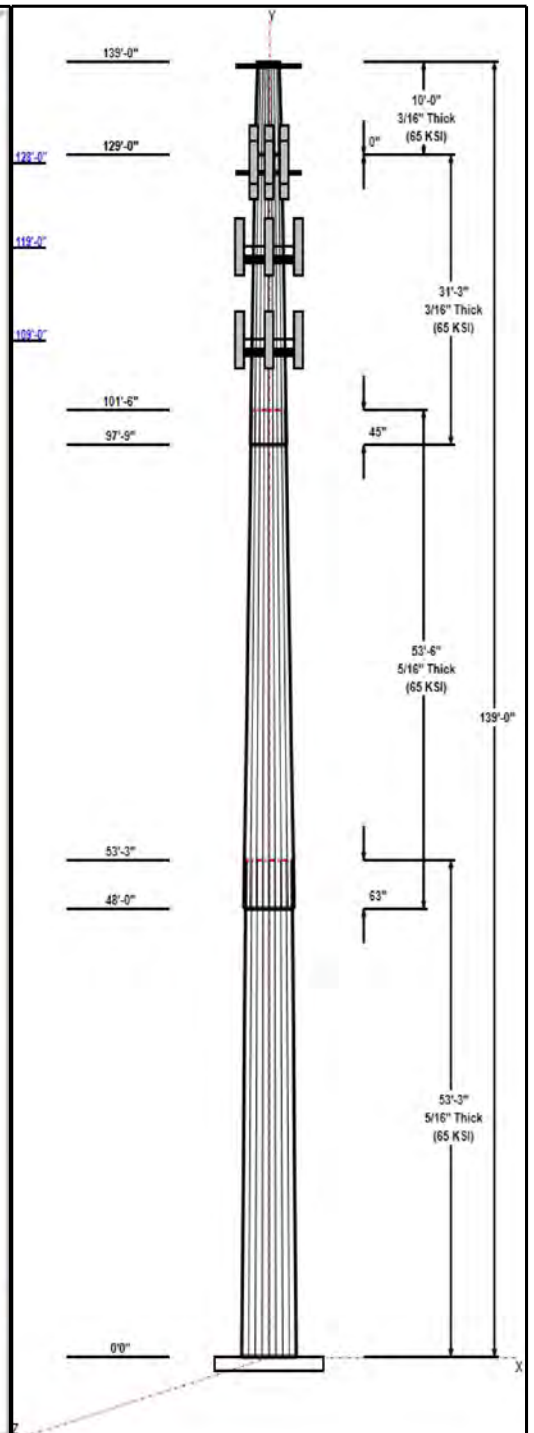
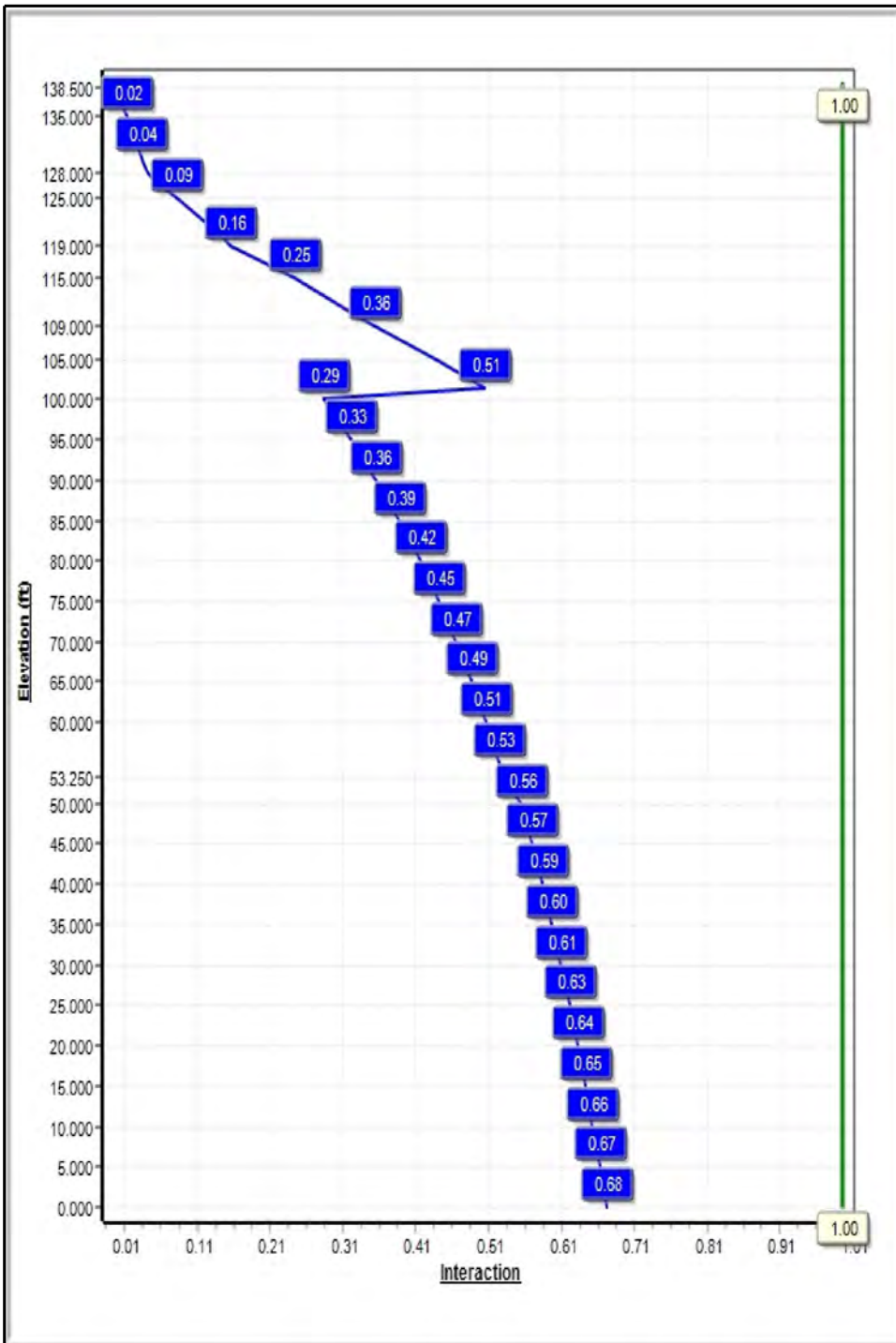
Dead Load Factor: 1.20
 Wind Load Factor: 1.60

Load Case : 1.2D + 1.6W 93 mph Wind



Iterations: 25

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Structure: CT13060-A-SBA

Type: Tapered
Site Name: Newtown 2
Height: 139.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.23496

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Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	53.25	39.00	51.51	0.313		0.23496	65
2	53.50	28.29	40.86	0.313	Slip	0.23496	65
3	31.25	22.20	29.54	0.188	Slip	0.23496	65
4	10.00	19.85	22.20	0.188	Butt	0.23496	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
138.50	138.50	1	Low Profile Platform	-
128.00	128.00	3	AIR6449 B41	T-Mobile
128.00	128.00	3	VV-65A-R1	T-Mobile
128.00	128.00	3	APXVAALL24_43-U-NA20	T-Mobile
128.00	128.00	3	4449 B71 + B85	T-Mobile
128.00	128.00	3	4460 Radio	T-Mobile
127.00	127.00	1	HRK12 (Handrail Kit)	T-Mobile
127.00	127.00	3	Ericsson - KRY 112 114-1	T-Mobile
127.00	127.00	1	Low Profile Platform	T-Mobile
119.00	119.00	1	Site Pro PRK-1245L	AT&T
119.00	119.00	3	Ericsson - RRUS-11 - RRU	AT&T
119.00	119.00	3	Ericsson - RRUS-32 B2 -	AT&T
119.00	119.00	2	Raycap - DC6-48-60-18-8F	AT&T
119.00	119.00	1	Platform w/ Handrail	AT&T
119.00	119.00	6	Powerwave - 7770	AT&T
119.00	119.00	3	Quintel - QS66512-2	AT&T
119.00	119.00	3	Cci - HPA-65R-BUU-H6	AT&T
119.00	119.00	9	Powerwave - LGP21401 -	AT&T
119.00	119.00	3	Powerwave -	AT&T
119.00	119.00	6	Kaelus - DBC0061F1V51-2	AT&T
119.00	119.00	3	Ericsson - RRUS 32 B30 -	AT&T
109.00	109.00	3	Commscope	Dish Wireless
109.00	109.00	3	TA08025-B604	Dish Wireless
109.00	109.00	3	TA08025-B605	Dish Wireless
109.00	109.00	1	RDIDC-9181-OF-48	Dish Wireless
109.00	109.00	1	MC-PK8-DSH	Dish Wireless

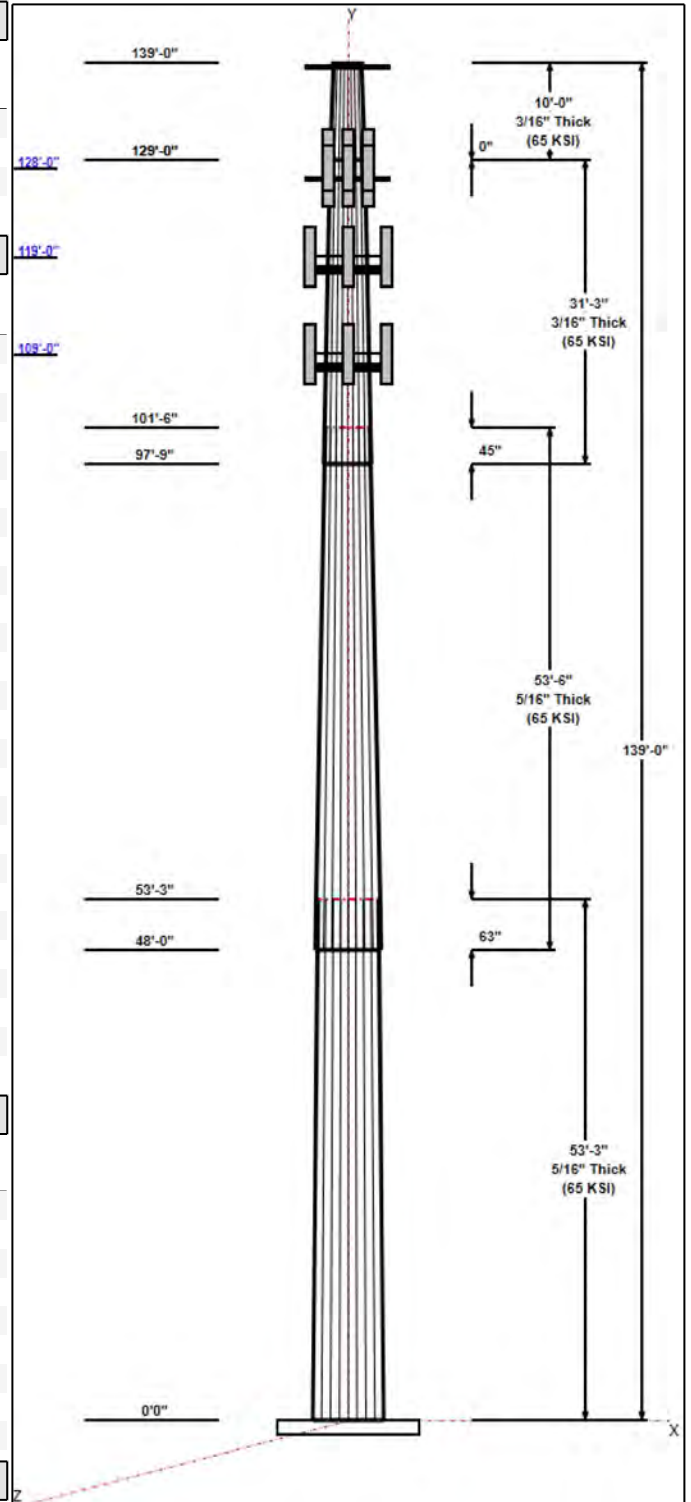
Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	138.00	Inside	Safety Cable	
0.00	128.00	Inside	1 5/8" Coax	T-Mobile
0.00	128.00	Inside	1-5/8" Fiber	T-Mobile
0.00	128.00	Inside	1.9" Fiber	T-Mobile
0.00	119.00	Inside	1 5/8" Coax	AT&T
0.00	119.00	Inside	1/2" Fiber	AT&T
0.00	119.00	Inside	2" Innerduct	AT&T
0.00	119.00	Inside	3/4" DC	AT&T
0.00	109.00	Inside	1.75" Hybrid	Dish Wireless

Anchor Bolts

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

Base Plate



Structure: CT13060-A-SBA

Type: Tapered
Site Name: Newtown 2
Height: 139.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.23496

1/14/2022

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Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.7500	56.0	60.0	Clipped

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 93 mph Wind	2207.0	21.2	36.9
0.9D + 1.6W 93 mph Wind	2178.9	21.2	27.7
1.2D + 1.0Di + 1.0Wi 50 mph Wind	706.2	6.7	59.5
1.2D + 1.0E	203.4	1.8	36.9
0.9D + 1.0E	200.6	1.8	27.7
1.0D + 1.0W 60 mph Wind	569.8	5.5	30.8

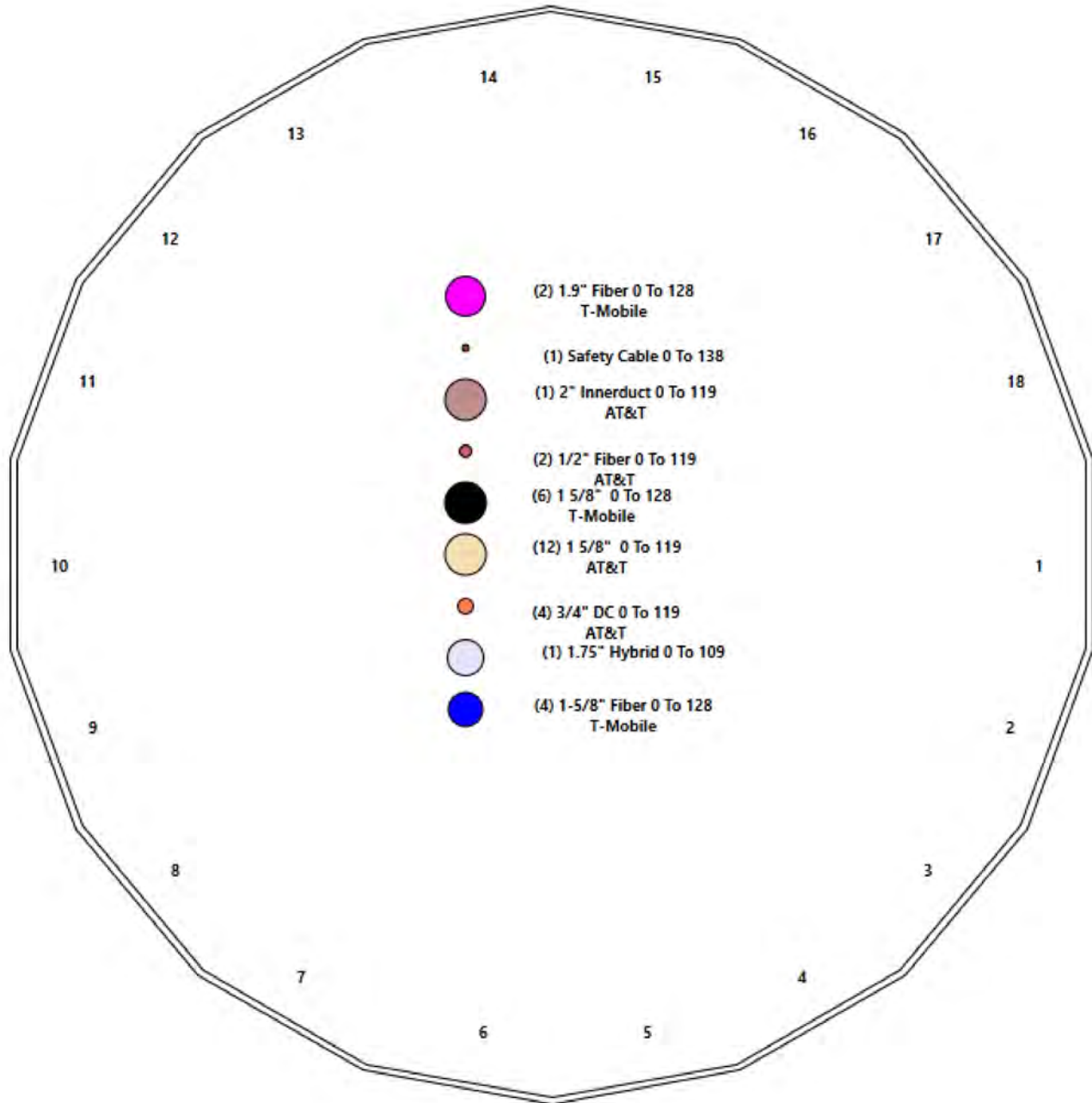
Structure: CT13060-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Newtown 2
Height: 139.00 (ft)

1/14/2022



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Shaft Properties

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (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

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	53.250	0.3125	65		0.00	8,077
2	18	53.500	0.3125	65	Slip	63.00	6,186
3	18	31.250	0.1875	65	Slip	45.00	1,625
4	18	10.000	0.1875	65	Flange	0.00	422
Total Shaft Weight:							16,310

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	51.51	0.00	50.78	16816.70	27.65	164.83	39.00	53.25	38.37	7255.12	20.59	124.7	0.234964
2	40.86	48.00	40.21	8351.83	21.64	130.74	28.29	101.50	27.75	2743.10	14.55	90.52	0.234964
3	29.54	97.75	17.47	1901.87	26.37	157.56	22.20	129.00	13.10	801.92	19.47	118.4	0.234964
4	22.20	129.0	13.10	801.92	19.47	118.40	19.85	139.00	11.70	571.56	17.26	105.8	0.234964

Load Summary

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	138.50	Low Profile Platform	1	1800.00	30.00	1.00	3358.21	53.893	1.00	0.00	0.00
2	128.00	AIR6449 B41	3	103.00	5.65	0.71	237.96	6.586	0.71	0.00	0.00
3	128.00	VV-65A-R1	3	32.00	5.89	0.68	145.21	7.978	0.68	0.00	0.00
4	128.00	APXVAALL24_43-U-NA20	3	122.80	20.24	0.73	542.95	22.109	0.73	0.00	0.00
5	128.00	4449 B71 + B85	3	73.20	1.97	0.67	130.03	2.530	0.67	0.00	0.00
6	128.00	4460 Radio	3	109.00	2.85	0.67	179.77	3.514	0.67	0.00	0.00
7	127.00	HRK12 (Handrail Kit)	1	261.72	9.75	1.00	567.19	19.122	1.00	0.00	0.00
8	127.00	Ericsson - KRY 112 114-1 Double	3	11.00	0.41	0.67	21.60	0.877	0.67	0.00	0.00
9	127.00	Low Profile Platform	1	1650.00	33.40	1.00	3066.04	59.771	1.00	0.00	0.00
10	119.00	Site Pro PRK-1245L Platform	1	464.91	11.50	1.00	782.03	23.266	1.00	0.00	0.00
11	119.00	Ericsson - RRUS-11 - RRU	3	51.00	2.52	0.67	121.62	3.139	0.67	0.00	0.00
12	119.00	Ericsson - RRUS-32 B2 - RRU	3	53.00	2.74	0.67	125.30	3.675	0.67	0.00	0.00
13	119.00	Raycap - DC6-48-60-18-8F - SP	2	31.80	0.92	1.00	92.21	1.348	1.00	0.00	0.00
14	119.00	Platform w/ Handrail	1	1800.00	40.20	1.00	3334.75	73.105	1.00	0.00	0.00
15	119.00	Powerwave - 7770	6	35.00	5.50	0.77	163.94	6.517	0.79	0.00	0.00
16	119.00	Quintel - QS66512-2	3	111.00	8.13	0.92	320.88	9.378	0.93	0.00	0.00
17	119.00	Cci - HPA-65R-BUU-H6	3	51.00	9.66	0.83	285.26	10.984	0.85	0.00	0.00
18	119.00	Powerwave - LGP21401 - TMA	9	14.10	1.29	0.50	38.53	2.107	0.50	0.00	0.00
19	119.00	Powerwave - TT19-08BP-111-001 -	3	16.00	0.64	0.67	35.78	1.219	0.67	0.00	0.00
20	119.00	Kaelus - DBC0061F1V51-2 -	6	25.40	0.43	0.67	39.61	0.709	0.67	0.00	0.00
21	119.00	Ericsson - RRUS 32 B30 - RRU	3	60.00	2.74	0.67	141.85	3.675	0.67	0.00	0.00
22	109.00	Commscope FFVV-65B-R2	3	70.80	12.05	0.75	341.76	13.699	0.75	0.00	0.00
23	109.00	TA08025-B604	3	63.90	1.96	0.67	112.94	2.503	0.67	0.00	0.00
24	109.00	TA08025-B605	3	75.00	1.96	0.67	125.66	2.503	0.67	0.00	0.00
25	109.00	RDIDC-9181-OF-48	1	21.90	2.01	1.00	73.48	2.560	1.00	0.00	0.00
26	109.00	MC-PK8-DSH	1	1727.00	37.59	1.00	3361.79	83.340	1.00	0.00	0.00
Totals:			75	11,286.53			24,901.71				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	138.00	(1) Safety Cable	0.00	Inside
0.00	128.00	(6) 1 5/8" Coax	0.00	Inside
0.00	128.00	(4) 1-5/8" Fiber	0.00	Inside
0.00	128.00	(2) 1.9" Fiber	0.00	Inside
0.00	119.00	(12) 1 5/8" Coax	0.00	Inside
0.00	119.00	(2) 1/2" Fiber	0.00	Inside
0.00	119.00	(1) 2" Innerduct	0.00	Inside
0.00	119.00	(4) 3/4" DC	0.00	Inside
0.00	109.00	(1) 1.75" Hybrid	0.00	Inside

Shaft Section Properties

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Increment Length: 5 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in ³)	Weight (lb)
0.00		0.3125	51.510	50.780	16816.7	27.65	164.83	68.9	643.0	0.0
5.00		0.3125	50.335	49.614	15685.4	26.99	161.07	69.7	613.8	854.0
10.00		0.3125	49.160	48.449	14606.0	26.33	157.31	70.4	585.2	834.2
15.00		0.3125	47.986	47.284	13577.3	25.67	153.55	71.2	557.3	814.4
20.00		0.3125	46.811	46.119	12598.1	25.00	149.79	72.0	530.1	794.6
25.00		0.3125	45.636	44.954	11667.1	24.34	146.03	72.8	503.5	774.7
30.00		0.3125	44.461	43.788	10783.1	23.68	142.28	73.6	477.7	754.9
35.00		0.3125	43.286	42.623	9945.0	23.01	138.52	74.3	452.5	735.1
40.00		0.3125	42.111	41.458	9151.5	22.35	134.76	75.1	428.0	715.3
45.00		0.3125	40.937	40.293	8401.3	21.69	131.00	75.9	404.2	695.4
48.00	Bot - Section 2	0.3125	40.232	39.593	7971.5	21.29	128.74	76.4	390.3	407.8
50.00		0.3125	39.762	39.127	7693.3	21.02	127.24	76.7	381.1	540.0
53.25	Top - Section 1	0.3125	39.623	38.990	7612.5	20.95	126.79	0.0	0.0	863.9
55.00		0.3125	39.212	38.582	7376.1	20.71	125.48	77.0	370.5	231.0
60.00		0.3125	38.037	37.417	6727.8	20.05	121.72	77.8	348.4	646.5
65.00		0.3125	36.862	36.252	6118.6	19.39	117.96	78.6	326.9	626.7
70.00		0.3125	35.688	35.086	5547.3	18.73	114.20	79.4	306.2	606.9
75.00		0.3125	34.513	33.921	5012.8	18.06	110.44	80.2	286.1	587.0
80.00		0.3125	33.338	32.756	4513.8	17.40	106.68	80.9	266.7	567.2
85.00		0.3125	32.163	31.591	4049.0	16.74	102.92	81.7	248.0	547.4
90.00		0.3125	30.988	30.425	3617.3	16.07	99.16	82.5	229.9	527.6
95.00		0.3125	29.813	29.260	3217.4	15.41	95.40	82.5	212.6	507.7
97.75	Bot - Section 3	0.3125	29.167	28.619	3010.6	15.05	93.34	82.5	203.3	270.8
100.00		0.3125	28.639	28.095	2848.1	14.75	91.64	82.5	195.9	349.7
101.50	Top - Section 2	0.1875	28.661	16.945	1735.7	25.54	152.86	0.0	0.0	229.5
105.00		0.1875	27.839	16.455	1589.6	24.77	148.47	72.3	112.5	198.9
109.00		0.1875	26.899	15.896	1433.0	23.89	143.46	73.3	104.9	220.2
110.00		0.1875	26.664	15.756	1395.5	23.66	142.21	73.6	103.1	53.9
115.00		0.1875	25.489	15.057	1217.8	22.56	135.94	74.9	94.1	262.1
119.00		0.1875	24.549	14.498	1087.1	21.68	130.93	75.9	87.2	201.1
120.00		0.1875	24.314	14.358	1056.0	21.45	129.68	76.2	85.5	49.1
125.00		0.1875	23.139	13.659	909.1	20.35	123.41	77.5	77.4	238.3
127.00		0.1875	22.670	13.379	854.4	19.91	120.90	78.0	74.2	92.0
128.00		0.1875	22.435	13.239	827.9	19.69	119.65	78.2	72.7	45.3
129.00	Top - Section 3	0.1875	22.200	13.100	801.9	19.47	118.40	78.5	71.1	44.8
129.00	Bot - Section 4	0.1875	22.200	13.100	801.9	19.47	118.40	78.5	71.1	
130.00		0.1875	21.965	12.960	776.5	19.25	117.14	78.8	69.6	44.3
135.00		0.1875	20.790	12.261	657.5	18.14	110.88	80.1	62.3	214.5
138.50		0.1875	19.967	11.771	581.9	17.37	106.49	81.0	57.4	143.1
139.00		0.1875	19.850	11.701	571.6	17.26	105.87	81.1	56.7	20.0
16310.0										

Wind Loading - Shaft

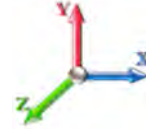
Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 25

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		1.00	0.70	14.724	16.20	339.15	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	14.724	16.20	331.41	0.650	0.000	5.00	21.545	14.00	362.9	0.0	1024.9
10.00		1.00	0.70	14.724	16.20	323.68	0.650	0.000	5.00	21.048	13.68	354.5	0.0	1001.1
15.00		1.00	0.70	14.724	16.20	315.94	0.650	0.000	5.00	20.551	13.36	346.2	0.0	977.3
20.00		1.00	0.70	14.724	16.20	308.21	0.650	0.000	5.00	20.054	13.04	337.8	0.0	953.5
25.00		1.00	0.70	14.724	16.20	300.47	0.650	0.000	5.00	19.557	12.71	329.4	0.0	929.7
30.00		1.00	0.70	14.736	16.21	292.86	0.650	0.000	5.00	19.060	12.39	321.3	0.0	905.9
35.00		1.00	0.73	15.400	16.94	291.47	0.650	0.000	5.00	18.563	12.07	327.0	0.0	882.1
40.00		1.00	0.76	15.999	17.60	289.02	0.650	0.000	5.00	18.066	11.74	330.7	0.0	858.3
45.00		1.00	0.79	16.546	18.20	285.73	0.650	0.000	5.00	17.569	11.42	332.6	0.0	834.5
48.00	Bot - Section 2	1.00	0.80	16.854	18.54	283.41	0.650	0.000	3.00	10.303	6.70	198.6	0.0	489.3
50.00		1.00	0.81	17.052	18.76	281.74	0.650	0.000	2.00	6.875	4.47	134.1	0.0	647.9
53.25	Top - Section 1	1.00	0.83	17.362	19.10	278.82	0.650	0.000	3.25	11.002	7.15	218.5	0.0	1036.7
55.00		1.00	0.83	17.523	19.28	281.65	0.650	0.000	1.75	5.837	3.79	117.0	0.0	277.2
60.00		1.00	0.85	17.964	19.76	276.63	0.650	0.000	5.00	16.342	10.62	335.8	0.0	775.8
65.00		1.00	0.87	18.380	20.22	271.17	0.650	0.000	5.00	15.845	10.30	333.2	0.0	752.0
70.00		1.00	0.89	18.773	20.65	265.32	0.650	0.000	5.00	15.348	9.98	329.6	0.0	728.2
75.00		1.00	0.91	19.147	21.06	259.13	0.650	0.000	5.00	14.851	9.65	325.3	0.0	704.5
80.00		1.00	0.93	19.503	21.45	252.62	0.650	0.000	5.00	14.354	9.33	320.2	0.0	680.7
85.00		1.00	0.94	19.844	21.83	245.84	0.650	0.000	5.00	13.857	9.01	314.6	0.0	656.9
90.00		1.00	0.96	20.170	22.19	238.80	0.650	0.000	5.00	13.359	8.68	308.3	0.0	633.1
95.00		1.00	0.97	20.484	22.53	231.53	0.650	0.000	5.00	12.862	8.36	301.4	0.0	609.3
97.75	Bot - Section 3	1.00	0.98	20.652	22.72	227.44	0.650	0.000	2.75	6.862	4.46	162.1	0.0	325.0
100.00		1.00	0.99	20.787	22.87	224.04	0.650	0.000	2.25	5.574	3.62	132.6	0.0	419.6
101.50	Top - Section 2	1.00	0.99	20.875	22.96	221.76	0.650	0.000	1.50	3.660	2.38	87.4	0.0	275.4
105.00		1.00	1.00	21.079	23.19	219.31	0.650	0.000	3.50	8.367	5.44	201.8	0.0	238.7
109.00	Appurtenance(s)	1.00	1.01	21.305	23.44	213.04	0.650	0.000	4.00	9.264	6.02	225.8	0.0	264.2
110.00		1.00	1.02	21.361	23.50	211.45	0.650	0.000	1.00	2.266	1.47	55.4	0.0	64.6
115.00		1.00	1.03	21.634	23.80	203.43	0.650	0.000	5.00	11.033	7.17	273.1	0.0	314.6
119.00	Appurtenance(s)	1.00	1.04	21.846	24.03	196.88	0.650	0.000	4.00	8.468	5.50	211.6	0.0	241.4
120.00		1.00	1.04	21.898	24.09	195.23	0.650	0.000	1.00	2.067	1.34	51.8	0.0	58.9
125.00		1.00	1.05	22.155	24.37	186.89	0.650	0.000	5.00	10.039	6.53	254.4	0.0	286.0
127.00	Appurtenance(s)	1.00	1.06	22.256	24.48	183.51	0.650	0.000	2.00	3.876	2.52	98.7	0.0	110.4
128.00	Appurtenance(s)	1.00	1.06	22.306	24.54	181.81	0.650	0.000	1.00	1.908	1.24	48.7	0.0	54.3
129.00	Top - Section 3	1.00	1.06	22.356	24.59	180.10	0.650	0.000	1.00	1.888	1.23	48.3	0.0	53.8
130.00		1.00	1.07	22.405	24.65	178.39	0.650	0.000	1.00	1.869	1.21	47.9	0.0	53.2
135.00		1.00	1.08	22.648	24.91	169.77	0.650	0.000	5.00	9.045	5.88	234.3	0.0	257.5
138.50	Appurtenance(s)	1.00	1.08	22.814	25.10	163.65	0.650	0.000	3.50	6.035	3.92	157.5	0.0	171.7
139.00		1.00	1.09	22.838	25.12	162.77	0.650	0.000	0.50	0.842	0.55	22.0	0.0	24.0
Totals:									139.00			8,592.5		19,572.0

Discrete Appurtenance Forces

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 25

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	138.50	Low Profile Platform	1	22.814	25.095	1.00	1.00	30.00	2160.00	0.000	0.000	1204.58	0.00	0.00
2	128.00	4460 Radio	3	22.306	24.536	0.50	0.75	4.30	392.40	0.000	0.000	168.67	0.00	0.00
3	128.00	4449 B71 + B85	3	22.306	24.536	0.50	0.75	2.97	263.52	0.000	0.000	116.59	0.00	0.00
4	128.00	APXVAALL24_43-U-NA20	3	22.306	24.536	0.55	0.75	33.24	442.08	0.000	0.000	1305.11	0.00	0.00
5	128.00	VV-65A-R1	3	22.306	24.536	0.51	0.75	9.01	115.20	0.000	0.000	353.78	0.00	0.00
6	128.00	AIR6449 B41	3	22.306	24.536	0.53	0.75	9.03	370.80	0.000	0.000	354.34	0.00	0.00
7	127.00	Ericsson - KRY 112 114-1	3	22.256	24.482	0.50	0.75	0.62	39.60	0.000	0.000	24.21	0.00	0.00
8	127.00	Low Profile Platform	1	22.256	24.482	1.00	1.00	33.40	1980.00	0.000	0.000	1308.29	0.00	0.00
9	127.00	HRK12 (Handrail Kit)	1	22.256	24.482	1.00	1.00	9.75	314.06	0.000	0.000	381.91	0.00	0.00
10	119.00	Site Pro PRK-1245L	1	21.846	24.031	1.00	1.00	11.50	557.89	0.000	0.000	442.16	0.00	0.00
11	119.00	Raycap -	2	21.846	24.031	0.75	0.75	1.38	76.32	0.000	0.000	53.06	0.00	0.00
12	119.00	Ericsson - RRUS-32 B2 -	3	21.846	24.031	0.50	0.75	4.13	190.80	0.000	0.000	158.82	0.00	0.00
13	119.00	Ericsson - RRUS-11 -	3	21.846	24.031	0.50	0.75	3.80	183.60	0.000	0.000	146.06	0.00	0.00
14	119.00	Ericsson - RRUS 32 B30 -	3	21.846	24.031	0.50	0.75	4.13	216.00	0.000	0.000	158.82	0.00	0.00
15	119.00	Quintel - QS66512-2	3	21.846	24.031	0.69	0.75	16.79	399.60	0.000	0.000	645.66	0.00	0.00
16	119.00	Platform w/ Handrail	1	21.846	24.031	1.00	1.00	40.20	2160.00	0.000	0.000	1545.65	0.00	0.00
17	119.00	Powerwave - 7770	6	21.846	24.031	0.57	0.75	18.96	252.00	0.000	0.000	728.94	0.00	0.00
18	119.00	Kaelus -	6	21.846	24.031	0.50	0.75	1.30	182.88	0.000	0.000	49.85	0.00	0.00
19	119.00	Cci - HPA-65R-BUU-H6	3	21.846	24.031	0.63	0.75	18.13	183.60	0.000	0.000	696.97	0.00	0.00
20	119.00	Powerwave - LGP21401 -	9	21.846	24.031	0.38	0.75	4.35	152.28	0.000	0.000	167.40	0.00	0.00
21	119.00	Powerwave -	3	21.846	24.031	0.50	0.75	0.96	57.60	0.000	0.000	37.10	0.00	0.00
22	109.00	MC-PK8-DSH	1	21.305	23.435	1.00	1.00	37.59	2072.40	0.000	0.000	1409.50	0.00	0.00
23	109.00	RDIDC-9181-OF-48	1	21.305	23.435	1.00	1.00	2.01	26.28	0.000	0.000	75.37	0.00	0.00
24	109.00	TA08025-B605	3	21.305	23.435	0.50	0.75	2.95	270.00	0.000	0.000	110.79	0.00	0.00
25	109.00	TA08025-B604	3	21.305	23.435	0.50	0.75	2.95	230.04	0.000	0.000	110.79	0.00	0.00
26	109.00	Commscope	3	21.305	23.435	0.56	0.75	20.33	254.88	0.000	0.000	762.47	0.00	0.00

Totals: 13,543.84

12,516.89

Total Applied Force Summary

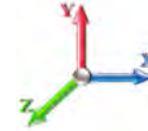
Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 25

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
5.00		362.91	1181.66	0.00	0.00
10.00		354.54	1157.87	0.00	0.00
15.00		346.17	1134.08	0.00	0.00
20.00		337.79	1110.29	0.00	0.00
25.00		329.42	1086.50	0.00	0.00
30.00		321.32	1062.71	0.00	0.00
35.00		327.03	1038.92	0.00	0.00
40.00		330.65	1015.13	0.00	0.00
45.00		332.56	991.34	0.00	0.00
48.00		198.65	583.38	0.00	0.00
50.00		134.11	710.67	0.00	0.00
53.25		218.52	1138.60	0.00	0.00
55.00		117.01	332.04	0.00	0.00
60.00		335.84	932.63	0.00	0.00
65.00		333.16	908.84	0.00	0.00
70.00		329.61	885.05	0.00	0.00
75.00		325.28	861.25	0.00	0.00
80.00		320.25	837.46	0.00	0.00
85.00		314.56	813.67	0.00	0.00
90.00		308.27	789.88	0.00	0.00
95.00		301.42	766.09	0.00	0.00
97.75		162.13	411.21	0.00	0.00
100.00		132.56	490.15	0.00	0.00
101.50		87.41	322.48	0.00	0.00
105.00		201.75	348.43	0.00	0.00
109.00	(11) attachments	2694.71	3243.25	0.00	0.00
110.00		55.38	93.60	0.00	0.00
115.00		273.05	459.41	0.00	0.00
119.00	(43) attachments	5042.11	4969.82	0.00	0.00
120.00		51.79	70.31	0.00	0.00
125.00		254.44	342.96	0.00	0.00
127.00	(5) attachments	1813.11	2466.85	0.00	0.00
128.00	(15) attachments	2347.19	1649.74	0.00	0.00
129.00		48.30	54.10	0.00	0.00
130.00		47.89	53.53	0.00	0.00
135.00		234.34	259.09	0.00	0.00
138.50	(1) attachments	1362.10	2332.71	0.00	0.00
139.00		22.01	23.96	0.00	0.00
	Totals:	21,109.34	36,929.68	0.00	0.00

Wind Loading - Shaft

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



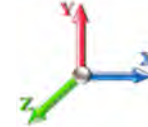
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Load Case: 0.9D + 1.6W 93 mph Wind

Iterations 25

Dead Load Factor 0.90

Wind Load Factor 1.60



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		1.00	0.70	14.724	16.20	339.15	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	14.724	16.20	331.41	0.650	0.000	5.00	21.545	14.00	362.9	0.0	768.6
10.00		1.00	0.70	14.724	16.20	323.68	0.650	0.000	5.00	21.048	13.68	354.5	0.0	750.8
15.00		1.00	0.70	14.724	16.20	315.94	0.650	0.000	5.00	20.551	13.36	346.2	0.0	733.0
20.00		1.00	0.70	14.724	16.20	308.21	0.650	0.000	5.00	20.054	13.04	337.8	0.0	715.1
25.00		1.00	0.70	14.724	16.20	300.47	0.650	0.000	5.00	19.557	12.71	329.4	0.0	697.3
30.00		1.00	0.70	14.736	16.21	292.86	0.650	0.000	5.00	19.060	12.39	321.3	0.0	679.4
35.00		1.00	0.73	15.400	16.94	291.47	0.650	0.000	5.00	18.563	12.07	327.0	0.0	661.6
40.00		1.00	0.76	15.999	17.60	289.02	0.650	0.000	5.00	18.066	11.74	330.7	0.0	643.7
45.00		1.00	0.79	16.546	18.20	285.73	0.650	0.000	5.00	17.569	11.42	332.6	0.0	625.9
48.00	Bot - Section 2	1.00	0.80	16.854	18.54	283.41	0.650	0.000	3.00	10.303	6.70	198.6	0.0	367.0
50.00		1.00	0.81	17.052	18.76	281.74	0.650	0.000	2.00	6.875	4.47	134.1	0.0	486.0
53.25	Top - Section 1	1.00	0.83	17.362	19.10	278.82	0.650	0.000	3.25	11.002	7.15	218.5	0.0	777.5
55.00		1.00	0.83	17.523	19.28	281.65	0.650	0.000	1.75	5.837	3.79	117.0	0.0	207.9
60.00		1.00	0.85	17.964	19.76	276.63	0.650	0.000	5.00	16.342	10.62	335.8	0.0	581.9
65.00		1.00	0.87	18.380	20.22	271.17	0.650	0.000	5.00	15.845	10.30	333.2	0.0	564.0
70.00		1.00	0.89	18.773	20.65	265.32	0.650	0.000	5.00	15.348	9.98	329.6	0.0	546.2
75.00		1.00	0.91	19.147	21.06	259.13	0.650	0.000	5.00	14.851	9.65	325.3	0.0	528.3
80.00		1.00	0.93	19.503	21.45	252.62	0.650	0.000	5.00	14.354	9.33	320.2	0.0	510.5
85.00		1.00	0.94	19.844	21.83	245.84	0.650	0.000	5.00	13.857	9.01	314.6	0.0	492.7
90.00		1.00	0.96	20.170	22.19	238.80	0.650	0.000	5.00	13.359	8.68	308.3	0.0	474.8
95.00		1.00	0.97	20.484	22.53	231.53	0.650	0.000	5.00	12.862	8.36	301.4	0.0	457.0
97.75	Bot - Section 3	1.00	0.98	20.652	22.72	227.44	0.650	0.000	2.75	6.862	4.46	162.1	0.0	243.7
100.00		1.00	0.99	20.787	22.87	224.04	0.650	0.000	2.25	5.574	3.62	132.6	0.0	314.7
101.50	Top - Section 2	1.00	0.99	20.875	22.96	221.76	0.650	0.000	1.50	3.660	2.38	87.4	0.0	206.6
105.00		1.00	1.00	21.079	23.19	219.31	0.650	0.000	3.50	8.367	5.44	201.8	0.0	179.0
109.00	Appurtenance(s)	1.00	1.01	21.305	23.44	213.04	0.650	0.000	4.00	9.264	6.02	225.8	0.0	198.2
110.00		1.00	1.02	21.361	23.50	211.45	0.650	0.000	1.00	2.266	1.47	55.4	0.0	48.5
115.00		1.00	1.03	21.634	23.80	203.43	0.650	0.000	5.00	11.033	7.17	273.1	0.0	235.9
119.00	Appurtenance(s)	1.00	1.04	21.846	24.03	196.88	0.650	0.000	4.00	8.468	5.50	211.6	0.0	181.0
120.00		1.00	1.04	21.898	24.09	195.23	0.650	0.000	1.00	2.067	1.34	51.8	0.0	44.2
125.00		1.00	1.05	22.155	24.37	186.89	0.650	0.000	5.00	10.039	6.53	254.4	0.0	214.5
127.00	Appurtenance(s)	1.00	1.06	22.256	24.48	183.51	0.650	0.000	2.00	3.876	2.52	98.7	0.0	82.8
128.00	Appurtenance(s)	1.00	1.06	22.306	24.54	181.81	0.650	0.000	1.00	1.908	1.24	48.7	0.0	40.8
129.00	Top - Section 3	1.00	1.06	22.356	24.59	180.10	0.650	0.000	1.00	1.888	1.23	48.3	0.0	40.3
130.00		1.00	1.07	22.405	24.65	178.39	0.650	0.000	1.00	1.869	1.21	47.9	0.0	39.9
135.00		1.00	1.08	22.648	24.91	169.77	0.650	0.000	5.00	9.045	5.88	234.3	0.0	193.1
138.50	Appurtenance(s)	1.00	1.08	22.814	25.10	163.65	0.650	0.000	3.50	6.035	3.92	157.5	0.0	128.8
139.00		1.00	1.09	22.838	25.12	162.77	0.650	0.000	0.50	0.842	0.55	22.0	0.0	18.0
Totals:									139.00			8,592.5		14,679.0

Discrete Appurtenance Forces

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 25

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	138.50	Low Profile Platform	1	22.814	25.095	1.00	1.00	30.00	1620.00	0.000	0.000	1204.58	0.00	0.00
2	128.00	4460 Radio	3	22.306	24.536	0.50	0.75	4.30	294.30	0.000	0.000	168.67	0.00	0.00
3	128.00	4449 B71 + B85	3	22.306	24.536	0.50	0.75	2.97	197.64	0.000	0.000	116.59	0.00	0.00
4	128.00	APXVAALL24_43-U-NA20	3	22.306	24.536	0.55	0.75	33.24	331.56	0.000	0.000	1305.11	0.00	0.00
5	128.00	VV-65A-R1	3	22.306	24.536	0.51	0.75	9.01	86.40	0.000	0.000	353.78	0.00	0.00
6	128.00	AIR6449 B41	3	22.306	24.536	0.53	0.75	9.03	278.10	0.000	0.000	354.34	0.00	0.00
7	127.00	Ericsson - KRY 112 114-1	3	22.256	24.482	0.50	0.75	0.62	29.70	0.000	0.000	24.21	0.00	0.00
8	127.00	Low Profile Platform	1	22.256	24.482	1.00	1.00	33.40	1485.00	0.000	0.000	1308.29	0.00	0.00
9	127.00	HRK12 (Handrail Kit)	1	22.256	24.482	1.00	1.00	9.75	235.55	0.000	0.000	381.91	0.00	0.00
10	119.00	Site Pro PRK-1245L	1	21.846	24.031	1.00	1.00	11.50	418.42	0.000	0.000	442.16	0.00	0.00
11	119.00	Raycap -	2	21.846	24.031	0.75	0.75	1.38	57.24	0.000	0.000	53.06	0.00	0.00
12	119.00	Ericsson - RRUS-32 B2 -	3	21.846	24.031	0.50	0.75	4.13	143.10	0.000	0.000	158.82	0.00	0.00
13	119.00	Ericsson - RRUS-11 -	3	21.846	24.031	0.50	0.75	3.80	137.70	0.000	0.000	146.06	0.00	0.00
14	119.00	Ericsson - RRUS 32 B30 -	3	21.846	24.031	0.50	0.75	4.13	162.00	0.000	0.000	158.82	0.00	0.00
15	119.00	Quintel - QS66512-2	3	21.846	24.031	0.69	0.75	16.79	299.70	0.000	0.000	645.66	0.00	0.00
16	119.00	Platform w/ Handrail	1	21.846	24.031	1.00	1.00	40.20	1620.00	0.000	0.000	1545.65	0.00	0.00
17	119.00	Powerwave - 7770	6	21.846	24.031	0.57	0.75	18.96	189.00	0.000	0.000	728.94	0.00	0.00
18	119.00	Kaelus -	6	21.846	24.031	0.50	0.75	1.30	137.16	0.000	0.000	49.85	0.00	0.00
19	119.00	Cci - HPA-65R-BUU-H6	3	21.846	24.031	0.63	0.75	18.13	137.70	0.000	0.000	696.97	0.00	0.00
20	119.00	Powerwave - LGP21401 -	9	21.846	24.031	0.38	0.75	4.35	114.21	0.000	0.000	167.40	0.00	0.00
21	119.00	Powerwave -	3	21.846	24.031	0.50	0.75	0.96	43.20	0.000	0.000	37.10	0.00	0.00
22	109.00	MC-PK8-DSH	1	21.305	23.435	1.00	1.00	37.59	1554.30	0.000	0.000	1409.50	0.00	0.00
23	109.00	RDIDC-9181-OF-48	1	21.305	23.435	1.00	1.00	2.01	19.71	0.000	0.000	75.37	0.00	0.00
24	109.00	TA08025-B605	3	21.305	23.435	0.50	0.75	2.95	202.50	0.000	0.000	110.79	0.00	0.00
25	109.00	TA08025-B604	3	21.305	23.435	0.50	0.75	2.95	172.53	0.000	0.000	110.79	0.00	0.00
26	109.00	Commscope	3	21.305	23.435	0.56	0.75	20.33	191.16	0.000	0.000	762.47	0.00	0.00

Totals: 10,157.88

12,516.89

Total Applied Force Summary

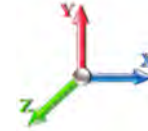
Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 25

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
5.00		362.91	886.25	0.00	0.00
10.00		354.54	868.40	0.00	0.00
15.00		346.17	850.56	0.00	0.00
20.00		337.79	832.72	0.00	0.00
25.00		329.42	814.88	0.00	0.00
30.00		321.32	797.03	0.00	0.00
35.00		327.03	779.19	0.00	0.00
40.00		330.65	761.35	0.00	0.00
45.00		332.56	743.50	0.00	0.00
48.00		198.65	437.54	0.00	0.00
50.00		134.11	533.00	0.00	0.00
53.25		218.52	853.95	0.00	0.00
55.00		117.01	249.03	0.00	0.00
60.00		335.84	699.47	0.00	0.00
65.00		333.16	681.63	0.00	0.00
70.00		329.61	663.78	0.00	0.00
75.00		325.28	645.94	0.00	0.00
80.00		320.25	628.10	0.00	0.00
85.00		314.56	610.26	0.00	0.00
90.00		308.27	592.41	0.00	0.00
95.00		301.42	574.57	0.00	0.00
97.75		162.13	308.41	0.00	0.00
100.00		132.56	367.61	0.00	0.00
101.50		87.41	241.86	0.00	0.00
105.00		201.75	261.33	0.00	0.00
109.00	(11) attachments	2694.71	2432.43	0.00	0.00
110.00		55.38	70.20	0.00	0.00
115.00		273.05	344.56	0.00	0.00
119.00	(43) attachments	5042.11	3727.37	0.00	0.00
120.00		51.79	52.73	0.00	0.00
125.00		254.44	257.22	0.00	0.00
127.00	(5) attachments	1813.11	1850.14	0.00	0.00
128.00	(15) attachments	2347.19	1237.30	0.00	0.00
129.00		48.30	40.58	0.00	0.00
130.00		47.89	40.15	0.00	0.00
135.00		234.34	194.32	0.00	0.00
138.50	(1) attachments	1362.10	1749.53	0.00	0.00
139.00		22.01	17.97	0.00	0.00
	Totals:	21,109.34	27,697.26	0.00	0.00

Wind Loading - Shaft

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Iterations 25

Dead Load Factor 1.20

Wind Load Factor 1.00



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		1.00	0.70	4.256	4.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	4.256	4.68	0.00	1.200	1.242	5.00	22.580	27.10	126.9	401.3	1426.2
10.00		1.00	0.70	4.256	4.68	0.00	1.200	1.331	5.00	22.157	26.59	124.5	421.0	1422.1
15.00		1.00	0.70	4.256	4.68	0.00	1.200	1.386	5.00	21.706	26.05	121.9	428.7	1406.0
20.00		1.00	0.70	4.256	4.68	0.00	1.200	1.427	5.00	21.243	25.49	119.3	431.1	1384.6
25.00		1.00	0.70	4.256	4.68	0.00	1.200	1.459	5.00	20.773	24.93	116.7	430.4	1360.1
30.00		1.00	0.70	4.260	4.69	0.00	1.200	1.486	5.00	20.298	24.36	114.1	427.6	1333.5
35.00		1.00	0.73	4.451	4.90	0.00	1.200	1.509	5.00	19.820	23.78	116.5	423.3	1305.5
40.00		1.00	0.76	4.625	5.09	0.00	1.200	1.529	5.00	19.340	23.21	118.1	418.0	1276.3
45.00		1.00	0.79	4.783	5.26	0.00	1.200	1.547	5.00	18.858	22.63	119.1	411.7	1246.2
48.00	Bot - Section 2	1.00	0.80	4.872	5.36	0.00	1.200	1.557	3.00	11.081	13.30	71.3	244.5	733.9
50.00		1.00	0.81	4.929	5.42	0.00	1.200	1.564	2.00	7.396	8.88	48.1	164.3	812.3
53.25	Top - Section 1	1.00	0.83	5.018	5.52	0.00	1.200	1.574	3.25	11.854	14.22	78.5	263.9	1300.6
55.00		1.00	0.83	5.065	5.57	0.00	1.200	1.579	1.75	6.298	7.56	42.1	141.2	418.3
60.00		1.00	0.85	5.193	5.71	0.00	1.200	1.592	5.00	17.669	21.20	121.1	395.2	1171.0
65.00		1.00	0.87	5.313	5.84	0.00	1.200	1.605	5.00	17.182	20.62	120.5	386.7	1138.7
70.00		1.00	0.89	5.426	5.97	0.00	1.200	1.617	5.00	16.695	20.03	119.6	377.8	1106.0
75.00		1.00	0.91	5.534	6.09	0.00	1.200	1.628	5.00	16.208	19.45	118.4	368.5	1073.0
80.00		1.00	0.93	5.637	6.20	0.00	1.200	1.639	5.00	15.719	18.86	117.0	359.0	1039.6
85.00		1.00	0.94	5.736	6.31	0.00	1.200	1.649	5.00	15.231	18.28	115.3	349.1	1006.0
90.00		1.00	0.96	5.830	6.41	0.00	1.200	1.658	5.00	14.741	17.69	113.4	339.0	972.1
95.00		1.00	0.97	5.921	6.51	0.00	1.200	1.667	5.00	14.252	17.10	111.4	328.7	937.9
97.75	Bot - Section 3	1.00	0.98	5.970	6.57	0.00	1.200	1.672	2.75	7.629	9.15	60.1	177.6	502.6
100.00		1.00	0.99	6.008	6.61	0.00	1.200	1.676	2.25	6.203	7.44	49.2	144.9	564.5
101.50	Top - Section 2	1.00	0.99	6.034	6.64	0.00	1.200	1.678	1.50	4.080	4.90	32.5	95.7	371.1
105.00		1.00	1.00	6.093	6.70	0.00	1.200	1.684	3.50	9.349	11.22	75.2	217.9	456.6
109.00	Appurtenance(s)	1.00	1.01	6.158	6.77	0.00	1.200	1.690	4.00	10.391	12.47	84.5	242.1	506.3
110.00		1.00	1.02	6.174	6.79	0.00	1.200	1.692	1.00	2.548	3.06	20.8	60.1	124.7
115.00		1.00	1.03	6.253	6.88	0.00	1.200	1.699	5.00	12.449	14.94	102.8	289.3	603.8
119.00	Appurtenance(s)	1.00	1.04	6.315	6.95	0.00	1.200	1.705	4.00	9.605	11.53	80.1	224.2	465.6
120.00		1.00	1.04	6.330	6.96	0.00	1.200	1.707	1.00	2.352	2.82	19.7	55.6	114.5
125.00		1.00	1.05	6.404	7.04	0.00	1.200	1.714	5.00	11.467	13.76	96.9	266.6	552.6
127.00	Appurtenance(s)	1.00	1.06	6.433	7.08	0.00	1.200	1.716	2.00	4.448	5.34	37.8	104.8	215.2
128.00	Appurtenance(s)	1.00	1.06	6.448	7.09	0.00	1.200	1.718	1.00	2.195	2.63	18.7	51.9	106.3
129.00	Top - Section 3	1.00	1.06	6.462	7.11	0.00	1.200	1.719	1.00	2.175	2.61	18.6	51.5	105.3
130.00		1.00	1.07	6.476	7.12	0.00	1.200	1.720	1.00	2.155	2.59	18.4	51.0	104.2
135.00		1.00	1.08	6.546	7.20	0.00	1.200	1.727	5.00	10.484	12.58	90.6	243.4	500.8
138.50	Appurtenance(s)	1.00	1.08	6.594	7.25	0.00	1.200	1.731	3.50	7.045	8.45	61.3	164.6	336.3
139.00		1.00	1.09	6.601	7.26	0.00	1.200	1.732	0.50	0.987	1.18	8.6	23.4	47.4
Totals:									139.00			3,129.3		29,547.6

Discrete Appurtenance Forces

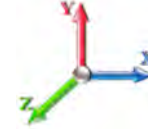
Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 25

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	138.50	Low Profile Platform	1	6.594	7.254	1.00	1.00	53.89	3718.21	0.000	0.000	390.93	0.00	0.00
2	128.00	4460 Radio	3	6.448	7.092	0.50	0.75	5.30	553.72	0.000	0.000	37.57	0.00	0.00
3	128.00	4449 B71 + B85	3	6.448	7.092	0.50	0.75	3.81	258.82	0.000	0.000	27.05	0.00	0.00
4	128.00	APXVAALL24_43-U-NA20	3	6.448	7.092	0.55	0.75	36.31	1702.52	0.000	0.000	257.55	0.00	0.00
5	128.00	VV-65A-R1	3	6.448	7.092	0.51	0.75	12.21	356.14	0.000	0.000	86.57	0.00	0.00
6	128.00	AIR6449 B41	3	6.448	7.092	0.53	0.75	10.52	680.58	0.000	0.000	74.61	0.00	0.00
7	127.00	Ericsson - KRY 112 114-1	3	6.433	7.076	0.50	0.75	1.32	62.11	0.000	0.000	9.36	0.00	0.00
8	127.00	Low Profile Platform	1	6.433	7.076	1.00	1.00	59.77	3246.04	0.000	0.000	422.96	0.00	0.00
9	127.00	HRK12 (Handrail Kit)	1	6.433	7.076	1.00	1.00	19.12	881.25	0.000	0.000	135.31	0.00	0.00
10	119.00	Site Pro PRK-1245L	1	6.315	6.946	1.00	1.00	23.27	779.92	0.000	0.000	161.61	0.00	0.00
11	119.00	Raycap -	2	6.315	6.946	0.75	0.75	2.02	161.74	0.000	0.000	14.04	0.00	0.00
12	119.00	Ericsson - RRUS-32 B2 -	3	6.315	6.946	0.50	0.75	5.54	355.21	0.000	0.000	38.48	0.00	0.00
13	119.00	Ericsson - RRUS-11 -	3	6.315	6.946	0.50	0.75	4.73	347.46	0.000	0.000	32.87	0.00	0.00
14	119.00	Ericsson - RRUS 32 B30 -	3	6.315	6.946	0.50	0.75	5.54	408.76	0.000	0.000	38.48	0.00	0.00
15	119.00	Quintel - QS66512-2	3	6.315	6.946	0.69	0.75	19.52	872.34	0.000	0.000	135.57	0.00	0.00
16	119.00	Platform w/ Handrail	1	6.315	6.946	1.00	1.00	73.10	3994.75	0.000	0.000	507.79	0.00	0.00
17	119.00	Powerwave - 7770	6	6.315	6.946	0.59	0.75	23.20	1235.66	0.000	0.000	161.12	0.00	0.00
18	119.00	Kaelus -	6	6.315	6.946	0.50	0.75	2.14	247.12	0.000	0.000	14.84	0.00	0.00
19	119.00	Cci - HPA-65R-BUU-H6	3	6.315	6.946	0.64	0.75	20.93	714.18	0.000	0.000	145.41	0.00	0.00
20	119.00	Powerwave - LGP21401 -	9	6.315	6.946	0.38	0.75	7.11	308.24	0.000	0.000	49.38	0.00	0.00
21	119.00	Powerwave -	3	6.315	6.946	0.50	0.75	1.84	99.53	0.000	0.000	12.77	0.00	0.00
22	109.00	MC-PK8-DSH	1	6.158	6.774	1.00	1.00	83.34	3334.19	0.000	0.000	564.55	0.00	0.00
23	109.00	RDIDC-9181-OF-48	1	6.158	6.774	1.00	1.00	2.56	65.16	0.000	0.000	17.34	0.00	0.00
24	109.00	TA08025-B605	3	6.158	6.774	0.50	0.75	3.77	384.18	0.000	0.000	25.56	0.00	0.00
25	109.00	TA08025-B604	3	6.158	6.774	0.50	0.75	3.77	340.86	0.000	0.000	25.56	0.00	0.00
26	109.00	Commscope	3	6.158	6.774	0.56	0.75	23.12	1067.77	0.000	0.000	156.60	0.00	0.00

Totals: 26,176.45

3,543.90

Total Applied Force Summary

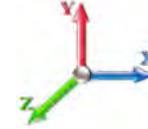
Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 25

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
5.00		126.85	1582.96	0.00	0.00
10.00		124.48	1578.91	0.00	0.00
15.00		121.94	1562.80	0.00	0.00
20.00		119.34	1541.38	0.00	0.00
25.00		116.70	1516.87	0.00	0.00
30.00		114.13	1490.30	0.00	0.00
35.00		116.46	1462.26	0.00	0.00
40.00		118.06	1433.10	0.00	0.00
45.00		119.06	1403.04	0.00	0.00
48.00		71.26	827.93	0.00	0.00
50.00		48.12	875.00	0.00	0.00
53.25		78.53	1402.50	0.00	0.00
55.00		42.10	473.19	0.00	0.00
60.00		121.10	1327.85	0.00	0.00
65.00		120.49	1295.55	0.00	0.00
70.00		119.58	1262.85	0.00	0.00
75.00		118.40	1229.79	0.00	0.00
80.00		116.97	1196.43	0.00	0.00
85.00		115.32	1162.79	0.00	0.00
90.00		113.45	1128.89	0.00	0.00
95.00		111.39	1094.75	0.00	0.00
97.75		60.11	588.79	0.00	0.00
100.00		49.19	635.06	0.00	0.00
101.50		32.50	418.13	0.00	0.00
105.00		75.19	566.34	0.00	0.00
109.00	(11) attachments	874.08	5823.86	0.00	0.00
110.00		20.77	153.67	0.00	0.00
115.00		102.76	748.69	0.00	0.00
119.00	(43) attachments	1392.42	10106.39	0.00	0.00
120.00		19.65	125.91	0.00	0.00
125.00		96.93	609.58	0.00	0.00
127.00	(5) attachments	605.41	4427.39	0.00	0.00
128.00	(15) attachments	502.04	3669.46	0.00	0.00
129.00		18.55	105.58	0.00	0.00
130.00		18.42	104.55	0.00	0.00
135.00		90.59	502.49	0.00	0.00
138.50	(1) attachments	452.26	4055.52	0.00	0.00
139.00		8.60	47.36	0.00	0.00
Totals:		6,673.21	59,537.91	0.00	0.00

Calculated Forces

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Iterations 25

Dead Load Factor 1.20

Wind Load 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	-59.53	-6.70	0.00	-706.19	0.00	706.19	3147.71	1573.86	6633.45	3321.65	0.00	0.000	0.000	0.232
5.00	-57.94	-6.64	0.00	-672.67	0.00	672.67	3110.30	1555.15	6403.28	3206.40	0.03	-0.058	0.000	0.228
10.00	-56.36	-6.57	0.00	-639.49	0.00	639.49	3071.25	1535.62	6173.46	3091.32	0.12	-0.118	0.000	0.225
15.00	-54.79	-6.50	0.00	-606.66	0.00	606.66	3030.56	1515.28	5944.24	2976.54	0.28	-0.179	0.000	0.222
20.00	-53.24	-6.43	0.00	-574.15	0.00	574.15	2988.24	1494.12	5715.85	2862.17	0.50	-0.240	0.000	0.218
25.00	-51.72	-6.37	0.00	-541.99	0.00	541.99	2944.28	1472.14	5488.53	2748.34	0.79	-0.303	0.000	0.215
30.00	-50.22	-6.30	0.00	-510.15	0.00	510.15	2898.69	1449.34	5262.51	2635.17	1.14	-0.368	0.000	0.211
35.00	-48.75	-6.23	0.00	-478.65	0.00	478.65	2851.46	1425.73	5038.05	2522.77	1.56	-0.433	0.000	0.207
40.00	-47.31	-6.16	0.00	-447.50	0.00	447.50	2802.60	1401.30	4815.37	2411.26	2.05	-0.499	0.000	0.202
45.00	-45.91	-6.07	0.00	-416.72	0.00	416.72	2752.10	1376.05	4594.71	2300.77	2.61	-0.566	0.000	0.198
48.00	-45.08	-6.01	0.00	-398.52	0.00	398.52	2721.01	1360.51	4463.39	2235.01	2.97	-0.608	0.000	0.195
50.00	-44.20	-5.99	0.00	-386.49	0.00	386.49	2699.97	1349.98	4376.32	2191.41	3.24	-0.636	0.000	0.193
53.25	-42.79	-5.92	0.00	-367.04	0.00	367.04	2693.71	1346.85	4350.71	2178.59	3.68	-0.681	0.000	0.184
55.00	-42.31	-5.90	0.00	-356.69	0.00	356.69	2675.00	1337.50	4274.96	2140.66	3.94	-0.706	0.000	0.182
60.00	-40.98	-5.81	0.00	-327.18	0.00	327.18	2620.47	1310.24	4060.32	2033.18	4.71	-0.772	0.000	0.177
65.00	-39.68	-5.72	0.00	-298.12	0.00	298.12	2564.30	1282.15	3848.53	1927.13	5.56	-0.838	0.000	0.170
70.00	-38.41	-5.62	0.00	-269.53	0.00	269.53	2506.50	1253.25	3639.84	1822.63	6.47	-0.904	0.000	0.163
75.00	-37.18	-5.53	0.00	-241.41	0.00	241.41	2447.06	1223.53	3434.48	1719.79	7.45	-0.969	0.000	0.156
80.00	-35.98	-5.43	0.00	-213.77	0.00	213.77	2385.98	1192.99	3232.68	1618.74	8.50	-1.034	0.000	0.147
85.00	-34.81	-5.33	0.00	-186.62	0.00	186.62	2323.27	1161.64	3034.69	1519.60	9.62	-1.097	0.000	0.138
90.00	-33.68	-5.23	0.00	-159.97	0.00	159.97	2258.93	1129.46	2840.75	1422.49	10.80	-1.158	0.000	0.127
95.00	-32.59	-5.12	0.00	-133.82	0.00	133.82	2173.88	1086.94	2628.05	1315.98	12.04	-1.216	0.000	0.117
97.75	-32.00	-5.06	0.00	-119.74	0.00	119.74	2126.27	1063.14	2513.60	1258.67	12.75	-1.246	0.000	0.110
100.00	-31.36	-5.01	0.00	-108.35	0.00	108.35	2087.31	1043.66	2421.85	1212.73	13.35	-1.271	0.000	0.104
101.50	-30.94	-4.98	0.00	-100.83	0.00	100.83	2088.23	544.12	1274.83	638.36	13.75	-1.286	0.000	0.186
105.00	-30.37	-4.92	0.00	-83.39	0.00	83.39	1070.27	535.14	1217.34	609.58	14.71	-1.320	0.000	0.165
109.00	-24.57	-3.92	0.00	-63.72	0.00	63.72	1048.77	524.38	1152.06	576.89	15.84	-1.372	0.000	0.134
110.00	-24.41	-3.91	0.00	-59.80	0.00	59.80	1043.23	521.61	1135.83	568.76	16.12	-1.385	0.000	0.129
115.00	-23.67	-3.81	0.00	-40.25	0.00	40.25	1014.55	507.27	1055.24	528.40	17.60	-1.436	0.000	0.100
119.00	-13.60	-2.16	0.00	-25.02	0.00	25.02	990.42	495.21	991.60	496.54	18.82	-1.466	0.000	0.064
120.00	-13.47	-2.14	0.00	-22.86	0.00	22.86	984.23	492.11	975.83	488.64	19.13	-1.472	0.000	0.060
125.00	-12.86	-2.03	0.00	-12.15	0.00	12.15	952.28	476.14	897.82	449.58	20.68	-1.496	0.000	0.041
127.00	-8.45	-1.31	0.00	-8.08	0.00	8.08	939.04	469.52	867.06	434.18	21.31	-1.502	0.000	0.028
128.00	-4.80	-0.71	0.00	-6.77	0.00	6.77	932.32	466.16	851.79	426.53	21.63	-1.505	0.000	0.021
129.00	-4.69	-0.69	0.00	-6.05	0.00	6.05	925.54	462.77	836.59	418.92	21.94	-1.507	0.000	0.020
129.00	-4.69	-0.69	0.00	-6.05	0.00	6.05	925.54	462.77	836.59	418.92	21.94	-1.507	0.000	0.020
130.00	-4.59	-0.67	0.00	-5.36	0.00	5.36	918.69	459.34	821.46	411.34	22.26	-1.509	0.000	0.018
135.00	-4.09	-0.57	0.00	-2.00	0.00	2.00	883.47	441.73	746.98	374.05	23.84	-1.516	0.000	0.010
138.50	-0.05	-0.01	0.00	0.00	0.00	0.00	857.84	428.92	696.10	348.57	24.95	-1.517	0.000	0.000
139.00	0.00	-0.01	0.00	0.00	0.00	0.00	854.11	427.06	688.92	344.97	25.11	-1.517	0.000	0.000

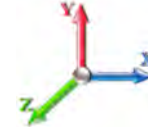
Seismic Segment Forces (Factored)

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0E						Iterations 23
Gust Response Factor	1.10			Sds	0.22	Ss 0.21
Dead Load Factor	1.20	Seismic Load Factor	1.00	Sd1	0.11	S1 0.07
Wind Load Factor	0.00	Structure Frequency (f1)	0.32	SA	0.03	Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		854.05	0.00	0.03	0.02	21.11	
10.00		834.22	0.01	0.05	0.03	28.76	
15.00		814.40	0.02	0.07	0.04	31.68	
20.00		794.57	0.04	0.07	0.04	32.64	
25.00		774.75	0.06	0.07	0.04	32.84	
30.00		754.92	0.09	0.07	0.04	32.84	
35.00		735.10	0.12	0.07	0.03	32.83	
40.00		715.27	0.16	0.07	0.03	32.68	
45.00		695.45	0.20	0.06	0.02	32.07	
48.00	Bot - Section 2	407.75	0.23	0.06	0.02	18.65	
50.00		539.96	0.24	0.06	0.02	24.33	
53.25	Top - Section 1	863.90	0.28	0.05	0.01	37.17	
55.00		230.96	0.30	0.05	0.01	9.54	
60.00		646.52	0.35	0.03	0.01	21.59	
65.00		626.69	0.41	0.01	0.01	12.68	
70.00		606.87	0.48	-0.01	0.01	1.39	
75.00		587.04	0.55	-0.03	0.01	-10.22	
80.00		567.22	0.63	-0.06	0.02	-19.55	
85.00		547.39	0.71	-0.09	0.03	-24.93	
90.00		527.57	0.79	-0.11	0.05	-26.05	
95.00		507.74	0.88	-0.12	0.08	-23.33	
97.75	Bot - Section 3	270.81	0.93	-0.12	0.10	-11.13	
100.00		349.65	0.98	-0.11	0.12	-12.44	
101.50	Top - Section 2	229.53	1.01	-0.11	0.14	-7.15	
105.00		198.89	1.08	-0.08	0.17	-3.68	
109.00	Appurtenance(s)	2598.1	1.16	-0.03	0.23	-0.30	
110.00		53.85	1.18	-0.01	0.24	0.28	
115.00		262.13	1.29	0.11	0.33	9.29	
119.00	Appurtenance(s)	4044.9	1.39	0.26	0.42	260.87	
120.00		49.09	1.41	0.30	0.44	3.56	
125.00		238.34	1.53	0.57	0.58	27.73	
127.00	Appurtenance(s)	2036.7	1.58	0.71	0.64	276.79	
128.00	Appurtenance(s)	1365.2	1.60	0.79	0.67	199.47	
129.00	Top - Section 3	44.81	1.63	0.87	0.71	7.02	
130.00		44.34	1.65	0.95	0.74	7.42	
135.00		214.55	1.78	1.46	0.95	48.41	
138.50	Appurtenance(s)	1943.1	1.88	1.91	1.11	526.32	
139.00		19.97	1.89	1.98	1.14	5.54	
Totals:		27,596.5				1,636.7	Total Wind: 21,109.3

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure: CT13060-A-SBA
 Site Name: Newtown 2
 Height: 139.00 (ft)
 Base Elev: 0.000 (ft)
 Gh: 1.1

Topography: 1

Code: EIA/TIA-222-G 1/14/2022
 Exposure: B
 Crest Height: 0.00
 Site Class: D - Stiff Soil
 Struct Class: II



Load Case: 1.2D + 1.0E

Iterations 23

Gust Response Factor 1.10 Sds 0.22
 Dead Load Factor 1.20 Seismic Load Factor 1.00 Sd1 0.11
 Wind Load Factor 0.00 Structure Frequency (f1) 0.32 SA 0.03 Seismic Importance Factor 1.00



Ss 0.21
 S1 0.07

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	-36.93	-1.78	0.00	-203.41	0.00	203.41	3147.71	1573.86	6633.45	3321.65	0.00	0.00	0.00	0.073
5.00	-35.75	-1.77	0.00	-194.51	0.00	194.51	3110.30	1555.15	6403.28	3206.40	0.01	-0.02	0.072	
10.00	-34.59	-1.75	0.00	-185.66	0.00	185.66	3071.25	1535.62	6173.46	3091.32	0.04	-0.03	0.071	
15.00	-33.45	-1.73	0.00	-176.91	0.00	176.91	3030.56	1515.28	5944.24	2976.54	0.08	-0.05	0.070	
20.00	-32.34	-1.71	0.00	-168.27	0.00	168.27	2988.24	1494.12	5715.85	2862.17	0.14	-0.07	0.070	
25.00	-31.26	-1.68	0.00	-159.74	0.00	159.74	2944.28	1472.14	5488.53	2748.34	0.23	-0.09	0.069	
30.00	-30.19	-1.66	0.00	-151.34	0.00	151.34	2898.69	1449.34	5262.51	2635.17	0.33	-0.11	0.068	
35.00	-29.15	-1.63	0.00	-143.06	0.00	143.06	2851.46	1425.73	5038.05	2522.77	0.45	-0.13	0.067	
40.00	-28.14	-1.61	0.00	-134.90	0.00	134.90	2802.60	1401.30	4815.37	2411.26	0.60	-0.15	0.066	
45.00	-27.15	-1.58	0.00	-126.87	0.00	126.87	2752.10	1376.05	4594.71	2300.77	0.76	-0.17	0.065	
48.00	-26.56	-1.56	0.00	-122.13	0.00	122.13	2721.01	1360.51	4463.39	2235.01	0.87	-0.18	0.064	
50.00	-25.85	-1.54	0.00	-119.00	0.00	119.00	2699.97	1349.98	4376.32	2191.41	0.95	-0.19	0.064	
53.25	-24.71	-1.51	0.00	-113.99	0.00	113.99	2693.71	1346.85	4350.71	2178.59	1.08	-0.20	0.061	
55.00	-24.38	-1.50	0.00	-111.36	0.00	111.36	2675.00	1337.50	4274.96	2140.66	1.16	-0.21	0.061	
60.00	-23.45	-1.48	0.00	-103.85	0.00	103.85	2620.47	1310.24	4060.32	2033.18	1.39	-0.23	0.060	
65.00	-22.54	-1.48	0.00	-96.43	0.00	96.43	2564.30	1282.15	3848.53	1927.13	1.64	-0.25	0.059	
70.00	-21.65	-1.48	0.00	-89.04	0.00	89.04	2506.50	1253.25	3639.84	1822.63	1.92	-0.27	0.057	
75.00	-20.79	-1.48	0.00	-81.65	0.00	81.65	2447.06	1223.53	3434.48	1719.79	2.21	-0.30	0.056	
80.00	-19.95	-1.49	0.00	-74.23	0.00	74.23	2385.98	1192.99	3232.68	1618.74	2.53	-0.32	0.054	
85.00	-19.14	-1.49	0.00	-66.80	0.00	66.80	2323.27	1161.64	3034.69	1519.60	2.88	-0.34	0.052	
90.00	-18.35	-1.49	0.00	-59.35	0.00	59.35	2258.93	1129.46	2840.75	1422.49	3.25	-0.36	0.050	
95.00	-17.58	-1.49	0.00	-51.90	0.00	51.90	2173.88	1086.94	2628.05	1315.98	3.64	-0.38	0.048	
97.75	-17.17	-1.49	0.00	-47.79	0.00	47.79	2126.27	1063.14	2513.60	1258.67	3.86	-0.40	0.046	
100.00	-16.68	-1.49	0.00	-44.44	0.00	44.44	2087.31	1043.66	2421.85	1212.73	4.05	-0.41	0.045	
101.50	-16.36	-1.49	0.00	-42.20	0.00	42.20	1088.23	544.12	1274.83	638.36	4.18	-0.41	0.081	
105.00	-16.01	-1.49	0.00	-36.98	0.00	36.98	1070.27	535.14	1217.34	609.58	4.49	-0.43	0.076	
109.00	-12.76	-1.47	0.00	-31.00	0.00	31.00	1048.77	524.38	1152.06	576.89	4.85	-0.45	0.066	
110.00	-12.67	-1.48	0.00	-29.53	0.00	29.53	1043.23	521.61	1135.83	568.76	4.95	-0.46	0.064	
115.00	-12.21	-1.47	0.00	-22.15	0.00	22.15	1014.55	507.27	1055.24	528.40	5.44	-0.48	0.054	
119.00	-7.24	-1.17	0.00	-16.28	0.00	16.28	990.42	495.21	991.60	496.54	5.86	-0.50	0.040	
120.00	-7.17	-1.16	0.00	-15.11	0.00	15.11	984.23	492.11	975.83	488.64	5.96	-0.51	0.038	
125.00	-6.83	-1.13	0.00	-9.30	0.00	9.30	952.28	476.14	897.82	449.58	6.50	-0.52	0.028	
127.00	-4.37	-0.83	0.00	-7.03	0.00	7.03	939.04	469.52	867.06	434.18	6.72	-0.53	0.021	
128.00	-2.72	-0.62	0.00	-6.20	0.00	6.20	932.32	466.16	851.79	426.53	6.83	-0.53	0.017	
129.00	-2.66	-0.61	0.00	-5.58	0.00	5.58	925.54	462.77	836.59	418.92	6.94	-0.53	0.016	
129.00	-2.66	-0.61	0.00	-5.58	0.00	5.58	925.54	462.77	836.59	418.92	6.94	-0.53	0.016	
130.00	-2.61	-0.60	0.00	-4.96	0.00	4.96	918.69	459.34	821.46	411.34	7.05	-0.53	0.015	
135.00	-2.35	-0.55	0.00	-1.94	0.00	1.94	883.47	441.73	746.98	374.05	7.61	-0.54	0.008	
138.50	-0.02	-0.01	0.00	0.00	0.00	0.00	857.84	428.92	696.10	348.57	8.01	-0.54	0.000	
139.00	0.00	-0.01	0.00	0.00	0.00	0.00	854.11	427.06	688.92	344.97	8.07	-0.54	0.000	

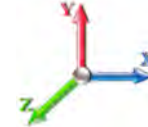
Seismic Segment Forces (Factored)

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0E				Iterations 23
Gust Response Factor	1.10	Sds	0.22	Ss 0.21
Dead Load Factor	0.90	Seismic Load Factor	1.00	S1 0.07
Wind Load Factor	0.00	Structure Frequency (f1)	0.32	SA 0.03
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		854.05	0.00	0.03	0.02	21.11	
10.00		834.22	0.01	0.05	0.03	28.76	
15.00		814.40	0.02	0.07	0.04	31.68	
20.00		794.57	0.04	0.07	0.04	32.64	
25.00		774.75	0.06	0.07	0.04	32.84	
30.00		754.92	0.09	0.07	0.04	32.84	
35.00		735.10	0.12	0.07	0.03	32.83	
40.00		715.27	0.16	0.07	0.03	32.68	
45.00		695.45	0.20	0.06	0.02	32.07	
48.00	Bot - Section 2	407.75	0.23	0.06	0.02	18.65	
50.00		539.96	0.24	0.06	0.02	24.33	
53.25	Top - Section 1	863.90	0.28	0.05	0.01	37.17	
55.00		230.96	0.30	0.05	0.01	9.54	
60.00		646.52	0.35	0.03	0.01	21.59	
65.00		626.69	0.41	0.01	0.01	12.68	
70.00		606.87	0.48	-0.01	0.01	1.39	
75.00		587.04	0.55	-0.03	0.01	-10.22	
80.00		567.22	0.63	-0.06	0.02	-19.55	
85.00		547.39	0.71	-0.09	0.03	-24.93	
90.00		527.57	0.79	-0.11	0.05	-26.05	
95.00		507.74	0.88	-0.12	0.08	-23.33	
97.75	Bot - Section 3	270.81	0.93	-0.12	0.10	-11.13	
100.00		349.65	0.98	-0.11	0.12	-12.44	
101.50	Top - Section 2	229.53	1.01	-0.11	0.14	-7.15	
105.00		198.89	1.08	-0.08	0.17	-3.68	
109.00	Appurtenance(s)	2598.1	1.16	-0.03	0.23	-0.30	
110.00		53.85	1.18	-0.01	0.24	0.28	
115.00		262.13	1.29	0.11	0.33	9.29	
119.00	Appurtenance(s)	4044.9	1.39	0.26	0.42	260.87	
120.00		49.09	1.41	0.30	0.44	3.56	
125.00		238.34	1.53	0.57	0.58	27.73	
127.00	Appurtenance(s)	2036.7	1.58	0.71	0.64	276.79	
128.00	Appurtenance(s)	1365.2	1.60	0.79	0.67	199.47	
129.00	Top - Section 3	44.81	1.63	0.87	0.71	7.02	
130.00		44.34	1.65	0.95	0.74	7.42	
135.00		214.55	1.78	1.46	0.95	48.41	
138.50	Appurtenance(s)	1943.1	1.88	1.91	1.11	526.32	
139.00		19.97	1.89	1.98	1.14	5.54	
Totals:		27,596.5				1,636.7	Total Wind: 21,109.3

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure: CT13060-A-SBA
Site Name: Newtown 2
Height: 139.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: EIA/TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Topography: 1
Struct Class: II

1/14/2022
Page: 23



Load Case: 0.9D + 1.0E

Iterations 23

Gust Response Factor 1.10

Sds 0.22

Ss 0.21

Dead Load Factor 0.90 **Seismic Load Factor** 1.00 **Sd1** 0.11

S1 0.07

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32 **SA** 0.03 **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	-27.70	-1.78	0.00	-200.62	0.00	200.62	3147.71	1573.86	6633.45	3321.65		0.00	0.00	0.069
5.00	-26.81	-1.77	0.00	-191.72	0.00	191.72	3110.30	1555.15	6403.28	3206.40		0.01	-0.02	0.068
10.00	-25.94	-1.74	0.00	-182.90	0.00	182.90	3071.25	1535.62	6173.46	3091.32		0.04	-0.03	0.068
15.00	-25.09	-1.72	0.00	-174.18	0.00	174.18	3030.56	1515.28	5944.24	2976.54		0.08	-0.05	0.067
20.00	-24.26	-1.69	0.00	-165.58	0.00	165.58	2988.24	1494.12	5715.85	2862.17		0.14	-0.07	0.066
25.00	-23.44	-1.67	0.00	-157.11	0.00	157.11	2944.28	1472.14	5488.53	2748.34		0.22	-0.09	0.065
30.00	-22.64	-1.64	0.00	-148.78	0.00	148.78	2898.69	1449.34	5262.51	2635.17		0.33	-0.11	0.064
35.00	-21.86	-1.61	0.00	-140.58	0.00	140.58	2851.46	1425.73	5038.05	2522.77		0.45	-0.12	0.063
40.00	-21.10	-1.59	0.00	-132.51	0.00	132.51	2802.60	1401.30	4815.37	2411.26		0.59	-0.14	0.062
45.00	-20.36	-1.56	0.00	-124.58	0.00	124.58	2752.10	1376.05	4594.71	2300.77		0.75	-0.16	0.062
48.00	-19.92	-1.54	0.00	-119.91	0.00	119.91	2721.01	1360.51	4463.39	2235.01		0.86	-0.18	0.061
50.00	-19.39	-1.52	0.00	-116.82	0.00	116.82	2699.97	1349.98	4376.32	2191.41		0.93	-0.19	0.060
53.25	-18.53	-1.48	0.00	-111.89	0.00	111.89	2693.71	1346.85	4350.71	2178.59		1.06	-0.20	0.058
55.00	-18.28	-1.48	0.00	-109.29	0.00	109.29	2675.00	1337.50	4274.96	2140.66		1.14	-0.21	0.058
60.00	-17.58	-1.46	0.00	-101.91	0.00	101.91	2620.47	1310.24	4060.32	2033.18		1.36	-0.23	0.057
65.00	-16.90	-1.45	0.00	-94.61	0.00	94.61	2564.30	1282.15	3848.53	1927.13		1.61	-0.25	0.056
70.00	-16.24	-1.45	0.00	-87.37	0.00	87.37	2506.50	1253.25	3639.84	1822.63		1.88	-0.27	0.054
75.00	-15.59	-1.45	0.00	-80.11	0.00	80.11	2447.06	1223.53	3434.48	1719.79		2.18	-0.29	0.053
80.00	-14.96	-1.46	0.00	-72.84	0.00	72.84	2385.98	1192.99	3232.68	1618.74		2.49	-0.31	0.051
85.00	-14.35	-1.46	0.00	-65.56	0.00	65.56	2323.27	1161.64	3034.69	1519.60		2.83	-0.33	0.049
90.00	-13.76	-1.46	0.00	-58.27	0.00	58.27	2258.93	1129.46	2840.75	1422.49		3.19	-0.36	0.047
95.00	-13.18	-1.46	0.00	-50.97	0.00	50.97	2173.88	1086.94	2628.05	1315.98		3.58	-0.38	0.045
97.75	-12.88	-1.46	0.00	-46.95	0.00	46.95	2126.27	1063.14	2513.60	1258.67		3.80	-0.39	0.043
100.00	-12.51	-1.46	0.00	-43.67	0.00	43.67	2087.31	1043.66	2421.85	1212.73		3.98	-0.40	0.042
101.50	-12.27	-1.46	0.00	-41.48	0.00	41.48	1088.23	544.12	1274.83	638.36		4.11	-0.40	0.076
105.00	-12.00	-1.46	0.00	-36.37	0.00	36.37	1070.27	535.14	1217.34	609.58		4.41	-0.42	0.071
109.00	-9.57	-1.45	0.00	-30.52	0.00	30.52	1048.77	524.38	1152.06	576.89		4.77	-0.44	0.062
110.00	-9.50	-1.45	0.00	-29.07	0.00	29.07	1043.23	521.61	1135.83	568.76		4.87	-0.45	0.060
115.00	-9.16	-1.44	0.00	-21.83	0.00	21.83	1014.55	507.27	1055.24	528.40		5.35	-0.47	0.050
119.00	-5.43	-1.15	0.00	-16.07	0.00	16.07	990.42	495.21	991.60	496.54		5.76	-0.49	0.038
120.00	-5.38	-1.15	0.00	-14.92	0.00	14.92	984.23	492.11	975.83	488.64		5.86	-0.50	0.036
125.00	-5.12	-1.12	0.00	-9.19	0.00	9.19	952.28	476.14	897.82	449.58		6.39	-0.51	0.026
127.00	-3.27	-0.82	0.00	-6.95	0.00	6.95	939.04	469.52	867.06	434.18		6.61	-0.52	0.020
128.00	-2.04	-0.61	0.00	-6.13	0.00	6.13	932.32	466.16	851.79	426.53		6.71	-0.52	0.017
129.00	-2.00	-0.61	0.00	-5.52	0.00	5.52	925.54	462.77	836.59	418.92		6.82	-0.52	0.015
129.00	-2.00	-0.61	0.00	-5.52	0.00	5.52	925.54	462.77	836.59	418.92		6.82	-0.52	0.015
130.00	-1.96	-0.60	0.00	-4.91	0.00	4.91	918.69	459.34	821.46	411.34		6.93	-0.52	0.014
135.00	-1.76	-0.55	0.00	-1.92	0.00	1.92	883.47	441.73	746.98	374.05		7.49	-0.53	0.007
138.50	-0.02	-0.01	0.00	0.00	0.00	0.00	857.84	428.92	696.10	348.57		7.88	-0.53	0.000
139.00	0.00	-0.01	0.00	0.00	0.00	0.00	854.11	427.06	688.92	344.97		7.93	-0.53	0.000

Wind Loading - Shaft

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 24

Dead Load Factor 1.00

Wind Load Factor 1.00



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		1.00	0.70	6.129	6.74	218.81	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	6.129	6.74	213.82	0.650	0.000	5.00	21.545	14.00	94.4	0.0	854.0
10.00		1.00	0.70	6.129	6.74	208.83	0.650	0.000	5.00	21.048	13.68	92.2	0.0	834.2
15.00		1.00	0.70	6.129	6.74	203.83	0.650	0.000	5.00	20.551	13.36	90.1	0.0	814.4
20.00		1.00	0.70	6.129	6.74	198.84	0.650	0.000	5.00	20.054	13.04	87.9	0.0	794.6
25.00		1.00	0.70	6.129	6.74	193.85	0.650	0.000	5.00	19.557	12.71	85.7	0.0	774.7
30.00		1.00	0.70	6.134	6.75	188.94	0.650	0.000	5.00	19.060	12.39	83.6	0.0	754.9
35.00		1.00	0.73	6.410	7.05	188.05	0.650	0.000	5.00	18.563	12.07	85.1	0.0	735.1
40.00		1.00	0.76	6.659	7.33	186.47	0.650	0.000	5.00	18.066	11.74	86.0	0.0	715.3
45.00		1.00	0.79	6.887	7.58	184.34	0.650	0.000	5.00	17.569	11.42	86.5	0.0	695.4
48.00	Bot - Section 2	1.00	0.80	7.015	7.72	182.84	0.650	0.000	3.00	10.303	6.70	51.7	0.0	407.8
50.00		1.00	0.81	7.098	7.81	181.76	0.650	0.000	2.00	6.875	4.47	34.9	0.0	540.0
53.25	Top - Section 1	1.00	0.83	7.227	7.95	179.88	0.650	0.000	3.25	11.002	7.15	56.8	0.0	863.9
55.00		1.00	0.83	7.294	8.02	181.71	0.650	0.000	1.75	5.837	3.79	30.4	0.0	231.0
60.00		1.00	0.85	7.477	8.22	178.47	0.650	0.000	5.00	16.342	10.62	87.4	0.0	646.5
65.00		1.00	0.87	7.650	8.42	174.95	0.650	0.000	5.00	15.845	10.30	86.7	0.0	626.7
70.00		1.00	0.89	7.814	8.60	171.17	0.650	0.000	5.00	15.348	9.98	85.7	0.0	606.9
75.00		1.00	0.91	7.969	8.77	167.18	0.650	0.000	5.00	14.851	9.65	84.6	0.0	587.0
80.00		1.00	0.93	8.118	8.93	162.98	0.650	0.000	5.00	14.354	9.33	83.3	0.0	567.2
85.00		1.00	0.94	8.260	9.09	158.61	0.650	0.000	5.00	13.857	9.01	81.8	0.0	547.4
90.00		1.00	0.96	8.396	9.24	154.07	0.650	0.000	5.00	13.359	8.68	80.2	0.0	527.6
95.00		1.00	0.97	8.526	9.38	149.37	0.650	0.000	5.00	12.862	8.36	78.4	0.0	507.7
97.75	Bot - Section 3	1.00	0.98	8.596	9.46	146.73	0.650	0.000	2.75	6.862	4.46	42.2	0.0	270.8
100.00		1.00	0.99	8.652	9.52	144.54	0.650	0.000	2.25	5.574	3.62	34.5	0.0	349.7
101.50	Top - Section 2	1.00	0.99	8.689	9.56	143.07	0.650	0.000	1.50	3.660	2.38	22.7	0.0	229.5
105.00		1.00	1.00	8.774	9.65	141.49	0.650	0.000	3.50	8.367	5.44	52.5	0.0	198.9
109.00	Appurtenance(s)	1.00	1.01	8.868	9.75	137.45	0.650	0.000	4.00	9.264	6.02	58.7	0.0	220.2
110.00		1.00	1.02	8.891	9.78	136.42	0.650	0.000	1.00	2.266	1.47	14.4	0.0	53.9
115.00		1.00	1.03	9.005	9.91	131.24	0.650	0.000	5.00	11.033	7.17	71.0	0.0	262.1
119.00	Appurtenance(s)	1.00	1.04	9.093	10.00	127.02	0.650	0.000	4.00	8.468	5.50	55.1	0.0	201.1
120.00		1.00	1.04	9.115	10.03	125.96	0.650	0.000	1.00	2.067	1.34	13.5	0.0	49.1
125.00		1.00	1.05	9.222	10.14	120.57	0.650	0.000	5.00	10.039	6.53	66.2	0.0	238.3
127.00	Appurtenance(s)	1.00	1.06	9.264	10.19	118.39	0.650	0.000	2.00	3.876	2.52	25.7	0.0	92.0
128.00	Appurtenance(s)	1.00	1.06	9.284	10.21	117.30	0.650	0.000	1.00	1.908	1.24	12.7	0.0	45.3
129.00	Top - Section 3	1.00	1.06	9.305	10.24	116.20	0.650	0.000	1.00	1.888	1.23	12.6	0.0	44.8
130.00		1.00	1.07	9.326	10.26	115.09	0.650	0.000	1.00	1.869	1.21	12.5	0.0	44.3
135.00		1.00	1.08	9.427	10.37	109.53	0.650	0.000	5.00	9.045	5.88	61.0	0.0	214.5
138.50	Appurtenance(s)	1.00	1.08	9.496	10.45	105.58	0.650	0.000	3.50	6.035	3.92	41.0	0.0	143.1
139.00		1.00	1.09	9.506	10.46	105.01	0.650	0.000	0.50	0.842	0.55	5.7	0.0	20.0
Totals:									139.00			2,235.3		16,310.0

Discrete Appurtenance Forces

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

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	138.50	Low Profile Platform	1	9.496	10.446	1.00	1.00	30.00	1800.00	0.000	0.000	313.37	0.00	0.00
2	128.00	4460 Radio	3	9.284	10.213	0.50	0.75	4.30	327.00	0.000	0.000	43.88	0.00	0.00
3	128.00	4449 B71 + B85	3	9.284	10.213	0.50	0.75	2.97	219.60	0.000	0.000	30.33	0.00	0.00
4	128.00	APXVAALL24_43-U-NA20	3	9.284	10.213	0.55	0.75	33.24	368.40	0.000	0.000	339.52	0.00	0.00
5	128.00	VV-65A-R1	3	9.284	10.213	0.51	0.75	9.01	96.00	0.000	0.000	92.04	0.00	0.00
6	128.00	AIR6449 B41	3	9.284	10.213	0.53	0.75	9.03	309.00	0.000	0.000	92.18	0.00	0.00
7	127.00	Ericsson - KRY 112 114-1	3	9.264	10.190	0.50	0.75	0.62	33.00	0.000	0.000	6.30	0.00	0.00
8	127.00	Low Profile Platform	1	9.264	10.190	1.00	1.00	33.40	1650.00	0.000	0.000	340.35	0.00	0.00
9	127.00	HRK12 (Handrail Kit)	1	9.264	10.190	1.00	1.00	9.75	261.72	0.000	0.000	99.35	0.00	0.00
10	119.00	Site Pro PRK-1245L	1	9.093	10.002	1.00	1.00	11.50	464.91	0.000	0.000	115.03	0.00	0.00
11	119.00	Raycap -	2	9.093	10.002	0.75	0.75	1.38	63.60	0.000	0.000	13.80	0.00	0.00
12	119.00	Ericsson - RRUS-32 B2 -	3	9.093	10.002	0.50	0.75	4.13	159.00	0.000	0.000	41.32	0.00	0.00
13	119.00	Ericsson - RRUS-11 -	3	9.093	10.002	0.50	0.75	3.80	153.00	0.000	0.000	38.00	0.00	0.00
14	119.00	Ericsson - RRUS 32 B30 -	3	9.093	10.002	0.50	0.75	4.13	180.00	0.000	0.000	41.32	0.00	0.00
15	119.00	Quintel - QS66512-2	3	9.093	10.002	0.69	0.75	16.79	333.00	0.000	0.000	167.96	0.00	0.00
16	119.00	Platform w/ Handrail	1	9.093	10.002	1.00	1.00	40.20	1800.00	0.000	0.000	402.09	0.00	0.00
17	119.00	Powerwave - 7770	6	9.093	10.002	0.57	0.75	18.96	210.00	0.000	0.000	189.63	0.00	0.00
18	119.00	Kaelus -	6	9.093	10.002	0.50	0.75	1.30	152.40	0.000	0.000	12.97	0.00	0.00
19	119.00	Cci - HPA-65R-BUU-H6	3	9.093	10.002	0.63	0.75	18.13	153.00	0.000	0.000	181.31	0.00	0.00
20	119.00	Powerwave - LGP21401 -	9	9.093	10.002	0.38	0.75	4.35	126.90	0.000	0.000	43.55	0.00	0.00
21	119.00	Powerwave -	3	9.093	10.002	0.50	0.75	0.96	48.00	0.000	0.000	9.65	0.00	0.00
22	109.00	MC-PK8-DSH	1	8.868	9.755	1.00	1.00	37.59	1727.00	0.000	0.000	366.68	0.00	0.00
23	109.00	RDIDC-9181-OF-48	1	8.868	9.755	1.00	1.00	2.01	21.90	0.000	0.000	19.61	0.00	0.00
24	109.00	TA08025-B605	3	8.868	9.755	0.50	0.75	2.95	225.00	0.000	0.000	28.82	0.00	0.00
25	109.00	TA08025-B604	3	8.868	9.755	0.50	0.75	2.95	191.70	0.000	0.000	28.82	0.00	0.00
26	109.00	Commscope	3	8.868	9.755	0.56	0.75	20.33	212.40	0.000	0.000	198.35	0.00	0.00
Totals:								11,286.53				3,256.22		

Total Applied Force Summary

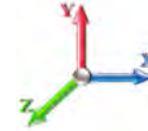
Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

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
5.00		94.41	984.72	0.00	0.00
10.00		92.23	964.89	0.00	0.00
15.00		90.05	945.07	0.00	0.00
20.00		87.88	925.24	0.00	0.00
25.00		85.70	905.42	0.00	0.00
30.00		83.59	885.59	0.00	0.00
35.00		85.08	865.77	0.00	0.00
40.00		86.02	845.94	0.00	0.00
45.00		86.51	826.12	0.00	0.00
48.00		51.68	486.15	0.00	0.00
50.00		34.89	592.23	0.00	0.00
53.25		56.85	948.84	0.00	0.00
55.00		30.44	276.70	0.00	0.00
60.00		87.37	777.19	0.00	0.00
65.00		86.67	757.36	0.00	0.00
70.00		85.75	737.54	0.00	0.00
75.00		84.62	717.71	0.00	0.00
80.00		83.31	697.89	0.00	0.00
85.00		81.83	678.06	0.00	0.00
90.00		80.19	658.24	0.00	0.00
95.00		78.41	638.41	0.00	0.00
97.75		42.18	342.68	0.00	0.00
100.00		34.48	408.45	0.00	0.00
101.50		22.74	268.73	0.00	0.00
105.00		52.49	290.36	0.00	0.00
109.00	(11) attachments	701.02	2702.71	0.00	0.00
110.00		14.41	78.00	0.00	0.00
115.00		71.03	382.84	0.00	0.00
119.00	(43) attachments	1311.68	4141.52	0.00	0.00
120.00		13.47	58.59	0.00	0.00
125.00		66.19	285.80	0.00	0.00
127.00	(5) attachments	471.67	2055.71	0.00	0.00
128.00	(15) attachments	610.61	1374.78	0.00	0.00
129.00		12.56	45.09	0.00	0.00
130.00		12.46	44.61	0.00	0.00
135.00		60.96	215.91	0.00	0.00
138.50	(1) attachments	354.35	1943.92	0.00	0.00
139.00		5.72	19.97	0.00	0.00
Totals:		5,491.50	30,774.74	0.00	0.00

Calculated Forces

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind **Iterations** 24

Dead Load Factor 1.00

Wind Load 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	-30.77	-5.50	0.00	-569.76	0.00	569.76	3147.71	1573.86	6633.45	3321.65	0.00	0.000	0.000	0.181
5.00	-29.78	-5.43	0.00	-542.24	0.00	542.24	3110.30	1555.15	6403.28	3206.40	0.03	-0.047	0.000	0.179
10.00	-28.81	-5.36	0.00	-515.07	0.00	515.07	3071.25	1535.62	6173.46	3091.32	0.10	-0.095	0.000	0.176
15.00	-27.86	-5.30	0.00	-488.25	0.00	488.25	3030.56	1515.28	5944.24	2976.54	0.23	-0.144	0.000	0.173
20.00	-26.93	-5.23	0.00	-461.77	0.00	461.77	2988.24	1494.12	5715.85	2862.17	0.40	-0.194	0.000	0.170
25.00	-26.03	-5.16	0.00	-435.62	0.00	435.62	2944.28	1472.14	5488.53	2748.34	0.63	-0.244	0.000	0.167
30.00	-25.14	-5.10	0.00	-409.81	0.00	409.81	2898.69	1449.34	5262.51	2635.17	0.92	-0.296	0.000	0.164
35.00	-24.27	-5.03	0.00	-384.31	0.00	384.31	2851.46	1425.73	5038.05	2522.77	1.25	-0.348	0.000	0.161
40.00	-23.42	-4.96	0.00	-359.16	0.00	359.16	2802.60	1401.30	4815.37	2411.26	1.65	-0.401	0.000	0.157
45.00	-22.59	-4.89	0.00	-334.35	0.00	334.35	2752.10	1376.05	4594.71	2300.77	2.10	-0.455	0.000	0.154
48.00	-22.10	-4.84	0.00	-319.70	0.00	319.70	2721.01	1360.51	4463.39	2235.01	2.39	-0.488	0.000	0.151
50.00	-21.50	-4.81	0.00	-310.02	0.00	310.02	2699.97	1349.98	4376.32	2191.41	2.60	-0.511	0.000	0.149
53.25	-20.55	-4.76	0.00	-294.38	0.00	294.38	2693.71	1346.85	4350.71	2178.59	2.96	-0.547	0.000	0.143
55.00	-20.27	-4.74	0.00	-286.05	0.00	286.05	2675.00	1337.50	4274.96	2140.66	3.17	-0.567	0.000	0.141
60.00	-19.49	-4.66	0.00	-262.37	0.00	262.37	2620.47	1310.24	4060.32	2033.18	3.79	-0.620	0.000	0.136
65.00	-18.73	-4.58	0.00	-239.08	0.00	239.08	2564.30	1282.15	3848.53	1927.13	4.47	-0.673	0.000	0.131
70.00	-17.99	-4.50	0.00	-216.18	0.00	216.18	2506.50	1253.25	3639.84	1822.63	5.20	-0.726	0.000	0.126
75.00	-17.27	-4.42	0.00	-193.67	0.00	193.67	2447.06	1223.53	3434.48	1719.79	5.99	-0.779	0.000	0.120
80.00	-16.57	-4.35	0.00	-171.54	0.00	171.54	2385.98	1192.99	3232.68	1618.74	6.84	-0.830	0.000	0.113
85.00	-15.89	-4.27	0.00	-149.82	0.00	149.82	2323.27	1161.64	3034.69	1519.60	7.73	-0.881	0.000	0.105
90.00	-15.23	-4.19	0.00	-128.48	0.00	128.48	2258.93	1129.46	2840.75	1422.49	8.68	-0.930	0.000	0.097
95.00	-14.59	-4.11	0.00	-107.53	0.00	107.53	2173.88	1086.94	2628.05	1315.98	9.68	-0.976	0.000	0.088
97.75	-14.25	-4.07	0.00	-96.22	0.00	96.22	2126.27	1063.14	2513.60	1258.67	10.25	-1.001	0.000	0.083
100.00	-13.84	-4.03	0.00	-87.07	0.00	87.07	2087.31	1043.66	2421.85	1212.73	10.73	-1.021	0.000	0.078
101.50	-13.57	-4.01	0.00	-81.03	0.00	81.03	1088.23	544.12	1274.83	638.36	11.05	-1.033	0.000	0.139
105.00	-13.28	-3.96	0.00	-67.00	0.00	67.00	1070.27	535.14	1217.34	609.58	11.82	-1.060	0.000	0.122
109.00	-10.59	-3.21	0.00	-51.18	0.00	51.18	1048.77	524.38	1152.06	576.89	12.73	-1.102	0.000	0.099
110.00	-10.51	-3.20	0.00	-47.97	0.00	47.97	1043.23	521.61	1135.83	568.76	12.96	-1.112	0.000	0.094
115.00	-10.12	-3.13	0.00	-31.97	0.00	31.97	1014.55	507.27	1055.24	528.40	14.15	-1.153	0.000	0.071
119.00	-6.01	-1.73	0.00	-19.47	0.00	19.47	990.42	495.21	991.60	496.54	15.12	-1.177	0.000	0.045
120.00	-5.95	-1.72	0.00	-17.74	0.00	17.74	984.23	492.11	975.83	488.64	15.37	-1.182	0.000	0.042
125.00	-5.67	-1.65	0.00	-9.14	0.00	9.14	952.28	476.14	897.82	449.58	16.62	-1.200	0.000	0.026
127.00	-3.62	-1.13	0.00	-5.85	0.00	5.85	939.04	469.52	867.06	434.18	17.12	-1.205	0.000	0.017
128.00	-2.26	-0.49	0.00	-4.72	0.00	4.72	932.32	466.16	851.79	426.53	17.38	-1.206	0.000	0.013
129.00	-2.21	-0.48	0.00	-4.22	0.00	4.22	925.54	462.77	836.59	418.92	17.63	-1.208	0.000	0.012
129.00	-2.21	-0.48	0.00	-4.22	0.00	4.22	925.54	462.77	836.59	418.92	17.63	-1.208	0.000	0.012
130.00	-2.17	-0.47	0.00	-3.74	0.00	3.74	918.69	459.34	821.46	411.34	17.88	-1.209	0.000	0.011
135.00	-1.96	-0.40	0.00	-1.41	0.00	1.41	883.47	441.73	746.98	374.05	19.15	-1.214	0.000	0.006
138.50	-0.02	-0.01	0.00	0.00	0.00	0.00	857.84	428.92	696.10	348.57	20.04	-1.215	0.000	0.000
139.00	0.00	-0.01	0.00	0.00	0.00	0.00	854.11	427.06	688.92	344.97	20.17	-1.215	0.000	0.000

Final Analysis Summary

Structure: CT13060-A-SBA	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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	21.2	0.00	36.90	0.00	0.00	2207.01
0.9D + 1.6W 93 mph Wind	21.2	0.00	27.66	0.00	0.00	2178.95
1.2D + 1.0Di + 1.0Wi 50 mph Wind	6.7	0.00	59.53	0.00	0.00	706.19
1.2D + 1.0E	1.8	0.00	36.93	0.00	0.00	203.41
0.9D + 1.0E	1.8	0.00	27.70	0.00	0.00	200.62
1.0D + 1.0W 60 mph Wind	5.5	0.00	30.77	0.00	0.00	569.76

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	-36.90	-21.17	0.00	-2207.0	0.00	-2207.0	3147.71	1573.8	6633.45	3321.65	0.00	0.676
0.9D + 1.6W 93 mph Wind	-27.66	-21.15	0.00	-2178.9	0.00	-2178.9	3147.71	1573.8	6633.45	3321.65	0.00	0.665
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-59.53	-6.70	0.00	-706.19	0.00	-706.19	3147.71	1573.8	6633.45	3321.65	0.00	0.232
1.2D + 1.0E	-16.36	-1.49	0.00	-42.20	0.00	-42.20	1088.23	544.12	1274.83	638.36	101.50	0.081
0.9D + 1.0E	-12.27	-1.46	0.00	-41.48	0.00	-41.48	1088.23	544.12	1274.83	638.36	101.50	0.076
1.0D + 1.0W 60 mph Wind	-30.77	-5.50	0.00	-569.76	0.00	-569.76	3147.71	1573.8	6633.45	3321.65	0.00	0.181

Base Plate Summary

Structure: CT13060-A-SB	Code: EIA/TIA-222-G	1/14/2022
Site Name: Newtown 2	Exposure: B	
Height: 139.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Reactions	Base Plate	Anchor Bolts
Original Design	Yield (ksi): 60.00	Bolt Circle: 58.00
Moment (kip-ft): 1882.00	Width (in): 56.00	Number Bolts: 12.00
Axial (kip): 32.90	Style: Clipped	Bolt Type: 2.25" 18J
Shear (kip): 17.20	Polygon Sides: 4.00	Bolt Diameter (in): 2.25
Analysis (1.2D + 1.6W)	Clip Length (in): 10.00	Yield (ksi): 75.00
Moment (kip-ft): 2207.01	Effective Len (in): 10.31	Ultimate (ksi): 100.00
Axial (kip): 36.90	Moment (kip-in): 510.01	Arrangement: Clustered
Shear (kip): 21.17	Allow Stress (ksi): 81.00	Cluster Dist (in): 6.00
	Applied Stress (ksi): 38.88	Start Angle (deg): 45.00
	Stress Ratio: 0.48	Compression
		Force (kip): 157.17
		Allowable (kip): 260.00
		Ratio: 0.62
		Tension
		Force (kip): 147.25
		Allowable (kip): 260.00
		Ratio: 0.58



Monopole Mat Foundation Design

Date

1/14/2022

Customer Name:	T-Mobile	TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	139
Site Number:	CT13060-A-SBA	Engineer Name:	M. Franco
Engr. Number:	121996	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations

Structure Type:

Monopole

Analysis or Design?

Analysis

Base Reactions (Factored):

Axial Load (Kips):	36.9	Shear Force (Kips):	21.2
Uplift Force (Kips):	0.0	Moment (Kips-ft):	2207.0

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	7.0	Depth of Base BG (ft.):	5.5
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft):	2.00
Length of Pad (ft.):	23	Width of Pad (ft.):	23

Final Length of pad (ft)	23.0	Final width of pad (ft):	23.0
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Material Properties and Rebar 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:	36	Tie Spacing (in):	12.0	
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):	36	Qty. of Rebar in Pad (W):	36
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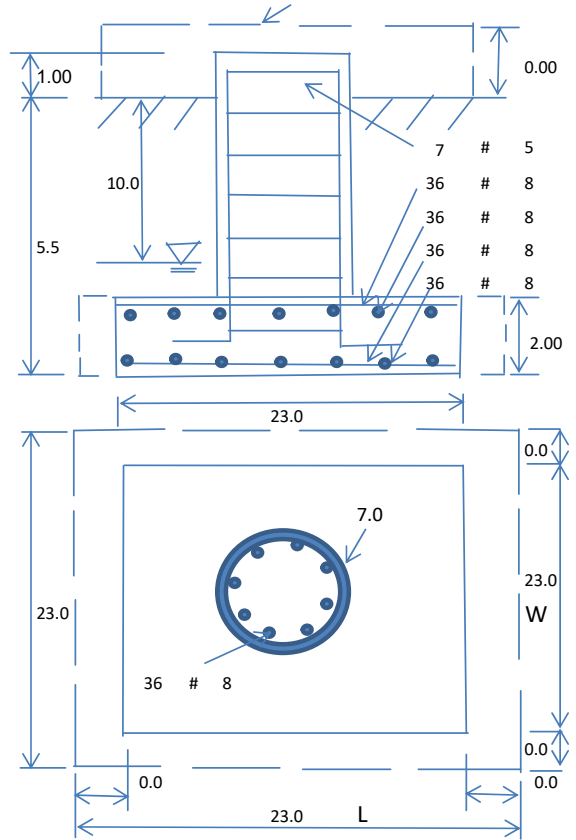
Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	36	Qty. of Rebar in Pad (W):	36
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Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

Soil Unit Weight (pcf):	110.0	Soil Buoyant Weight:	50.0	Pcf		
Water Table B.G.S. (ft):	10.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	12000	Ultimate Skin Friction:		Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	Yes		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	No	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.):	1716.80	Total Dry Soil Weight (Kips):	188.85
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	188.85	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	1231.18	Total Dry Concrete Weight (Kips):	184.68
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	184.68	Total Vertical Load on Base (Kips):	410.43

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	2150	< Allowable Factored Soil Bearing (psf):	9000	0.24	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	4290.3	> Design Factored Momont (kips-ft):	2345	0.55	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.83				OK!

Load/
Capacity
Ratio

Check the capacities of Reinforcing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75		
Strength reduction factor (Axial compression):	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):	4845.7	> Design Factored Moment (Mu, Kips-F	2302.4	0.48	OK!
Calculated Shear Capacity (Kips):	734.1	> Design Factored Shear (Kips):	21.2	0.03	OK!
Calculated Tension Capacity (Tn, Kips):	1535.8	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	9747.6	> Design Factored Axial Load (Pu Kips):	36.9	0.00	OK!
Moment & Axial Strength Combination:	0.48	OK! Check Tie Spacing (Design/Required):		1	OK!
Pier Reinforcement Ratio:	0.005	Reinforcement Ratio is satisfied per ACI			
(2).Concrete Pad:					
One-Way Design Shear Capacity (L-Direction, Kips):	536.8	> One-Way Factored Shear (L-D. Kips):	167.7	0.31	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	536.8	> One-Way Factored Shear (W-D., Kips)	167.7	0.31	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	516.0	> One-Way Factored Shear (C-C, Kips):	166.9	0.32	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0050	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0050		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	2507.2	> Moment at Bottom (L-Dir. K-Ft):	768.7	0.31	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	2507.2	> Moment at Bottom (W-Dir. K-Ft):	768.7	0.31	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	3500.6	> Moment at Bottom (C-C Dir. K-Ft):	1087.1	0.31	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0050	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0050		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	2507.2	> Moment at the top (L-Dir K-Ft):	330.6	0.13	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	2507.2	> Moment at the top (W-Dir K-Ft):	330.6	0.13	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	3500.6	> Moment at the top (C-C Dir. K-Ft):	311.4	0.09	OK!
(3).Check Punching Shear Capacity due to Moment in the Pier:					
Moment transferred by punching shear:	882.8	k-ft. Max. factored shear stress $v_{u,CD}$:		1.5	Psi
Max. factored shear stress $v_{u,AB}$:	10.6	Psi Factored shear Strength ϕv_n :		189.7	Psi
Max. factored shear stress v_u :	10.6	Psi Check Usage of Punching Shear Capacity:		0.06	OK!

EXHIBIT 8

Mount Analysis



Tower Engineering Solutions

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

Antenna Mount Analysis Report

Existing Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT13060-A-SBA

Customer Site Name: Newtown 2

Carrier Name: T-Mobile (App#: 183532, V1)

Carrier Site ID / Name: CT11259F / Newtown

Site Location: 3 Edmund Road

Newtown, Connecticut

Fairfield County

Latitude: 41.420899

Longitude: -73.298102

Exp. 01/31/2022



01/05/2022

Analysis Result:

Max Structural Usage: 51.20% [Pass]

Report Prepared By: Sarath Basamsetti

Introduction

The purpose of this report is to summarize the analysis results on the (1) Platform w/handrail at 128.00' 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	Mount mapping by Full Metal Services dated 04/25/2019.
Antenna Loading	SBA, Application #: 183532, v1 dated: 1/4/2022
Existing Modifications	TES Project: 81228, dated: 07/25/2019

Analysis Criteria

Basic Wind Speed Used in the Analysis: $V_{ULT} = 125$ mph (3-Sec. Gust) / Equivalent to
 $V_{ASD} = 97$ mph (3-Sec. Gust)

Basic Wind Speed with Ice: 50 mph (3-Sec. Gust) with 0.75" radial ice concurrent

Operational Wind Speed: 60 mph +0" Radial ice

Standard/Codes: ANSI/TIA/EIA 222-G

Exposure Category: B

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) Platform w/handrail at 128.00' elevation.

Final Antenna Configuration

3	RFS APXVAALL24_43-U-NA20
3	Commscope VV-65A-R1
3	Ericsson AIR6449 B41
3	Ericsson KRY 112 144/1
3	Ericsson 4449 B71+B12
3	Ericsson 4460 B25 + B66

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 51.20%, 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. Mount Mapping Information
4. 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: CT13060-A-SBA - Newtown 2

Sector: **A**

1/5/2022

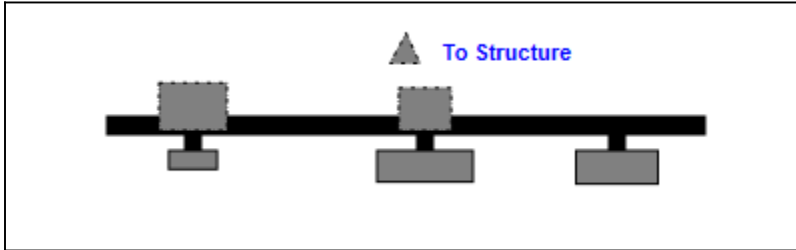
Structure Type: Monopole

Mount Elev: 128.00

Page: 1

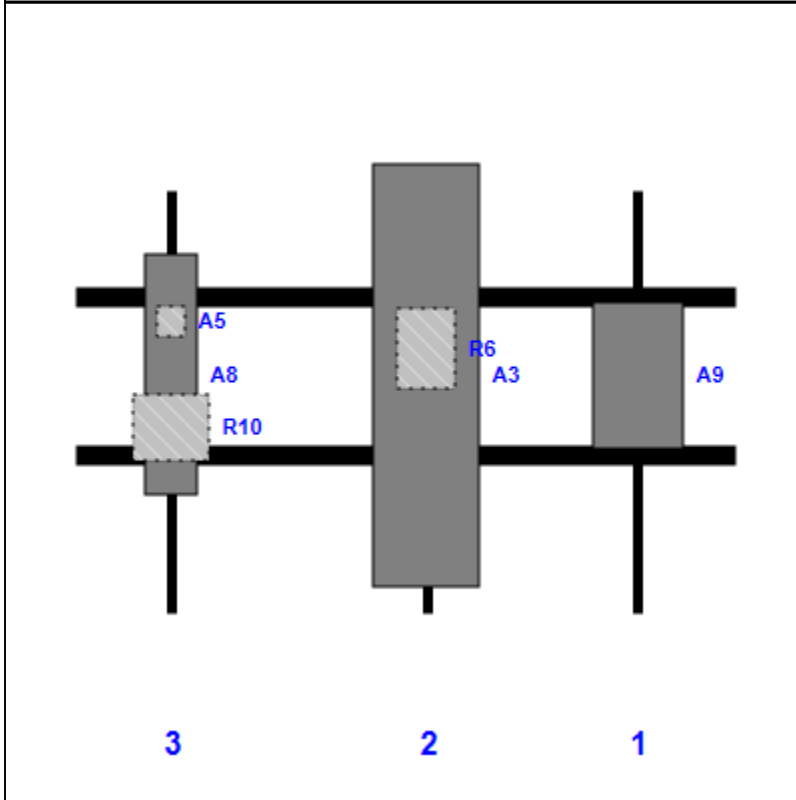


Plan View



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
A9	AIR6449 B41	33.10	20.50	128.00	1	a	Front	42.00			
A3	APXVAALL24_43-U-NA20	95.90	24.00	80.00	2	a	Front	42.00			
R6	Radio 4449 B71+B12	17.90	13.10	80.00	2	a	Behind	36.00			
A8	VV-65A-R1	54.72	12.08	22.00	3	a	Front	42.00			
A5	KRY 112 144/1	6.90	6.10	22.00	3	a	Behind	30.00			
R10	4460 B25 + B66	15.10	17.00	22.00	3	a	Behind	54.00			

Structure: CT13060-A-SBA - Newtown 2

Sector: **B**

1/5/2022

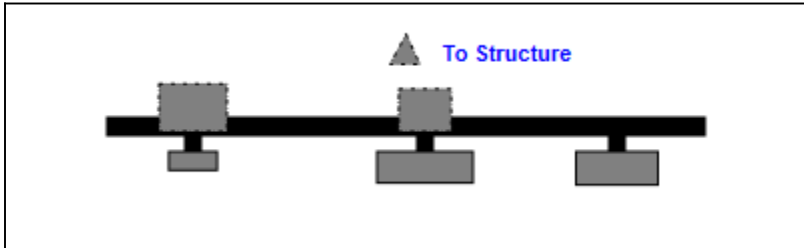
Structure Type: Monopole

Mount Elev: 128.00

Page: 2

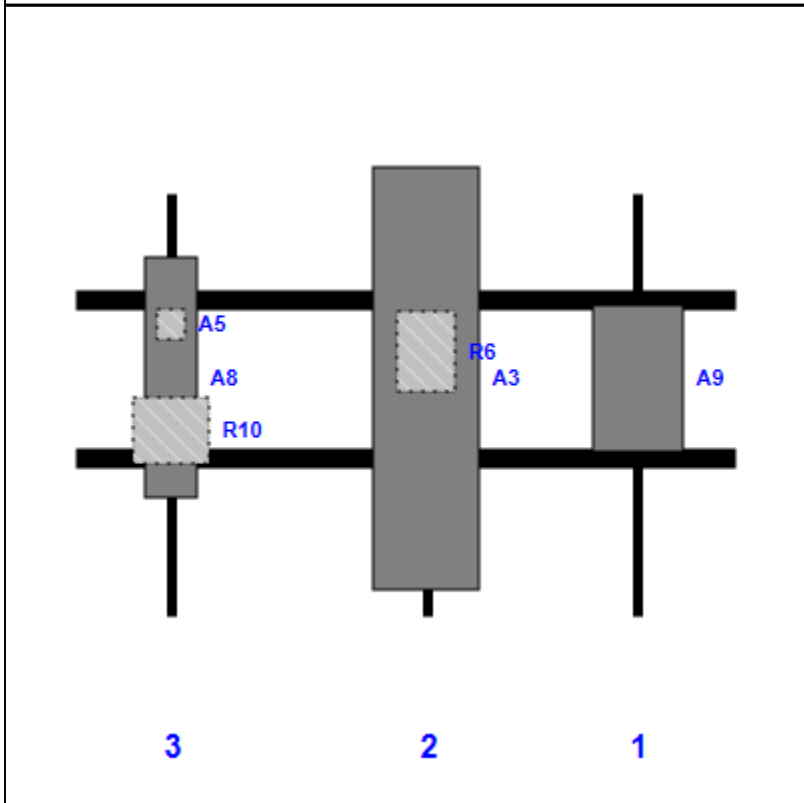


Plan View



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
A9	AIR6449 B41	33.10	20.50	128.00	1	a	Front	42.00			
A3	APXVAALL24_43-U-NA20	95.90	24.00	80.00	2	a	Front	42.00			
R6	Radio 4449 B71+B12	17.90	13.10	80.00	2	a	Behind	36.00			
A8	VV-65A-R1	54.72	12.08	22.00	3	a	Front	42.00			
A5	KRY 112 144/1	6.90	6.10	22.00	3	a	Behind	30.00			
R10	4460 B25 + B66	15.10	17.00	22.00	3	a	Behind	54.00			

Structure: CT13060-A-SBA - Newtown 2

Sector: **C**

1/5/2022

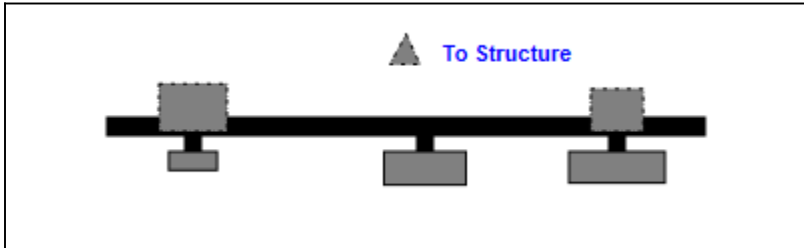
Structure Type: Monopole

Mount Elev: 128.00

Page: 3

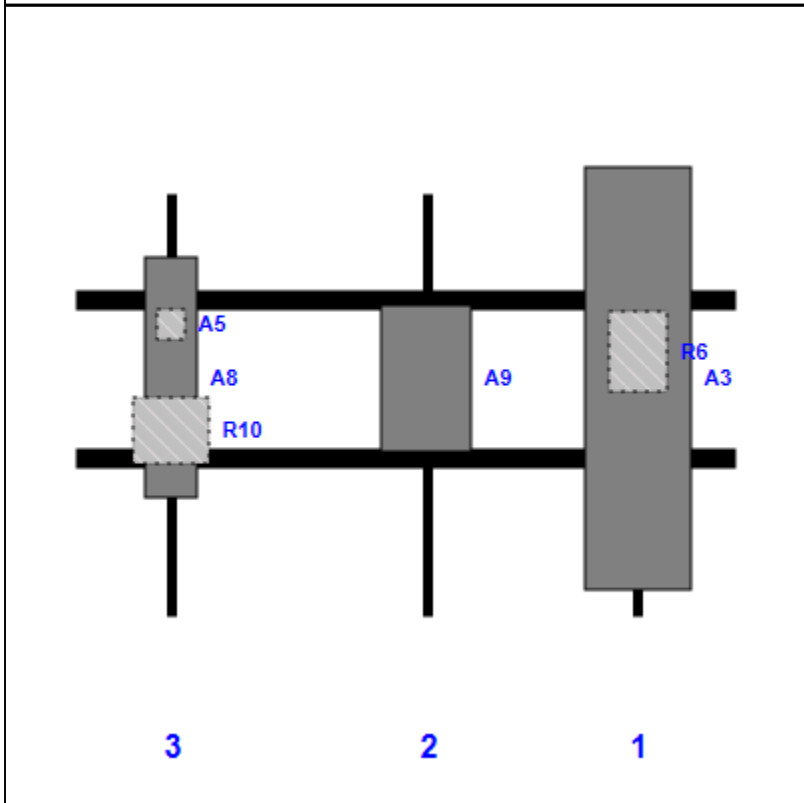


Plan View



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
A3	APXVAALL24_43-U-NA20	95.90	24.00	128.00	1	a	Front	42.00			
R6	Radio 4449 B71+B12	17.90	13.10	128.00	1	a	Behind	36.00			
A9	AIR6449 B41	33.10	20.50	80.00	2	a	Front	42.00			
A8	VV-65A-R1	54.72	12.08	22.00	3	a	Front	42.00			
A5	KRY 112 144/1	6.90	6.10	22.00	3	a	Behind	30.00			
R10	4460 B25 + B66	15.10	17.00	22.00	3	a	Behind	54.00			

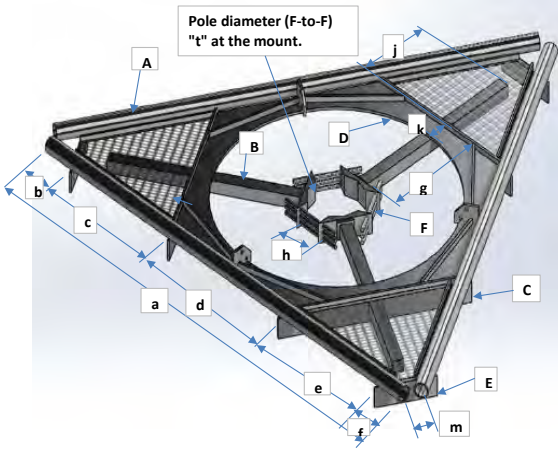


Antenna Mount Type "MT-D" Mapping Form (PATENT PENDING)

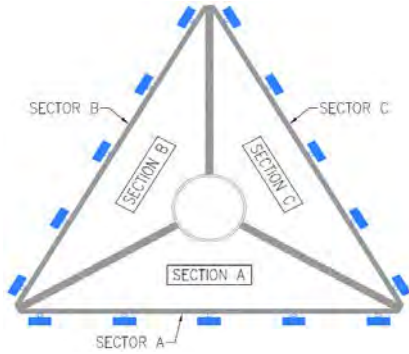
FCC #
1250706

Tower Owner:	SBA Communications	Mapping Date:	4/25/19
Site Name:	Newtown 2	Structure Type:	Monopole
Site Number or ID:	CT13060-A-SBA	Structure Height (Ft.):	140
Mapping Contractor:	Full Metal Tower Services	Mount Height (Ft.):	128.6

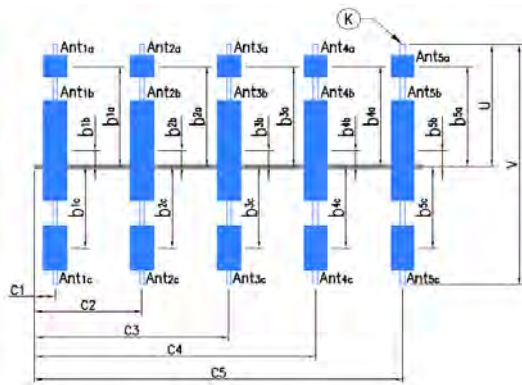
This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.



Geometries (Unit: inches)									
a	150	e	35	j	12	o	N/A	s	N/A
b	15	f	15	k	6	p	N/A	t	19
c	35	g	32	m	10	q	N/A	u*	48
d	50	h	24	n	N/A	r	N/A	v*	72
Members/Bolts (Unit: inches) * - See Ant. Layout for "u", "v" and member "K" (pipe)									
Items	Member	Lx (O.D.)	Ly (I.D.)	T	Items	Member	Lx (O.D.)	Ly (I.D.)	T
A	3.5 OD x 0.216 Pipe	3.5	3.068	0.216	F	3/4" Bolt			24
B	Tubing 4x4x1/4	4	4	0.25	G				
C	3/8" Thick. Plate	0	0	0.375	H				
D	1/4" Thick. Plate	0	0	0.25	J				
E	3/8" Thick. Plate	0	0	0.375	K* (pipe)	2.375 OD x 0.154 Pipe	2.375	2.067	0.154
Distance from top of main platform member to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.)									
Distance from top of main platform member to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.)									
Please enter the infomation below if members can't be found from the drop down lists									



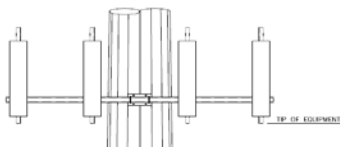
Climbing ladder is Located at Section A, at 0° Degree Azimuth



Antenna Layout

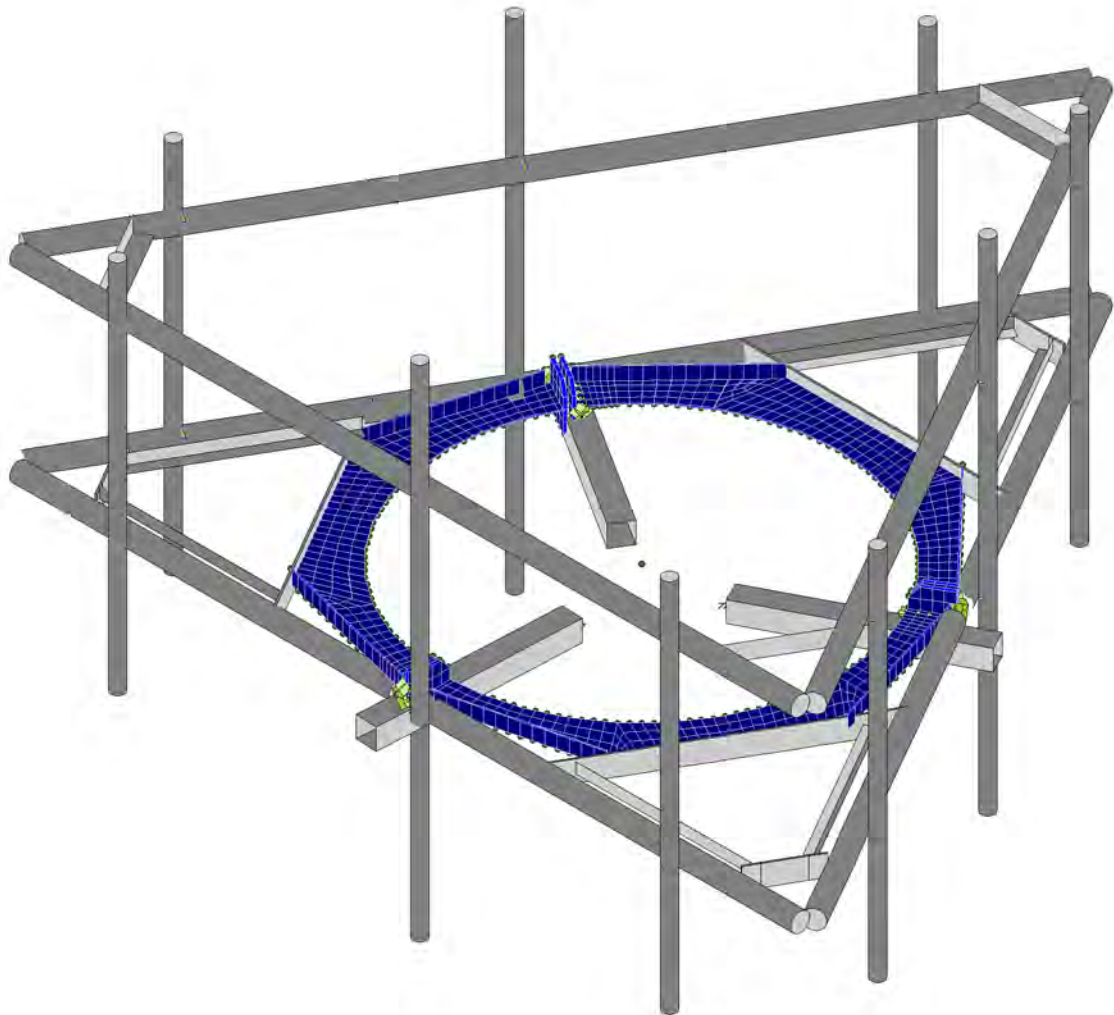
Azimuth (Degree) of Each Sector and Climbing Information

Sector A:	340°		Deg	
Sector B:	110°	↗	Deg	
Sector C:	230°		Deg	
Climbing	0°		Deg	Located at Section A
Climbing Facility	Corrosion Type:	Minor corrosion observed		
	Access:	Climbing path was unobstructed.		
	Condition:	N/A		

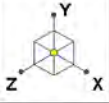


Ants. Items	Enter antenna model. If not labled, enter "Unknown". If no antenna at specified location, enter "N/A". If antennas and the locations are the same on all three sectors, only enter one sector.					Mounting Locations (Unit: inches)			Photos of antennas Photo Numbers
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ..." (In.)	Horiz. offset (Use "-" if Ant. is inside)	Horiz. offset "C ₁ , C ₂ , C ₃ , C ₄ , C ₅ " (in.)	
Sector A									
Ant _{1a}									
Ant _{1b}	Antenna A	12	8	56	1/2" (1)	+10"	7.5	22	
Ant _{1c}									
Ant _{2a}									
Ant _{2b}	Antenna B	13	9	57	1/2" (2)	+11"	8	128	
Ant _{2c}	TMA A	7	3.5	12	1/2" (2)	+12"	N/A	128	
Ant _{3a}									
Ant _{3b}									
Ant _{3c}									
Ant _{4a}									
Ant _{4b}									
Ant _{4c}									
Ant _{5a}									
Ant _{5b}									
Ant _{5c}									
Are Ant same as sector A?		Yes		Antennas on Sector B are the same as Sector A					

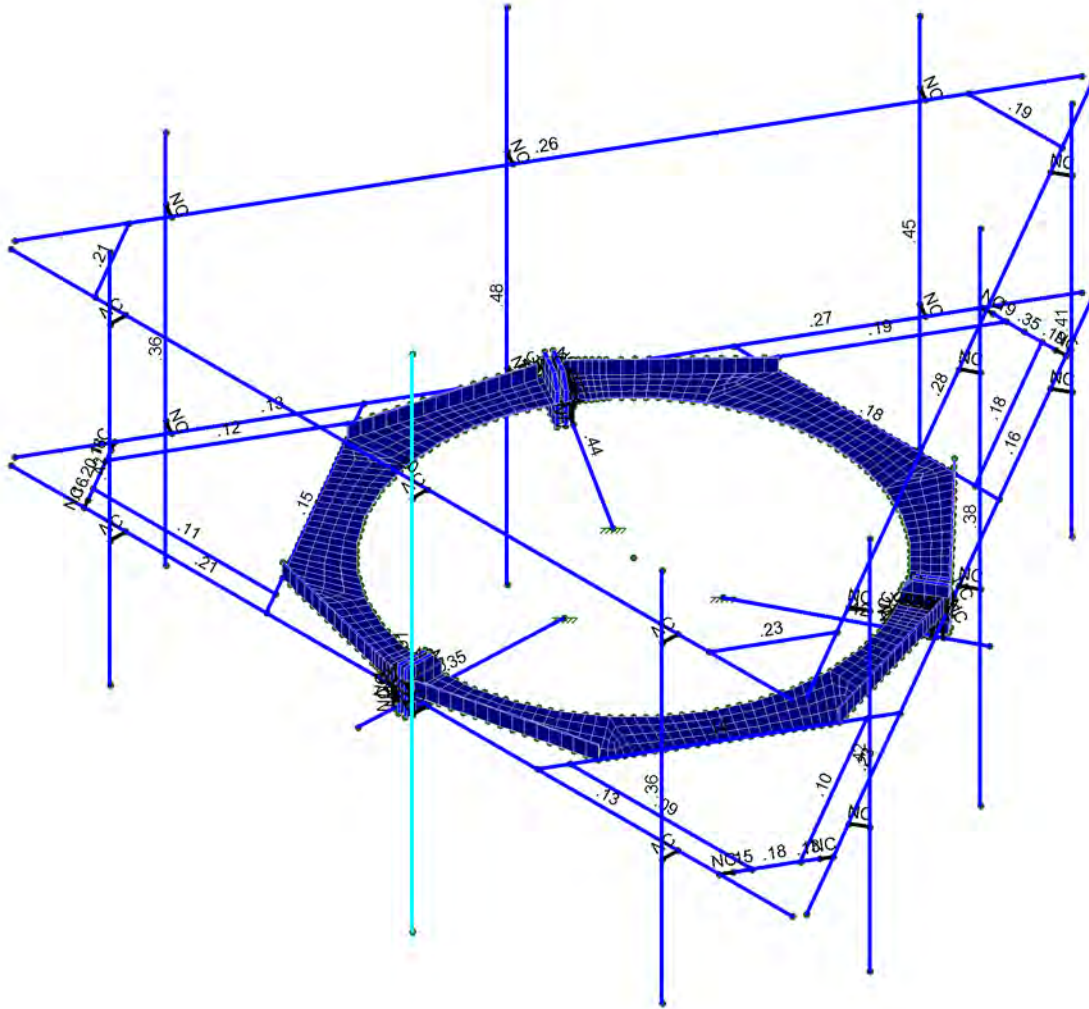
Are Ant same as sector A/B?		No	Sector C						
Ant _{1a}									
Ant _{1b}	Antenna B	13	9	57	1/2" (2)	+11"	8	70	
Ant _{1c}	TMA A	7	3.5	12	1/2" (2)	+12"	N/A	70	
Ant _{2a}									
Ant _{2b}	Antenna A	12	8	56	1/2" (1)	+10"	7.5	128	



Tower Engineering Solutio...	CT13060-A-SBA_MT_LO_Loads Only_G	SK - 1
TES Project No. 121399		Jan 5, 2022 at 6:12 PM
		CT13060-A-SBA_121399_G_RISA_...



Code Check (Env)	
Black	No Calc
Red	> 1.0
Magenta	.90-1.0
Green	.75- .90
Cyan	.50- .75
Blue	0- .50



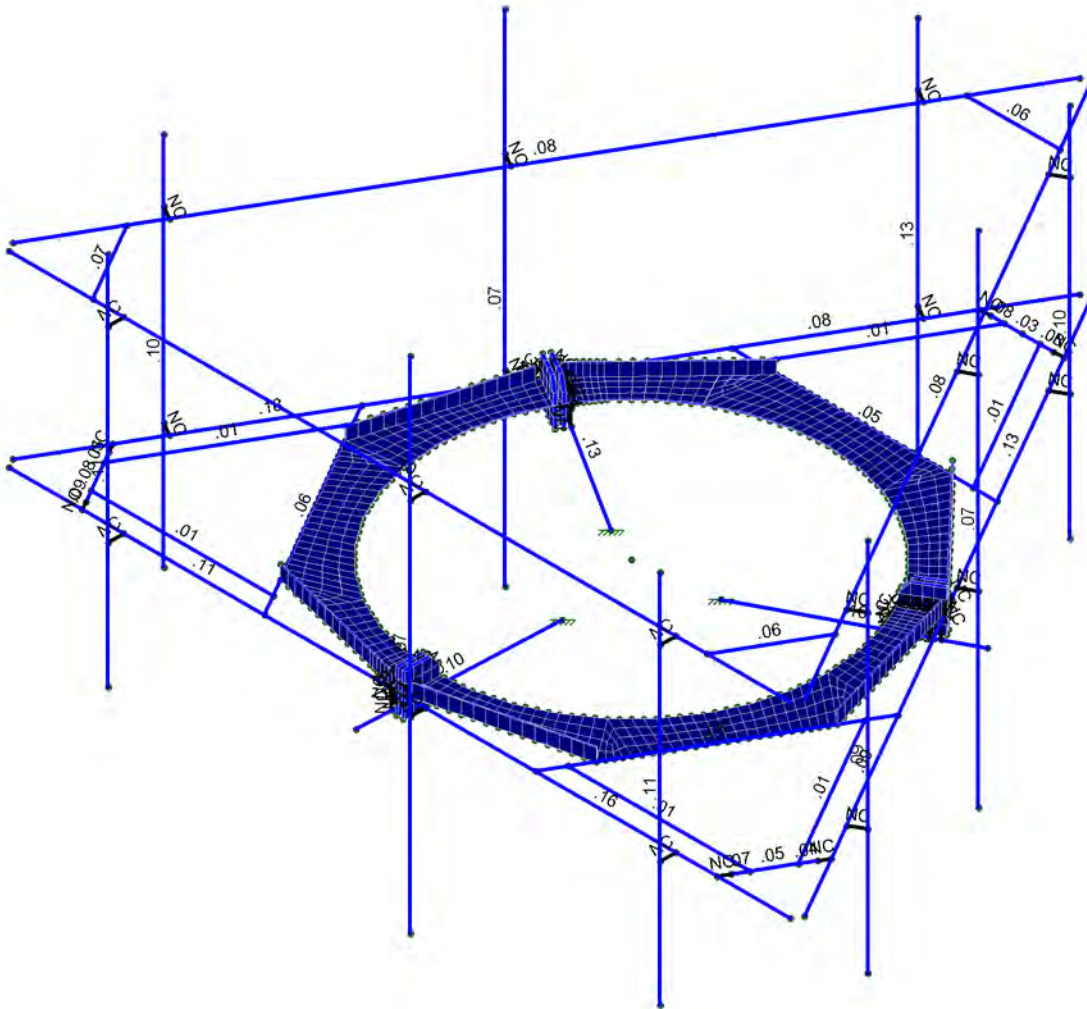
Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

Tower Engineering Solutio...	CT13060-A-SBA_MT_LO_Loads Only_G	SK - 2
		Jan 5, 2022 at 6:13 PM
TES Project No. 121399		CT13060-A-SBA_121399_G_RISA_...



Shear Check
(Env)

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



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

Tower Engineering Solutio...

CT13060-A-SBA_MT_LO_Loads Only_G

SK - 3

Jan 5, 2022 at 6:13 PM

TES Project No. 121399

CT13060-A-SBA_121399_G_RISA_...



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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6 UjW@ UX'7 UjYg

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					27		
2	Antenna Di	None					27		
3	Antenna W Front	None					27		
4	Antenna Wi Front	None					27		
5	Antenna W Side	None					27		
6	Antenna Wi Side	None					27		
7	Service Lm1	None					1		
8	Service Lm2	None					1		
9	Structure D	None		-1				3	
10	Structure Di	None						42	3
11	Structure W Front	None						42	
12	Structure Wi Front	None						42	
13	Structure W Side	None						42	
14	Structure Wi Side	None						42	
15	BLC 9 Transient Area..	None						36	
16	BLC 10 Transient Are..	None						36	

@ UX'7 ca VjbUjcbg

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.2D+1.6W (Fr...	Yes	Y	1	1.2	9	1.2	3	1.6	11	1.6									
2	1.2D+1.6W (Ba...	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 (Ri...	Yes	Y	1	1.2	9	1.2	5	-1.6	13	-1.6									
5	1.2D+1.0Di+1.0...	Yes	Y	1	1.2	9	1.2	2	1	10	1	4	1	12	1					
6	1.2D+1.0Di+1.0...	Yes	Y	1	1.2	9	1.2	2	1	10	1	4	-1	12	-1					
7	1.2D+1.0Di+1.0...	Yes	Y	1	1.2	9	1.2	2	1	10	1	6	1	14	1					
8	1.2D+1.0Di+1.0...	Yes	Y	1	1.2	9	1.2	2	1	10	1	6	-1	14	-1					
9	1.2D+1.5L1+.16...	Yes	Y	1	1.2	9	1.2	7	1.5	3	.16	11	.16							
10	1.2D+1.5L2+.16...	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													

>cjbh7 ccfXjbUjYg UbX'HYa dYfUi fYg

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-6.25	0	3.704857	0	
2	N2	6.25	0	3.704857	0	
3	N3	0	0	0	0	
4	N4	-5.083	0	3.704857	0	
5	N5	-2.167	0	3.704857	0	
6	N6	2.167	0	3.704857	0	
7	N7	5.083	0	3.704857	0	
8	N8	6.3335	0	3.56023	0	
9	N9	0.0835	0	-7.265087	0	
10	N10	5.75	0	2.549579	0	
11	N11	4.292	0	0.024249	0	
12	N12	2.125	0	-3.729106	0	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
13	N13	0.667	0	-6.254436	0	
14	N14	-0.0835	0	-7.265087	0	
15	N15	-6.3335	0	3.56023	0	
16	N16	-0.667	0	-6.254436	0	
17	N17	-2.125	0	-3.729106	0	
18	N18	-4.292	0	0.024249	0	
19	N19	-5.75	0	2.549579	0	
20	N20	-5.275258	0	3.371857	0	
21	N21	-2.359258	0	3.371857	0	
22	N22	5.275258	0	3.371857	0	
23	N23	2.359258	0	3.371857	0	
24	N24	5.557743	0	2.882579	0	
25	N25	4.099743	0	0.357249	0	
26	N26	0.282485	0	-6.254436	0	
27	N27	1.740485	0	-3.729106	0	
28	N28	-0.282485	0	-6.254436	0	
29	N29	-1.740485	0	-3.729106	0	
30	N30	-5.557743	0	2.882579	0	
31	N31	-4.099743	0	0.357249	0	
32	N32	-0.052083	0	3.704857	0	
33	N33	-2.525758	0	3.083471	0	
34	N34	2.525758	0	3.083471	0	
35	N35	-5e-14	0	-3.729106	0	
36	N36	-2e-14	0	-3.146106	0	
37	N37	-2.724607	0	1.573053	0	
38	N38	-2.410057	0	2.022278	0	
39	N39	-2.022278	0	2.410057	0	
40	N40	-1.573053	0	2.724607	0	
41	N41	-1.076031	0	2.956372	0	
42	N42	-0.546315	0	3.098309	0	
43	N43	-0.052083	0	3.146106	0	
44	N44	0.546315	0	3.098309	0	
45	N45	1.076031	0	2.956372	0	
46	N46	1.573053	0	2.724607	0	
47	N47	2.022278	0	2.410057	0	
48	N48	2.410057	0	2.022278	0	
49	N49	2.724607	0	1.573053	0	
50	N50	-3.2295	0	1.864553	0	
51	N51	-2.9795	0	2.297565	0	
52	N52	-2.7295	0	2.730578	0	
53	N53	3.2295	0	1.864553	0	
54	N54	2.9795	0	2.297565	0	
55	N55	2.7295	0	2.730578	0	
56	N56	-1.894318	0	3.238817	0	
57	N57	-1.262879	0	3.394164	0	
58	N58	-0.631439	0	3.54951	0	
59	N59	0.631439	0	3.54951	0	
60	N60	1.262879	0	3.394164	0	
61	N61	1.894318	0	3.238817	0	
62	N62	-0.273158	0	3.122207	0	
63	N63	-0.317303	0	3.626794	0	
64	N64	-4e-14	0	-3.583356	0	



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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
65	N65	-4e-14	0	-3.437606	0	
66	N66	-4e-14	0	-3.291856	0	
67	N67	2.850831	0	1.645928	0	
68	N68	2.977054	0	1.718803	0	
69	N69	3.103277	0	1.791678	0	
70	N70	2.64597	0	1.685359	0	
71	N71	2.567332	0	1.797665	0	
72	N72	2.488694	0	1.909971	0	
73	N73	2.776227	0	1.757221	0	
74	N74	2.701624	0	1.868514	0	
75	N75	2.627021	0	1.979807	0	
76	N76	2.552418	0	2.0911	0	
77	N77	2.906485	0	1.829082	0	
78	N78	2.835916	0	1.939362	0	
79	N79	2.765347	0	2.049642	0	
80	N80	2.694778	0	2.159922	0	
81	N81	3.036743	0	1.900944	0	
82	N82	2.970208	0	2.010211	0	
83	N83	2.903674	0	2.119477	0	
84	N84	2.837139	0	2.228744	0	
85	N85	3.167	0	1.972806	0	
86	N86	3.1045	0	2.081059	0	
87	N87	3.042	0	2.189312	0	
88	N88	2.313112	0	2.119222	0	
89	N89	2.216167	0	2.216167	0	
90	N90	2.119222	0	2.313112	0	
91	N91	2.464084	0	2.190871	0	
92	N92	2.37575	0	2.290643	0	
93	N93	2.287417	0	2.390415	0	
94	N94	2.199083	0	2.490187	0	
95	N95	2.615056	0	2.262521	0	
96	N96	2.535334	0	2.365119	0	
97	N97	2.455611	0	2.467718	0	
98	N98	2.375889	0	2.570317	0	
99	N99	2.766028	0	2.33417	0	
100	N100	2.694917	0	2.439596	0	
101	N101	2.623806	0	2.545022	0	
102	N102	2.552695	0	2.650448	0	
103	N103	2.917	0	2.405819	0	
104	N104	2.8545	0	2.514072	0	
105	N105	2.792	0	2.622325	0	
106	N106	2.399888	0	2.915117	0	
107	N107	2.274018	0	2.746764	0	
108	N108	2.148148	0	2.57841	0	
109	N109	2.367898	0	3.122307	0	
110	N110	2.253416	0	2.963904	0	
111	N111	2.138935	0	2.805501	0	
112	N112	2.024453	0	2.647098	0	
113	N113	1.909971	0	2.488694	0	
114	N114	2.210038	0	3.161144	0	
115	N115	2.106945	0	3.012691	0	
116	N116	2.003852	0	2.864238	0	



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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
117	N117	1.900758	0	2.715785	0	
118	N118	1.797665	0	2.567332	0	
119	N119	2.052178	0	3.199981	0	
120	N120	1.960473	0	3.061478	0	
121	N121	1.868769	0	2.922975	0	
122	N122	1.777064	0	2.784472	0	
123	N123	1.685359	0	2.64597	0	
124	N124	1.814002	0	3.110265	0	
125	N125	1.733686	0	2.981712	0	
126	N126	1.653369	0	2.85316	0	
127	N127	1.736458	0	3.277654	0	
128	N128	1.664543	0	3.153877	0	
129	N129	1.592628	0	3.030101	0	
130	N130	1.520713	0	2.906325	0	
131	N131	1.448797	0	2.782549	0	
132	N132	1.578599	0	3.31649	0	
133	N133	1.515084	0	3.19749	0	
134	N134	1.45157	0	3.07849	0	
135	N135	1.388056	0	2.95949	0	
136	N136	1.324542	0	2.84049	0	
137	N137	1.420739	0	3.355327	0	
138	N138	1.365626	0	3.241103	0	
139	N139	1.310513	0	3.126879	0	
140	N140	1.2554	0	3.012655	0	
141	N141	1.200287	0	2.898431	0	
142	N142	1.216167	0	3.284716	0	
143	N143	1.169455	0	3.175268	0	
144	N144	1.122743	0	3.06582	0	
145	N145	1.105019	0	3.433	0	
146	N146	1.064665	0	3.322714	0	
147	N147	1.024311	0	3.212428	0	
148	N148	0.983957	0	3.102142	0	
149	N149	0.943602	0	2.991856	0	
150	N150	0.947159	0	3.471837	0	
151	N151	0.913163	0	3.360713	0	
152	N152	0.879166	0	3.249589	0	
153	N153	0.84517	0	3.138465	0	
154	N154	0.811173	0	3.027341	0	
155	N155	0.789299	0	3.510674	0	
156	N156	0.761661	0	3.398712	0	
157	N157	0.734022	0	3.286749	0	
158	N158	0.706383	0	3.174787	0	
159	N159	0.678744	0	3.062825	0	
160	N160	0.610158	0	3.43671	0	
161	N161	0.588877	0	3.32391	0	
162	N162	0.567596	0	3.211109	0	
163	N163	0.409737	0	3.110258	0	
164	N164	0.273158	0	3.122207	0	
165	N165	0.136579	0	3.134156	0	
166	N166	0.425697	0	3.22978	0	
167	N167	0.283798	0	3.248451	0	
168	N168	0.141899	0	3.267122	0	



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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
169	N169	-0.052083	0	3.285793	0	
170	N170	0.441658	0	3.349303	0	
171	N171	0.294439	0	3.374696	0	
172	N172	0.147219	0	3.400088	0	
173	N173	-0.052083	0	3.425481	0	
174	N174	0.457619	0	3.468825	0	
175	N175	0.305079	0	3.50094	0	
176	N176	0.15254	0	3.533054	0	
177	N177	-0.052083	0	3.565169	0	
178	N178	0.47358	0	3.588347	0	
179	N179	0.31572	0	3.627184	0	
180	N180	0.15786	0	3.66602	0	
181	N181	-0.678744	0	3.062825	0	
182	N182	-0.811173	0	3.027341	0	
183	N183	-0.943602	0	2.991856	0	
184	N184	-0.567596	0	3.211109	0	
185	N185	-0.706383	0	3.174787	0	
186	N186	-0.84517	0	3.138465	0	
187	N187	-0.983957	0	3.102142	0	
188	N188	-1.122743	0	3.06582	0	
189	N189	-0.588877	0	3.32391	0	
190	N190	-0.734022	0	3.286749	0	
191	N191	-0.879166	0	3.249589	0	
192	N192	-1.024311	0	3.212428	0	
193	N193	-1.169455	0	3.175268	0	
194	N194	-0.610158	0	3.43671	0	
195	N195	-0.761661	0	3.398712	0	
196	N196	-0.913163	0	3.360713	0	
197	N197	-1.064665	0	3.322714	0	
198	N198	-1.216167	0	3.284716	0	
199	N199	-0.789299	0	3.510674	0	
200	N200	-0.947159	0	3.471837	0	
201	N201	-1.105019	0	3.433	0	
202	N202	-1.448797	0	2.782549	0	
203	N203	-1.324542	0	2.84049	0	
204	N204	-1.200287	0	2.898431	0	
205	N205	-1.653369	0	2.85316	0	
206	N206	-1.520713	0	2.906325	0	
207	N207	-1.388056	0	2.95949	0	
208	N208	-1.2554	0	3.012655	0	
209	N209	-1.733686	0	2.981712	0	
210	N210	-1.592628	0	3.030101	0	
211	N211	-1.45157	0	3.07849	0	
212	N212	-1.310513	0	3.126879	0	
213	N213	-1.814002	0	3.110265	0	
214	N214	-1.664543	0	3.153877	0	
215	N215	-1.515084	0	3.19749	0	
216	N216	-1.365626	0	3.241103	0	
217	N217	-1.736458	0	3.277654	0	
218	N218	-1.578599	0	3.31649	0	
219	N219	-1.420739	0	3.355327	0	
220	N220	-1.685359	0	2.64597	0	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
221	N221	-1.797665	0	2.567332	0	
222	N222	-1.909971	0	2.488694	0	
223	N223	-1.811229	0	2.814323	0	
224	N224	-1.908193	0	2.733289	0	
225	N225	-2.005156	0	2.652255	0	
226	N226	-2.10212	0	2.571221	0	
227	N227	-2.199083	0	2.490187	0	
228	N228	-2.049405	0	2.904039	0	
229	N229	-2.131026	0	2.820609	0	
230	N230	-2.212647	0	2.737178	0	
231	N231	-2.294268	0	2.653748	0	
232	N232	-2.375889	0	2.570317	0	
233	N233	-2.287581	0	2.993755	0	
234	N234	-2.35386	0	2.907928	0	
235	N235	-2.420138	0	2.822101	0	
236	N236	-2.486416	0	2.736275	0	
237	N237	-2.552695	0	2.650448	0	
238	N238	-2.576693	0	2.995247	0	
239	N239	-2.627629	0	2.907024	0	
240	N240	-2.678565	0	2.818801	0	
241	N241	-2.119222	0	2.313112	0	
242	N242	-2.216167	0	2.216167	0	
243	N243	-2.313112	0	2.119222	0	
244	N244	-2.287417	0	2.390415	0	
245	N245	-2.37575	0	2.290643	0	
246	N246	-2.464084	0	2.190871	0	
247	N247	-2.552418	0	2.0911	0	
248	N248	-2.455611	0	2.467718	0	
249	N249	-2.535334	0	2.365119	0	
250	N250	-2.615056	0	2.262521	0	
251	N251	-2.694778	0	2.159922	0	
252	N252	-2.623806	0	2.545022	0	
253	N253	-2.694917	0	2.439596	0	
254	N254	-2.766028	0	2.33417	0	
255	N255	-2.837139	0	2.228744	0	
256	N256	-2.792	0	2.622325	0	
257	N257	-2.8545	0	2.514072	0	
258	N258	-2.917	0	2.405819	0	
259	N259	-2.488694	0	1.909971	0	
260	N260	-2.567332	0	1.797665	0	
261	N261	-2.64597	0	1.685359	0	
262	N262	-2.627021	0	1.979807	0	
263	N263	-2.701624	0	1.868514	0	
264	N264	-2.776227	0	1.757221	0	
265	N265	-2.850831	0	1.645928	0	
266	N266	-2.765347	0	2.049642	0	
267	N267	-2.835916	0	1.939362	0	
268	N268	-2.906485	0	1.829082	0	
269	N269	-2.977054	0	1.718803	0	
270	N270	-2.903674	0	2.119477	0	
271	N271	-2.970208	0	2.010211	0	
272	N272	-3.036743	0	1.900944	0	



Company : Tower Engineering Solutions, LLC
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>c]bh7 ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
273	N273	-3.103277	0	1.791678	0	
274	N274	-3.042	0	2.189312	0	
275	N275	-3.1045	0	2.081059	0	
276	N276	-3.167	0	1.972806	0	
277	N277	-0.478026	0	3.104284	0	
278	N278	-0.409737	0	3.110258	0	
279	N279	-0.341447	0	3.116233	0	
280	N280	-0.496746	0	3.220421	0	
281	N281	-0.425895	0	3.229732	0	
282	N282	-0.355045	0	3.239043	0	
283	N283	-0.284194	0	3.248354	0	
284	N284	-0.515466	0	3.336557	0	
285	N285	-0.442054	0	3.349205	0	
286	N286	-0.368642	0	3.361853	0	
287	N287	-0.295231	0	3.374501	0	
288	N288	-0.534186	0	3.452694	0	
289	N289	-0.458213	0	3.468679	0	
290	N290	-0.38224	0	3.484663	0	
291	N291	-0.306267	0	3.500647	0	
292	N292	-0.552905	0	3.568831	0	
293	N293	-0.474371	0	3.588152	0	
294	N294	-0.395837	0	3.607473	0	
295	N295	-0.204868	0	3.128182	0	
296	N296	-0.136579	0	3.134156	0	
297	N297	-0.213146	0	3.257714	0	
298	N298	-0.142097	0	3.267074	0	
299	N299	-0.221423	0	3.387246	0	
300	N300	-0.147615	0	3.399991	0	
301	N301	-0.2297	0	3.516778	0	
302	N302	-0.153133	0	3.532908	0	
303	N303	-0.237978	0	3.64631	0	
304	N304	-0.158652	0	3.665826	0	
305	N305	2.627629	0	2.907024	0	
306	N306	2.425845	0	2.741368	0	
307	N307	-2.210038	0	3.161144	0	
308	N308	-1.99771	0	3.015632	0	
309	N309	2.79063	-0.333	-1.45271	0	
310	N310	-2.023557	0	2.959835	0	
311	N311	-2.195728	0	3.041071	0	
312	N312	-2.367898	0	3.122307	0	
313	N313	-2.103874	0	3.088388	0	
314	N314	-1.838463	0	2.906498	0	
315	N315	-1.865698	0	2.998672	0	
316	N316	-1.958938	0	3.099326	0	
317	N317	-2.052178	0	3.199981	0	
318	N318	2.576693	0	2.995247	0	
319	N319	2.463312	0	2.869657	0	
320	N320	2.526737	0	2.824196	0	
321	N321	2.349931	0	2.744066	0	
322	N322	2.678565	0	2.818801	0	
323	N323	2.539716	0	2.737322	0	
324	N324	2.400867	0	2.655843	0	



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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
325	N325	2.274507	0	2.617127	0	
326	N326	0.052084	0	3.704857	0	
327	N327	0.052084	0	3.146106	0	
328	N328	0.052084	0	3.285793	0	
329	N329	0.052084	0	3.425481	0	
330	N330	0.052084	0	3.565169	0	
331	N331	-0.052083	0.333333	3.704857	0	
332	N332	-0.052083	0.333333	3.285793	0	
333	N333	-0.052083	0.333333	3.425481	0	
334	N334	-0.052083	0.333333	3.565169	0	
335	N335	0.052084	0.333333	3.704857	0	
336	N336	0.052084	0.333333	3.285793	0	
337	N337	0.052084	0.333333	3.425481	0	
338	N338	0.052084	0.333333	3.565169	0	
339	N339	-0.052083	-0.333333	3.704857	0	
340	N340	-0.052083	-0.333333	3.146106	0	
341	N341	-0.052083	-0.333333	3.285793	0	
342	N342	-0.052083	-0.333333	3.425481	0	
343	N343	-0.052083	-0.333333	3.565169	0	
344	N344	0.052084	-0.333333	3.704857	0	
345	N345	0.052084	-0.333333	3.146106	0	
346	N346	0.052084	-0.333333	3.285793	0	
347	N347	0.052084	-0.333333	3.425481	0	
348	N348	0.052084	-0.333333	3.565169	0	
349	N349	-0.052083	-0.166666	3.704857	0	
350	N350	-0.052083	-0.166666	3.146106	0	
351	N351	-0.052083	-0.166666	3.285793	0	
352	N352	-0.052083	-0.166666	3.425481	0	
353	N353	-0.052083	-0.166666	3.565169	0	
354	N354	0.052084	-0.166666	3.704857	0	
355	N355	0.052084	-0.166666	3.146106	0	
356	N356	0.052084	-0.166666	3.285793	0	
357	N357	0.052084	-0.166666	3.425481	0	
358	N358	0.052084	-0.166666	3.565169	0	
359	N359	-0.052083	0.166667	3.704857	0	
360	N360	-0.052083	0.166667	3.146106	0	
361	N361	-0.052083	0.166667	3.285793	0	
362	N362	-0.052083	0.166667	3.425481	0	
363	N363	-0.052083	0.166667	3.565169	0	
364	N364	0.052084	0.166667	3.704857	0	
365	N365	0.052084	0.166667	3.146106	0	
366	N366	0.052084	0.166667	3.285793	0	
367	N367	0.052084	0.166667	3.425481	0	
368	N368	0.052084	0.166667	3.565169	0	
369	N369	3.234542	0	-1.807323	0	
370	N370	3.933243	0	0.645635	0	
371	N371	1.407485	0	-3.729106	0	
372	N372	2.956372	0	1.076031	0	
373	N373	3.098309	0	0.546315	0	
374	N374	3.146106	0	-4.2e-13	0	
375	N375	3.098309	0	-0.546315	0	
376	N376	2.956372	0	-1.076031	0	



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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
377	N377	2.750649	0	-1.527948	0	
378	N378	2.410057	0	-2.022278	0	
379	N379	2.022278	0	-2.410057	0	
380	N380	1.573053	0	-2.724607	0	
381	N381	1.076031	0	-2.956372	0	
382	N382	0.546315	0	-3.098309	0	
383	N383	3.4795	0	1.43154	0	
384	N384	3.7295	0	0.998527	0	
385	N385	0.5	0	-3.729106	0	
386	N386	1	0	-3.729106	0	
387	N387	3.752057	0	0.021119	0	
388	N388	3.570871	0	-0.603397	0	
389	N389	3.389686	0	-1.227913	0	
390	N390	2.758246	0	-2.321598	0	
391	N391	2.307993	0	-2.790767	0	
392	N392	1.857739	0	-3.259936	0	
393	N393	2.84049	0	-1.324542	0	
394	N394	3.299547	0	-1.538604	0	
395	N395	0.136579	0	-3.134156	0	
396	N396	0.273158	0	-3.122207	0	
397	N397	0.409737	0	-3.110258	0	
398	N398	0.133684	0	-3.282894	0	
399	N399	0.267368	0	-3.273932	0	
400	N400	0.401052	0	-3.26497	0	
401	N401	0.534737	0	-3.256008	0	
402	N402	0.130789	0	-3.431631	0	
403	N403	0.261579	0	-3.425656	0	
404	N404	0.392368	0	-3.419682	0	
405	N405	0.523158	0	-3.413707	0	
406	N406	0.127895	0	-3.580368	0	
407	N407	0.255789	0	-3.577381	0	
408	N408	0.383684	0	-3.574394	0	
409	N409	0.511579	0	-3.571406	0	
410	N410	0.125	0	-3.729106	0	
411	N411	0.25	0	-3.729106	0	
412	N412	0.375	0	-3.729106	0	
413	N413	0.678744	0	-3.062825	0	
414	N414	0.811173	0	-3.027341	0	
415	N415	0.943602	0	-2.991856	0	
416	N416	0.665308	0	-3.229395	0	
417	N417	0.79588	0	-3.202782	0	
418	N418	0.926452	0	-3.176169	0	
419	N419	1.057024	0	-3.149556	0	
420	N420	0.651872	0	-3.395965	0	
421	N421	0.780587	0	-3.378223	0	
422	N422	0.909301	0	-3.360481	0	
423	N423	1.038016	0	-3.342739	0	
424	N424	0.638436	0	-3.562535	0	
425	N425	0.765293	0	-3.553664	0	
426	N426	0.892151	0	-3.544793	0	
427	N427	1.019008	0	-3.535922	0	
428	N428	0.625	0	-3.729106	0	



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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
429	N429	0.75	0	-3.729106	0	
430	N430	0.875	0	-3.729106	0	
431	N431	1.324622	0	-3.535922	0	
432	N432	1.241758	0	-3.342739	0	
433	N433	1.158895	0	-3.149556	0	
434	N434	1.520048	0	-3.611813	0	
435	N435	1.440108	0	-3.433468	0	
436	N436	1.360168	0	-3.255122	0	
437	N437	1.280227	0	-3.076777	0	
438	N438	1.200287	0	-2.898431	0	
439	N439	1.632612	0	-3.494521	0	
440	N440	1.555594	0	-3.331013	0	
441	N441	1.478577	0	-3.167505	0	
442	N442	1.40156	0	-3.003998	0	
443	N443	1.324542	0	-2.84049	0	
444	N444	1.745175	0	-3.377229	0	
445	N445	1.671081	0	-3.228559	0	
446	N446	1.596986	0	-3.079889	0	
447	N447	1.522892	0	-2.931219	0	
448	N448	1.448797	0	-2.782549	0	
449	N449	1.786567	0	-3.126104	0	
450	N450	1.715396	0	-2.992272	0	
451	N451	1.644224	0	-2.85844	0	
452	N452	1.970302	0	-3.142644	0	
453	N453	1.899066	0	-3.018475	0	
454	N454	1.827831	0	-2.894307	0	
455	N455	1.756595	0	-2.770138	0	
456	N456	1.685359	0	-2.64597	0	
457	N457	2.082866	0	-3.025352	0	
458	N458	2.011566	0	-2.910847	0	
459	N459	1.940265	0	-2.796342	0	
460	N460	1.868965	0	-2.681837	0	
461	N461	1.797665	0	-2.567332	0	
462	N462	2.195429	0	-2.908059	0	
463	N463	2.124065	0	-2.803218	0	
464	N464	2.0527	0	-2.698377	0	
465	N465	1.981336	0	-2.593536	0	
466	N466	1.909971	0	-2.488694	0	
467	N467	2.236564	0	-2.695589	0	
468	N468	2.165135	0	-2.600412	0	
469	N469	2.093706	0	-2.505234	0	
470	N470	2.420556	0	-2.673475	0	
471	N471	2.345223	0	-2.583384	0	
472	N472	2.269889	0	-2.493293	0	
473	N473	2.194556	0	-2.403203	0	
474	N474	2.119222	0	-2.313112	0	
475	N475	2.53312	0	-2.556182	0	
476	N476	2.453881	0	-2.471179	0	
477	N477	2.374643	0	-2.386175	0	
478	N478	2.295405	0	-2.301171	0	
479	N479	2.216167	0	-2.216167	0	
480	N480	2.645683	0	-2.43889	0	



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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
481	N481	2.56254	0	-2.358973	0	
482	N482	2.479397	0	-2.279056	0	
483	N483	2.396255	0	-2.199139	0	
484	N484	2.313112	0	-2.119222	0	
485	N485	2.671199	0	-2.246768	0	
486	N486	2.584152	0	-2.171938	0	
487	N487	2.497104	0	-2.097108	0	
488	N488	2.488694	0	-1.909971	0	
489	N489	2.567332	0	-1.797665	0	
490	N490	2.64597	0	-1.685359	0	
491	N491	2.584223	0	-1.983555	0	
492	N492	2.671342	0	-1.870002	0	
493	N493	2.758461	0	-1.756449	0	
494	N494	2.871622	0	-1.597792	0	
495	N495	2.679752	0	-2.057138	0	
496	N496	2.775353	0	-1.942339	0	
497	N497	2.870953	0	-1.82754	0	
498	N498	2.992595	0	-1.667635	0	
499	N499	2.775281	0	-2.130722	0	
500	N500	2.879363	0	-2.014676	0	
501	N501	2.983445	0	-1.89863	0	
502	N502	3.113569	0	-1.737479	0	
503	N503	2.87081	0	-2.204305	0	
504	N504	2.983373	0	-2.087013	0	
505	N505	3.095937	0	-1.969721	0	
506	N506	2.991856	0	-0.943602	0	
507	N507	3.027341	0	-0.811173	0	
508	N508	3.062825	0	-0.678744	0	
509	N509	3.064701	0	-1.114002	0	
510	N510	3.102638	0	-0.975648	0	
511	N511	3.140575	0	-0.837294	0	
512	N512	3.178512	0	-0.69894	0	
513	N513	3.21645	0	-0.560586	0	
514	N514	3.173029	0	-1.151972	0	
515	N515	3.213419	0	-1.007693	0	
516	N516	3.25381	0	-0.863414	0	
517	N517	3.2942	0	-0.719135	0	
518	N518	3.33459	0	-0.574856	0	
519	N519	3.281357	0	-1.189942	0	
520	N520	3.324201	0	-1.039738	0	
521	N521	3.367044	0	-0.889534	0	
522	N522	3.409888	0	-0.73933	0	
523	N523	3.452731	0	-0.589126	0	
524	N524	3.434982	0	-1.071784	0	
525	N525	3.480279	0	-0.915655	0	
526	N526	3.525575	0	-0.759526	0	
527	N527	3.134156	0	-0.136579	0	
528	N528	3.122207	0	-0.273158	0	
529	N529	3.110258	0	-0.409737	0	
530	N530	3.297593	0	0.00528	0	
531	N531	3.277307	0	-0.136187	0	
532	N532	3.257022	0	-0.277653	0	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
533	N533	3.236736	0	-0.419119	0	
534	N534	3.449081	0	0.01056	0	
535	N535	3.420459	0	-0.135794	0	
536	N536	3.391836	0	-0.282148	0	
537	N537	3.363213	0	-0.428502	0	
538	N538	3.600569	0	0.015839	0	
539	N539	3.56361	0	-0.135402	0	
540	N540	3.52665	0	-0.286644	0	
541	N541	3.48969	0	-0.437885	0	
542	N542	3.706761	0	-0.13501	0	
543	N543	3.661464	0	-0.291139	0	
544	N544	3.616168	0	-0.447268	0	
545	N545	3.134156	0	0.136579	0	
546	N546	3.122207	0	0.273158	0	
547	N547	3.110258	0	0.409737	0	
548	N548	3.34289	0	0.161409	0	
549	N549	3.321194	0	0.285899	0	
550	N550	3.299498	0	0.410389	0	
551	N551	3.277803	0	0.534879	0	
552	N552	3.256107	0	0.659368	0	
553	N553	3.539674	0	0.322818	0	
554	N554	3.508232	0	0.435218	0	
555	N555	3.476789	0	0.547619	0	
556	N556	3.445347	0	0.66002	0	
557	N557	3.413905	0	0.772421	0	
558	N558	3.736458	0	0.484226	0	
559	N559	3.695269	0	0.584538	0	
560	N560	3.65408	0	0.68485	0	
561	N561	3.612891	0	0.785162	0	
562	N562	3.571702	0	0.885474	0	
563	N563	3.882307	0	0.733858	0	
564	N564	3.831371	0	0.822081	0	
565	N565	3.780436	0	0.910304	0	
566	N566	3.062825	0	0.678744	0	
567	N567	3.027341	0	0.811173	0	
568	N568	2.991856	0	0.943602	0	
569	N569	3.213869	0	0.785754	0	
570	N570	3.171631	0	0.912139	0	
571	N571	3.129392	0	1.038524	0	
572	N572	3.087154	0	1.164909	0	
573	N573	3.364913	0	0.892763	0	
574	N574	3.31592	0	1.013104	0	
575	N575	3.266928	0	1.133445	0	
576	N576	3.217936	0	1.253786	0	
577	N577	3.515956	0	0.999772	0	
578	N578	3.46021	0	1.114069	0	
579	N579	3.404464	0	1.228366	0	
580	N580	3.348718	0	1.342663	0	
581	N581	3.667	0	1.106781	0	
582	N582	3.6045	0	1.215034	0	
583	N583	3.542	0	1.323287	0	
584	N584	2.898431	0	1.200287	0	



Company : Tower Engineering Solutions, LLC
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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
585	N585	2.84049	0	1.324542	0	
586	N586	2.782549	0	1.448797	0	
587	N587	3.028073	0	1.285163	0	
588	N588	2.968992	0	1.405418	0	
589	N589	2.909911	0	1.525673	0	
590	N590	3.157716	0	1.37004	0	
591	N591	3.097495	0	1.486294	0	
592	N592	3.037274	0	1.602549	0	
593	N593	3.287358	0	1.454917	0	
594	N594	3.225998	0	1.56717	0	
595	N595	3.164637	0	1.679424	0	
596	N596	3.417	0	1.539793	0	
597	N597	3.3545	0	1.648046	0	
598	N598	3.292	0	1.7563	0	
599	N599	2.927402	0	-1.138159	0	
600	N600	2.898431	0	-1.200287	0	
601	N601	2.86946	0	-1.262414	0	
602	N602	3.037339	0	-1.180016	0	
603	N603	3.009977	0	-1.24603	0	
604	N604	2.982616	0	-1.312044	0	
605	N605	2.955254	0	-1.378058	0	
606	N606	3.147276	0	-1.221872	0	
607	N607	3.121524	0	-1.291773	0	
608	N608	3.095771	0	-1.361673	0	
609	N609	3.070019	0	-1.431573	0	
610	N610	3.257214	0	-1.263729	0	
611	N611	3.23307	0	-1.337516	0	
612	N612	3.208927	0	-1.411302	0	
613	N613	3.184783	0	-1.485089	0	
614	N614	3.367151	0	-1.305586	0	
615	N615	3.344617	0	-1.383258	0	
616	N616	3.322082	0	-1.460931	0	
617	N617	2.811519	0	-1.38667	0	
618	N618	2.782549	0	-1.448797	0	
619	N619	2.927836	0	-1.444267	0	
620	N620	2.900417	0	-1.510477	0	
621	N621	3.044152	0	-1.501865	0	
622	N622	3.018286	0	-1.572157	0	
623	N623	3.160469	0	-1.559463	0	
624	N624	3.136155	0	-1.633837	0	
625	N625	3.276786	0	-1.61706	0	
626	N626	3.254024	0	-1.695516	0	
627	N627	1.203743	0	-3.729106	0	
628	N628	1.161172	0	-3.471528	0	
629	N629	3.84265	0	0.333377	0	
630	N630	3.610468	0	0.222251	0	
631	N631	3.575071	0	0.272534	0	
632	N632	3.731509	0	0.38102	0	
633	N633	3.887946	0	0.489506	0	
634	N634	3.726559	0	0.277814	0	
635	N635	3.436332	0	0.138907	0	
636	N636	3.529775	0	0.116405	0	



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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
637	N637	3.663564	0	0.146827	0	
638	N638	3.797353	0	0.177248	0	
639	N639	1.305614	0	-3.729106	0	
640	N640	1.253539	0	-3.568119	0	
641	N641	1.182457	0	-3.600317	0	
642	N642	1.201465	0	-3.407133	0	
643	N643	1.101871	0	-3.729106	0	
644	N644	1.100733	0	-3.568119	0	
645	N645	1.099594	0	-3.407133	0	
646	N646	1.129244	0	-3.278344	0	
647	N647	3.182458	0	-1.897535	0	
648	N648	2.698565	0	-1.618159	0	
649	N649	2.819539	0	-1.688003	0	
650	N650	2.940512	0	-1.757847	0	
651	N651	3.061485	0	-1.827691	0	
652	N652	3.234542	0.333333	-1.807323	0	
653	N653	2.871622	0.333333	-1.597792	0	
654	N654	2.992595	0.333333	-1.667635	0	
655	N655	3.113569	0.333333	-1.737479	0	
656	N656	3.182458	0.333333	-1.897535	0	
657	N657	2.819539	0.333333	-1.688003	0	
658	N658	2.940512	0.333333	-1.757847	0	
659	N659	3.061485	0.333333	-1.827691	0	
660	N660	3.234542	-0.333333	-1.807323	0	
661	N661	2.750649	-0.333333	-1.527948	0	
662	N662	2.871622	-0.333333	-1.597792	0	
663	N663	2.992595	-0.333333	-1.667635	0	
664	N664	3.113569	-0.333333	-1.737479	0	
665	N665	3.182458	-0.333333	-1.897535	0	
666	N666	2.698565	-0.333333	-1.618159	0	
667	N667	2.819539	-0.333333	-1.688003	0	
668	N668	2.940512	-0.333333	-1.757847	0	
669	N669	3.061485	-0.333333	-1.827691	0	
670	N670	3.234542	-0.166666	-1.807323	0	
671	N671	2.750649	-0.166666	-1.527948	0	
672	N672	2.871622	-0.166666	-1.597792	0	
673	N673	2.992595	-0.166666	-1.667635	0	
674	N674	3.113569	-0.166666	-1.737479	0	
675	N675	3.182458	-0.166666	-1.897535	0	
676	N676	2.698565	-0.166666	-1.618159	0	
677	N677	2.819539	-0.166666	-1.688003	0	
678	N678	2.940512	-0.166666	-1.757847	0	
679	N679	3.061485	-0.166666	-1.827691	0	
680	N680	3.234542	0.166667	-1.807323	0	
681	N681	2.750649	0.166667	-1.527948	0	
682	N682	2.871622	0.166667	-1.597792	0	
683	N683	2.992595	0.166667	-1.667635	0	
684	N684	3.113569	0.166667	-1.737479	0	
685	N685	3.182458	0.166667	-1.897535	0	
686	N686	2.698565	0.166667	-1.618159	0	
687	N687	2.819539	0.166667	-1.688003	0	
688	N688	2.940512	0.166667	-1.757847	0	



>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
689	N689	3.061485	0.166667	-1.827691	0	
690	N690	-3.182459	0	-1.897534	0	
691	N691	-1.407485	0	-3.729106	0	
692	N692	-3.933243	0	0.645635	0	
693	N693	-0.546315	0	-3.098309	0	
694	N694	-1.076031	0	-2.956372	0	
695	N695	-1.573053	0	-2.724607	0	
696	N696	-2.022278	0	-2.410057	0	
697	N697	-2.410057	0	-2.022278	0	
698	N698	-2.698566	0	-1.618158	0	
699	N699	-2.956372	0	-1.076031	0	
700	N700	-3.098309	0	-0.546315	0	
701	N701	-3.146106	0	1e-14	0	
702	N702	-3.098309	0	0.546315	0	
703	N703	-2.956372	0	1.076031	0	
704	N704	-0.5	0	-3.729106	0	
705	N705	-1	0	-3.729106	0	
706	N706	-3.4795	0	1.43154	0	
707	N707	-3.7295	0	0.998527	0	
708	N708	-1.857739	0	-3.259936	0	
709	N709	-2.307993	0	-2.790767	0	
710	N710	-2.758246	0	-2.321598	0	
711	N711	-3.389686	0	-1.227913	0	
712	N712	-3.570871	0	-0.603397	0	
713	N713	-3.752057	0	0.021119	0	
714	N714	-2.567332	0	-1.797665	0	
715	N715	-2.982244	0	-2.08819	0	
716	N716	-2.782549	0	1.448797	0	
717	N717	-2.84049	0	1.324542	0	
718	N718	-2.898431	0	1.200287	0	
719	N719	-2.909911	0	1.525673	0	
720	N720	-2.968992	0	1.405418	0	
721	N721	-3.028073	0	1.285163	0	
722	N722	-3.087154	0	1.164909	0	
723	N723	-3.037274	0	1.602549	0	
724	N724	-3.097495	0	1.486294	0	
725	N725	-3.157716	0	1.37004	0	
726	N726	-3.217936	0	1.253786	0	
727	N727	-3.164637	0	1.679424	0	
728	N728	-3.225998	0	1.56717	0	
729	N729	-3.287358	0	1.454917	0	
730	N730	-3.348718	0	1.342663	0	
731	N731	-3.292	0	1.7563	0	
732	N732	-3.3545	0	1.648046	0	
733	N733	-3.417	0	1.539793	0	
734	N734	-2.991856	0	0.943602	0	
735	N735	-3.027341	0	0.811173	0	
736	N736	-3.062825	0	0.678744	0	
737	N737	-3.129392	0	1.038524	0	
738	N738	-3.171631	0	0.912139	0	
739	N739	-3.213869	0	0.785754	0	
740	N740	-3.256107	0	0.659368	0	



Company : Tower Engineering Solutions, LLC
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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
741	N741	-3.266928	0	1.133445	0	
742	N742	-3.31592	0	1.013104	0	
743	N743	-3.364913	0	0.892763	0	
744	N744	-3.413905	0	0.772421	0	
745	N745	-3.404464	0	1.228366	0	
746	N746	-3.46021	0	1.114069	0	
747	N747	-3.515956	0	0.999772	0	
748	N748	-3.571702	0	0.885474	0	
749	N749	-3.542	0	1.323287	0	
750	N750	-3.6045	0	1.215034	0	
751	N751	-3.667	0	1.106781	0	
752	N752	-3.724509	0	0.620805	0	
753	N753	-3.515776	0	0.595975	0	
754	N754	-3.307043	0	0.571145	0	
755	N755	-3.887946	0	0.489506	0	
756	N756	-3.693524	0	0.469564	0	
757	N757	-3.499102	0	0.449621	0	
758	N758	-3.30468	0	0.429679	0	
759	N759	-3.110258	0	0.409737	0	
760	N760	-3.84265	0	0.333377	0	
761	N761	-3.662539	0	0.318322	0	
762	N762	-3.482429	0	0.303267	0	
763	N763	-3.302318	0	0.288213	0	
764	N764	-3.122207	0	0.273158	0	
765	N765	-3.797353	0	0.177248	0	
766	N766	-3.631554	0	0.167081	0	
767	N767	-3.465755	0	0.156913	0	
768	N768	-3.299956	0	0.146746	0	
769	N769	-3.134156	0	0.136579	0	
770	N770	-3.600569	0	0.015839	0	
771	N771	-3.449081	0	0.01056	0	
772	N772	-3.297593	0	0.00528	0	
773	N773	-3.706761	0	-0.13501	0	
774	N774	-3.56361	0	-0.135402	0	
775	N775	-3.420459	0	-0.135794	0	
776	N776	-3.277307	0	-0.136187	0	
777	N777	-3.134156	0	-0.136579	0	
778	N778	-3.661464	0	-0.291139	0	
779	N779	-3.52665	0	-0.286644	0	
780	N780	-3.391836	0	-0.282148	0	
781	N781	-3.257022	0	-0.277653	0	
782	N782	-3.122207	0	-0.273158	0	
783	N783	-3.616168	0	-0.447268	0	
784	N784	-3.48969	0	-0.437885	0	
785	N785	-3.363213	0	-0.428502	0	
786	N786	-3.236736	0	-0.419119	0	
787	N787	-3.110258	0	-0.409737	0	
788	N788	-3.452731	0	-0.589126	0	
789	N789	-3.33459	0	-0.574856	0	
790	N790	-3.21645	0	-0.560586	0	
791	N791	-3.525575	0	-0.759526	0	
792	N792	-3.409888	0	-0.73933	0	



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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
793	N793	-3.2942	0	-0.719135	0	
794	N794	-3.178512	0	-0.69894	0	
795	N795	-3.062825	0	-0.678744	0	
796	N796	-3.480279	0	-0.915655	0	
797	N797	-3.367044	0	-0.889534	0	
798	N798	-3.25381	0	-0.863414	0	
799	N799	-3.140575	0	-0.837294	0	
800	N800	-3.027341	0	-0.811173	0	
801	N801	-3.434982	0	-1.071784	0	
802	N802	-3.324201	0	-1.039738	0	
803	N803	-3.213419	0	-1.007693	0	
804	N804	-3.102638	0	-0.975648	0	
805	N805	-2.991856	0	-0.943602	0	
806	N806	-3.281357	0	-1.189942	0	
807	N807	-3.173029	0	-1.151972	0	
808	N808	-3.064701	0	-1.114002	0	
809	N809	-2.898431	0	-1.200287	0	
810	N810	-2.84049	0	-1.324542	0	
811	N811	-2.782549	0	-1.448797	0	
812	N812	-3.009921	0	-1.246225	0	
813	N813	-2.955141	0	-1.378449	0	
814	N814	-2.900361	0	-1.510673	0	
815	N815	-2.819539	0	-1.688002	0	
816	N816	-3.12141	0	-1.292164	0	
817	N817	-3.069791	0	-1.432356	0	
818	N818	-3.018173	0	-1.572548	0	
819	N819	-2.940512	0	-1.757846	0	
820	N820	-3.2329	0	-1.338103	0	
821	N821	-3.184442	0	-1.486263	0	
822	N822	-3.135985	0	-1.634424	0	
823	N823	-3.061486	0	-1.82769	0	
824	N824	-3.344389	0	-1.384042	0	
825	N825	-3.299093	0	-1.540171	0	
826	N826	-3.253797	0	-1.6963	0	
827	N827	-2.313112	0	-2.119222	0	
828	N828	-2.216167	0	-2.216167	0	
829	N829	-2.119222	0	-2.313112	0	
830	N830	-2.497104	0	-2.097108	0	
831	N831	-2.396255	0	-2.199139	0	
832	N832	-2.295405	0	-2.301171	0	
833	N833	-2.194556	0	-2.403203	0	
834	N834	-2.093706	0	-2.505234	0	
835	N835	-2.584152	0	-2.171938	0	
836	N836	-2.479397	0	-2.279056	0	
837	N837	-2.374643	0	-2.386175	0	
838	N838	-2.269889	0	-2.493293	0	
839	N839	-2.165135	0	-2.600412	0	
840	N840	-2.671199	0	-2.246768	0	
841	N841	-2.56254	0	-2.358973	0	
842	N842	-2.453881	0	-2.471179	0	
843	N843	-2.345223	0	-2.583384	0	
844	N844	-2.236564	0	-2.695589	0	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
845	N845	-2.645683	0	-2.43889	0	
846	N846	-2.53312	0	-2.556182	0	
847	N847	-2.420556	0	-2.673475	0	
848	N848	-1.685359	0	-2.64597	0	
849	N849	-1.797665	0	-2.567332	0	
850	N850	-1.909971	0	-2.488694	0	
851	N851	-1.644224	0	-2.85844	0	
852	N852	-1.756595	0	-2.770138	0	
853	N853	-1.868965	0	-2.681837	0	
854	N854	-1.981336	0	-2.593536	0	
855	N855	-1.715396	0	-2.992272	0	
856	N856	-1.827831	0	-2.894307	0	
857	N857	-1.940265	0	-2.796342	0	
858	N858	-2.0527	0	-2.698377	0	
859	N859	-1.786567	0	-3.126104	0	
860	N860	-1.899066	0	-3.018475	0	
861	N861	-2.011566	0	-2.910847	0	
862	N862	-2.124065	0	-2.803218	0	
863	N863	-1.970302	0	-3.142644	0	
864	N864	-2.082866	0	-3.025352	0	
865	N865	-2.195429	0	-2.908059	0	
866	N866	-1.448797	0	-2.782549	0	
867	N867	-1.324542	0	-2.84049	0	
868	N868	-1.200287	0	-2.898431	0	
869	N869	-1.531661	0	-2.975732	0	
870	N870	-1.413002	0	-3.019188	0	
871	N871	-1.294342	0	-3.062644	0	
872	N872	-1.175683	0	-3.1061	0	
873	N873	-1.057024	0	-3.149556	0	
874	N874	-1.490269	0	-3.226856	0	
875	N875	-1.377206	0	-3.255827	0	
876	N876	-1.264142	0	-3.284798	0	
877	N877	-1.151079	0	-3.313768	0	
878	N878	-1.038016	0	-3.342739	0	
879	N879	-1.448877	0	-3.477981	0	
880	N880	-1.34141	0	-3.492466	0	
881	N881	-1.233942	0	-3.506952	0	
882	N882	-1.126475	0	-3.521437	0	
883	N883	-1.019008	0	-3.535922	0	
884	N884	-1.305614	0	-3.729106	0	
885	N885	-1.203743	0	-3.729106	0	
886	N886	-1.101871	0	-3.729106	0	
887	N887	-0.943602	0	-2.991856	0	
888	N888	-0.811173	0	-3.027341	0	
889	N889	-0.678744	0	-3.062825	0	
890	N890	-0.926452	0	-3.176169	0	
891	N891	-0.79588	0	-3.202782	0	
892	N892	-0.665308	0	-3.229395	0	
893	N893	-0.534737	0	-3.256008	0	
894	N894	-0.909301	0	-3.360481	0	
895	N895	-0.780587	0	-3.378223	0	
896	N896	-0.651872	0	-3.395965	0	



Company : Tower Engineering Solutions, LLC
 Designer :
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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
897	N897	-0.523158	0	-3.413707	0	
898	N898	-0.892151	0	-3.544793	0	
899	N899	-0.765293	0	-3.553664	0	
900	N900	-0.638436	0	-3.562535	0	
901	N901	-0.511579	0	-3.571406	0	
902	N902	-0.875	0	-3.729106	0	
903	N903	-0.75	0	-3.729106	0	
904	N904	-0.625	0	-3.729106	0	
905	N905	-0.409737	0	-3.110258	0	
906	N906	-0.273158	0	-3.122207	0	
907	N907	-0.136579	0	-3.134156	0	
908	N908	-0.401052	0	-3.26497	0	
909	N909	-0.267368	0	-3.273932	0	
910	N910	-0.133684	0	-3.282894	0	
911	N911	-0.392368	0	-3.419682	0	
912	N912	-0.261579	0	-3.425656	0	
913	N913	-0.130789	0	-3.431631	0	
914	N914	-0.383684	0	-3.574394	0	
915	N915	-0.255789	0	-3.577381	0	
916	N916	-0.127895	0	-3.580368	0	
917	N917	-0.375	0	-3.729106	0	
918	N918	-0.25	0	-3.729106	0	
919	N919	-0.125	0	-3.729106	0	
920	N920	-2.449376	0	-1.966125	0	
921	N921	-2.488694	0	-1.909971	0	
922	N922	-2.528013	0	-1.853818	0	
923	N923	-2.540593	0	-2.040405	0	
924	N924	-2.584082	0	-1.983702	0	
925	N925	-2.627571	0	-1.926999	0	
926	N926	-2.67106	0	-1.870296	0	
927	N927	-2.631811	0	-2.114685	0	
928	N928	-2.67947	0	-2.057433	0	
929	N929	-2.727129	0	-2.00018	0	
930	N930	-2.774788	0	-1.942928	0	
931	N931	-2.723028	0	-2.188965	0	
932	N932	-2.774858	0	-2.131163	0	
933	N933	-2.826687	0	-2.073361	0	
934	N934	-2.878516	0	-2.015559	0	
935	N935	-2.814246	0	-2.263246	0	
936	N936	-2.870245	0	-2.204894	0	
937	N937	-2.926245	0	-2.146542	0	
938	N938	-2.606651	0	-1.741512	0	
939	N939	-2.64597	0	-1.685359	0	
940	N940	-2.71469	0	-1.813446	0	
941	N941	-2.75832	0	-1.756597	0	
942	N942	-2.822729	0	-1.885381	0	
943	N943	-2.870671	0	-1.827834	0	
944	N944	-2.930769	0	-1.957315	0	
945	N945	-2.983022	0	-1.899072	0	
946	N946	-3.038808	0	-2.029249	0	
947	N947	-3.095372	0	-1.970309	0	
948	N948	-3.831371	0	0.822081	0	



>c]bh7ccfX]bUHyg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
949	N949	-3.587017	0	0.730159	0	
950	N950	-1.632612	0	-3.494521	0	
951	N951	-1.612759	0	-3.237883	0	
952	N952	-1.551514	0	-3.23237	0	
953	N953	-1.535781	0	-3.422091	0	
954	N954	-1.520048	0	-3.611813	0	
955	N955	-1.622685	0	-3.366202	0	
956	N956	-1.597869	0	-3.045405	0	
957	N957	-1.664077	0	-3.115077	0	
958	N958	-1.704626	0	-3.246153	0	
959	N959	-1.745175	0	-3.377229	0	
960	N960	-3.882307	0	0.733858	0	
961	N961	-3.716852	0	0.698463	0	
962	N962	-3.709194	0	0.77612	0	
963	N963	-3.551397	0	0.663067	0	
964	N964	-3.780436	0	0.910304	0	
965	N965	-3.640448	0	0.830797	0	
966	N966	-3.500461	0	0.75129	0	
967	N967	-3.403752	0	0.661218	0	
968	N968	-3.234542	0	-1.807322	0	
969	N969	-2.750649	0	-1.527947	0	
970	N970	-2.871623	0	-1.597791	0	
971	N971	-2.992596	0	-1.667635	0	
972	N972	-3.113569	0	-1.737479	0	
973	N973	-3.182459	0.333333	-1.897534	0	
974	N974	-2.819539	0.333333	-1.688002	0	
975	N975	-2.940512	0.333333	-1.757846	0	
976	N976	-3.061486	0.333333	-1.82769	0	
977	N977	-3.234542	0.333333	-1.807322	0	
978	N978	-2.871623	0.333333	-1.597791	0	
979	N979	-2.992596	0.333333	-1.667635	0	
980	N980	-3.113569	0.333333	-1.737479	0	
981	N981	-3.182459	-0.333333	-1.897534	0	
982	N982	-2.698566	-0.333333	-1.618158	0	
983	N983	-2.819539	-0.333333	-1.688002	0	
984	N984	-2.940512	-0.333333	-1.757846	0	
985	N985	-3.061486	-0.333333	-1.82769	0	
986	N986	-3.234542	-0.333333	-1.807322	0	
987	N987	-2.750649	-0.333333	-1.527947	0	
988	N988	-2.871623	-0.333333	-1.597791	0	
989	N989	-2.992596	-0.333333	-1.667635	0	
990	N990	-3.113569	-0.333333	-1.737479	0	
991	N991	-3.182459	-0.166666	-1.897534	0	
992	N992	-2.698566	-0.166666	-1.618158	0	
993	N993	-2.819539	-0.166666	-1.688002	0	
994	N994	-2.940512	-0.166666	-1.757846	0	
995	N995	-3.061486	-0.166666	-1.82769	0	
996	N996	-3.234542	-0.166666	-1.807322	0	
997	N997	-2.750649	-0.166666	-1.527947	0	
998	N998	-2.871623	-0.166666	-1.597791	0	
999	N999	-2.992596	-0.166666	-1.667635	0	
1000	N1000	-3.113569	-0.166666	-1.737479	0	



Company : Tower Engineering Solutions, LLC
 Designer :
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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1001	N1001	-3.182459	0.166667	-1.897534	0	
1002	N1002	-2.698566	0.166667	-1.618158	0	
1003	N1003	-2.819539	0.166667	-1.688002	0	
1004	N1004	-2.940512	0.166667	-1.757846	0	
1005	N1005	-3.061486	0.166667	-1.82769	0	
1006	N1006	-3.234542	0.166667	-1.807322	0	
1007	N1007	-2.750649	0.166667	-1.527947	0	
1008	N1008	-2.871623	0.166667	-1.597791	0	
1009	N1009	-2.992596	0.166667	-1.667635	0	
1010	N1010	-3.113569	0.166667	-1.737479	0	
1011	N1011	-2.525758	0.208333	3.083471	0	
1012	N1012	2.525758	0.208333	3.083471	0	
1013	N1013	-1.894318	0.208333	3.238817	0	
1014	N1014	-1.262879	0.208333	3.394164	0	
1015	N1015	-0.631439	0.208333	3.54951	0	
1016	N1016	0.631439	0.208333	3.54951	0	
1017	N1017	1.262879	0.208333	3.394164	0	
1018	N1018	1.894318	0.208333	3.238817	0	
1019	N1019	-0.317303	0.208333	3.626794	0	
1020	N1020	2.367898	0.208333	3.122307	0	
1021	N1021	2.210038	0.208333	3.161144	0	
1022	N1022	2.052178	0.208333	3.199981	0	
1023	N1023	1.736458	0.208333	3.277654	0	
1024	N1024	1.578599	0.208333	3.31649	0	
1025	N1025	1.420739	0.208333	3.355327	0	
1026	N1026	1.105019	0.208333	3.433	0	
1027	N1027	0.947159	0.208333	3.471837	0	
1028	N1028	0.789299	0.208333	3.510674	0	
1029	N1029	0.47358	0.208333	3.588347	0	
1030	N1030	0.31572	0.208333	3.627184	0	
1031	N1031	0.15786	0.208333	3.66602	0	
1032	N1032	-0.789299	0.208333	3.510674	0	
1033	N1033	-0.947159	0.208333	3.471837	0	
1034	N1034	-1.105019	0.208333	3.433	0	
1035	N1035	-1.736458	0.208333	3.277654	0	
1036	N1036	-1.578599	0.208333	3.31649	0	
1037	N1037	-1.420739	0.208333	3.355327	0	
1038	N1038	-0.552905	0.208333	3.568831	0	
1039	N1039	-0.474371	0.208333	3.588152	0	
1040	N1040	-0.395837	0.208333	3.607473	0	
1041	N1041	-0.237978	0.208333	3.64631	0	
1042	N1042	-0.158652	0.208333	3.665826	0	
1043	N1043	-2.210038	0.208333	3.161144	0	
1044	N1044	-2.367898	0.208333	3.122307	0	
1045	N1045	-2.052178	0.208333	3.199981	0	
1046	N1046	3.933243	0.208333	0.645635	0	
1047	N1047	1.407485	0.208333	-3.729106	0	
1048	N1048	3.752057	0.208333	0.021119	0	
1049	N1049	3.570871	0.208333	-0.603397	0	
1050	N1050	3.389686	0.208333	-1.227913	0	
1051	N1051	2.758246	0.208333	-2.321598	0	
1052	N1052	2.307993	0.208333	-2.790767	0	



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	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1053	N1053	1.857739	0.208333	-3.259936	0	
1054	N1054	3.299547	0.208333	-1.538604	0	
1055	N1055	1.520048	0.208333	-3.611813	0	
1056	N1056	1.632612	0.208333	-3.494521	0	
1057	N1057	1.745175	0.208333	-3.377229	0	
1058	N1058	1.970302	0.208333	-3.142644	0	
1059	N1059	2.082866	0.208333	-3.025352	0	
1060	N1060	2.195429	0.208333	-2.908059	0	
1061	N1061	2.420556	0.208333	-2.673475	0	
1062	N1062	2.53312	0.208333	-2.556182	0	
1063	N1063	2.645683	0.208333	-2.43889	0	
1064	N1064	2.87081	0.208333	-2.204305	0	
1065	N1065	2.983373	0.208333	-2.087013	0	
1066	N1066	3.095937	0.208333	-1.969721	0	
1067	N1067	3.434982	0.208333	-1.071784	0	
1068	N1068	3.480279	0.208333	-0.915655	0	
1069	N1069	3.525575	0.208333	-0.759526	0	
1070	N1070	3.706761	0.208333	-0.13501	0	
1071	N1071	3.661464	0.208333	-0.291139	0	
1072	N1072	3.616168	0.208333	-0.447268	0	
1073	N1073	3.367151	0.208333	-1.305586	0	
1074	N1074	3.344617	0.208333	-1.383258	0	
1075	N1075	3.322082	0.208333	-1.460931	0	
1076	N1076	3.276786	0.208333	-1.61706	0	
1077	N1077	3.254024	0.208333	-1.695516	0	
1078	N1078	3.84265	0.208333	0.333377	0	
1079	N1079	3.887946	0.208333	0.489506	0	
1080	N1080	3.797353	0.208333	0.177248	0	
1081	N1081	-1.407485	0.208333	-3.729106	0	
1082	N1082	-3.933243	0.208333	0.645635	0	
1083	N1083	-1.857739	0.208333	-3.259936	0	
1084	N1084	-2.307993	0.208333	-2.790767	0	
1085	N1085	-2.758246	0.208333	-2.321598	0	
1086	N1086	-3.389686	0.208333	-1.227913	0	
1087	N1087	-3.570871	0.208333	-0.603397	0	
1088	N1088	-3.752057	0.208333	0.021119	0	
1089	N1089	-2.982244	0.208333	-2.08819	0	
1090	N1090	-3.887946	0.208333	0.489506	0	
1091	N1091	-3.84265	0.208333	0.333377	0	
1092	N1092	-3.797353	0.208333	0.177248	0	
1093	N1093	-3.706761	0.208333	-0.13501	0	
1094	N1094	-3.661464	0.208333	-0.291139	0	
1095	N1095	-3.616168	0.208333	-0.447268	0	
1096	N1096	-3.525575	0.208333	-0.759526	0	
1097	N1097	-3.480279	0.208333	-0.915655	0	
1098	N1098	-3.434982	0.208333	-1.071784	0	
1099	N1099	-3.344389	0.208333	-1.384042	0	
1100	N1100	-3.299093	0.208333	-1.540171	0	
1101	N1101	-3.253797	0.208333	-1.6963	0	
1102	N1102	-2.645683	0.208333	-2.43889	0	
1103	N1103	-2.53312	0.208333	-2.556182	0	
1104	N1104	-2.420556	0.208333	-2.673475	0	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 6:13 PM
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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1105	N1105	-1.970302	0.208333	-3.142644	0	
1106	N1106	-2.082866	0.208333	-3.025352	0	
1107	N1107	-2.195429	0.208333	-2.908059	0	
1108	N1108	-2.814246	0.208333	-2.263246	0	
1109	N1109	-2.870245	0.208333	-2.204894	0	
1110	N1110	-2.926245	0.208333	-2.146542	0	
1111	N1111	-3.038808	0.208333	-2.029249	0	
1112	N1112	-3.095372	0.208333	-1.970309	0	
1113	N1113	-1.632612	0.208333	-3.494521	0	
1114	N1114	-1.520048	0.208333	-3.611813	0	
1115	N1115	-1.745175	0.208333	-3.377229	0	
1116	N1116	-0.507185	0	-6.254436	0	
1117	N1117	0.507185	0	-6.254436	0	
1118	N1118	-5.162908	0	3.566453	0	
1119	N1119	-5.670093	0	2.687983	0	
1120	N1120	5.670093	0	2.687983	0	
1121	N1121	5.162908	0	3.566453	0	
1122	N1122	-4e-14	0	-6.254436	0	
1123	N1123	2.79063	-0.083333	-1.45271	0	
1124	N1124	-0.177083	0	3.704857	0	
1125	N1125	0.177083	0	3.704857	0	
1126	N1126	3.297042	0	-1.69907	0	
1127	N1127	3.119959	0	-2.005787	0	
1128	N1128	-3.119959	0	-2.005787	0	
1129	N1129	-3.297042	0	-1.69907	0	
1130	N1130	2.908869	-.333	-1.514261	0	
1131	N1131	2.908869	-0.083333	-1.514261	0	
1132	N1132	3.026841	-.333	-1.575674	0	
1133	N1133	3.026841	-0.083333	-1.575674	0	
1134	N1134	3.14508	-.333	-1.637225	0	
1135	N1135	3.14508	-0.083333	-1.637225	0	
1136	N1136	3.263052	-.333	-1.698637	0	
1137	N1137	3.263052	-0.083333	-1.698637	0	
1138	N1138	-2.653399	-.333	-1.690402	0	
1139	N1139	-2.653399	-0.083333	-1.690402	0	
1140	N1140	-2.765823	-.333	-1.762024	0	
1141	N1141	-2.765823	-0.083333	-1.762024	0	
1142	N1142	-2.877994	-.333	-1.833484	0	
1143	N1143	-2.877994	-0.083333	-1.833484	0	
1144	N1144	-2.990418	-.333	-1.905106	0	
1145	N1145	-2.990418	-0.083333	-1.905106	0	
1146	N1146	-3.102589	-.333	-1.976567	0	
1147	N1147	-3.102589	-0.083333	-1.976567	0	
1148	N1148	-0.137231	-.333	3.143112	0	
1149	N1149	-0.137231	-0.083333	3.143112	0	
1150	N1150	-0.143046	-.333	3.276285	0	
1151	N1151	-0.143046	-0.083333	3.276285	0	
1152	N1152	-0.148847	-.333	3.409158	0	
1153	N1153	-0.148847	-0.083333	3.409158	0	
1154	N1154	-0.154662	-.333	3.542331	0	
1155	N1155	-0.154662	-0.083333	3.542331	0	
1156	N1156	-0.160463	-.333	3.675205	0	



Company : Tower Engineering Solutions, LLC
 Designer :
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>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f c]h]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1157	N1157	-0.160463	-0.083333	3.675205	0	
1158	N1158	0.942301	-.333	-0.490531	0	
1159	N1159	3.751555	-0.333333	-1.952936	0	
1160	N1160	-0.895963	-.333	-0.570791	0	
1161	N1161	-3.56707	-0.333333	-2.272474	0	
1162	N1162	-0.046338	-.333	1.061322	0	
1163	N1163	-0.184485	-0.333333	4.22541	0	
1164	N1164	4.41667	0	3.704857	0	
1165	N1165	0.4167	0	3.704857	0	
1166	N1166	-4.41667	0	3.704857	0	
1167	N1167	4.41667	4	3.954857	0	
1168	N1168	0.4167	5	3.954857	0	
1169	N1169	-4.41667	4	3.954857	0	
1170	N1170	4.41667	-2	3.954857	0	
1171	N1171	0.4167	-3	3.954857	0	
1172	N1172	-4.41667	-2	3.954857	0	
1173	N1173	-6.25	3	3.704857	0	
1174	N1174	6.25	3	3.704857	0	
1175	N1175	6.3335	3	3.56023	0	
1176	N1176	0.0835	3	-7.265087	0	
1177	N1177	-0.0835	3	-7.265087	0	
1178	N1178	-6.3335	3	3.56023	0	
1179	N1179	-4.41667	3	3.704857	0	
1180	N1180	0.4167	3	3.704857	0	
1181	N1181	4.41667	3	3.704857	0	
1182	N1182	-4.91667	3	3.704857	0	
1183	N1183	4.91667	3	3.704857	0	
1184	N1184	5.666835	3	2.405533	0	
1185	N1185	0.750165	3	-6.11039	0	
1186	N1186	-0.750165	3	-6.11039	0	
1187	N1187	-5.666835	3	2.405533	0	
1188	N1188	4.41667	0	3.954857	0	
1189	N1189	0.4167	0	3.954857	0	
1190	N1190	-4.41667	0	3.954857	0	
1191	N1191	-4.41667	3	3.954857	0	
1192	N1192	0.4167	3	3.954857	0	
1193	N1193	4.41667	3	3.954857	0	
1194	N1194	1.000165	0	-5.677377	0	
1195	N1195	3.00015	0	-2.213301	0	
1196	N1196	5.416835	0	1.97252	0	
1197	N1197	1.216672	4	-5.802377	0	
1198	N1198	3.216657	5	-2.338301	0	
1199	N1199	5.633342	4	1.84752	0	
1200	N1200	1.216672	-2	-5.802377	0	
1201	N1201	3.216657	-3	-2.338301	0	
1202	N1202	5.633342	-2	1.84752	0	
1203	N1203	5.416835	3	1.97252	0	
1204	N1204	3.00015	3	-2.213301	0	
1205	N1205	1.000165	3	-5.677377	0	
1206	N1206	1.216672	0	-5.802377	0	
1207	N1207	3.216657	0	-2.338301	0	
1208	N1208	5.633342	0	1.84752	0	



>c]bh7ccfX]bUHyg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1209	N1209	5.633342	3	1.84752	0	
1210	N1210	3.216657	3	-2.338301	0	
1211	N1211	1.216672	3	-5.802377	0	
1212	N1212	-5.416835	0	1.97252	0	
1213	N1213	-3.41685	0	-1.491556	0	
1214	N1214	-1.000165	0	-5.677377	0	
1215	N1215	-5.633342	4	1.84752	0	
1216	N1216	-3.633357	5	-1.616556	0	
1217	N1217	-1.216672	4	-5.802377	0	
1218	N1218	-5.633342	-2	1.84752	0	
1219	N1219	-3.633357	-3	-1.616556	0	
1220	N1220	-1.216672	-2	-5.802377	0	
1221	N1221	-1.000165	3	-5.677377	0	
1222	N1222	-3.41685	3	-1.491556	0	
1223	N1223	-5.416835	3	1.97252	0	
1224	N1224	-5.633342	0	1.84752	0	
1225	N1225	-3.633357	0	-1.616556	0	
1226	N1226	-1.216672	0	-5.802377	0	
1227	N1227	-1.216672	3	-5.802377	0	
1228	N1228	-3.633357	3	-1.616556	0	
1229	N1229	-5.633342	3	1.84752	0	

<chFc`YX'GhYY'GYW]cb'GYlg

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipes 1	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	Footrails	PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
3	Plan Bracing	PL3/8x4	Beam	RECT	A36 Gr.36	Typical	1.5	.018	2	.066
4	Handrails	PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
5	Grating Angle	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	.944	.346	.346	.021
6	Standoff Arm	HSS4X4X6	Beam	SquareTube	A500 Gr.B ...	Typical	4.78	10.3	10.3	17.5
7	Plate Bracing2	PL3/8x4	Beam	RECT	A36 Gr.36	Typical	1.5	.018	2	.066
8	MP 2	PIPE 2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
9	HR End Conn	L3X3X4	Beam	Pipe	A36 Gr.36	Typical	1.44	1.23	1.23	.031

<chFc`YX'GhYY'DfcdYf]Yg

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



A Ya Vyf Df Ja Ufm8 UU

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	M1	N1	N1124			Footrails	Beam	Pipe	A53 Gr.B	Typical
2	M2	N18	N5			Plan Bracing	Beam	RECT	A36 Gr.36	Typical
3	M3	N6	N11			Plan Bracing	Beam	RECT	A36 Gr.36	Typical
4	M4	N1116	N28			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
5	M5	N12	N17			Plan Bracing	Beam	RECT	A36 Gr.36	Typical
6	M6	N20	N21		270	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
7	M7	N22	N23			Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
8	M8	N24	N25		270	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
9	M9	N26	N27			Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
10	M10	N28	N29		270	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
11	M11	N30	N31			Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
12	M12	N1125	N2			Footrails	Beam	Pipe	A53 Gr.B	Typical
13	M13	N362	N367			RIGID	None	None	RIGID	Typical
14	M14	N352	N357			RIGID	None	None	RIGID	Typical
15	M15	N351	N356			RIGID	None	None	RIGID	Typical
16	M16	N8	N1126			Footrails	Beam	Pipe	A53 Gr.B	Typical
17	M17	N1127	N9			Footrails	Beam	Pipe	A53 Gr.B	Typical
18	M18	N683	N688			RIGID	None	None	RIGID	Typical
19	M19	N673	N678			RIGID	None	None	RIGID	Typical
20	M20	N672	N677			RIGID	None	None	RIGID	Typical
21	M21	N14	N1128			Footrails	Beam	Pipe	A53 Gr.B	Typical
22	M22	N1129	N15			Footrails	Beam	Pipe	A53 Gr.B	Typical
23	M23	N1004	N1009			RIGID	None	None	RIGID	Typical
24	M24	N994	N999			RIGID	None	None	RIGID	Typical
25	M25	N993	N998			RIGID	None	None	RIGID	Typical
26	M26	N16	N1116			RIGID	None	None	RIGID	Typical
27	M27	N13	N1117			RIGID	None	None	RIGID	Typical
28	M28	N1118	N20			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
29	M29	N4	N1118			RIGID	None	None	RIGID	Typical
30	M30	N19	N1119			RIGID	None	None	RIGID	Typical
31	M31	N1120	N24			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
32	M32	N10	N1120			RIGID	None	None	RIGID	Typical
33	M33	N7	N1121			RIGID	None	None	RIGID	Typical
34	M34	N30	N1119			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
35	M35	N28	N26			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
36	M36	N26	N1117			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
37	M37	N24	N22			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
38	M38	N22	N1121			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
39	M39	N20	N30			Plate Bracing2	Beam	RECT	A36 Gr.36	Typical
40	M40	N1123	N309			RIGID	None	None	RIGID	Typical
41	M41	N359	N1124			RIGID	None	None	RIGID	Typical
42	M42	N1124	N349			RIGID	None	None	RIGID	Typical
43	M43	N364	N1125			RIGID	None	None	RIGID	Typical
44	M44	N1125	N354			RIGID	None	None	RIGID	Typical
45	M45	N680	N1126			RIGID	None	None	RIGID	Typical
46	M46	N1126	N670			RIGID	None	None	RIGID	Typical
47	M47	N685	N1127			RIGID	None	None	RIGID	Typical
48	M48	N1127	N675			RIGID	None	None	RIGID	Typical
49	M49	N1001	N1128			RIGID	None	None	RIGID	Typical
50	M50	N1128	N991			RIGID	None	None	RIGID	Typical
51	M51	N1006	N1129			RIGID	None	None	RIGID	Typical
52	M52	N1129	N996			RIGID	None	None	RIGID	Typical



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	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
53	M53	N1124	N32			RIGID	None	None	RIGID	Typical
54	M54	N1125	N326			RIGID	None	None	RIGID	Typical
55	M55	N1126	N369			RIGID	None	None	RIGID	Typical
56	M56	N1127	N647			RIGID	None	None	RIGID	Typical
57	M57	N1128	N690			RIGID	None	None	RIGID	Typical
58	M58	N1129	N968			RIGID	None	None	RIGID	Typical
59	M59	N1131	N1130			RIGID	None	None	RIGID	Typical
60	M60	N1133	N1132			RIGID	None	None	RIGID	Typical
61	M61	N1135	N1134			RIGID	None	None	RIGID	Typical
62	M62	N1137	N1136			RIGID	None	None	RIGID	Typical
63	M63	N617	N1123			RIGID	None	None	RIGID	Typical
64	M64	N1123	N618			RIGID	None	None	RIGID	Typical
65	M65	N1123	N377			RIGID	None	None	RIGID	Typical
66	M66	N1131	N619			RIGID	None	None	RIGID	Typical
67	M67	N1131	N620			RIGID	None	None	RIGID	Typical
68	M68	N1131	N494			RIGID	None	None	RIGID	Typical
69	M69	N1133	N621			RIGID	None	None	RIGID	Typical
70	M70	N1133	N622			RIGID	None	None	RIGID	Typical
71	M71	N1133	N498			RIGID	None	None	RIGID	Typical
72	M72	N1135	N623			RIGID	None	None	RIGID	Typical
73	M73	N1135	N624			RIGID	None	None	RIGID	Typical
74	M74	N1135	N502			RIGID	None	None	RIGID	Typical
75	M75	N1137	N625			RIGID	None	None	RIGID	Typical
76	M76	N1137	N626			RIGID	None	None	RIGID	Typical
77	M77	N1137	N369			RIGID	None	None	RIGID	Typical
78	M78	N1139	N1138			RIGID	None	None	RIGID	Typical
79	M79	N1141	N1140			RIGID	None	None	RIGID	Typical
80	M80	N1143	N1142			RIGID	None	None	RIGID	Typical
81	M81	N1145	N1144			RIGID	None	None	RIGID	Typical
82	M82	N1147	N1146			RIGID	None	None	RIGID	Typical
83	M83	N938	N1139			RIGID	None	None	RIGID	Typical
84	M84	N1139	N939			RIGID	None	None	RIGID	Typical
85	M85	N1139	N698			RIGID	None	None	RIGID	Typical
86	M86	N1141	N940			RIGID	None	None	RIGID	Typical
87	M87	N1141	N941			RIGID	None	None	RIGID	Typical
88	M88	N1141	N815			RIGID	None	None	RIGID	Typical
89	M89	N1143	N942			RIGID	None	None	RIGID	Typical
90	M90	N1143	N943			RIGID	None	None	RIGID	Typical
91	M91	N1143	N819			RIGID	None	None	RIGID	Typical
92	M92	N1145	N944			RIGID	None	None	RIGID	Typical
93	M93	N1145	N945			RIGID	None	None	RIGID	Typical
94	M94	N1145	N823			RIGID	None	None	RIGID	Typical
95	M95	N1147	N946			RIGID	None	None	RIGID	Typical
96	M96	N1147	N947			RIGID	None	None	RIGID	Typical
97	M97	N1147	N690			RIGID	None	None	RIGID	Typical
98	M98	N1149	N1148			RIGID	None	None	RIGID	Typical
99	M99	N1151	N1150			RIGID	None	None	RIGID	Typical
100	M100	N1153	N1152			RIGID	None	None	RIGID	Typical
101	M101	N1155	N1154			RIGID	None	None	RIGID	Typical
102	M102	N1157	N1156			RIGID	None	None	RIGID	Typical
103	M103	N295	N1149			RIGID	None	None	RIGID	Typical
104	M104	N1149	N296			RIGID	None	None	RIGID	Typical



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	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
105	M105	N1149	N43			RIGID	None	None	RIGID	Typical
106	M106	N1151	N297			RIGID	None	None	RIGID	Typical
107	M107	N1151	N298			RIGID	None	None	RIGID	Typical
108	M108	N1151	N169			RIGID	None	None	RIGID	Typical
109	M109	N1153	N299			RIGID	None	None	RIGID	Typical
110	M110	N1153	N300			RIGID	None	None	RIGID	Typical
111	M111	N1153	N173			RIGID	None	None	RIGID	Typical
112	M112	N1155	N301			RIGID	None	None	RIGID	Typical
113	M113	N1155	N302			RIGID	None	None	RIGID	Typical
114	M114	N1155	N177			RIGID	None	None	RIGID	Typical
115	M115	N1157	N303			RIGID	None	None	RIGID	Typical
116	M116	N1157	N304			RIGID	None	None	RIGID	Typical
117	M117	N1157	N32			RIGID	None	None	RIGID	Typical
118	M118	N1158	N1159			HSS4X4X4	Beam	SquareTube	A500 Gr...	Typical
119	M119	N1160	N1161			HSS4X4X4	Beam	SquareTube	A500 Gr...	Typical
120	M120	N1162	N1163			HSS4X4X4	Beam	SquareTube	A500 Gr...	Typical
121	MP3A	N1169	N1172			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
122	MP2A	N1168	N1171			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
123	MP1A	N1167	N1170			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
124	M124	N1173	N1174			Handrails	Beam	Pipe	A53 Gr.B	Typical
125	M125	N1175	N1176			Handrails	Beam	Pipe	A53 Gr.B	Typical
126	M126	N1177	N1178			Handrails	Beam	Pipe	A53 Gr.B	Typical
127	M127	N1182	N1187			HR End Conn	Beam	Pipe	A36 Gr.36	Typical
128	M128	N1184	N1183			HR End Conn	Beam	Pipe	A36 Gr.36	Typical
129	M129	N1186	N1185			HR End Conn	Beam	Pipe	A36 Gr.36	Typical
130	M130	N1191	N1179			RIGID	None	None	RIGID	Typical
131	M131	N1190	N1166			RIGID	None	None	RIGID	Typical
132	M132	N1192	N1180			RIGID	None	None	RIGID	Typical
133	M133	N1189	N1165			RIGID	None	None	RIGID	Typical
134	M134	N1193	N1181			RIGID	None	None	RIGID	Typical
135	M135	N1188	N1164			RIGID	None	None	RIGID	Typical
136	MP3C	N1199	N1202			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
137	MP2C	N1198	N1201			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
138	MP1C	N1197	N1200			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
139	M139	N1209	N1203			RIGID	None	None	RIGID	Typical
140	M140	N1208	N1196			RIGID	None	None	RIGID	Typical
141	M141	N1210	N1204			RIGID	None	None	RIGID	Typical
142	M142	N1207	N1195			RIGID	None	None	RIGID	Typical
143	M143	N1211	N1205			RIGID	None	None	RIGID	Typical
144	M144	N1206	N1194			RIGID	None	None	RIGID	Typical
145	MP3B	N1217	N1220			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
146	MP2B	N1216	N1219			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
147	MP1B	N1215	N1218			Mount Pipes 1	Beam	Pipe	A53 Gr.B	Typical
148	M148	N1227	N1221			RIGID	None	None	RIGID	Typical
149	M149	N1226	N1214			RIGID	None	None	RIGID	Typical
150	M150	N1228	N1222			RIGID	None	None	RIGID	Typical
151	M151	N1225	N1213			RIGID	None	None	RIGID	Typical
152	M152	N1229	N1223			RIGID	None	None	RIGID	Typical
153	M153	N1224	N1212			RIGID	None	None	RIGID	Typical



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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A Ya Vyf 5 Xj Ub WX 8 UH

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes				None
4	M4						Yes				None
5	M5						Yes				None
6	M6						Yes				None
7	M7						Yes				None
8	M8						Yes				None
9	M9						Yes				None
10	M10						Yes				None
11	M11						Yes				None
12	M12						Yes				None
13	M13						Yes	** NA **			None
14	M14						Yes	** NA **			None
15	M15						Yes	** NA **			None
16	M16						Yes				None
17	M17						Yes				None
18	M18						Yes	** NA **			None
19	M19						Yes	** NA **			None
20	M20						Yes	** NA **			None
21	M21						Yes				None
22	M22						Yes				None
23	M23						Yes	** NA **			None
24	M24						Yes	** NA **			None
25	M25						Yes	** NA **			None
26	M26						Yes	** NA **			None
27	M27						Yes	** NA **			None
28	M28						Yes				None
29	M29						Yes	** NA **			None
30	M30						Yes	** NA **			None
31	M31						Yes				None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes				None
35	M35						Yes				None
36	M36						Yes				None
37	M37						Yes				None
38	M38						Yes				None
39	M39						Yes				None
40	M40						Yes	** NA **			None
41	M41						Yes	** NA **			None
42	M42						Yes	** NA **			None
43	M43						Yes	** NA **			None
44	M44						Yes	** NA **			None
45	M45						Yes	** NA **			None
46	M46						Yes	** NA **			None
47	M47						Yes	** NA **			None
48	M48						Yes	** NA **			None
49	M49						Yes	** NA **			None
50	M50						Yes	** NA **			None
51	M51						Yes	** NA **			None



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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A Ya Vyf'5 Xj Ub WX'8 UHf7 cbhbi YXL

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
52	M52						Yes	** NA **			None
53	M53						Yes	** NA **			None
54	M54						Yes	** NA **			None
55	M55						Yes	** NA **			None
56	M56						Yes	** NA **			None
57	M57						Yes	** NA **			None
58	M58						Yes	** NA **			None
59	M59						Yes	** NA **			None
60	M60						Yes	** NA **			None
61	M61						Yes	** NA **			None
62	M62						Yes	** NA **			None
63	M63						Yes	** NA **			None
64	M64						Yes	** NA **			None
65	M65						Yes	** NA **			None
66	M66						Yes	** NA **			None
67	M67						Yes	** NA **			None
68	M68						Yes	** NA **			None
69	M69						Yes	** NA **			None
70	M70						Yes	** NA **			None
71	M71						Yes	** NA **			None
72	M72						Yes	** NA **			None
73	M73						Yes	** NA **			None
74	M74						Yes	** NA **			None
75	M75						Yes	** NA **			None
76	M76						Yes	** NA **			None
77	M77						Yes	** NA **			None
78	M78						Yes	** NA **			None
79	M79						Yes	** NA **			None
80	M80						Yes	** NA **			None
81	M81						Yes	** NA **			None
82	M82						Yes	** NA **			None
83	M83						Yes	** NA **			None
84	M84						Yes	** NA **			None
85	M85						Yes	** NA **			None
86	M86						Yes	** NA **			None
87	M87						Yes	** NA **			None
88	M88						Yes	** NA **			None
89	M89						Yes	** NA **			None
90	M90						Yes	** NA **			None
91	M91						Yes	** NA **			None
92	M92						Yes	** NA **			None
93	M93						Yes	** NA **			None
94	M94						Yes	** NA **			None
95	M95						Yes	** NA **			None
96	M96						Yes	** NA **			None
97	M97						Yes	** NA **			None
98	M98						Yes	** NA **			None
99	M99						Yes	** NA **			None
100	M100						Yes	** NA **			None
101	M101						Yes	** NA **			None
102	M102						Yes	** NA **			None
103	M103						Yes	** NA **			None



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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A Ya Vyf'5 Xj Ub WX'8 UJf7 cbh7bi YX

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
104	M104						Yes	** NA **			None
105	M105						Yes	** NA **			None
106	M106						Yes	** NA **			None
107	M107						Yes	** NA **			None
108	M108						Yes	** NA **			None
109	M109						Yes	** NA **			None
110	M110						Yes	** NA **			None
111	M111						Yes	** NA **			None
112	M112						Yes	** NA **			None
113	M113						Yes	** NA **			None
114	M114						Yes	** NA **			None
115	M115						Yes	** NA **			None
116	M116						Yes	** NA **			None
117	M117						Yes	** NA **			None
118	M118						Yes				None
119	M119						Yes				None
120	M120						Yes				None
121	MP3A						Yes				None
122	MP2A						Yes				None
123	MP1A						Yes				None
124	M124						Yes				None
125	M125						Yes				None
126	M126						Yes				None
127	M127						Yes				None
128	M128						Yes				None
129	M129						Yes				None
130	M130						Yes	** NA **			None
131	M131						Yes	** NA **			None
132	M132						Yes	** NA **			None
133	M133						Yes	** NA **			None
134	M134						Yes	** NA **			None
135	M135						Yes	** NA **			None
136	MP3C						Yes				None
137	MP2C						Yes				None
138	MP1C						Yes				None
139	M139						Yes	** NA **			None
140	M140						Yes	** NA **			None
141	M141						Yes	** NA **			None
142	M142						Yes	** NA **			None
143	M143						Yes	** NA **			None
144	M144						Yes	** NA **			None
145	MP3B						Yes				None
146	MP2B						Yes				None
147	MP1B						Yes				None
148	M148						Yes	** NA **			None
149	M149						Yes	** NA **			None
150	M150						Yes	** NA **			None
151	M151						Yes	** NA **			None
152	M152						Yes	** NA **			None
153	M153						Yes	** NA **			None



<chFc`YX`GhY`8 YgJ[b`DU`Ua Yhfg

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Footrails	6.073			Lbyy			1	1		Lateral
2	M2	Plan Bracing	4.25	Segment	Segment	Lbyy			.65	.65		Lateral
3	M3	Plan Bracing	4.25	Segment	Segment	Lbyy			.65	.65		Lateral
4	M4	Plate Bracin...	.225			Lbyy			.65	.65		Lateral
5	M5	Plan Bracing	4.25	Segment	Segment	Lbyy			.65	.65		Lateral
6	M6	Grating Angle	2.916			Lbyy			.65	.65		Lateral
7	M7	Grating Angle	2.916			Lbyy			.65	.65		Lateral
8	M8	Grating Angle	2.916			Lbyy			.65	.65		Lateral
9	M9	Grating Angle	2.916			Lbyy			.65	.65		Lateral
10	M10	Grating Angle	2.916			Lbyy			.65	.65		Lateral
11	M11	Grating Angle	2.916			Lbyy			.65	.65		Lateral
12	M12	Footrails	6.073			Lbyy			1	1		Lateral
13	M16	Footrails	6.073			Lbyy			1	1		Lateral
14	M17	Footrails	6.073			Lbyy			1	1		Lateral
15	M21	Footrails	6.073			Lbyy			1	1		Lateral
16	M22	Footrails	6.073			Lbyy			1	1		Lateral
17	M28	Plate Bracin...	.225			Lbyy			.65	.65		Lateral
18	M31	Plate Bracin...	.225			Lbyy			.65	.65		Lateral
19	M34	Plate Bracin...	.225			Lbyy			.65	.65		Lateral
20	M35	Plate Bracin...	.565			Lbyy			.65	.65		Lateral
21	M36	Plate Bracin...	.225			Lbyy			.65	.65		Lateral
22	M37	Plate Bracin...	.565			Lbyy			.65	.65		Lateral
23	M38	Plate Bracin...	.225			Lbyy			.65	.65		Lateral
24	M39	Plate Bracin...	.565			Lbyy			.65	.65		Lateral
25	M118	HSS4X4X4	3.167			Lbyy			2.1	2.1		Lateral
26	M119	HSS4X4X4	3.167			Lbyy			2.1	2.1		Lateral
27	M120	HSS4X4X4	3.167			Lbyy			2.1	2.1		Lateral
28	MP3A	Mount Pipe...	6			Lbyy						Lateral
29	MP2A	Mount Pipe...	8			Lbyy						Lateral
30	MP1A	Mount Pipe...	6			Lbyy						Lateral
31	M124	Handrails	12.5			Lbyy						Lateral
32	M125	Handrails	12.5			Lbyy						Lateral
33	M126	Handrails	12.5			Lbyy						Lateral
34	M127	HR End Conn	1.5			Lbyy						Lateral
35	M128	HR End Conn	1.5			Lbyy						Lateral
36	M129	HR End Conn	1.5			Lbyy						Lateral
37	MP3C	Mount Pipe...	6			Lbyy						Lateral
38	MP2C	Mount Pipe...	8			Lbyy						Lateral
39	MP1C	Mount Pipe...	6			Lbyy						Lateral
40	MP3B	Mount Pipe...	6			Lbyy						Lateral
41	MP2B	Mount Pipe...	8			Lbyy						Lateral
42	MP1B	Mount Pipe...	6			Lbyy						Lateral

>c]bh6 ci bXUf mi7 c bX]h]cbg

	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	N1158	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N1160	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N1162	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction



9bj YcdY>c]bhfYUM]cbg

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
1	N1158	max	3278.418	4	2659.591	7	1049.905	1	2.702	5	2.165	3	5.117	7
2		min	-1318.191	3	420.133	4	-1936.595	2	-.332	2	-2.061	4	-.759	4
3	N1160	max	1254.564	4	2998.737	8	1299.67	1	3.965	5	2.363	3	.306	3
4		min	-3023.358	3	578.279	3	-2572.614	2	-.315	2	-2.255	4	-5.215	8
5	N1162	max	951.069	4	2598.677	6	3218.401	5	.918	1	1.104	4	.692	3
6		min	-1142.508	3	289.846	1	-993.819	2	-5.377	6	-.956	3	-1.023	4
7	Totals:	max	5484.051	4	7800.16	6	5503.036	1						
8		min	-5484.058	3	3143.557	1	-5503.028	2						

9bj YcdYA Ya Vyf'GYW]cb : cfWg

Member	Sec		Axial [lb]	LC	y Shear [lb]	LC	z Shear [lb]	LC	Torque [k-...]	LC	y-y Mome...	LC	z-z Mome...	LC	
1	M1	1	max	0	11	0	11	0	11	0	11	0	11	11	
2			min	0	1	0	1	0	1	0	1	0	1	1	
3		2	max	342.065	7	57.225	3	328.503	1	.485	9	.122	1	.563	9
4			min	-57.749	4	-341.862	9	-207.724	2	-.069	10	-.125	2	-.046	2
5		3	max	813.514	3	39.094	1	235.511	2	.2	2	.198	3	.256	9
6			min	-310.21	4	-343.708	6	-209.968	1	-.319	1	-.084	4	-.363	3
7		4	max	586.083	3	87.31	1	209.338	4	.057	9	.192	2	.718	9
8			min	-198.249	4	-391.9	6	-358.191	3	-.321	5	-.119	1	-.132	3
9		5	max	586.083	3	74.477	1	209.338	4	.057	9	.274	4	1.147	9
10			min	-198.249	4	-421.358	6	-358.191	3	-.321	5	-.426	3	-.171	1
11	M2	1	max	433.901	2	121.802	1	109.318	1	.016	1	.019	2	.262	1
12			min	-545.191	1	-65.972	2	-124.393	2	-.013	2	-.016	1	-.189	2
13		2	max	1532.111	3	102.672	1	.264	1	.004	1	0	3	.14	1
14			min	-574.804	4	-92.988	2	-.163	2	-.001	2	0	4	-.114	9
15		3	max	2162.253	7	81.644	1	1.679	4	.003	1	.001	7	.088	8
16			min	-548.263	4	-112.14	2	-.837	8	-.003	2	0	4	-.03	9
17		4	max	1176.307	1	61.798	1	.712	4	.001	1	0	1	.166	6
18			min	-499.569	2	-127.552	2	-1.904	3	-.004	2	0	2	-.051	1
19		5	max	287.584	4	60.621	1	174.98	1	.008	4	.033	1	.255	2
20			min	-496.606	3	-77.563	2	-161.717	2	-.011	3	-.029	2	-.119	1
21	M3	1	max	394.97	1	99.411	2	110.502	2	.01	4	.022	1	.209	2
22			min	-483.083	2	-60.48	1	-134.476	1	-.008	3	-.018	2	-.173	1
23		2	max	1437.196	1	75.551	2	.609	4	.004	2	0	5	.112	2
24			min	-479.575	2	-77.774	1	-.524	3	-.001	1	0	2	-.1	1
25		3	max	2028.92	8	58.249	2	.797	2	.003	2	.001	8	.074	6
26			min	-347.67	3	-100.059	1	-1.551	3	-.003	1	0	3	-.032	10
27		4	max	899.63	8	38.778	2	.125	3	.001	2	0	8	.177	5
28			min	-256.141	3	-118.091	1	-1.663	8	-.004	1	0	3	-.024	2
29		5	max	367.319	2	71.136	10	123.445	4	.01	2	.028	4	.234	5
30			min	-585.993	1	-69.333	1	-120.46	3	-.014	1	-.026	3	-.068	2
31	M4	1	max	325.967	6	101.841	9	173.602	3	.021	3	.071	4	.059	9
32			min	-105.024	1	-71.863	10	-334.173	4	-.021	4	-.046	3	-.04	1
33		2	max	325.967	6	101.497	9	173.602	3	.021	3	.052	4	.054	9
34			min	-105.024	1	-72.207	10	-334.173	4	-.021	4	-.036	3	-.038	1
35		3	max	325.967	6	101.153	9	173.602	3	.021	3	.034	4	.048	9
36			min	-105.024	1	-72.551	10	-334.173	4	-.021	4	-.027	3	-.036	1
37		4	max	325.967	6	100.809	9	173.602	3	.021	3	.015	4	.042	9
38			min	-105.024	1	-72.895	10	-334.173	4	-.021	4	-.017	3	-.034	1



9bj YcdYA Ya VYf'GYW]cb: cfWkg'f7 cbl]bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC
39	5	max	325.967	6	100.465	9	173.602	3	.021	3	-.003	1	.037	9
40		min	-105.024	1	-73.239	10	-334.173	4	-.021	4	-.015	6	-.033	3
41	M5	1	max	651.492	4	124.103	3	210.192	3	.012	3	.04	.257	3
42			min	-734.622	3	-88.279	4	-235.457	4	-.01	4	-.034	.26	4
43		2	max	1452.576	2	103.946	3	.522	2	.003	3	0	.132	3
44			min	-494.3	1	-111.54	4	-.434	1	0	4	0	-.154	4
45		3	max	2086.303	6	86.443	3	.354	3	.003	3	.001	.047	10
46			min	-591.599	1	-135.152	4	-1.78	2	-.002	4	0	-.011	4
47		4	max	1222.009	3	65.61	3	.508	1	0	3	0	.158	4
48			min	-611.181	4	-151.29	4	-1.818	6	-.004	4	0	-.068	3
49		5	max	589.314	3	51.508	3	216.019	3	.011	3	.035	.266	4
50			min	-805.072	4	-73.158	4	-210.591	4	-.013	4	-.033	-.132	3
51	M6	1	max	120.531	2	11.65	1	32.783	7	0	2	.047	.05	1
52			min	-275.912	1	-22.906	2	3.465	4	0	1	-.037	-.054	2
53		2	max	120.531	2	22.028	1	16.389	7	0	2	.038	.042	1
54			min	-275.912	1	-33.284	2	-1.989	4	0	1	-.027	-.034	2
55		3	max	120.531	2	32.406	1	5.292	3	0	2	.022	.029	5
56			min	-275.912	1	-43.662	2	-7.798	4	0	1	-.015	-.011	2
57		4	max	120.531	2	42.784	1	-.008	3	0	2	.003	.029	7
58			min	-275.912	1	-54.04	2	-20.292	8	0	1	-.01	-.009	4
59		5	max	120.531	2	53.163	1	-3.402	3	0	2	.018	.044	2
60			min	-275.912	1	-64.418	2	-30.44	8	0	1	-.035	-.029	1
61	M7	1	max	125.177	2	34.732	8	29.94	3	.001	1	.036	.05	4
62			min	-313.419	1	.978	3	-38.788	4	0	2	-.034	-.045	3
63		2	max	125.177	2	20.582	8	29.94	3	.001	1	.029	.027	2
64			min	-313.419	1	-3.736	3	-38.788	4	0	2	-.024	-.036	1
65		3	max	125.177	2	9.929	4	29.94	3	.001	1	.02	.011	2
66			min	-313.419	1	-9.274	3	-38.788	4	0	2	-.016	-.03	5
67		4	max	125.177	2	4.693	4	31.794	1	.001	1	.002	.011	3
68			min	-313.419	1	-16.096	7	-40.491	2	0	2	-.008	-.031	8
69		5	max	125.177	2	1.303	4	42.172	1	.001	1	.009	.035	3
70			min	-313.419	1	-26.232	7	-50.869	2	0	2	-.023	-.051	4
71	M8	1	max	37.239	3	20.218	2	34.495	5	0	1	.047	.039	2
72			min	-199.28	8	-34.469	1	2.704	2	0	2	-.034	-.049	1
73		2	max	32.745	3	22.812	2	18.097	5	0	1	.036	.035	4
74			min	-197.764	8	-37.063	1	-2.751	2	0	2	-.022	-.029	3
75		3	max	32.515	1	25.407	2	6.747	1	0	1	.022	.027	8
76			min	-198.641	6	-39.658	1	-8.561	2	0	2	-.013	-.01	3
77		4	max	37.009	1	28.886	4	1.447	1	0	1	.007	.031	5
78			min	-200.157	6	-43.047	3	-19.172	6	0	2	-.01	-.007	2
79		5	max	41.503	1	36.67	4	-1.947	1	0	1	.018	.048	1
80			min	-201.672	6	-50.831	3	-29.321	6	0	2	-.036	-.03	2
81	M9	1	max	173.291	3	34.897	7	44.468	4	0	4	.073	.105	3
82			min	-361.228	4	-.854	4	-52.63	3	0	3	-.07	-.104	4
83		2	max	177.785	3	18.502	7	52.251	4	0	4	.054	.066	3
84			min	-365.722	4	-6.307	4	-60.414	3	0	3	-.047	-.077	4
85		3	max	182.279	3	11.011	3	60.035	4	0	4	.028	.025	3
86			min	-370.216	4	-12.117	4	-68.197	3	0	3	-.022	-.044	4
87		4	max	186.772	3	5.711	3	67.818	4	0	4	.003	.006	1
88			min	-374.71	4	-19.973	8	-75.981	3	0	3	-.005	-.032	6
89		5	max	191.266	3	2.318	3	75.602	4	0	4	.03	.044	4
90			min	-379.203	4	-30.121	8	-83.764	3	0	3	-.044	-.059	3

9bj YcdYA Ya Vyf GYVjcb: cfWkg f7 cbh7bi YXL

Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC		
91	M10	1	max	175.738	4	41.459	3	31.006	8	0	4	.077	4	.1	3
92			min	-321.453	3	-55.867	4	-4.679	3	0	3	-.063	3	-.11	4
93		2	max	180.232	4	49.243	3	17.97	4	0	4	.057	4	.073	3
94			min	-325.947	3	-63.651	4	-9.392	3	0	3	-.044	3	-.069	4
95		3	max	184.726	4	57.026	3	12.431	4	0	4	.03	4	.039	3
96			min	-330.44	3	-71.434	4	-14.931	3	0	3	-.022	3	-.026	4
97		4	max	189.22	4	64.81	3	7.192	4	0	4	.003	2	.024	8
98			min	-334.934	3	-79.218	4	-21.448	7	0	3	-.007	1	-.001	3
99		5	max	193.713	4	72.594	3	3.801	4	0	4	.024	3	.063	4
100			min	-339.428	3	-87.001	4	-31.587	7	0	3	-.044	4	-.048	3
101	M11	1	max	118.708	4	36.14	5	31.269	2	0	2	.052	1	.063	1
102			min	-302.539	3	1.567	2	-43.623	1	0	1	-.047	2	-.053	2
103		2	max	114.214	4	21.991	5	33.864	2	0	2	.039	1	.031	1
104			min	-298.045	3	-3.146	2	-46.217	1	0	1	-.031	2	-.036	2
105		3	max	109.72	4	10.069	1	36.458	2	0	2	.021	1	.007	4
106			min	-293.551	3	-8.685	2	-48.812	1	0	1	-.015	2	-.026	7
107		4	max	105.227	4	4.83	1	39.053	2	0	2	.001	4	.01	2
108			min	-289.057	3	-14.653	6	-51.406	1	0	1	-.008	9	-.033	5
109		5	max	100.733	4	1.439	1	41.647	2	0	2	.011	2	.039	2
110			min	-284.564	3	-24.792	6	-54.001	1	0	1	-.027	1	-.059	1
111	M12	1	max	1304.219	4	1879.303	6	681.031	1	.384	5	.107	1	.605	10
112			min	-823.146	3	246.685	1	-523.826	2	-.154	10	-.081	2	-.131	1
113		2	max	734.399	4	242.195	2	265.22	2	.351	8	.191	4	.348	10
114			min	-354.421	3	-83.757	1	-218.454	1	-.058	10	-.099	3	-.106	4
115		3	max	861.902	4	131.612	2	168.162	1	.352	5	.192	4	.232	10
116			min	-417.724	3	-35.125	1	-185.857	2	-.112	2	-.101	3	-.287	4
117		4	max	450.06	4	408.911	10	67.125	2	.094	9	.063	1	.608	10
118			min	-207.395	3	-1.824	3	-210.707	5	-.453	10	-.055	2	-.014	2
119		5	max	0	11	0	11	0	11	0	11	0	11	0	11
120			min	0	1	0	1	0	1	0	1	0	1	0	1
121	M13	1	max	-395.775	4	796.676	6	1628.679	1	0	11	.042	2	.041	2
122			min	-3270.848	7	146.103	1	-1782.525	2	0	1	-.274	5	-.049	1
123		2	max	-395.775	4	796.676	6	1628.679	1	0	11	-.004	2	.03	2
124			min	-3270.848	7	146.103	1	-1782.525	2	0	1	-.268	5	-.053	1
125		3	max	-395.775	4	796.676	6	1628.679	1	0	11	-.051	2	.018	2
126			min	-3270.848	7	146.103	1	-1782.525	2	0	1	-.261	5	-.058	5
127		4	max	-395.775	4	796.676	6	1628.679	1	0	11	-.095	4	.007	2
128			min	-3270.848	7	146.103	1	-1782.525	2	0	1	-.255	7	-.077	5
129		5	max	-395.775	4	796.676	6	1628.679	1	0	11	-.066	1	-.005	2
130			min	-3270.848	7	146.103	1	-1782.525	2	0	1	-.27	6	-.095	5
131	M14	1	max	2649.21	2	280.716	2	1362.72	10	0	11	.096	2	.046	5
132			min	-2071.897	1	-179.55	1	95.536	1	0	1	-.112	1	-.006	2
133		2	max	2649.21	2	280.716	2	1362.72	10	0	11	.117	2	.043	5
134			min	-2071.897	1	-179.55	1	95.536	1	0	1	-.109	1	-.013	2
135		3	max	2649.21	2	280.716	2	1362.72	10	0	11	.137	2	.044	1
136			min	-2071.897	1	-179.55	1	95.536	1	0	1	-.107	1	-.02	2
137		4	max	2649.21	2	280.716	2	1362.72	10	0	11	.157	2	.049	1
138			min	-2071.897	1	-179.55	1	95.536	1	0	1	-.104	1	-.028	2
139		5	max	2649.21	2	280.716	2	1362.72	10	0	11	.177	2	.054	1
140			min	-2071.897	1	-179.55	1	95.536	1	0	1	-.102	1	-.035	2
141	M15	1	max	2198.408	8	897.211	7	637.159	10	0	11	.007	2	.015	3
142			min	127.701	2	267.05	4	72.102	3	0	1	-.081	8	-.081	8



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 6:13 PM
 Checked By: _____

9bj YcdYA Ya VYf'GYWJcb: cfWVg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
143		2	max	2198.408	8	897.211	7	637.159	10	0	11	.012	2	.003	3
144			min	127.701	2	267.05	4	72.102	3	0	1	-.069	5	-.103	8
145		3	max	2198.408	8	897.211	7	637.159	10	0	11	.018	2	-.01	3
146			min	127.701	2	267.05	4	72.102	3	0	1	-.058	5	-.125	8
147		4	max	2198.408	8	897.211	7	637.159	10	0	11	.024	2	-.022	3
148			min	127.701	2	267.05	4	72.102	3	0	1	-.053	1	-.147	8
149		5	max	2198.408	8	897.211	7	637.159	10	0	11	.03	2	-.035	3
150			min	127.701	2	267.05	4	72.102	3	0	1	-.049	1	-.168	8
151	M16	1	max	0	11	.016	2	.003	1	0	11	0	11	0	11
152			min	0	1	-.002	10	0	7	0	1	0	1	0	1
153		2	max	341.946	5	66.84	9	312.41	4	.04	10	.101	4	.121	10
154			min	-17.698	2	-389.75	10	-206.715	3	-.023	6	-.114	3	-.026	9
155		3	max	937.312	1	-48.59	2	168.008	3	.114	1	.202	1	.254	2
156			min	-370.721	2	-435.097	10	-138.53	4	-.219	2	-.08	2	-.413	1
157		4	max	739.902	1	-22.267	2	241.201	2	-.014	10	.166	3	.676	10
158			min	-285.269	2	-426.31	7	-400.458	1	-.313	6	-.087	4	-.097	4
159		5	max	749.729	1	-35.1	2	235.527	2	-.014	10	.306	3	1.255	10
160			min	-295.096	2	-455.767	7	-394.785	1	-.313	6	-.469	4	-.042	4
161	M17	1	max	1407.248	2	1898	7	330.068	2	.482	4	.139	4	.887	5
162			min	-827.637	1	224.518	4	-180.899	1	-.329	3	-.116	3	-.151	2
163		2	max	969.111	2	388.563	7	406.776	3	.247	10	.302	3	.278	7
164			min	-517.313	1	-100.024	4	-353.136	4	-.023	4	-.216	4	-.066	4
165		3	max	1022.06	2	319.785	7	311.541	4	.238	8	.19	3	.124	4
166			min	-506.092	1	-23.213	4	-318.54	3	-.03	3	-.091	4	-.278	3
167		4	max	400.988	2	112.973	10	285.851	3	.073	10	.215	4	.086	10
168			min	-157.848	1	-60.995	9	-425.174	4	-.048	7	-.207	3	-.032	9
169		5	max	0	11	.005	7	0	5	0	11	0	11	0	11
170			min	0	1	-.021	1	-.006	3	0	1	0	1	0	1
171	M18	1	max	-190.367	2	791.231	7	1429.683	4	0	5	.03	1	.054	3
172			min	-4329.561	5	-69.156	4	-1892.297	3	0	7	-.267	6	-.063	4
173		2	max	-190.367	2	791.231	7	1429.683	4	0	5	-.018	1	.038	3
174			min	-4329.561	5	-69.156	4	-1892.297	3	0	7	-.278	6	-.062	4
175		3	max	-190.367	2	791.231	7	1429.683	4	0	5	-.067	1	.021	3
176			min	-4329.561	5	-69.156	4	-1892.297	3	0	7	-.289	6	-.06	4
177		4	max	-190.367	2	791.231	7	1429.683	4	0	5	-.085	9	.005	3
178			min	-4329.561	5	-69.156	4	-1892.297	3	0	7	-.303	7	-.075	8
179		5	max	-190.367	2	791.231	7	1429.683	4	0	5	-.065	4	-.012	3
180			min	-4329.561	5	-69.156	4	-1892.297	3	0	7	-.335	7	-.091	8
181	M19	1	max	2696.434	1	487.923	3	1702.534	7	0	5	.092	1	.036	8
182			min	-1624.019	2	-435.232	4	-142.056	4	0	1	-.091	2	-.002	3
183		2	max	2696.434	1	487.923	3	1702.534	7	0	5	.117	1	.038	4
184			min	-1624.019	2	-435.232	4	-142.056	4	0	1	-.088	2	-.015	3
185		3	max	2696.434	1	487.923	3	1702.534	7	0	5	.142	1	.05	4
186			min	-1624.019	2	-435.232	4	-142.056	4	0	1	-.084	2	-.028	3
187		4	max	2696.434	1	487.923	3	1702.534	7	0	5	.166	1	.061	4
188			min	-1624.019	2	-435.232	4	-142.056	4	0	1	-.081	2	-.04	3
189		5	max	2696.434	1	487.923	3	1702.534	7	0	5	.197	5	.072	4
190			min	-1624.019	2	-435.232	4	-142.056	4	0	1	-.077	2	-.053	3
191	M20	1	max	2421.975	6	1098.923	8	742.43	7	0	1	.015	1	.035	1
192			min	-247.373	1	68.685	3	-262.018	4	0	10	-.085	6	-.088	2
193		2	max	2421.975	6	1098.923	8	742.43	7	0	1	.021	1	.022	1
194			min	-247.373	1	68.685	3	-262.018	4	0	10	-.069	6	-.112	6



9bj YcdYA Ya Vyf GYVjcb: cfWkg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
195		3	max	2421.975	6	1098.923	8	742.43	7	0	1	.027	1	.01	1
196			min	-247.373	1	68.685	3	-262.018	4	0	10	-.062	2	-.138	6
197		4	max	2421.975	6	1098.923	8	742.43	7	0	1	.034	1	-.003	1
198			min	-247.373	1	68.685	3	-262.018	4	0	10	-.057	2	-.164	6
199		5	max	2421.975	6	1098.923	8	742.43	7	0	1	.04	1	-.016	1
200			min	-247.373	1	68.685	3	-262.018	4	0	10	-.052	2	-.19	6
201	M21	1	max	0	11	.023	1	.006	4	0	11	0	11	0	11
202			min	0	1	-.005	8	0	9	0	1	0	1	0	1
203		2	max	366.903	6	59.077	10	205.265	3	.038	1	.139	3	.081	9
204			min	-82.075	3	-119.623	6	-99.364	4	-.067	9	-.152	4	-.027	10
205		3	max	1013.469	4	-30.026	3	295.656	4	.138	4	.216	4	.198	3
206			min	-427.707	3	-468.896	8	-268.658	3	-.247	3	-.094	3	-.316	4
207		4	max	802.809	4	9.482	3	332.525	3	-.075	1	.266	4	.725	5
208			min	-330.402	3	-516.993	8	-490.949	4	-.284	6	-.188	3	-.114	2
209		5	max	812.636	4	-3.351	3	315.504	3	-.075	1	.384	1	1.499	5
210			min	-340.229	3	-546.451	8	-473.928	4	-.284	6	-.547	2	.011	2
211	M22	1	max	1461.194	1	2117.2	5	702.336	3	.416	3	.091	2	.694	9
212			min	-897.424	2	433.106	2	-534.434	4	-.175	4	-.069	1	-.093	3
213		2	max	808.584	1	270.887	1	346.759	1	.402	7	.218	1	.309	9
214			min	-364.871	2	-80.449	2	-283.15	2	.021	9	-.113	2	-.134	3
215		3	max	976.76	1	246.051	9	148.902	2	.328	7	.212	1	.262	2
216			min	-464.187	2	-27.023	2	-175.325	1	-.068	4	-.108	2	-.408	1
217		4	max	397.446	1	456.783	9	67.623	4	.092	7	.079	2	.169	9
218			min	-140.756	2	-31.988	10	-192.796	3	-.026	4	-.082	1	-.021	4
219		5	max	0	11	.002	9	0	8	0	11	0	11	0	11
220			min	0	1	-.016	2	-.004	1	0	1	0	1	0	1
221	M23	1	max	-556.876	3	956.542	5	1730.144	3	0	3	.088	4	.035	1
222			min	-3682.355	8	73.872	2	-2000.888	4	0	5	-.291	7	-.038	2
223		2	max	-556.876	3	956.542	5	1730.144	3	0	3	.035	4	.023	4
224			min	-3682.355	8	73.872	2	-2000.888	4	0	5	-.29	7	-.042	3
225		3	max	-556.876	3	956.542	5	1730.144	3	0	3	-.017	4	.013	4
226			min	-3682.355	8	73.872	2	-2000.888	4	0	5	-.289	7	-.052	7
227		4	max	-556.876	3	956.542	5	1730.144	3	0	3	-.069	4	.003	4
228			min	-3682.355	8	73.872	2	-2000.888	4	0	5	-.287	7	-.075	7
229		5	max	-556.876	3	956.542	5	1730.144	3	0	3	-.069	10	-.007	4
230			min	-3682.355	8	73.872	2	-2000.888	4	0	5	-.3	5	-.098	7
231	M24	1	max	2842.121	4	366.186	4	1375.674	8	0	5	.104	4	.044	6
232			min	-2007.55	3	-234.871	3	103.818	10	0	2	-.113	3	.001	1
233		2	max	2842.121	4	366.186	4	1375.674	8	0	5	.124	4	.039	6
234			min	-2007.55	3	-234.871	3	103.818	10	0	2	-.108	3	-.006	1
235		3	max	2842.121	4	366.186	4	1375.674	8	0	5	.145	4	.035	2
236			min	-2007.55	3	-234.871	3	103.818	10	0	2	-.103	3	-.013	1
237		4	max	2842.121	4	366.186	4	1375.674	8	0	5	.165	4	.039	2
238			min	-2007.55	3	-234.871	3	103.818	10	0	2	-.099	3	-.02	1
239		5	max	2842.121	4	366.186	4	1375.674	8	0	5	.186	4	.044	3
240			min	-2007.55	3	-234.871	3	103.818	10	0	2	-.094	3	-.028	4
241	M25	1	max	2432.586	7	982.597	6	621.516	5	0	8	.026	4	.043	4
242			min	-604.952	4	251.523	1	-116.238	2	0	4	-.089	7	-.098	3
243		2	max	2432.586	7	982.597	6	621.516	5	0	8	.031	4	.034	4
244			min	-604.952	4	251.523	1	-116.238	2	0	4	-.079	3	-.115	7
245		3	max	2432.586	7	982.597	6	621.516	5	0	8	.036	4	.025	4
246			min	-604.952	4	251.523	1	-116.238	2	0	4	-.073	3	-.14	7



9bj YcdYA Ya Vyf GYWjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
247	4	max	2432.586	7	982.597	6	621.516	5	0	8	.041	4	.016	4	
248		min	-604.952	4	251.523	1	-116.238	2	0	4	-.068	3	-.165	7	
249	5	max	2432.586	7	982.597	6	621.516	5	0	8	.045	4	.008	4	
250		min	-604.952	4	251.523	1	-116.238	2	0	4	-.063	3	-.19	7	
251	M26	1	max	325.967	6	101.841	9	173.395	3	.021	3	.125	4	.076	9
252		min	-105.025	1	-71.863	10	-334.066	4	-.021	4	-.074	3	-.045	1	
253	2	max	325.967	6	101.841	9	173.395	3	.021	3	.111	4	.072	9	
254		min	-105.025	1	-71.863	10	-334.066	4	-.021	4	-.067	3	-.044	1	
255	3	max	325.967	6	101.841	9	173.395	3	.021	3	.098	4	.068	9	
256		min	-105.025	1	-71.863	10	-334.066	4	-.021	4	-.06	3	-.042	1	
257	4	max	325.967	6	101.841	9	173.395	3	.021	3	.084	4	.063	9	
258		min	-105.025	1	-71.863	10	-334.066	4	-.021	4	-.053	3	-.041	1	
259	5	max	325.967	6	101.841	9	173.395	3	.021	3	.071	4	.059	9	
260		min	-105.025	1	-71.863	10	-334.066	4	-.021	4	-.046	3	-.04	1	
261	M27	1	max	413.521	4	100.02	10	307.359	3	.018	3	.073	4	.084	10
262		min	-172.821	3	-73.703	9	-167.741	4	-.022	4	-.113	3	-.057	3	
263	2	max	413.521	4	100.02	10	307.359	3	.018	3	.066	4	.08	10	
264		min	-172.821	3	-73.703	9	-167.741	4	-.022	4	-.101	3	-.058	3	
265	3	max	413.521	4	100.02	10	307.359	3	.018	3	.059	4	.076	10	
266		min	-172.821	3	-73.703	9	-167.741	4	-.022	4	-.089	3	-.058	3	
267	4	max	413.521	4	100.02	10	307.359	3	.018	3	.052	4	.072	10	
268		min	-172.821	3	-73.703	9	-167.741	4	-.022	4	-.077	3	-.059	3	
269	5	max	413.521	4	100.02	10	307.359	3	.018	3	.046	4	.068	10	
270		min	-172.821	3	-73.703	9	-167.741	4	-.022	4	-.064	3	-.059	3	
271	M28	1	max	397.881	1	75.15	10	48.183	4	.014	1	.036	2	.067	10
272		min	-174.321	2	-422.491	9	-209.381	7	-.019	9	-.014	1	-.503	9	
273	2	max	398.573	1	74.806	10	46.983	4	.014	1	.027	2	.063	10	
274		min	-175.014	2	-422.835	9	-209.08	7	-.019	9	-.013	1	-.479	9	
275	3	max	399.266	1	74.462	10	45.783	4	.014	1	.018	2	.059	10	
276		min	-175.706	2	-423.179	9	-208.778	7	-.019	9	-.012	1	-.455	9	
277	4	max	399.959	1	74.117	10	44.584	4	.014	1	.009	2	.054	10	
278		min	-176.399	2	-423.523	9	-208.476	7	-.019	9	-.011	1	-.431	9	
279	5	max	400.651	1	73.773	10	43.384	4	.014	1	0	2	.05	10	
280		min	-177.091	2	-423.867	9	-208.174	7	-.019	9	-.015	5	-.408	9	
281	M29	1	max	397.875	1	75.146	10	48.195	4	.014	1	.066	7	.079	10
282		min	-174.319	2	-422.461	9	-209.162	7	-.019	9	-.02	4	-.57	9	
283	2	max	397.875	1	75.146	10	48.195	4	.014	1	.058	3	.076	10	
284		min	-174.319	2	-422.461	9	-209.162	7	-.019	9	-.019	4	-.553	9	
285	3	max	397.875	1	75.146	10	48.195	4	.014	1	.05	3	.073	10	
286		min	-174.319	2	-422.461	9	-209.162	7	-.019	9	-.017	4	-.536	9	
287	4	max	397.875	1	75.146	10	48.195	4	.014	1	.043	3	.07	10	
288		min	-174.319	2	-422.461	9	-209.162	7	-.019	9	-.015	4	-.52	9	
289	5	max	397.875	1	75.146	10	48.195	4	.014	1	.036	2	.067	10	
290		min	-174.319	2	-422.461	9	-209.162	7	-.019	9	-.014	1	-.503	9	
291	M30	1	max	354.982	7	442.835	9	307.16	1	.013	1	.059	2	.107	7
292		min	-115.204	4	-44.573	10	-147.635	2	-.014	2	-.106	1	-.033	4	
293	2	max	354.982	7	442.835	9	307.16	1	.013	1	.053	2	.101	7	
294		min	-115.204	4	-44.573	10	-147.635	2	-.014	2	-.094	1	-.032	4	
295	3	max	354.982	7	442.835	9	307.16	1	.013	1	.047	2	.095	7	
296		min	-115.204	4	-44.573	10	-147.635	2	-.014	2	-.082	1	-.037	9	
297	4	max	354.982	7	442.835	9	307.16	1	.013	1	.041	2	.09	7	
298		min	-115.204	4	-44.573	10	-147.635	2	-.014	2	-.069	1	-.055	9	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

Jan 5, 2022
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 Checked By: _____

9bj YcdYA Ya VYf GYVjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
299	5	max	354.982	7	442.835	9	307.16	1	.013	1	.035	2	.084	7	
300		min	-115.204	4	-44.573	10	-147.635	2	-.014	2	-.057	1	-.073	9	
301	M31	1	max	389.22	4	375.596	10	71.056	2	.01	2	.046	1	.02	6
302		min	-177.02	3	-79.512	9	-236.669	5	-.011	1	-.022	2	-.105	10	
303		2	max	389.912	4	375.251	10	70.656	2	.01	2	.034	1	.019	6
304		min	-177.712	3	-79.856	9	-236.568	5	-.011	1	-.018	2	-.126	10	
305		3	max	390.605	4	374.907	10	70.256	2	.01	2	.021	1	.017	8
306		min	-178.405	3	-80.2	9	-236.468	5	-.011	1	-.014	2	-.147	10	
307		4	max	391.298	4	374.563	10	69.856	2	.01	2	.008	1	.016	8
308		min	-179.098	3	-80.544	9	-236.367	5	-.011	1	-.01	2	-.168	10	
309		5	max	391.99	4	374.219	10	69.456	2	.01	2	-.004	4	.015	8
310		min	-179.79	3	-80.888	9	-236.267	5	-.011	1	-.013	8	-.189	10	
311	M32	1	max	389.219	4	375.609	10	70.983	2	.01	2	.083	1	.026	6
312		min	-177.019	3	-79.511	9	-236.423	5	-.011	1	-.033	2	-.045	10	
313		2	max	389.219	4	375.609	10	70.983	2	.01	2	.074	1	.025	6
314		min	-177.019	3	-79.511	9	-236.423	5	-.011	1	-.03	2	-.06	10	
315		3	max	389.219	4	375.609	10	70.983	2	.01	2	.064	1	.023	6
316		min	-177.019	3	-79.511	9	-236.423	5	-.011	1	-.027	2	-.075	10	
317		4	max	389.219	4	375.609	10	70.983	2	.01	2	.055	1	.022	6
318		min	-177.019	3	-79.511	9	-236.423	5	-.011	1	-.025	2	-.09	10	
319		5	max	389.219	4	375.609	10	70.983	2	.01	2	.046	1	.02	6
320		min	-177.019	3	-79.511	9	-236.423	5	-.011	1	-.022	2	-.105	10	
321	M33	1	max	359.095	8	110.271	9	315.148	4	.015	10	.06	3	.107	9
322		min	-113.08	3	-355.058	10	-174.201	3	-.014	1	-.101	4	-.532	10	
323		2	max	359.095	8	110.271	9	315.148	4	.015	10	.053	3	.103	9
324		min	-113.08	3	-355.058	10	-174.201	3	-.014	1	-.088	4	-.518	10	
325		3	max	359.095	8	110.271	9	315.148	4	.015	10	.046	3	.099	9
326		min	-113.08	3	-355.058	10	-174.201	3	-.014	1	-.076	4	-.504	10	
327		4	max	359.095	8	110.271	9	315.148	4	.015	10	.039	3	.094	9
328		min	-113.08	3	-355.058	10	-174.201	3	-.014	1	-.063	4	-.489	10	
329		5	max	359.095	8	110.271	9	315.148	4	.015	10	.032	3	.09	9
330		min	-113.08	3	-355.058	10	-174.201	3	-.014	1	-.051	4	-.475	10	
331	M34	1	max	355.679	7	45.949	10	305.889	1	.013	1	.008	4	.053	7
332		min	-117.973	4	-441.436	9	-146.026	2	-.014	2	-.023	3	-.172	9	
333		2	max	355.504	7	45.605	10	306.289	1	.013	1	.007	4	.061	7
334		min	-117.281	4	-441.78	9	-146.425	2	-.014	2	-.012	3	-.147	9	
335		3	max	355.33	7	45.261	10	306.689	1	.013	1	.022	1	.069	7
336		min	-116.588	4	-442.124	9	-146.825	2	-.014	2	-.019	2	-.122	9	
337		4	max	355.156	7	44.917	10	307.089	1	.013	1	.04	1	.076	7
338		min	-115.895	4	-442.468	9	-147.225	2	-.014	2	-.027	2	-.097	9	
339		5	max	354.982	7	44.573	10	307.489	1	.013	1	.057	1	.084	7
340		min	-115.203	4	-442.812	9	-147.625	2	-.014	2	-.035	2	-.073	9	
341	M35	1	max	281.045	2	88.851	9	430.809	3	.004	2	.129	4	.037	9
342		min	-125.663	1	-81.304	10	-459.608	4	-.007	1	-.123	3	-.045	3	
343		2	max	281.045	2	87.826	9	430.809	3	.004	2	.064	4	.029	4
344		min	-125.663	1	-82.329	10	-459.608	4	-.007	1	-.062	3	-.047	3	
345		3	max	281.045	2	86.8	9	430.809	3	.004	2	0	1	.028	4
346		min	-125.663	1	-83.353	10	-459.608	4	-.007	1	-.003	6	-.049	3	
347		4	max	281.045	2	85.776	9	430.806	3	.004	2	.06	3	.035	10
348		min	-125.663	1	-84.378	10	-459.587	4	-.007	1	-.066	4	-.05	3	
349		5	max	281.045	2	84.751	9	430.806	3	.004	2	.121	3	.047	10
350		min	-125.663	1	-85.403	10	-459.587	4	-.007	1	-.131	4	-.053	7	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

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9bj YcdYA Ya Vyf'GYW]cb: cfWkg'f7 cbh]bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
351	M36	1	max	413.523	4	75.08	9	307.072	3	.018	3	.006	1	.046	10
352			min	-172.823	3	-98.647	10	-168.29	4	-.022	4	-.019	2	-.063	3
353		2	max	413.523	4	74.736	9	307.072	3	.018	3	.013	3	.051	10
354			min	-172.823	3	-98.991	10	-168.29	4	-.022	4	-.017	4	-.062	3
355		3	max	413.523	4	74.392	9	307.072	3	.018	3	.03	3	.057	10
356			min	-172.823	3	-99.335	10	-168.29	4	-.022	4	-.027	4	-.061	3
357		4	max	413.523	4	74.048	9	307.072	3	.018	3	.047	3	.062	10
358			min	-172.823	3	-99.679	10	-168.29	4	-.022	4	-.036	4	-.06	3
359		5	max	413.523	4	73.704	9	307.072	3	.018	3	.064	3	.068	10
360			min	-172.823	3	-100.023	10	-168.29	4	-.022	4	-.046	4	-.059	3
361	M37	1	max	298.135	4	366.466	10	201.594	2	.008	10	.063	1	.013	9
362			min	-144.114	3	-91.754	9	-228.681	1	-.01	1	-.057	2	-.185	10
363		2	max	299.876	4	365.441	10	200.589	2	.008	10	.031	1	.027	9
364			min	-145.855	3	-92.779	9	-227.676	1	-.01	1	-.029	2	-.237	10
365		3	max	301.618	4	364.416	10	199.583	2	.008	10	0	3	.04	9
366			min	-147.596	3	-93.804	9	-226.67	1	-.01	1	-.003	8	-.289	10
367		4	max	303.359	4	363.391	10	198.578	2	.008	10	.027	2	.053	9
368			min	-149.338	3	-94.829	9	-225.665	1	-.01	1	-.033	1	-.34	10
369		5	max	305.101	4	362.366	10	197.573	2	.008	10	.055	2	.066	9
370			min	-151.079	3	-95.854	9	-224.66	1	-.01	1	-.065	1	-.391	10
371	M38	1	max	358.397	8	356.485	10	310.737	4	.015	10	.006	3	.065	9
372			min	-110.31	3	-108.9	9	-169.315	3	-.014	1	-.02	5	-.395	10
373		2	max	358.571	8	356.141	10	311.937	4	.015	10	.01	2	.071	9
374			min	-111.003	3	-109.244	9	-170.514	3	-.014	1	-.016	1	-.415	10
375		3	max	358.745	8	355.796	10	313.136	4	.015	10	.015	2	.077	9
376			min	-111.696	3	-109.588	9	-171.714	3	-.014	1	-.013	1	-.435	10
377		4	max	358.92	8	355.452	10	314.336	4	.015	10	.033	4	.084	9
378			min	-112.388	3	-109.932	9	-172.913	3	-.014	1	-.023	3	-.455	10
379		5	max	359.094	8	355.108	10	315.535	4	.015	10	.051	4	.09	9
380			min	-113.081	3	-110.276	9	-174.113	3	-.014	1	-.032	3	-.475	10
381	M39	1	max	252.37	1	61.267	10	248.792	1	.006	1	.071	2	.05	10
382			min	-97.075	2	-426.843	9	-253.226	2	-.016	9	-.072	1	-.407	9
383		2	max	254.112	1	60.242	10	249.797	1	.006	1	.035	2	.041	10
384			min	-98.816	2	-427.869	9	-254.231	2	-.016	9	-.037	1	-.347	9
385		3	max	255.853	1	59.217	10	250.803	1	.006	1	0	4	.037	1
386			min	-100.557	2	-428.894	9	-255.236	2	-.016	9	-.003	7	-.286	9
387		4	max	257.594	1	58.191	10	251.808	1	.006	1	.034	1	.044	5
388			min	-102.299	2	-429.92	9	-256.242	2	-.016	9	-.037	2	-.226	9
389		5	max	259.336	1	57.166	10	252.813	1	.006	1	.07	1	.057	7
390			min	-104.04	2	-430.945	9	-257.247	2	-.016	9	-.073	2	-.165	9
391	M40	1	max	1196.178	8	3481.877	4	2289.117	1	.274	1	.249	1	.258	3
392			min	-28.748	3	-2917.597	3	-2591.536	2	-.19	2	-.165	2	-.347	4
393		2	max	1196.178	8	3481.877	4	2289.117	1	.274	1	.392	1	.44	3
394			min	-28.748	3	-2917.597	3	-2591.536	2	-.19	2	-.327	2	-.564	4
395		3	max	1196.178	8	3481.877	4	2289.117	1	.274	1	.535	1	.622	3
396			min	-28.748	3	-2917.597	3	-2591.536	2	-.19	2	-.489	2	-.781	4
397		4	max	1196.178	8	3481.877	4	2289.117	1	.274	1	.678	1	.804	3
398			min	-28.748	3	-2917.597	3	-2591.536	2	-.19	2	-.651	2	-.999	4
399		5	max	1196.178	8	3481.877	4	2289.117	1	.274	1	.821	1	.986	3
400			min	-28.748	3	-2917.597	3	-2591.536	2	-.19	2	-.812	2	-1.216	4
401	M41	1	max	-124.956	4	-173.713	1	36.754	9	.096	6	-.013	1	.052	6
402			min	-405.763	7	-935.159	6	-1036.493	10	.017	1	-.07	6	.013	1



9bj YcdYA Ya Vyf GYVJcb: cfWVg fT cbhpi YXL

Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC		
403	2	max	-124.956	4	-173.713	1	36.754	9	.096	6	-.013	1	.101	6	
404		min	-405.763	7	-935.159	6	-1036.493	10	.017	1	-.112	6	.022	1	
405	3	max	-124.956	4	-173.713	1	36.754	9	.096	6	-.014	1	.15	6	
406		min	-405.763	7	-935.159	6	-1036.493	10	.017	1	-.156	10	.031	1	
407	4	max	-124.956	4	-173.713	1	36.754	9	.096	6	-.014	1	.198	6	
408		min	-405.763	7	-935.159	6	-1036.493	10	.017	1	-.21	10	.04	1	
409	5	max	-124.956	4	-173.713	1	36.754	9	.096	6	-.014	1	.247	6	
410		min	-405.763	7	-935.159	6	-1036.493	10	.017	1	-.264	10	.049	1	
411	M42	1	max	153.464	2	576.912	2	1294.815	10	.057	2	.063	4	.163	2
412		min	-283.066	1	-253.82	1	-279.862	4	-.032	1	-.298	10	-.075	1	
413	2	max	153.464	2	576.912	2	1294.815	10	.057	2	.052	1	.133	2	
414		min	-283.066	1	-253.82	1	-279.862	4	-.032	1	-.23	10	-.061	1	
415	3	max	153.464	2	576.912	2	1294.815	10	.057	2	.042	1	.103	2	
416		min	-283.066	1	-253.82	1	-279.862	4	-.032	1	-.163	10	-.048	1	
417	4	max	153.464	2	576.912	2	1294.815	10	.057	2	.033	1	.073	2	
418		min	-283.066	1	-253.82	1	-279.862	4	-.032	1	-.095	10	-.035	1	
419	5	max	153.464	2	576.912	2	1294.815	10	.057	2	.023	1	.043	2	
420		min	-283.066	1	-253.82	1	-279.862	4	-.032	1	-.041	2	-.022	1	
421	M43	1	max	77.204	1	46.2	1	1386.446	5	.008	1	.119	6	.078	6
422		min	-1488.579	6	-1198.678	10	-502.553	2	-.161	6	-.005	1	.005	1	
423	2	max	77.204	1	46.2	1	1386.446	5	.008	1	.168	7	.14	6	
424		min	-1488.579	6	-1198.678	10	-502.553	2	-.161	6	.059	4	.002	1	
425	3	max	77.204	1	46.2	1	1386.446	5	.008	1	.239	5	.202	6	
426		min	-1488.579	6	-1198.678	10	-502.553	2	-.161	6	.044	2	0	1	
427	4	max	77.204	1	46.2	1	1386.446	5	.008	1	.312	5	.265	6	
428		min	-1488.579	6	-1198.678	10	-502.553	2	-.161	6	.017	2	-.003	1	
429	5	max	77.204	1	46.2	1	1386.446	5	.008	1	.384	5	.327	6	
430		min	-1488.579	6	-1198.678	10	-502.553	2	-.161	6	-.009	2	-.005	1	
431	M44	1	max	1434.14	6	1094.337	2	581.074	10	.025	1	.273	5	.288	2
432		min	-165.842	1	-352.771	1	-920.903	5	-.15	6	-.013	10	-.094	1	
433	2	max	1434.14	6	1094.337	2	581.074	10	.025	1	.225	5	.231	2	
434		min	-165.842	1	-352.771	1	-920.903	5	-.15	6	.017	10	-.076	1	
435	3	max	1434.14	6	1094.337	2	581.074	10	.025	1	.177	5	.174	2	
436		min	-165.842	1	-352.771	1	-920.903	5	-.15	6	.047	10	-.057	1	
437	4	max	1434.14	6	1094.337	2	581.074	10	.025	1	.142	6	.117	2	
438		min	-165.842	1	-352.771	1	-920.903	5	-.15	6	.02	1	-.039	1	
439	5	max	1434.14	6	1094.337	2	581.074	10	.025	1	.111	6	.06	2	
440		min	-165.842	1	-352.771	1	-920.903	5	-.15	6	-.018	1	-.021	1	
441	M45	1	max	-106.226	3	-206.437	2	226.062	4	.114	5	-.014	2	.064	5
442		min	-489.396	8	-1091.172	5	-1105.21	7	.019	2	-.084	5	.012	2	
443	2	max	-106.226	3	-206.437	2	226.062	4	.114	5	-.011	2	.121	5	
444		min	-489.396	8	-1091.172	5	-1105.21	7	.019	2	-.14	5	.023	2	
445	3	max	-106.226	3	-206.437	2	226.062	4	.114	5	-.006	4	.178	5	
446		min	-489.396	8	-1091.172	5	-1105.21	7	.019	2	-.196	5	.034	2	
447	4	max	-106.226	3	-206.437	2	226.062	4	.114	5	.006	4	.235	5	
448		min	-489.396	8	-1091.172	5	-1105.21	7	.019	2	-.253	7	.045	2	
449	5	max	-106.226	3	-206.437	2	226.062	4	.114	5	.018	4	.292	5	
450		min	-489.396	8	-1091.172	5	-1105.21	7	.019	2	-.311	7	.055	2	
451	M46	1	max	165.47	1	646.904	5	1333.528	5	.059	1	.114	2	.18	5
452		min	-251.544	2	-167.022	2	-460.066	2	-.024	2	-.32	5	-.051	2	
453	2	max	165.47	1	646.904	5	1333.528	5	.059	1	.09	2	.146	5	
454		min	-251.544	2	-167.022	2	-460.066	2	-.024	2	-.25	5	-.042	2	



9bj YcdYA Ya Vyf GYWjcb: cfWkg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
455		3	max	165.47	1	646.904	5	1333.528	5	.059	1	.066	2	.112	5
456			min	-251.544	2	-167.022	2	-460.066	2	-.024	2	-.181	5	-.034	2
457		4	max	165.47	1	646.904	5	1333.528	5	.059	1	.042	2	.079	5
458			min	-251.544	2	-167.022	2	-460.066	2	-.024	2	-.112	5	-.025	2
459		5	max	165.47	1	646.904	5	1333.528	5	.059	1	.018	2	.045	5
460			min	-251.544	2	-167.022	2	-460.066	2	-.024	2	-.043	1	-.016	2
461	M47	1	max	73.105	2	165.417	2	1535.057	4	.013	2	.17	5	.106	5
462			min	-1959.087	5	-1815.934	5	-929.825	3	-.229	5	-.01	2	.007	2
463		2	max	73.105	2	165.417	2	1535.057	4	.013	2	.196	8	.2	5
464			min	-1959.087	5	-1815.934	5	-929.825	3	-.229	5	.013	3	-.002	2
465		3	max	73.105	2	165.417	2	1535.057	4	.013	2	.24	8	.295	5
466			min	-1959.087	5	-1815.934	5	-929.825	3	-.229	5	-.035	3	-.011	2
467		4	max	73.105	2	165.417	2	1535.057	4	.013	2	.292	4	.39	5
468			min	-1959.087	5	-1815.934	5	-929.825	3	-.229	5	-.083	3	-.019	2
469		5	max	73.105	2	165.417	2	1535.057	4	.013	2	.372	4	.484	5
470			min	-1959.087	5	-1815.934	5	-929.825	3	-.229	5	-.132	3	-.028	2
471	M48	1	max	1886.73	5	1595.679	5	1024.907	3	.01	2	.284	4	.417	5
472			min	28.181	2	-266.128	2	-1345.851	4	-.215	5	-.11	3	-.075	2
473		2	max	1886.73	5	1595.679	5	1024.907	3	.01	2	.214	4	.334	5
474			min	28.181	2	-266.128	2	-1345.851	4	-.215	5	-.056	3	-.061	2
475		3	max	1886.73	5	1595.679	5	1024.907	3	.01	2	.182	8	.25	5
476			min	28.181	2	-266.128	2	-1345.851	4	-.215	5	-.003	3	-.047	2
477		4	max	1886.73	5	1595.679	5	1024.907	3	.01	2	.16	5	.167	5
478			min	28.181	2	-266.128	2	-1345.851	4	-.215	5	.038	2	-.033	2
479		5	max	1886.73	5	1595.679	5	1024.907	3	.01	2	.159	5	.084	5
480			min	28.181	2	-266.128	2	-1345.851	4	-.215	5	-.007	2	-.019	2
481	M49	1	max	-133.895	10	-235.84	3	79.05	3	.114	8	-.018	3	.059	8
482			min	-466.383	6	-1117.029	8	-972.018	9	.024	3	-.083	8	.015	10
483		2	max	-133.895	10	-235.84	3	79.05	3	.114	8	-.014	3	.117	8
484			min	-466.383	6	-1117.029	8	-972.018	9	.024	3	-.126	8	.028	10
485		3	max	-133.895	10	-235.84	3	79.05	3	.114	8	-.01	3	.176	8
486			min	-466.383	6	-1117.029	8	-972.018	9	.024	3	-.169	8	.041	10
487		4	max	-133.895	10	-235.84	3	79.05	3	.114	8	-.006	3	.234	8
488			min	-466.383	6	-1117.029	8	-972.018	9	.024	3	-.211	8	.054	10
489		5	max	-133.895	10	-235.84	3	79.05	3	.114	8	-.002	3	.292	8
490			min	-466.383	6	-1117.029	8	-972.018	9	.024	3	-.256	9	.066	3
491	M50	1	max	138.333	4	626.183	4	1182.097	9	.06	4	.123	3	.177	4
492			min	-276.285	3	-235.344	3	-481.171	3	-.03	3	-.282	9	-.07	3
493		2	max	138.333	4	626.183	4	1182.097	9	.06	4	.097	3	.144	4
494			min	-276.285	3	-235.344	3	-481.171	3	-.03	3	-.22	9	-.057	3
495		3	max	138.333	4	626.183	4	1182.097	9	.06	4	.072	3	.112	4
496			min	-276.285	3	-235.344	3	-481.171	3	-.03	3	-.159	9	-.045	3
497		4	max	138.333	4	626.183	4	1182.097	9	.06	4	.047	3	.079	4
498			min	-276.285	3	-235.344	3	-481.171	3	-.03	3	-.099	4	-.033	3
499		5	max	138.333	4	626.183	4	1182.097	9	.06	4	.022	3	.046	4
500			min	-276.285	3	-235.344	3	-481.171	3	-.03	3	-.043	4	-.021	3
501	M51	1	max	17.199	3	27.248	3	1630.675	3	.005	3	.139	8	.089	8
502			min	-1731.332	8	-1402.145	8	-756.121	4	-.188	8	-.003	3	.014	3
503		2	max	17.199	3	27.248	3	1630.675	3	.005	3	.189	6	.162	8
504			min	-1731.332	8	-1402.145	8	-756.121	4	-.188	8	.051	1	.013	3
505		3	max	17.199	3	27.248	3	1630.675	3	.005	3	.259	7	.235	8
506			min	-1731.332	8	-1402.145	8	-756.121	4	-.188	8	.024	4	.011	3



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 6:13 PM
 Checked By: _____

9bj YcdYA Ya VYf GYVjcb : cfWkg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
507		4	max	17.199	3	27.248	3	1630.675	3	.005	3	.333	7	.308	8
508			min	-1731.332	8	-1402.145	8	-756.121	4	-.188	8	-.015	4	.01	3
509		5	max	17.199	3	27.248	3	1630.675	3	.005	3	.407	7	.381	8
510			min	-1731.332	8	-1402.145	8	-756.121	4	-.188	8	-.055	4	.009	3
511	M52	1	max	1682.877	8	1294.432	9	329.651	9	0	3	.293	7	.336	9
512			min	21.18	3	-203.801	3	-896.667	7	-.178	8	.031	1	-.061	3
513		2	max	1682.877	8	1294.432	9	329.651	9	0	3	.247	7	.268	9
514			min	21.18	3	-203.801	3	-896.667	7	-.178	8	.041	1	-.051	3
515		3	max	1682.877	8	1294.432	9	329.651	9	0	3	.202	6	.201	9
516			min	21.18	3	-203.801	3	-896.667	7	-.178	8	.05	1	-.04	3
517		4	max	1682.877	8	1294.432	9	329.651	9	0	3	.16	8	.134	9
518			min	21.18	3	-203.801	3	-896.667	7	-.178	8	.045	3	-.029	3
519		5	max	1682.877	8	1294.432	9	329.651	9	0	3	.132	8	.066	8
520			min	21.18	3	-203.801	3	-896.667	7	-.178	8	0	3	-.019	3
521	M53	1	max	1294.383	7	16.018	1	491.271	4	.19	2	.196	4	.917	9
522			min	208.406	4	-1056.476	6	-642.628	3	-.242	1	-.41	3	-.146	1
523		2	max	1294.383	7	16.018	1	491.271	4	.19	2	.211	4	.942	9
524			min	208.406	4	-1056.476	6	-642.628	3	-.242	1	-.431	3	-.146	1
525		3	max	1294.383	7	16.018	1	491.271	4	.19	2	.227	4	.966	9
526			min	208.406	4	-1056.476	6	-642.628	3	-.242	1	-.451	3	-.147	1
527		4	max	1294.383	7	16.018	1	491.271	4	.19	2	.242	4	.991	9
528			min	208.406	4	-1056.476	6	-642.628	3	-.242	1	-.471	3	-.147	1
529		5	max	1294.383	7	16.018	1	491.271	4	.19	2	.257	4	1.016	9
530			min	208.406	4	-1056.476	6	-642.628	3	-.242	1	-.491	3	-.148	1
531	M54	1	max	1203.442	4	-201.719	1	68.764	3	0	5	.051	4	.005	3
532			min	-542.588	3	-858.04	6	-198.814	4	0	2	-.03	3	-.058	8
533		2	max	1203.442	4	-201.719	1	68.764	3	0	5	.045	4	.017	10
534			min	-542.588	3	-858.04	6	-198.814	4	0	2	-.028	3	-.032	8
535		3	max	1203.442	4	-201.719	1	68.764	3	0	5	.039	4	.03	10
536			min	-542.588	3	-858.04	6	-198.814	4	0	2	-.026	3	-.019	1
537		4	max	1203.442	4	-201.719	1	68.764	3	0	5	.033	4	.043	10
538			min	-542.588	3	-858.04	6	-198.814	4	0	2	-.024	3	-.013	1
539		5	max	1203.442	4	-201.719	1	68.764	3	0	5	.026	4	.059	6
540			min	-542.588	3	-858.04	6	-198.814	4	0	2	-.022	3	-.007	1
541	M55	1	max	1418.812	8	-99.245	4	642.378	2	.237	1	.305	3	.974	10
542			min	93.811	3	-1161.721	7	-874.465	1	-.24	2	-.519	4	-.123	4
543		2	max	1418.812	8	-99.245	4	642.378	2	.237	1	.307	3	1.002	10
544			min	93.811	3	-1161.721	7	-874.465	1	-.24	2	-.529	4	-.12	4
545		3	max	1418.812	8	-99.245	4	642.378	2	.237	1	.31	3	1.031	10
546			min	93.811	3	-1161.721	7	-874.465	1	-.24	2	-.539	4	-.117	4
547		4	max	1418.812	8	-99.245	4	642.378	2	.237	1	.313	3	1.06	10
548			min	93.811	3	-1161.721	7	-874.465	1	-.24	2	-.549	4	-.114	4
549		5	max	1418.812	8	-99.245	4	642.378	2	.237	1	.315	3	1.088	10
550			min	93.811	3	-1161.721	7	-874.465	1	-.24	2	-.559	4	-.111	4
551	M56	1	max	1426.97	2	-236.506	9	117.163	1	0	6	.058	3	.026	1
552			min	-692.363	1	-808.788	7	-261.128	2	0	1	-.034	4	-.049	2
553		2	max	1426.97	2	-236.506	9	117.163	1	0	6	.057	3	.035	1
554			min	-692.363	1	-808.788	7	-261.128	2	0	1	-.037	4	-.037	2
555		3	max	1426.97	2	-236.506	9	117.163	1	0	6	.055	3	.043	1
556			min	-692.363	1	-808.788	7	-261.128	2	0	1	-.04	4	-.026	2
557		4	max	1426.97	2	-236.506	9	117.163	1	0	6	.054	3	.059	5
558			min	-692.363	1	-808.788	7	-261.128	2	0	1	-.043	4	-.015	2



9bj YcdYA Ya Vyf GYWjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
559		5	max	1426.97	2	-236.506	9	117.163	1	0	6	.052	3	.084	5
560			min	-692.363	1	-808.788	7	-261.128	2	0	1	-.046	4	-.004	2
561	M57	1	max	1573.243	6	-80.449	3	717.275	3	.183	4	.331	1	1.072	5
562			min	164.085	1	-1337.992	8	-896.436	4	-.22	3	-.56	2	-.115	2
563		2	max	1573.243	6	-80.449	3	717.275	3	.183	4	.344	1	1.112	5
564			min	164.085	1	-1337.992	8	-896.436	4	-.22	3	-.578	2	-.107	2
565		3	max	1573.243	6	-80.449	3	717.275	3	.183	4	.357	1	1.153	5
566			min	164.085	1	-1337.992	8	-896.436	4	-.22	3	-.597	2	-.1	2
567		4	max	1573.243	6	-80.449	3	717.275	3	.183	4	.37	1	1.193	5
568			min	164.085	1	-1337.992	8	-896.436	4	-.22	3	-.616	2	-.092	2
569		5	max	1573.243	6	-80.449	3	717.275	3	.183	4	.383	1	1.234	5
570			min	164.085	1	-1337.992	8	-896.436	4	-.22	3	-.634	2	-.085	2
571	M58	1	max	1193.766	1	-268.312	2	73.818	2	0	7	.066	1	.002	4
572			min	-478.881	2	-965.972	5	-207.619	1	0	4	-.041	2	-.062	7
573		2	max	1193.766	1	-268.312	2	73.818	2	0	7	.059	1	.016	9
574			min	-478.881	2	-965.972	5	-207.619	1	0	4	-.039	2	-.032	7
575		3	max	1193.766	1	-268.312	2	73.818	2	0	7	.053	1	.032	9
576			min	-478.881	2	-965.972	5	-207.619	1	0	4	-.036	2	-.021	3
577		4	max	1193.766	1	-268.312	2	73.818	2	0	7	.046	1	.048	9
578			min	-478.881	2	-965.972	5	-207.619	1	0	4	-.034	2	-.011	3
579		5	max	1193.766	1	-268.312	2	73.818	2	0	7	.04	1	.07	8
580			min	-478.881	2	-965.972	5	-207.619	1	0	4	-.032	2	-.001	3
581	M59	1	max	269.31	7	322.775	1	151.418	4	.2	10	.25	7	-.016	2
582			min	-50.558	4	-156.249	2	-893.615	7	-.056	3	.003	4	-.143	5
583		2	max	269.31	7	322.775	1	151.418	4	.2	10	.206	5	-.006	2
584			min	-50.558	4	-156.249	2	-893.615	7	-.056	3	-.035	2	-.159	5
585		3	max	269.31	7	322.775	1	151.418	4	.2	10	.171	1	.003	2
586			min	-50.558	4	-156.249	2	-893.615	7	-.056	3	-.078	2	-.175	5
587		4	max	269.31	7	322.775	1	151.418	4	.2	10	.176	1	.013	2
588			min	-50.558	4	-156.249	2	-893.615	7	-.056	3	-.121	2	-.192	5
589		5	max	269.31	7	322.775	1	151.418	4	.2	10	.181	1	.023	2
590			min	-50.558	4	-156.249	2	-893.615	7	-.056	3	-.164	2	-.208	5
591	M60	1	max	313.457	3	323.465	7	219.309	2	.22	10	.273	5	.012	2
592			min	-338.128	4	-21.033	4	-570.57	1	-.024	3	-.029	2	-.154	5
593		2	max	313.457	3	323.465	7	219.309	2	.22	10	.237	5	0	2
594			min	-338.128	4	-21.033	4	-570.57	1	-.024	3	-.015	2	-.171	5
595		3	max	313.457	3	323.465	7	219.309	2	.22	10	.202	5	-.011	2
596			min	-338.128	4	-21.033	4	-570.57	1	-.024	3	-.001	2	-.188	5
597		4	max	313.457	3	323.465	7	219.309	2	.22	10	.166	5	-.02	4
598			min	-338.128	4	-21.033	4	-570.57	1	-.024	3	.012	2	-.206	7
599		5	max	313.457	3	323.465	7	219.309	2	.22	10	.131	5	-.019	4
600			min	-338.128	4	-21.033	4	-570.57	1	-.024	3	.026	2	-.226	7
601	M61	1	max	338.181	3	368.414	7	362.921	2	.22	10	.1	7	.004	4
602			min	-228.22	4	-79.834	4	-518.159	1	.006	2	-.032	4	-.048	7
603		2	max	338.181	3	368.414	7	362.921	2	.22	10	.091	3	.009	4
604			min	-228.22	4	-79.834	4	-518.159	1	.006	2	-.042	4	-.071	7
605		3	max	338.181	3	368.414	7	362.921	2	.22	10	.091	3	.014	4
606			min	-228.22	4	-79.834	4	-518.159	1	.006	2	-.052	4	-.094	7
607		4	max	338.181	3	368.414	7	362.921	2	.22	10	.091	3	.019	4
608			min	-228.22	4	-79.834	4	-518.159	1	.006	2	-.062	4	-.117	7
609		5	max	338.181	3	368.414	7	362.921	2	.22	10	.092	3	.024	4
610			min	-228.22	4	-79.834	4	-518.159	1	.006	2	-.072	4	-.14	7



9bj YcdYA Ya VYf GYWjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
611	M62	1	max	1029.198	7	1135.244	10	1102.857	10	.487	4	-.114	4	.526	10
612			min	38.401	4	-248.859	4	-330.078	4	-.236	3	-.951	10	-.162	4
613		2	max	1029.198	7	1135.244	10	1102.857	10	.487	4	-.134	4	.455	10
614			min	38.401	4	-248.859	4	-330.078	4	-.236	3	-.882	10	-.146	4
615		3	max	1029.198	7	1135.244	10	1102.857	10	.487	4	-.134	9	.384	10
616			min	38.401	4	-248.859	4	-330.078	4	-.236	3	-.813	10	-.131	4
617		4	max	1029.198	7	1135.244	10	1102.857	10	.487	4	-.13	9	.314	10
618			min	38.401	4	-248.859	4	-330.078	4	-.236	3	-.744	10	-.115	4
619		5	max	1029.198	7	1135.244	10	1102.857	10	.487	4	-.126	9	.243	10
620			min	38.401	4	-248.859	4	-330.078	4	-.236	3	-.675	10	-.1	4
621	M63	1	max	1288.46	4	1605.225	4	1425.058	3	.007	7	.008	7	0	4
622			min	-661.279	3	-992.49	3	-2199.518	4	-.001	4	-.002	4	0	3
623		2	max	1288.46	4	1605.225	4	1425.058	3	.007	7	.046	3	.027	3
624			min	-661.279	3	-992.49	3	-2199.518	4	-.001	4	-.061	4	-.043	4
625		3	max	1288.46	4	1605.225	4	1425.058	3	.007	7	.085	3	.054	3
626			min	-661.279	3	-992.49	3	-2199.518	4	-.001	4	-.121	4	-.086	4
627		4	max	1288.46	4	1605.225	4	1425.058	3	.007	7	.123	3	.081	3
628			min	-661.279	3	-992.49	3	-2199.518	4	-.001	4	-.18	4	-.13	4
629		5	max	1288.46	4	1605.225	4	1425.058	3	.007	7	.162	3	.108	3
630			min	-661.279	3	-992.49	3	-2199.518	4	-.001	4	-.24	4	-.173	4
631	M64	1	max	231.234	3	604.145	4	224.743	10	0	5	.007	1	.055	4
632			min	-123.144	4	-495.99	3	-92.477	1	0	2	-.019	10	-.054	3
633		2	max	231.234	3	604.145	4	224.743	10	0	5	.005	1	.042	4
634			min	-123.144	4	-495.99	3	-92.477	1	0	2	-.015	10	-.044	3
635		3	max	231.234	3	604.145	4	224.743	10	0	5	.003	1	.03	4
636			min	-123.144	4	-495.99	3	-92.477	1	0	2	-.01	10	-.034	3
637		4	max	231.234	3	604.145	4	224.743	10	0	5	.001	4	.017	4
638			min	-123.144	4	-495.99	3	-92.477	1	0	2	-.005	10	-.023	3
639		5	max	231.234	3	604.145	4	224.743	10	0	5	0	4	.004	4
640			min	-123.144	4	-495.99	3	-92.477	1	0	2	0	3	-.013	7
641	M65	1	max	1478.581	8	340.018	4	2140.403	2	.04	10	.271	1	.077	5
642			min	17.622	3	-661	10	-2196.663	1	-.008	3	-.245	2	-.044	10
643		2	max	1478.581	8	340.018	4	2140.403	2	.04	10	.206	1	.08	5
644			min	17.622	3	-661	10	-2196.663	1	-.008	3	-.181	2	-.024	10
645		3	max	1478.581	8	340.018	4	2140.403	2	.04	10	.14	1	.083	5
646			min	17.622	3	-661	10	-2196.663	1	-.008	3	-.117	2	-.005	10
647		4	max	1478.581	8	340.018	4	2140.403	2	.04	10	.075	1	.086	5
648			min	17.622	3	-661	10	-2196.663	1	-.008	3	-.054	2	.012	2
649		5	max	1478.581	8	340.018	4	2140.403	2	.04	10	.041	10	.091	7
650			min	17.622	3	-661	10	-2196.663	1	-.008	3	-.002	3	.012	4
651	M66	1	max	527.896	8	76.964	3	133.888	3	.013	7	.078	4	.009	3
652			min	-89.516	3	-591.963	8	-798.206	10	-.002	4	-.029	3	-.063	8
653		2	max	527.896	8	76.964	3	133.888	3	.013	7	.059	4	.007	3
654			min	-89.516	3	-591.963	8	-798.206	10	-.002	4	-.025	3	-.046	8
655		3	max	527.896	8	76.964	3	133.888	3	.013	7	.041	4	.005	3
656			min	-89.516	3	-591.963	8	-798.206	10	-.002	4	-.021	3	-.03	8
657		4	max	527.896	8	76.964	3	133.888	3	.013	7	.022	4	.003	3
658			min	-89.516	3	-591.963	8	-798.206	10	-.002	4	-.017	3	-.014	8
659		5	max	527.896	8	76.964	3	133.888	3	.013	7	.003	4	.003	8
660			min	-89.516	3	-591.963	8	-798.206	10	-.002	4	-.016	7	0	3
661	M67	1	max	36.483	4	162.331	3	103.956	3	0	1	.018	4	-.006	9
662			min	-66.647	3	-176.607	4	-207.621	4	0	2	-.011	3	-.022	7



9bj YcdYA Ya VYf GYWjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
663		2	max	36.483	4	162.331	3	103.956	3	0	1	.014	4	-.003	4
664			min	-66.647	3	-176.607	4	-207.621	4	0	2	-.008	3	-.022	7
665		3	max	36.483	4	162.331	3	103.956	3	0	1	.009	4	.001	4
666			min	-66.647	3	-176.607	4	-207.621	4	0	2	-.006	3	-.023	7
667		4	max	36.483	4	162.331	3	103.956	3	0	1	.005	4	.005	4
668			min	-66.647	3	-176.607	4	-207.621	4	0	2	-.004	3	-.023	7
669		5	max	36.483	4	162.331	3	103.956	3	0	1	0	4	.009	4
670			min	-66.647	3	-176.607	4	-207.621	4	0	2	-.002	3	-.024	3
671	M68	1	max	1411.478	6	-58.798	3	311.506	3	.082	10	.116	10	.228	7
672			min	178.885	1	-903.447	8	-359.902	10	-.003	3	-.059	3	-.065	4
673		2	max	1411.478	6	-58.798	3	311.506	3	.082	10	.104	10	.253	7
674			min	178.885	1	-903.447	8	-359.902	10	-.003	3	-.05	3	-.047	4
675		3	max	1411.478	6	-58.798	3	311.506	3	.082	10	.093	10	.277	7
676			min	178.885	1	-903.447	8	-359.902	10	-.003	3	-.04	3	-.028	4
677		4	max	1411.478	6	-58.798	3	311.506	3	.082	10	.082	10	.301	7
678			min	178.885	1	-903.447	8	-359.902	10	-.003	3	-.03	3	-.01	4
679		5	max	1411.478	6	-58.798	3	311.506	3	.082	10	.071	10	.325	7
680			min	178.885	1	-903.447	8	-359.902	10	-.003	3	-.021	3	.009	4
681	M69	1	max	406.142	3	678.729	4	59.937	4	.015	7	.058	10	.078	4
682			min	-582.507	4	-532.489	3	-645.404	10	0	4	-.006	4	-.059	3
683		2	max	406.142	3	678.729	4	59.937	4	.015	7	.039	10	.059	4
684			min	-582.507	4	-532.489	3	-645.404	10	0	4	-.004	4	-.044	3
685		3	max	406.142	3	678.729	4	59.937	4	.015	7	.021	10	.04	4
686			min	-582.507	4	-532.489	3	-645.404	10	0	4	-.003	4	-.029	3
687		4	max	406.142	3	678.729	4	59.937	4	.015	7	.003	10	.021	4
688			min	-582.507	4	-532.489	3	-645.404	10	0	4	-.005	5	-.014	3
689		5	max	406.142	3	678.729	4	59.937	4	.015	7	0	4	.002	8
690			min	-582.507	4	-532.489	3	-645.404	10	0	4	-.016	7	0	3
691	M70	1	max	64.88	4	83.153	1	228.002	3	0	1	.021	4	.003	4
692			min	-57.024	3	-119.311	2	-240.459	4	0	2	-.021	3	-.026	7
693		2	max	64.88	4	83.153	1	228.002	3	0	1	.016	4	.003	4
694			min	-57.024	3	-119.311	2	-240.459	4	0	2	-.016	3	-.025	7
695		3	max	64.88	4	83.153	1	228.002	3	0	1	.011	4	.004	4
696			min	-57.024	3	-119.311	2	-240.459	4	0	2	-.011	3	-.024	7
697		4	max	64.88	4	83.153	1	228.002	3	0	1	.006	4	.005	4
698			min	-57.024	3	-119.311	2	-240.459	4	0	2	-.007	3	-.023	7
699		5	max	64.88	4	83.153	1	228.002	3	0	1	0	4	.006	4
700			min	-57.024	3	-119.311	2	-240.459	4	0	2	-.002	3	-.022	7
701	M71	1	max	889.431	3	275.769	2	174.082	2	.121	8	.13	10	.331	5
702			min	-827.942	4	-320.533	1	-293.806	10	-.009	3	-.057	3	-.016	2
703		2	max	889.431	3	275.769	2	174.082	2	.121	8	.12	10	.334	5
704			min	-827.942	4	-320.533	1	-293.806	10	-.009	3	-.053	3	-.025	2
705		3	max	889.431	3	275.769	2	174.082	2	.121	8	.111	10	.338	5
706			min	-827.942	4	-320.533	1	-293.806	10	-.009	3	-.05	3	-.033	2
707		4	max	889.431	3	275.769	2	174.082	2	.121	8	.101	10	.342	5
708			min	-827.942	4	-320.533	1	-293.806	10	-.009	3	-.046	3	-.042	2
709		5	max	889.431	3	275.769	2	174.082	2	.121	8	.094	4	.345	5
710			min	-827.942	4	-320.533	1	-293.806	10	-.009	3	-.043	3	-.051	2
711	M72	1	max	832.647	3	1188.393	4	419.214	4	.019	7	.064	3	.141	4
712			min	-1006.049	4	-799.192	3	-663.588	3	.003	4	-.051	4	-.087	3
713		2	max	832.647	3	1188.393	4	419.214	4	.019	7	.045	3	.107	4
714			min	-1006.049	4	-799.192	3	-663.588	3	.003	4	-.039	4	-.064	3



9bj YcdYA Ya Vyf GYVjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
715		3	max	832.647	3	1188.393	4	419.214	4	.019	7	.026	3	.073	4
716			min	-1006.049	4	-799.192	3	-663.588	3	.003	4	-.027	4	-.041	3
717		4	max	832.647	3	1188.393	4	419.214	4	.019	7	.007	3	.039	4
718			min	-1006.049	4	-799.192	3	-663.588	3	.003	4	-.015	4	-.018	3
719		5	max	832.647	3	1188.393	4	419.214	4	.019	7	-.003	4	.011	5
720			min	-1006.049	4	-799.192	3	-663.588	3	.003	4	-.02	7	.003	9
721	M73	1	max	46.433	2	193.693	1	264.797	3	0	1	.032	4	.009	4
722			min	-51.811	1	-159.676	2	-381.62	4	0	2	-.024	3	-.02	3
723		2	max	46.433	2	193.693	1	264.797	3	0	1	.024	4	.007	4
724			min	-51.811	1	-159.676	2	-381.62	4	0	2	-.018	3	-.019	3
725		3	max	46.433	2	193.693	1	264.797	3	0	1	.016	4	.005	4
726			min	-51.811	1	-159.676	2	-381.62	4	0	2	-.012	3	-.019	7
727		4	max	46.433	2	193.693	1	264.797	3	0	1	.008	4	.003	4
728			min	-51.811	1	-159.676	2	-381.62	4	0	2	-.007	3	-.019	7
729		5	max	46.433	2	193.693	1	264.797	3	0	1	0	4	.001	4
730			min	-51.811	1	-159.676	2	-381.62	4	0	2	-.002	7	-.02	7
731	M74	1	max	876.838	3	356.447	4	138.853	2	.103	5	.143	10	.162	5
732			min	-1040.191	4	-297.371	10	-334.341	10	.004	2	-.011	2	.01	2
733		2	max	876.838	3	356.447	4	138.853	2	.103	5	.131	10	.158	5
734			min	-1040.191	4	-297.371	10	-334.341	10	.004	2	-.006	2	.004	2
735		3	max	876.838	3	356.447	4	138.853	2	.103	5	.12	10	.154	5
736			min	-1040.191	4	-297.371	10	-334.341	10	.004	2	-.001	2	-.002	2
737		4	max	876.838	3	356.447	4	138.853	2	.103	5	.109	10	.149	5
738			min	-1040.191	4	-297.371	10	-334.341	10	.004	2	.003	2	-.008	2
739		5	max	876.838	3	356.447	4	138.853	2	.103	5	.098	10	.145	5
740			min	-1040.191	4	-297.371	10	-334.341	10	.004	2	-.002	3	-.014	2
741	M75	1	max	2067.935	10	3209.518	8	700.798	4	.014	7	.071	3	.394	8
742			min	-319.752	4	196.365	3	-659.944	3	.002	9	-.086	4	.03	3
743		2	max	2067.935	10	3209.518	8	700.798	4	.014	7	.052	3	.3	8
744			min	-319.752	4	196.365	3	-659.944	3	.002	9	-.066	4	.025	3
745		3	max	2067.935	10	3209.518	8	700.798	4	.014	7	.033	3	.205	8
746			min	-319.752	4	196.365	3	-659.944	3	.002	9	-.045	4	.019	3
747		4	max	2067.935	10	3209.518	8	700.798	4	.014	7	.013	3	.111	8
748			min	-319.752	4	196.365	3	-659.944	3	.002	9	-.025	4	.013	3
749		5	max	2067.935	10	3209.518	8	700.798	4	.014	7	-.002	2	.018	5
750			min	-319.752	4	196.365	3	-659.944	3	.002	9	-.013	5	.004	9
751	M76	1	max	-848.464	9	121.278	3	672.021	7	0	9	-.01	4	.004	3
752			min	-3852.396	5	-340.318	4	121.188	4	0	10	-.057	7	-.035	8
753		2	max	-848.464	9	121.278	3	672.021	7	0	9	-.008	4	.001	3
754			min	-3852.396	5	-340.318	4	121.188	4	0	10	-.043	7	-.029	8
755		3	max	-848.464	9	121.278	3	672.021	7	0	9	-.005	4	-.001	3
756			min	-3852.396	5	-340.318	4	121.188	4	0	10	-.029	7	-.022	8
757		4	max	-848.464	9	121.278	3	672.021	7	0	9	-.003	4	-.002	2
758			min	-3852.396	5	-340.318	4	121.188	4	0	10	-.015	7	-.016	5
759		5	max	-848.464	9	121.278	3	672.021	7	0	9	0	2	0	4
760			min	-3852.396	5	-340.318	4	121.188	4	0	10	0	5	-.01	7
761	M77	1	max	309.712	3	2475.751	5	1233.91	1	.53	4	.433	1	.21	4
762			min	-1272.229	8	604.978	9	-764.086	2	-.472	3	-.155	2	-.7	10
763		2	max	309.712	3	2475.751	5	1233.91	1	.53	4	.476	1	.176	4
764			min	-1272.229	8	604.978	9	-764.086	2	-.472	3	-.181	2	-.78	10
765		3	max	309.712	3	2475.751	5	1233.91	1	.53	4	.519	1	.141	4
766			min	-1272.229	8	604.978	9	-764.086	2	-.472	3	-.208	2	-.859	10



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 6:13 PM
 Checked By: _____

9bj YcdYA Ya VYf GYVJcb: cfWVg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
767		4	max	309.712	3	2475.751	5	1233.91	1	.53	4	.562	1	.106	4
768			min	-1272.229	8	604.978	9	-764.086	2	-.472	3	-.235	2	-.939	10
769		5	max	309.712	3	2475.751	5	1233.91	1	.53	4	.606	1	.071	4
770			min	-1272.229	8	604.978	9	-764.086	2	-.472	3	-.262	2	-1.019	10
771	M78	1	max	1322.193	6	2611.246	4	2662.918	1	.291	4	.211	1	.24	3
772			min	179.794	1	-3317.991	3	-2707.725	2	-.186	3	-.302	2	-.254	4
773		2	max	1322.193	6	2611.246	4	2662.918	1	.291	4	.377	1	.447	3
774			min	179.794	1	-3317.991	3	-2707.725	2	-.186	3	-.471	2	-.417	4
775		3	max	1322.193	6	2611.246	4	2662.918	1	.291	4	.543	1	.654	3
776			min	179.794	1	-3317.991	3	-2707.725	2	-.186	3	-.64	2	-.58	4
777		4	max	1322.193	6	2611.246	4	2662.918	1	.291	4	.709	1	.861	3
778			min	179.794	1	-3317.991	3	-2707.725	2	-.186	3	-.809	2	-.743	4
779		5	max	1322.193	6	2611.246	4	2662.918	1	.291	4	.876	1	1.068	3
780			min	179.794	1	-3317.991	3	-2707.725	2	-.186	3	-.978	2	-.906	4
781	M79	1	max	322.685	5	69.803	2	536.165	3	.204	6	-.024	3	.006	3
782			min	-68.842	2	-931.868	5	-398.264	4	-.032	1	-.218	8	-.13	8
783		2	max	322.685	5	69.803	2	536.165	3	.204	6	.009	3	.041	3
784			min	-68.842	2	-931.868	5	-398.264	4	-.032	1	-.214	8	-.09	4
785		3	max	322.685	5	69.803	2	536.165	3	.204	6	.043	3	.075	3
786			min	-68.842	2	-931.868	5	-398.264	4	-.032	1	-.21	8	-.085	4
787		4	max	322.685	5	69.803	2	536.165	3	.204	6	.076	3	.11	3
788			min	-68.842	2	-931.868	5	-398.264	4	-.032	1	-.208	4	-.08	4
789		5	max	322.685	5	69.803	2	536.165	3	.204	6	.11	3	.145	3
790			min	-68.842	2	-931.868	5	-398.264	4	-.032	1	-.233	4	-.075	4
791	M80	1	max	211.864	1	122.069	3	200.925	4	.228	8	.019	3	.022	3
792			min	-228.127	2	-636.07	8	-281.071	3	.003	9	-.221	8	-.134	8
793		2	max	211.864	1	122.069	3	200.925	4	.228	8	.002	3	.014	3
794			min	-228.127	2	-636.07	8	-281.071	3	.003	9	-.225	8	-.101	9
795		3	max	211.864	1	122.069	3	200.925	4	.228	8	-.016	3	.007	3
796			min	-228.127	2	-636.07	8	-281.071	3	.003	9	-.229	8	-.073	9
797		4	max	211.864	1	122.069	3	200.925	4	.228	8	-.033	3	0	3
798			min	-228.127	2	-636.07	8	-281.071	3	.003	9	-.234	8	-.045	9
799		5	max	211.864	1	122.069	3	200.925	4	.228	8	-.041	10	.025	8
800			min	-228.127	2	-636.07	8	-281.071	3	.003	9	-.238	8	-.017	9
801	M81	1	max	273.403	4	156.033	3	239.809	2	.237	8	.005	2	.016	3
802			min	-184.667	3	-425.338	8	-433.121	1	-.006	3	-.087	9	-.059	9
803		2	max	273.403	4	156.033	3	239.809	2	.237	8	.02	2	.023	2
804			min	-184.667	3	-425.338	8	-433.121	1	-.006	3	-.09	9	-.043	9
805		3	max	273.403	4	156.033	3	239.809	2	.237	8	.035	2	.038	2
806			min	-184.667	3	-425.338	8	-433.121	1	-.006	3	-.101	5	-.032	1
807		4	max	273.403	4	156.033	3	239.809	2	.237	8	.05	2	.053	2
808			min	-184.667	3	-425.338	8	-433.121	1	-.006	3	-.128	1	-.03	1
809		5	max	273.403	4	156.033	3	239.809	2	.237	8	.065	2	.067	2
810			min	-184.667	3	-425.338	8	-433.121	1	-.006	3	-.155	1	-.028	1
811	M82	1	max	1209.518	8	683.393	1	202.16	2	.517	2	1.037	5	.667	5
812			min	69.082	3	-418.012	2	-1695.242	5	-.237	1	-.033	2	.094	9
813		2	max	1209.518	8	683.393	1	202.16	2	.517	2	.931	5	.637	5
814			min	69.082	3	-418.012	2	-1695.242	5	-.237	1	-.02	2	.108	9
815		3	max	1209.518	8	683.393	1	202.16	2	.517	2	.825	5	.607	5
816			min	69.082	3	-418.012	2	-1695.242	5	-.237	1	-.008	2	.123	9
817		4	max	1209.518	8	683.393	1	202.16	2	.517	2	.72	5	.585	8
818			min	69.082	3	-418.012	2	-1695.242	5	-.237	1	.005	2	.132	3



9bj YcdYA Ya VYf GYVJcb: cfWVg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
819	5	max	1209.518	8	683.393	1	202.16	2	.517	2	.614	5	.571	8	
820		min	69.082	3	-418.012	2	-1695.242	5	-.237	1	.017	2	.093	3	
821	M83	1	max	1348.348	2	1636.486	2	1299.366	1	.008	5	.01	5	0	2
822		min	-734.272	1	-1065.46	1	-2123.367	2	0	2	0	2	0	1	
823		2	max	1348.348	2	1636.486	2	1299.366	1	.008	5	.042	1	.029	1
824		min	-734.272	1	-1065.46	1	-2123.367	2	0	2	-.058	2	-.044	2	
825		3	max	1348.348	2	1636.486	2	1299.366	1	.008	5	.077	1	.058	1
826		min	-734.272	1	-1065.46	1	-2123.367	2	0	2	-.115	2	-.088	2	
827		4	max	1348.348	2	1636.486	2	1299.366	1	.008	5	.113	1	.087	1
828		min	-734.272	1	-1065.46	1	-2123.367	2	0	2	-.173	2	-.132	2	
829		5	max	1348.348	2	1636.486	2	1299.366	1	.008	5	.148	1	.116	1
830		min	-734.272	1	-1065.46	1	-2123.367	2	0	2	-.23	2	-.177	2	
831	M84	1	max	197.101	5	471.415	2	210.972	5	0	4	.006	2	.041	2
832		min	-67.065	2	-377.629	1	-71.035	2	0	3	-.019	5	-.042	1	
833		2	max	197.101	5	471.415	2	210.972	5	0	4	.005	2	.031	2
834		min	-67.065	2	-377.629	1	-71.035	2	0	3	-.014	5	-.034	1	
835		3	max	197.101	5	471.415	2	210.972	5	0	4	.003	2	.021	2
836		min	-67.065	2	-377.629	1	-71.035	2	0	3	-.01	5	-.026	1	
837		4	max	197.101	5	471.415	2	210.972	5	0	4	.002	2	.011	2
838		min	-67.065	2	-377.629	1	-71.035	2	0	3	-.005	5	-.018	1	
839		5	max	197.101	5	471.415	2	210.972	5	0	4	0	2	.001	2
840		min	-67.065	2	-377.629	1	-71.035	2	0	3	0	5	-.014	5	
841	M85	1	max	1905.372	7	315.403	2	2488.899	3	.039	6	.326	4	.088	9
842		min	201.45	4	-594.753	1	-2607.566	4	-.007	9	-.283	3	-.028	1	
843		2	max	1905.372	7	315.403	2	2488.899	3	.039	6	.248	4	.083	9
844		min	201.45	4	-594.753	1	-2607.566	4	-.007	9	-.209	3	-.011	3	
845		3	max	1905.372	7	315.403	2	2488.899	3	.039	6	.171	4	.079	9
846		min	201.45	4	-594.753	1	-2607.566	4	-.007	9	-.135	3	.002	3	
847		4	max	1905.372	7	315.403	2	2488.899	3	.039	6	.093	4	.074	9
848		min	201.45	4	-594.753	1	-2607.566	4	-.007	9	-.061	3	.015	3	
849		5	max	1905.372	7	315.403	2	2488.899	3	.039	6	.041	6	.078	5
850		min	201.45	4	-594.753	1	-2607.566	4	-.007	9	-.004	9	.016	2	
851	M86	1	max	559.747	6	16.404	1	53.117	1	.017	8	.094	6	.003	1
852		min	-46.835	1	-630.86	6	-1000.321	6	0	3	-.018	1	-.067	6	
853		2	max	559.747	6	16.404	1	53.117	1	.017	8	.067	6	.002	1
854		min	-46.835	1	-630.86	6	-1000.321	6	0	3	-.017	1	-.05	6	
855		3	max	559.747	6	16.404	1	53.117	1	.017	8	.04	2	.002	1
856		min	-46.835	1	-630.86	6	-1000.321	6	0	3	-.015	1	-.032	6	
857		4	max	559.747	6	16.404	1	53.117	1	.017	8	.02	2	.001	1
858		min	-46.835	1	-630.86	6	-1000.321	6	0	3	-.014	1	-.015	6	
859		5	max	559.747	6	16.404	1	53.117	1	.017	8	0	3	.003	8
860		min	-46.835	1	-630.86	6	-1000.321	6	0	3	-.019	8	0	3	
861	M87	1	max	25.01	2	117.75	4	51.329	4	0	4	.017	7	-.006	10
862		min	-54.23	1	-128.783	3	-216.009	7	0	3	-.005	4	-.023	5	
863		2	max	25.01	2	117.75	4	51.329	4	0	4	.012	7	-.004	2
864		min	-54.23	1	-128.783	3	-216.009	7	0	3	-.004	4	-.024	5	
865		3	max	25.01	2	117.75	4	51.329	4	0	4	.008	3	-.002	2
866		min	-54.23	1	-128.783	3	-216.009	7	0	3	-.003	4	-.024	5	
867		4	max	25.01	2	117.75	4	51.329	4	0	4	.004	3	0	2
868		min	-54.23	1	-128.783	3	-216.009	7	0	3	-.002	4	-.025	5	
869		5	max	25.01	2	117.75	4	51.329	4	0	4	0	2	.002	2
870		min	-54.23	1	-128.783	3	-216.009	7	0	3	-.001	8	-.025	8	



9bj YcdYA Ya Vyf GYVjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
871	M88	1	max	1578.758	7	-98.366	4	272.399	1	.086	8	.099	2	.2	9
872			min	113.919	4	-975.116	7	-412.903	2	.003	3	-.05	9	-.021	2
873		2	max	1578.758	7	-98.366	4	272.399	1	.086	8	.088	6	.212	9
874			min	113.919	4	-975.116	7	-412.903	2	.003	3	-.044	9	-.006	2
875		3	max	1578.758	7	-98.366	4	272.399	1	.086	8	.08	6	.225	8
876			min	113.919	4	-975.116	7	-412.903	2	.003	3	-.037	9	.01	2
877		4	max	1578.758	7	-98.366	4	272.399	1	.086	8	.071	6	.252	8
878			min	113.919	4	-975.116	7	-412.903	2	.003	3	-.03	9	.026	2
879		5	max	1578.758	7	-98.366	4	272.399	1	.086	8	.062	6	.278	8
880			min	113.919	4	-975.116	7	-412.903	2	.003	3	-.023	9	.041	2
881	M89	1	max	372.917	1	587.152	2	12.326	3	.018	8	.052	8	.067	2
882			min	-522.76	2	-482.456	1	-641.972	8	0	3	0	3	-.053	1
883		2	max	372.917	1	587.152	2	12.326	3	.018	8	.034	5	.051	2
884			min	-522.76	2	-482.456	1	-641.972	8	0	3	-.002	9	-.04	1
885		3	max	372.917	1	587.152	2	12.326	3	.018	8	.016	5	.034	2
886			min	-522.76	2	-482.456	1	-641.972	8	0	3	-.004	9	-.026	1
887		4	max	372.917	1	587.152	2	12.326	3	.018	8	0	3	.018	2
888			min	-522.76	2	-482.456	1	-641.972	8	0	3	-.006	9	-.013	1
889		5	max	372.917	1	587.152	2	12.326	3	.018	8	0	3	.002	6
890			min	-522.76	2	-482.456	1	-641.972	8	0	3	-.02	8	0	3
891	M90	1	max	39.413	2	131.558	4	256.534	1	0	4	.026	2	.001	2
892			min	-27.524	1	-160.814	3	-302.183	2	0	3	-.023	1	-.026	5
893		2	max	39.413	2	131.558	4	256.534	1	0	4	.019	2	.001	2
894			min	-27.524	1	-160.814	3	-302.183	2	0	3	-.017	1	-.025	5
895		3	max	39.413	2	131.558	4	256.534	1	0	4	.013	2	0	2
896			min	-27.524	1	-160.814	3	-302.183	2	0	3	-.012	1	-.024	5
897		4	max	39.413	2	131.558	4	256.534	1	0	4	.007	2	0	2
898			min	-27.524	1	-160.814	3	-302.183	2	0	3	-.007	1	-.024	5
899		5	max	39.413	2	131.558	4	256.534	1	0	4	0	3	.002	3
900			min	-27.524	1	-160.814	3	-302.183	2	0	3	-.002	8	-.023	8
901	M91	1	max	744.349	4	412.479	3	234.755	3	.145	6	.122	6	.262	9
902			min	-632.796	3	-483.771	4	-274.076	4	.007	1	-.039	9	.01	3
903		2	max	744.349	4	412.479	3	234.755	3	.145	6	.119	6	.263	9
904			min	-632.796	3	-483.771	4	-274.076	4	.007	1	-.032	9	-.003	3
905		3	max	744.349	4	412.479	3	234.755	3	.145	6	.116	6	.266	8
906			min	-632.796	3	-483.771	4	-274.076	4	.007	1	-.024	9	-.016	3
907		4	max	744.349	4	412.479	3	234.755	3	.145	6	.113	6	.272	8
908			min	-632.796	3	-483.771	4	-274.076	4	.007	1	-.017	9	-.03	3
909		5	max	744.349	4	412.479	3	234.755	3	.145	6	.11	6	.278	8
910			min	-632.796	3	-483.771	4	-274.076	4	.007	1	-.012	1	-.043	3
911	M92	1	max	779.999	1	1046.407	2	347.037	2	.024	8	.068	1	.125	2
912			min	-896.877	2	-687.168	1	-697.814	1	.001	3	-.045	2	-.073	1
913		2	max	779.999	1	1046.407	2	347.037	2	.024	8	.048	1	.094	2
914			min	-896.877	2	-687.168	1	-697.814	1	.001	3	-.035	2	-.054	1
915		3	max	779.999	1	1046.407	2	347.037	2	.024	8	.027	1	.064	2
916			min	-896.877	2	-687.168	1	-697.814	1	.001	3	-.025	2	-.034	1
917		4	max	779.999	1	1046.407	2	347.037	2	.024	8	.007	1	.034	2
918			min	-896.877	2	-687.168	1	-697.814	1	.001	3	-.015	2	-.014	1
919		5	max	779.999	1	1046.407	2	347.037	2	.024	8	-.002	3	.013	8
920			min	-896.877	2	-687.168	1	-697.814	1	.001	3	-.025	8	.002	3
921	M93	1	max	52.662	3	229.305	4	296.699	1	0	4	.037	2	.01	2
922			min	-49.305	4	-188.862	3	-442.835	2	0	3	-.026	1	-.022	1



9bj YcdYA Ya VYf GYVjcb : cfWg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
923		2	max	52.662	3	229.305	4	296.699	1	0	4	.028	2	.007	2
924			min	-49.305	4	-188.862	3	-442.835	2	0	3	-.02	1	-.02	5
925		3	max	52.662	3	229.305	4	296.699	1	0	4	.019	2	.004	2
926			min	-49.305	4	-188.862	3	-442.835	2	0	3	-.013	1	-.02	5
927		4	max	52.662	3	229.305	4	296.699	1	0	4	.009	2	0	2
928			min	-49.305	4	-188.862	3	-442.835	2	0	3	-.007	1	-.021	5
929		5	max	52.662	3	229.305	4	296.699	1	0	4	0	3	0	3
930			min	-49.305	4	-188.862	3	-442.835	2	0	3	-.001	8	-.022	8
931	M94	1	max	819.786	4	411.804	3	214.531	3	.125	8	.147	8	.129	9
932			min	-959.615	3	-402.279	4	-326.435	4	.007	3	-.018	3	.006	1
933		2	max	819.786	4	411.804	3	214.531	3	.125	8	.139	8	.125	9
934			min	-959.615	3	-402.279	4	-326.435	4	.007	3	-.011	3	.014	1
935		3	max	819.786	4	411.804	3	214.531	3	.125	8	.131	8	.12	9
936			min	-959.615	3	-402.279	4	-326.435	4	.007	3	-.004	3	.018	3
937		4	max	819.786	4	411.804	3	214.531	3	.125	8	.123	8	.117	8
938			min	-959.615	3	-402.279	4	-326.435	4	.007	3	.003	3	.004	3
939		5	max	819.786	4	411.804	3	214.531	3	.125	8	.115	8	.121	8
940			min	-959.615	3	-402.279	4	-326.435	4	.007	3	.011	3	-.01	3
941	M95	1	max	2578.669	5	3631.219	6	706.913	2	.018	8	.077	1	.447	6
942			min	-182.426	2	487.512	1	-713.499	1	.003	3	-.088	2	.066	1
943		2	max	2578.669	5	3631.219	6	706.913	2	.018	8	.056	1	.34	6
944			min	-182.426	2	487.512	1	-713.499	1	.003	3	-.067	2	.052	1
945		3	max	2578.669	5	3631.219	6	706.913	2	.018	8	.035	1	.234	6
946			min	-182.426	2	487.512	1	-713.499	1	.003	3	-.046	2	.037	1
947		4	max	2578.669	5	3631.219	6	706.913	2	.018	8	.014	1	.127	6
948			min	-182.426	2	487.512	1	-713.499	1	.003	3	-.026	2	.023	1
949		5	max	2578.669	5	3631.219	6	706.913	2	.018	8	0	3	.022	8
950			min	-182.426	2	487.512	1	-713.499	1	.003	3	-.017	8	.003	3
951	M96	1	max	-552.794	3	113.546	1	744.563	8	0	3	-.007	3	.003	1
952			min	-4736.765	8	-337.461	2	80.803	3	0	8	-.063	8	-.038	6
953		2	max	-552.794	3	113.546	1	744.563	8	0	3	-.005	3	.001	1
954			min	-4736.765	8	-337.461	2	80.803	3	0	8	-.047	8	-.031	6
955		3	max	-552.794	3	113.546	1	744.563	8	0	3	-.003	3	0	3
956			min	-4736.765	8	-337.461	2	80.803	3	0	8	-.032	8	-.024	6
957		4	max	-552.794	3	113.546	1	744.563	8	0	3	-.002	3	0	3
958			min	-4736.765	8	-337.461	2	80.803	3	0	8	-.016	8	-.018	8
959		5	max	-552.794	3	113.546	1	744.563	8	0	3	0	3	0	3
960			min	-4736.765	8	-337.461	2	80.803	3	0	8	0	8	-.012	8
961	M97	1	max	-64.962	1	3010.811	8	1215.753	4	.482	2	.493	8	.219	2
962			min	-1474.682	6	679.126	3	-806.714	3	-.421	1	-.176	3	-.745	5
963		2	max	-64.962	1	3010.811	8	1215.753	4	.482	2	.528	4	.184	2
964			min	-1474.682	6	679.126	3	-806.714	3	-.421	1	-.204	3	-.847	5
965		3	max	-64.962	1	3010.811	8	1215.753	4	.482	2	.57	4	.148	2
966			min	-1474.682	6	679.126	3	-806.714	3	-.421	1	-.232	3	-.95	5
967		4	max	-64.962	1	3010.811	8	1215.753	4	.482	2	.613	4	.113	2
968			min	-1474.682	6	679.126	3	-806.714	3	-.421	1	-.26	3	-1.052	5
969		5	max	-64.962	1	3010.811	8	1215.753	4	.482	2	.656	4	.077	2
970			min	-1474.682	6	679.126	3	-806.714	3	-.421	1	-.289	3	-1.154	5
971	M98	1	max	1226.868	5	1989.719	4	3465.792	1	.23	3	.292	1	.232	3
972			min	325.558	2	-1874.446	3	-2605.6	2	-.148	4	-.237	2	-.13	4
973		2	max	1226.868	5	1989.719	4	3465.792	1	.23	3	.508	1	.349	3
974			min	325.558	2	-1874.446	3	-2605.6	2	-.148	4	-.4	2	-.254	4



9bj YcdYA Ya Vyf GYVJcb: cfWVg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
975		3	max	1226.868	5	1989.719	4	3465.792	1	.23	3	.725	1	.466	3
976			min	325.558	2	-1874.446	3	-2605.6	2	-.148	4	-.563	2	-.378	4
977		4	max	1226.868	5	1989.719	4	3465.792	1	.23	3	.941	1	.583	3
978			min	325.558	2	-1874.446	3	-2605.6	2	-.148	4	-.725	2	-.502	4
979		5	max	1226.868	5	1989.719	4	3465.792	1	.23	3	1.157	1	.7	3
980			min	325.558	2	-1874.446	3	-2605.6	2	-.148	4	-.888	2	-.626	4
981	M99	1	max	282.158	8	623.354	8	561.388	6	.196	9	.022	1	.225	6
982			min	-30.367	3	-151.531	3	115.377	1	-.026	10	-.019	2	-.007	1
983		2	max	282.158	8	623.354	8	561.388	6	.196	9	.04	5	.193	6
984			min	-30.367	3	-151.531	3	115.377	1	-.026	10	0	2	-.025	1
985		3	max	282.158	8	623.354	8	561.388	6	.196	9	.071	8	.161	6
986			min	-30.367	3	-151.531	3	115.377	1	-.026	10	.021	2	-.044	1
987		4	max	282.158	8	623.354	8	561.388	6	.196	9	.106	8	.15	2
988			min	-30.367	3	-151.531	3	115.377	1	-.026	10	.033	3	-.063	1
989		5	max	282.158	8	623.354	8	561.388	6	.196	9	.14	8	.158	3
990			min	-30.367	3	-151.531	3	115.377	1	-.026	10	.043	3	-.098	4
991	M100	1	max	168.373	2	405.185	2	477.684	6	.216	9	.013	1	.221	6
992			min	-194.134	1	-295.546	1	-27.237	1	-.007	10	-.013	2	-.053	1
993		2	max	168.373	2	405.185	2	477.684	6	.216	9	.027	7	.209	6
994			min	-194.134	1	-295.546	1	-27.237	1	-.007	10	.007	4	-.034	1
995		3	max	168.373	2	405.185	2	477.684	6	.216	9	.056	6	.198	6
996			min	-194.134	1	-295.546	1	-27.237	1	-.007	10	.009	1	-.016	1
997		4	max	168.373	2	405.185	2	477.684	6	.216	9	.086	6	.186	6
998			min	-194.134	1	-295.546	1	-27.237	1	-.007	10	.008	1	.002	1
999		5	max	168.373	2	405.185	2	477.684	6	.216	9	.116	6	.175	6
1000			min	-194.134	1	-295.546	1	-27.237	1	-.007	10	.006	1	.021	1
1001	M101	1	max	254.887	2	384.462	3	375.448	6	.209	9	.012	1	.092	10
1002			min	-182.932	1	-415.019	4	15.417	1	-.014	1	-.013	2	-.037	1
1003		2	max	254.887	2	384.462	3	375.448	6	.209	9	.021	5	.086	10
1004			min	-182.932	1	-415.019	4	15.417	1	-.014	1	.003	2	-.029	1
1005		3	max	254.887	2	384.462	3	375.448	6	.209	9	.043	6	.079	10
1006			min	-182.932	1	-415.019	4	15.417	1	-.014	1	.014	1	-.022	1
1007		4	max	254.887	2	384.462	3	375.448	6	.209	9	.066	6	.082	4
1008			min	-182.932	1	-415.019	4	15.417	1	-.014	1	.015	1	-.03	3
1009		5	max	254.887	2	384.462	3	375.448	6	.209	9	.089	6	.108	4
1010			min	-182.932	1	-415.019	4	15.417	1	-.014	1	.016	1	-.054	3
1011	M102	1	max	938.042	6	334.922	1	654.287	2	.374	7	.219	1	.062	1
1012			min	-50.976	1	-1420.835	9	-419.361	1	-.119	4	-.142	2	-1.029	9
1013		2	max	938.042	6	334.922	1	654.287	2	.374	7	.193	1	.041	1
1014			min	-50.976	1	-1420.835	9	-419.361	1	-.119	4	-.101	2	-.94	9
1015		3	max	938.042	6	334.922	1	654.287	2	.374	7	.167	1	.02	1
1016			min	-50.976	1	-1420.835	9	-419.361	1	-.119	4	-.06	2	-.851	9
1017		4	max	938.042	6	334.922	1	654.287	2	.374	7	.169	5	0	1
1018			min	-50.976	1	-1420.835	9	-419.361	1	-.119	4	-.019	2	-.763	9
1019		5	max	938.042	6	334.922	1	654.287	2	.374	7	.178	5	-.021	1
1020			min	-50.976	1	-1420.835	9	-419.361	1	-.119	4	.022	2	-.674	9
1021	M103	1	max	1105.155	3	1301.631	3	689.202	4	.006	6	.008	6	0	3
1022			min	-507.523	4	-720.856	4	-1513.344	3	0	1	0	1	0	9
1023		2	max	1105.155	3	1301.631	3	689.202	4	.006	6	.023	4	.02	4
1024			min	-507.523	4	-720.856	4	-1513.344	3	0	1	-.04	3	-.035	3
1025		3	max	1105.155	3	1301.631	3	689.202	4	.006	6	.042	4	.039	4
1026			min	-507.523	4	-720.856	4	-1513.344	3	0	1	-.081	3	-.07	3



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 6:13 PM
 Checked By: _____

9bj YcdYA Ya VYf GYWjcb: cfWkg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1027		4	max	1105.155	3	1301.631	3	689.202	4	.006	6	.06	4	.059	4
1028			min	-507.523	4	-720.856	4	-1513.344	3	0	1	-.122	3	-.105	3
1029		5	max	1105.155	3	1301.631	3	689.202	4	.006	6	.079	4	.078	4
1030			min	-507.523	4	-720.856	4	-1513.344	3	0	1	-.163	3	-.14	3
1031	M104	1	max	188.724	2	501.766	1	239.239	9	0	2	.008	3	.045	1
1032			min	-92.406	1	-368.065	2	-94.011	3	0	1	-.02	9	-.041	2
1033		2	max	188.724	2	501.766	1	239.239	9	0	2	.006	3	.034	1
1034			min	-92.406	1	-368.065	2	-94.011	3	0	1	-.015	9	-.034	2
1035		3	max	188.724	2	501.766	1	239.239	9	0	2	.004	3	.024	1
1036			min	-92.406	1	-368.065	2	-94.011	3	0	1	-.01	9	-.026	2
1037		4	max	188.724	2	501.766	1	239.239	9	0	2	.002	3	.013	1
1038			min	-92.406	1	-368.065	2	-94.011	3	0	1	-.005	9	-.018	2
1039		5	max	188.724	2	501.766	1	239.239	9	0	2	0	1	.003	1
1040			min	-92.406	1	-368.065	2	-94.011	3	0	1	0	6	-.011	6
1041	M105	1	max	1685.734	5	256.253	3	1900.18	1	.041	9	.225	2	.082	10
1042			min	156.941	2	-750.849	9	-1826.092	2	-.008	10	-.211	1	-.058	9
1043		2	max	1685.734	5	256.253	3	1900.18	1	.041	9	.171	2	.078	10
1044			min	156.941	2	-750.849	9	-1826.092	2	-.008	10	-.154	1	-.036	9
1045		3	max	1685.734	5	256.253	3	1900.18	1	.041	9	.116	2	.075	10
1046			min	156.941	2	-750.849	9	-1826.092	2	-.008	10	-.097	1	-.014	9
1047		4	max	1685.734	5	256.253	3	1900.18	1	.041	9	.062	2	.071	10
1048			min	156.941	2	-750.849	9	-1826.092	2	-.008	10	-.041	1	.009	9
1049		5	max	1685.734	5	256.253	3	1900.18	1	.041	9	.042	9	.072	6
1050			min	156.941	2	-750.849	9	-1826.092	2	-.008	10	-.006	10	.017	1
1051	M106	1	max	470.254	7	-62.865	2	-18.412	4	.013	6	.074	7	-.005	2
1052			min	31.02	4	-532.818	7	-789.361	9	-.002	1	-.005	4	-.057	7
1053		2	max	470.254	7	-62.865	2	-18.412	4	.013	6	.053	7	-.004	2
1054			min	31.02	4	-532.818	7	-789.361	9	-.002	1	-.006	4	-.042	7
1055		3	max	470.254	7	-62.865	2	-18.412	4	.013	6	.031	7	-.002	2
1056			min	31.02	4	-532.818	7	-789.361	9	-.002	1	-.006	4	-.027	7
1057		4	max	470.254	7	-62.865	2	-18.412	4	.013	6	.012	3	0	2
1058			min	31.02	4	-532.818	7	-789.361	9	-.002	1	-.007	4	-.012	7
1059		5	max	470.254	7	-62.865	2	-18.412	4	.013	6	.002	1	.002	7
1060			min	31.02	4	-532.818	7	-789.361	9	-.002	1	-.015	6	.001	1
1061	M107	1	max	22.203	1	145.154	2	94.708	2	0	2	.02	1	-.007	3
1062			min	-48.978	2	-169.214	1	-226.526	1	0	1	-.009	2	-.02	8
1063		2	max	22.203	1	145.154	2	94.708	2	0	2	.015	1	-.004	1
1064			min	-48.978	2	-169.214	1	-226.526	1	0	1	-.007	2	-.02	6
1065		3	max	22.203	1	145.154	2	94.708	2	0	2	.01	1	0	1
1066			min	-48.978	2	-169.214	1	-226.526	1	0	1	-.005	2	-.02	6
1067		4	max	22.203	1	145.154	2	94.708	2	0	2	.005	1	.003	1
1068			min	-48.978	2	-169.214	1	-226.526	1	0	1	-.003	2	-.02	6
1069		5	max	22.203	1	145.154	2	94.708	2	0	2	0	1	.006	1
1070			min	-48.978	2	-169.214	1	-226.526	1	0	1	-.001	2	-.02	6
1071	M108	1	max	1366.945	5	24.974	2	206.824	10	.08	9	.114	9	.177	2
1072			min	269.145	2	-884.121	5	-345.503	9	0	10	-.05	10	-.069	1
1073		2	max	1366.945	5	24.974	2	206.824	10	.08	9	.103	9	.19	10
1074			min	269.145	2	-884.121	5	-345.503	9	0	10	-.044	10	-.048	1
1075		3	max	1366.945	5	24.974	2	206.824	10	.08	9	.092	9	.205	6
1076			min	269.145	2	-884.121	5	-345.503	9	0	10	-.037	10	-.027	1
1077		4	max	1366.945	5	24.974	2	206.824	10	.08	9	.082	9	.227	6
1078			min	269.145	2	-884.121	5	-345.503	9	0	10	-.031	10	-.007	1



9bj YcdYA Ya VYf GYVjcb : cfWkg f7 cbh7pi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1079		5	max	1366.945	5	24.974	2	206.824	10	.08	9	.071	9	.25	6
1080			min	269.145	2	-884.121	5	-345.503	9	0	10	-.024	10	.014	1
1081	M109	1	max	252.071	2	512.8	1	125.96	1	.014	6	.056	9	.059	1
1082			min	-441.042	1	-353.026	2	-616.031	9	-.002	1	-.012	1	-.039	2
1083		2	max	252.071	2	512.8	1	125.96	1	.014	6	.038	9	.044	1
1084			min	-441.042	1	-353.026	2	-616.031	9	-.002	1	-.009	1	-.029	2
1085		3	max	252.071	2	512.8	1	125.96	1	.014	6	.021	9	.03	1
1086			min	-441.042	1	-353.026	2	-616.031	9	-.002	1	-.008	10	-.019	2
1087		4	max	252.071	2	512.8	1	125.96	1	.014	6	.004	9	.015	1
1088			min	-441.042	1	-353.026	2	-616.031	9	-.002	1	-.007	10	-.009	2
1089		5	max	252.071	2	512.8	1	125.96	1	.014	6	.002	1	.002	8
1090			min	-441.042	1	-353.026	2	-616.031	9	-.002	1	-.015	6	0	3
1091	M110	1	max	44.223	1	71.652	2	200.373	4	0	2	.019	3	-.004	3
1092			min	-32.976	2	-109.075	1	-229.234	3	0	1	-.017	4	-.021	6
1093		2	max	44.223	1	71.652	2	200.373	4	0	2	.014	3	-.002	1
1094			min	-32.976	2	-109.075	1	-229.234	3	0	1	-.013	4	-.021	6
1095		3	max	44.223	1	71.652	2	200.373	4	0	2	.009	3	0	1
1096			min	-32.976	2	-109.075	1	-229.234	3	0	1	-.009	4	-.02	6
1097		4	max	44.223	1	71.652	2	200.373	4	0	2	.004	3	.003	1
1098			min	-32.976	2	-109.075	1	-229.234	3	0	1	-.005	4	-.019	6
1099		5	max	44.223	1	71.652	2	200.373	4	0	2	0	1	.005	1
1100			min	-32.976	2	-109.075	1	-229.234	3	0	1	-.001	2	-.019	6
1101	M111	1	max	888.135	2	439.283	1	285.743	10	.114	7	.132	9	.242	10
1102			min	-895.67	1	-433.665	2	-260.034	9	.014	4	-.041	10	.003	1
1103		2	max	888.135	2	439.283	1	285.743	10	.114	7	.124	9	.239	10
1104			min	-895.67	1	-433.665	2	-260.034	9	.014	4	-.032	10	-.011	1
1105		3	max	888.135	2	439.283	1	285.743	10	.114	7	.116	9	.236	10
1106			min	-895.67	1	-433.665	2	-260.034	9	.014	4	-.023	10	-.025	1
1107		4	max	888.135	2	439.283	1	285.743	10	.114	7	.107	9	.233	6
1108			min	-895.67	1	-433.665	2	-260.034	9	.014	4	-.014	10	-.039	1
1109		5	max	888.135	2	439.283	1	285.743	10	.114	7	.099	9	.234	6
1110			min	-895.67	1	-433.665	2	-260.034	9	.014	4	-.004	10	-.053	1
1111	M112	1	max	566.368	2	880.14	1	295.593	1	.018	6	.047	2	.103	1
1112			min	-764.326	1	-471.413	2	-559.46	9	0	1	-.034	1	-.048	2
1113		2	max	566.368	2	880.14	1	295.593	1	.018	6	.032	2	.078	1
1114			min	-764.326	1	-471.413	2	-559.46	9	0	1	-.026	1	-.034	2
1115		3	max	566.368	2	880.14	1	295.593	1	.018	6	.016	2	.053	1
1116			min	-764.326	1	-471.413	2	-559.46	9	0	1	-.017	1	-.021	2
1117		4	max	566.368	2	880.14	1	295.593	1	.018	6	.004	4	.029	5
1118			min	-764.326	1	-471.413	2	-559.46	9	0	1	-.012	7	-.007	2
1119		5	max	566.368	2	880.14	1	295.593	1	.018	6	0	1	.01	6
1120			min	-764.326	1	-471.413	2	-559.46	9	0	1	-.019	6	.002	1
1121	M113	1	max	38.406	1	146.239	3	225.373	4	0	2	.029	3	.006	3
1122			min	-41.343	10	-118.612	4	-348.898	3	0	1	-.019	4	-.016	4
1123		2	max	38.406	1	146.239	3	225.373	4	0	2	.021	3	.003	3
1124			min	-41.343	10	-118.612	4	-348.898	3	0	1	-.014	4	-.015	8
1125		3	max	38.406	1	146.239	3	225.373	4	0	2	.014	3	0	1
1126			min	-41.343	10	-118.612	4	-348.898	3	0	1	-.01	4	-.016	6
1127		4	max	38.406	1	146.239	3	225.373	4	0	2	.007	3	.001	1
1128			min	-41.343	10	-118.612	4	-348.898	3	0	1	-.005	4	-.017	6
1129		5	max	38.406	1	146.239	3	225.373	4	0	2	0	1	.002	1
1130			min	-41.343	10	-118.612	4	-348.898	3	0	1	-.001	6	-.018	6



9bj YcdYA Ya VYf GYVjcb: cfWkg fT cbhji YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1131	M114	1	max	881.206	2	548.846	1	263.31	1	.094	7	.136	9	.134	10
1132			min	-1122.454	1	-449.159	2	-307.964	2	.018	4	-.006	1	-.012	4
1133		2	max	881.206	2	548.846	1	263.31	1	.094	7	.126	9	.124	10
1134			min	-1122.454	1	-449.159	2	-307.964	2	.018	4	.002	10	-.008	4
1135		3	max	881.206	2	548.846	1	263.31	1	.094	7	.117	9	.114	10
1136			min	-1122.454	1	-449.159	2	-307.964	2	.018	4	.007	10	-.004	4
1137		4	max	881.206	2	548.846	1	263.31	1	.094	7	.107	9	.106	7
1138			min	-1122.454	1	-449.159	2	-307.964	2	.018	4	.012	10	0	4
1139		5	max	881.206	2	548.846	1	263.31	1	.094	7	.097	9	.102	6
1140			min	-1122.454	1	-449.159	2	-307.964	2	.018	4	.017	10	-.014	1
1141	M115	1	max	1881.371	2	2981.97	7	473.49	3	.013	6	.045	4	.366	7
1142			min	-508.26	1	611.143	4	-425.121	4	0	1	-.06	3	.079	4
1143		2	max	1881.371	2	2981.97	7	473.49	3	.013	6	.032	4	.278	7
1144			min	-508.26	1	611.143	4	-425.121	4	0	1	-.046	3	.061	4
1145		3	max	1881.371	2	2981.97	7	473.49	3	.013	6	.02	4	.191	7
1146			min	-508.26	1	611.143	4	-425.121	4	0	1	-.032	3	.043	4
1147		4	max	1881.371	2	2981.97	7	473.49	3	.013	6	.007	4	.103	7
1148			min	-508.26	1	611.143	4	-425.121	4	0	1	-.018	3	.025	4
1149		5	max	1881.371	2	2981.97	7	473.49	3	.013	6	-.001	1	.017	6
1150			min	-508.26	1	611.143	4	-425.121	4	0	1	-.013	6	.003	1
1151	M116	1	max	-573.038	1	12.853	4	589.17	6	0	1	-.005	1	-.003	4
1152			min	-3626.282	6	-289.97	7	61.977	1	0	9	-.05	6	-.032	7
1153		2	max	-573.038	1	12.853	4	589.17	6	0	1	-.004	1	-.003	4
1154			min	-3626.282	6	-289.97	7	61.977	1	0	9	-.038	6	-.026	7
1155		3	max	-573.038	1	12.853	4	589.17	6	0	1	-.003	1	-.003	4
1156			min	-3626.282	6	-289.97	7	61.977	1	0	9	-.025	6	-.02	7
1157		4	max	-573.038	1	12.853	4	589.17	6	0	1	-.001	1	-.003	4
1158			min	-3626.282	6	-289.97	7	61.977	1	0	9	-.013	6	-.014	7
1159		5	max	-573.038	1	12.853	4	589.17	6	0	1	0	1	0	1
1160			min	-3626.282	6	-289.97	7	61.977	1	0	9	0	10	-.009	6
1161	M117	1	max	44.372	2	2354.196	6	937.116	3	.337	1	.361	7	.218	3
1162			min	-1286.065	5	662.967	1	-586.177	4	-.243	2	-.071	4	-.642	9
1163		2	max	44.372	2	2354.196	6	937.116	3	.337	1	.383	7	.186	3
1164			min	-1286.065	5	662.967	1	-586.177	4	-.243	2	-.091	4	-.719	9
1165		3	max	44.372	2	2354.196	6	937.116	3	.337	1	.405	7	.154	3
1166			min	-1286.065	5	662.967	1	-586.177	4	-.243	2	-.112	4	-.796	9
1167		4	max	44.372	2	2354.196	6	937.116	3	.337	1	.427	7	.122	3
1168			min	-1286.065	5	662.967	1	-586.177	4	-.243	2	-.132	4	-.872	9
1169		5	max	44.372	2	2354.196	6	937.116	3	.337	1	.458	3	.09	3
1170			min	-1286.065	5	662.967	1	-586.177	4	-.243	2	-.153	4	-.949	9
1171	M118	1	max	3131.918	8	2667.261	7	1574.436	4	.729	1	2.165	3	5.713	7
1172			min	-729.227	3	418.267	4	-1453.201	3	-.786	10	-2.061	4	-.528	4
1173		2	max	3129.595	8	2643.445	7	1569.63	4	.729	1	1.016	3	3.61	7
1174			min	-719.994	3	406.549	4	-1448.395	3	-.786	10	-.816	4	-.854	4
1175		3	max	3127.271	8	2619.63	7	1564.823	4	.729	1	.498	1	2.049	3
1176			min	-710.761	3	394.831	4	-1443.588	3	-.786	10	-.203	2	-1.171	4
1177		4	max	1231.616	1	1298.57	7	1533.546	10	-.098	9	.652	4	.219	3
1178			min	-527.024	2	-178.009	4	-582.173	4	-.684	10	-.473	3	-.202	4
1179		5	max	0	11	.003	6	.003	3	0	11	0	11	0	11
1180			min	0	1	-.016	3	-.002	2	0	1	0	1	0	1
1181	M119	1	max	3133.117	7	3007.745	8	1651.064	2	.733	2	2.363	3	6.417	8
1182			min	-499.437	4	577.585	3	-1526.588	1	-1.041	1	-2.255	4	.043	3



9bj YcdYA Ya Vyf GYVjcb: cfWVg fT cbhpi YXL

Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC		
1183	2	max	3130.546	7	2983.93	8	1635.029	2	.733	2	1.233	3	4.045	8	
1184		min	-489.221	4	565.867	3	-1510.553	1	-1.041	1	-1.03	4	-.409	3	
1185	3	max	3127.975	7	2960.114	8	1618.993	2	.733	2	.621	2	1.84	4	
1186		min	-479.006	4	554.149	3	-1494.517	1	-1.041	1	-.321	1	-.853	3	
1187	4	max	1183.437	4	1431.817	8	1800.834	5	-.044	3	.708	2	.168	1	
1188		min	-488.349	3	-103.406	3	-706.688	2	-.751	8	-.528	1	-.153	2	
1189	5	max	0	11	.004	6	.002	1	0	11	0	11	0	11	
1190		min	0	1	-.016	4	-.005	3	0	1	0	1	0	1	
1191	M120	1	max	3226.233	5	2605.723	6	1089.967	3	.772	3	1.104	4	5.391	6
1192		min	-990.631	2	286.977	1	-993.039	4	-.933	4	-.956	3	-.921	1	
1193	2	max	3225.986	5	2581.908	6	1067.467	3	.772	3	.373	8	3.447	2	
1194		min	-989.649	2	275.259	1	-970.539	4	-.933	4	-.102	3	-1.144	1	
1195	3	max	3225.738	5	2558.093	6	1044.966	3	.772	3	.735	3	2.105	2	
1196		min	-988.666	2	263.541	1	-948.038	4	-.933	4	-.433	4	-1.357	1	
1197	4	max	967.826	2	1121.607	6	1517.829	4	-.034	1	.551	3	.155	2	
1198		min	-411.432	1	-221.335	1	-705.131	3	-.652	9	-.367	4	-.157	1	
1199	5	max	0	11	0	3	0	8	0	11	0	11	0	11	
1200		min	0	1	-.002	2	0	1	0	1	0	1	0	1	
1201	MP3A	1	max	0	11	.016	8	.017	1	0	11	0	11	0	11
1202		min	0	1	-.005	3	-.017	2	0	1	0	1	0	1	
1203	2	max	117.081	2	83.233	1	130.654	9	.122	2	.045	1	.132	1	
1204		min	-293.53	9	-408.157	9	19.336	10	-.102	1	-.094	2	-.378	2	
1205	3	max	150.814	2	98.923	4	223.631	1	.122	2	.153	9	.299	9	
1206		min	-259.796	9	-408.157	9	-130.738	2	-.102	1	-.013	2	.007	1	
1207	4	max	-6.247	10	15.44	3	15.597	2	0	11	.012	1	.012	3	
1208		min	-19.131	5	-15.581	4	-15.511	1	0	1	-.012	2	-.012	4	
1209	5	max	0	11	.225	3	.382	2	0	11	0	11	0	11	
1210		min	0	1	-.478	9	-.297	1	0	1	0	1	0	1	
1211	MP2A	1	max	0	11	.227	4	.771	5	0	11	0	11	0	11
1212		min	0	1	-.229	3	-.633	2	0	1	0	1	0	1	
1213	2	max	1124.768	6	269.097	4	453.166	1	.036	1	.67	1	.394	4	
1214		min	128.876	1	-195.388	3	-453.125	2	-.029	2	-.67	2	-.301	3	
1215	3	max	1320.194	6	356.912	4	405.825	1	.036	1	.532	1	.122	3	
1216		min	227.206	1	-255.771	3	-301.284	2	-.029	2	-.353	2	-.232	4	
1217	4	max	-82.01	10	195.232	3	452.528	2	0	11	.236	1	.108	3	
1218		min	-304.455	5	-195.154	4	-452.41	1	0	1	-.236	2	-.108	4	
1219	5	max	0	11	.376	6	.534	6	0	11	0	11	0	11	
1220		min	0	1	-.032	9	.036	2	0	1	0	1	0	1	
1221	MP1A	1	max	0	11	.006	4	.018	1	0	11	0	11	0	11
1222		min	0	1	-.019	7	-.017	2	0	1	0	1	0	1	
1223	2	max	-23.936	2	347.347	10	166.438	10	.101	1	.062	1	.319	2	
1224		min	-501.657	10	-61.497	1	19.781	9	-.134	2	-.159	2	-.11	1	
1225	3	max	44.111	2	347.347	10	185.093	5	.101	1	.144	10	.005	3	
1226		min	-433.61	10	-127.889	3	-60.289	2	-.134	2	-.028	2	-.23	10	
1227	4	max	-6.248	10	15.236	3	15.237	2	0	11	.011	1	.011	3	
1228		min	-19.131	5	-15.229	4	-15.235	1	0	1	-.011	2	-.011	4	
1229	5	max	0	11	.038	7	.023	2	0	11	0	11	0	11	
1230		min	0	1	-.014	4	-.02	1	0	1	0	1	0	1	
1231	M124	1	max	0	11	0	11	0	11	0	11	0	11	0	11
1232		min	0	1	0	1	0	1	0	1	0	1	0	1	
1233	2	max	-18.125	1	11.526	1	94.773	1	.424	1	.185	1	.026	2	
1234		min	-460.507	9	-300.754	9	-149.417	2	-.332	2	-.199	2	-.235	9	



9bj YcdYA Ya Vyf GYVjcb: cfWVg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1235		3	max	-18.125	1	-14.888	1	48.061	1	.424	1	.408	1	.883	6
1236			min	-460.507	9	-361.1	6	-102.705	2	-.332	2	-.593	2	-.16	1
1237		4	max	-5.84	1	413.816	10	174.927	2	.363	2	.195	1	.158	2
1238			min	-359.955	9	5.581	1	-120.335	1	-.465	1	-.222	2	-.18	1
1239		5	max	0	11	0	11	0	11	0	11	0	11	0	11
1240			min	0	1	0	1	0	1	0	1	0	1	0	1
1241	M125	1	max	0	11	.017	3	.006	3	0	11	0	11	0	11
1242			min	0	1	-.002	10	-.004	1	0	1	0	1	0	1
1243		2	max	-12.774	9	10.319	2	26.784	1	.133	4	.161	2	.039	3
1244			min	-625.664	7	-417.028	5	-81.459	6	-.046	3	-.148	1	-.19	8
1245		3	max	-10.752	9	-16.095	2	38.462	1	.133	4	-.046	1	1.216	5
1246			min	-632.32	7	-477.661	5	-92.868	2	-.046	3	-.205	7	.019	2
1247		4	max	8.301	9	590.488	7	75.527	4	.026	3	.145	4	.089	1
1248			min	-451.558	5	8.755	4	-35.407	3	-.209	8	-.176	3	-.125	2
1249		5	max	0	11	.008	3	.002	3	0	11	0	11	0	11
1250			min	0	1	-.024	1	-.003	1	0	1	0	1	0	1
1251	M126	1	max	0	11	.023	1	.004	1	0	11	0	11	0	11
1252			min	0	1	-.006	4	-.007	4	0	1	0	1	0	1
1253		2	max	-20.195	10	45.065	3	58.022	3	.345	3	.165	3	.066	1
1254			min	-646.953	8	-405.321	8	-110.127	4	-.248	4	-.161	4	-.226	6
1255		3	max	-22.218	10	18.651	3	22.988	3	.345	3	.292	3	1.176	8
1256			min	-641.557	5	-465.954	8	-75.093	4	-.248	4	-.45	4	-.211	3
1257		4	max	3.805	10	525.887	5	127.733	4	.265	4	.175	2	.153	4
1258			min	-467.441	5	-32.103	2	-76.264	3	-.378	3	-.176	1	-.157	3
1259		5	max	0	11	.002	5	.005	1	0	11	0	11	0	11
1260			min	0	1	-.022	4	-.014	4	0	1	0	1	0	1
1261	M127	1	max	64.914	3	329.569	2	174.228	4	.011	1	.199	1	.082	2
1262			min	-253.827	8	-307.564	1	-172.55	3	-.01	2	-.205	2	-.359	5
1263		2	max	64.03	1	327.363	2	168.221	4	.011	1	.158	1	-.046	2
1264			min	-252.856	8	-309.769	1	-166.543	3	-.01	2	-.159	2	-.336	5
1265		3	max	67.499	1	325.158	2	162.214	4	.011	1	.129	3	-.083	1
1266			min	-252.098	6	-311.975	1	-160.536	3	-.01	2	-.124	4	-.329	6
1267		4	max	70.967	1	322.952	2	158.075	1	.011	1	.126	3	.042	1
1268			min	-253.07	6	-314.18	1	-156.845	2	-.01	2	-.119	4	-.362	6
1269		5	max	74.435	1	320.747	2	160.077	1	.011	1	.124	3	.168	1
1270			min	-254.041	6	-316.386	1	-158.847	2	-.01	2	-.116	4	-.427	2
1271	M128	1	max	115.155	1	295.627	1	187.776	2	.01	2	.081	1	.132	1
1272			min	-292.971	2	-240.615	2	-144.325	1	-.01	1	-.131	2	-.385	2
1273		2	max	111.686	1	293.422	1	185.774	2	.01	2	.121	1	.016	1
1274			min	-289.503	2	-242.82	2	-142.322	1	-.01	1	-.146	2	-.352	6
1275		3	max	108.218	1	291.216	1	183.772	2	.01	2	.161	1	-.099	1
1276			min	-286.035	2	-245.026	2	-140.32	1	-.01	1	-.162	2	-.327	6
1277		4	max	104.75	1	289.011	1	181.769	2	.01	2	.201	1	-.044	2
1278			min	-282.567	2	-247.231	2	-138.318	1	-.01	1	-.178	2	-.345	5
1279		5	max	101.282	1	286.805	1	179.767	2	.01	2	.241	1	.07	2
1280			min	-279.098	2	-249.437	2	-136.315	1	-.01	1	-.196	2	-.371	5
1281	M129	1	max	13.685	2	337.599	4	202.329	3	.01	3	.149	3	.117	4
1282			min	-250.519	5	-266.68	3	-160.557	4	-.009	4	-.19	4	-.379	7
1283		2	max	13.685	2	335.393	4	202.329	3	.01	3	.132	3	-.015	4
1284			min	-250.519	5	-268.886	3	-160.557	4	-.009	4	-.144	4	-.36	7
1285		3	max	13.685	2	333.188	4	202.329	3	.01	3	.114	3	-.118	1
1286			min	-250.519	5	-271.091	3	-160.557	4	-.009	4	-.097	4	-.349	6



9bj YcdYA Ya Vyf GYVjcb : cfWkg f7 cbh7bi YXL

Member	Sec	Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC		
1287	4	max	13.685	2	330.982	4	202.329	3	.01	3	.096	2	.005	3	
1288		min	-250.519	5	-273.297	3	-160.557	4	-.009	4	-.053	1	-.387	8	
1289	5	max	13.685	2	328.777	4	202.329	3	.01	3	.127	6	.131	3	
1290		min	-250.519	5	-275.502	3	-160.557	4	-.009	4	-.082	10	-.425	8	
1291	M130	1	max	-13.092	1	111.493	2	83.146	1	.553	2	.122	2	.027	1
1292		min	-130.32	6	-299.621	9	-407.428	9	-.173	1	-.102	1	-.139	6	
1293	2	max	-13.092	1	111.493	2	83.146	1	.553	2	.1	2	.044	1	
1294		min	-130.32	6	-299.621	9	-407.428	9	-.173	1	-.097	1	-.13	2	
1295	3	max	-13.092	1	111.493	2	83.146	1	.553	2	.078	2	.061	1	
1296		min	-130.32	6	-299.621	9	-407.428	9	-.173	1	-.091	1	-.137	2	
1297	4	max	-13.092	1	111.493	2	83.146	1	.553	2	.056	2	.078	1	
1298		min	-130.32	6	-299.621	9	-407.428	9	-.173	1	-.086	1	-.144	2	
1299	5	max	-13.092	1	111.493	2	83.146	1	.553	2	.034	2	.095	1	
1300		min	-130.32	6	-299.621	9	-407.428	9	-.173	1	-.104	9	-.151	2	
1301	M131	1	max	515.766	1	107.522	9	517.478	3	.708	9	.102	1	.082	2
1302		min	-420.214	2	-330.541	6	-252.465	4	-.077	1	-.122	2	-.298	9	
1303	2	max	515.766	1	107.522	9	517.478	3	.708	9	.097	1	.1	2	
1304		min	-420.214	2	-330.541	6	-252.465	4	-.077	1	-.1	2	-.305	9	
1305	3	max	515.766	1	107.522	9	517.478	3	.708	9	.091	1	.119	2	
1306		min	-420.214	2	-330.541	6	-252.465	4	-.077	1	-.078	2	-.312	9	
1307	4	max	515.766	1	107.522	9	517.478	3	.708	9	.086	1	.138	2	
1308		min	-420.214	2	-330.541	6	-252.465	4	-.077	1	-.056	2	-.318	9	
1309	5	max	515.766	1	107.522	9	517.478	3	.708	9	.104	9	.157	2	
1310		min	-420.214	2	-330.541	6	-252.465	4	-.077	1	-.034	2	-.325	9	
1311	M132	1	max	121.674	1	820.499	6	131.819	8	.584	3	.036	1	.846	2
1312		min	-232.147	2	48.408	1	12.24	1	-.677	4	-.029	2	-.876	1	
1313	2	max	121.674	1	820.499	6	131.819	8	.584	3	.037	1	.808	2	
1314		min	-232.147	2	48.408	1	12.24	1	-.677	4	-.023	2	-.879	1	
1315	3	max	121.674	1	820.499	6	131.819	8	.584	3	.038	1	.77	2	
1316		min	-232.147	2	48.408	1	12.24	1	-.677	4	-.018	2	-.882	1	
1317	4	max	121.674	1	820.499	6	131.819	8	.584	3	.039	1	.733	2	
1318		min	-232.147	2	48.408	1	12.24	1	-.677	4	-.012	2	-.885	1	
1319	5	max	121.674	1	820.499	6	131.819	8	.584	3	.046	8	.695	2	
1320		min	-232.147	2	48.408	1	12.24	1	-.677	4	-.007	2	-.888	1	
1321	M133	1	max	876.709	1	-315.369	1	468.71	3	.075	3	.029	2	-.034	2
1322		min	-766.28	2	-1650.009	6	-569.762	4	-.308	8	-.036	1	-.429	5	
1323	2	max	876.709	1	-315.369	1	468.71	3	.075	3	.039	3	.02	2	
1324		min	-766.28	2	-1650.009	6	-569.762	4	-.308	8	-.053	4	-.334	5	
1325	3	max	876.709	1	-315.369	1	468.71	3	.075	3	.068	3	.074	2	
1326		min	-766.28	2	-1650.009	6	-569.762	4	-.308	8	-.089	4	-.24	5	
1327	4	max	876.709	1	-315.369	1	468.71	3	.075	3	.098	3	.128	2	
1328		min	-766.28	2	-1650.009	6	-569.762	4	-.308	8	-.124	4	-.19	1	
1329	5	max	876.709	1	-315.369	1	468.71	3	.075	3	.127	3	.183	2	
1330		min	-766.28	2	-1650.009	6	-569.762	4	-.308	8	-.16	4	-.171	1	
1331	M134	1	max	-11.246	1	-29.27	2	345.827	10	.141	1	.101	1	.046	1
1332		min	-165.827	6	-507.675	10	-61.369	1	-.465	10	-.134	2	-.223	6	
1333	2	max	-11.246	1	-29.27	2	345.827	10	.141	1	.097	1	.063	1	
1334		min	-165.827	6	-507.675	10	-61.369	1	-.465	10	-.118	2	-.202	6	
1335	3	max	-11.246	1	-29.27	2	345.827	10	.141	1	.093	1	.079	1	
1336		min	-165.827	6	-507.675	10	-61.369	1	-.465	10	-.101	2	-.198	2	
1337	4	max	-11.246	1	-29.27	2	345.827	10	.141	1	.089	1	.096	1	
1338		min	-165.827	6	-507.675	10	-61.369	1	-.465	10	-.085	2	-.196	2	



9bj YcdYA Ya Vyf GYWjcb: cfWkg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1339	5	max	-11.246	1	-29.27	2	345.827	10	.141	1	.085	1	.113	1	
1340		min	-165.827	6	-507.675	10	-61.369	1	-.465	10	-.068	2	-.195	2	
1341	M135	1	max	351.011	1	358.675	10	210.342	3	.118	3	.134	2	.073	2
1342		min	-230.087	2	-117.145	2	-411.86	4	-.577	10	-.101	1	-.325	10	
1343		2	max	351.011	1	358.675	10	210.342	3	.118	3	.118	2	.081	2
1344		min	-230.087	2	-117.145	2	-411.86	4	-.577	10	-.097	1	-.347	10	
1345		3	max	351.011	1	358.675	10	210.342	3	.118	3	.101	2	.088	2
1346		min	-230.087	2	-117.145	2	-411.86	4	-.577	10	-.093	1	-.37	10	
1347		4	max	351.011	1	358.675	10	210.342	3	.118	3	.085	2	.095	2
1348		min	-230.087	2	-117.145	2	-411.86	4	-.577	10	-.089	1	-.392	10	
1349		5	max	351.011	1	358.675	10	210.342	3	.118	3	.068	2	.103	2
1350		min	-230.087	2	-117.145	2	-411.86	4	-.577	10	-.085	1	-.414	10	
1351	MP3C	1	max	0	11	.01	4	.006	1	0	11	0	11	0	11
1352		min	0	1	-.019	7	-.011	6	0	1	0	1	0	1	1
1353		2	max	33.565	1	313.749	5	389.488	5	.054	1	.184	2	.279	5
1354		min	-238.458	6	35.713	2	-132.064	2	-.038	2	-.433	1	-.012	2	
1355		3	max	67.298	1	322.26	8	485.153	1	.054	1	.203	10	-.066	2
1356		min	-163.424	2	-34.837	3	-240.519	2	-.038	2	-.029	2	-.192	8	
1357		4	max	-6.248	10	15.605	3	15.513	2	0	11	.012	1	.012	3
1358		min	-19.131	5	-15.451	4	-15.46	1	0	1	-.012	2	-.012	4	
1359		5	max	0	11	.469	7	.298	2	0	11	0	11	0	11
1360		min	0	1	-.236	4	-.246	1	0	1	0	1	0	1	1
1361	MP2C	1	max	0	11	.032	8	.031	5	0	11	0	11	0	11
1362		min	0	1	-.022	3	-.018	2	0	1	0	1	0	1	1
1363		2	max	1129.609	7	201.34	4	125.581	1	.031	2	.423	2	.314	4
1364		min	163.748	4	-185.576	3	-281.068	2	-.021	1	-.302	1	-.36	3	
1365		3	max	1428.786	7	456.58	4	292.962	1	.031	2	.043	1	.149	3
1366		min	295.678	4	-440.816	3	-448.449	2	-.021	1	-.278	6	-.226	4	
1367		4	max	-8.33	10	20.311	3	20.296	2	0	11	.02	1	.02	3
1368		min	-25.508	5	-20.303	4	-20.321	1	0	1	-.02	2	-.02	4	
1369		5	max	0	11	.042	7	.01	2	0	11	0	11	0	11
1370		min	0	1	-.016	4	-.119	5	0	1	0	1	0	1	1
1371	MP1C	1	max	0	11	.013	8	.038	5	0	11	0	11	0	11
1372		min	0	1	-.007	3	-.007	2	0	1	0	1	0	1	1
1373		2	max	-84.891	3	108.404	9	32.656	4	.041	4	.464	7	.246	4
1374		min	-579.277	8	-118.132	10	-459.847	7	-.071	3	-.077	4	-.291	3	
1375		3	max	85.036	3	451.109	4	101.892	1	.041	4	-.014	1	.119	3
1376		min	-134.864	4	-473.163	3	-472.018	6	-.071	3	-.229	6	-.131	4	
1377		4	max	-79.927	10	383.172	3	254.494	2	0	11	.131	1	.195	3
1378		min	-298.078	5	-383.179	4	-254.627	1	0	1	-.131	2	-.195	4	
1379		5	max	0	11	.085	3	.073	2	0	11	0	11	0	11
1380		min	0	1	-.124	8	-.879	5	0	1	0	1	0	1	1
1381	M139	1	max	12.557	1	27.276	1	84.126	2	.741	5	.054	1	.052	1
1382		min	-101.778	6	-257.576	6	-489.108	5	-.217	2	-.038	2	-.132	2	
1383		2	max	12.557	1	27.276	1	84.126	2	.741	5	.028	1	.05	1
1384		min	-101.778	6	-257.576	6	-489.108	5	-.217	2	-.032	2	-.119	2	
1385		3	max	12.557	1	27.276	1	84.126	2	.741	5	.02	9	.048	1
1386		min	-101.778	6	-257.576	6	-489.108	5	-.217	2	-.047	10	-.106	2	
1387		4	max	12.557	1	27.276	1	84.126	2	.741	5	.017	9	.047	1
1388		min	-101.778	6	-257.576	6	-489.108	5	-.217	2	-.074	10	-.094	2	
1389		5	max	12.557	1	27.276	1	84.126	2	.741	5	.014	9	.045	1
1390		min	-101.778	6	-257.576	6	-489.108	5	-.217	2	-.1	10	-.083	9	



9bj YcdYA Ya VYf GYVjcb: cfWkg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1391	M140	1	max	433.673	4	12.296	2	668.662	1	.759	5	.038	2	.05	1
1392			min	-357.695	3	-277.377	5	-343.381	2	-.143	2	-.054	1	-.207	6
1393		2	max	433.673	4	12.296	2	668.662	1	.759	5	.047	4	.064	1
1394			min	-357.695	3	-277.377	5	-343.381	2	-.143	2	-.043	3	-.201	2
1395		3	max	433.673	4	12.296	2	668.662	1	.759	5	.068	4	.078	1
1396			min	-357.695	3	-277.377	5	-343.381	2	-.143	2	-.043	3	-.202	2
1397		4	max	433.673	4	12.296	2	668.662	1	.759	5	.089	4	.091	1
1398			min	-357.695	3	-277.377	5	-343.381	2	-.143	2	-.044	3	-.202	2
1399		5	max	433.673	4	12.296	2	668.662	1	.759	5	.113	1	.105	1
1400			min	-357.695	3	-277.377	5	-343.381	2	-.143	2	-.048	2	-.203	2
1401	M141	1	max	56.699	3	1104.203	7	230.677	2	.306	1	.031	2	.231	3
1402			min	-151.804	4	154.554	4	-102.833	1	-.433	2	-.021	1	-.253	4
1403		2	max	56.699	3	1104.203	7	230.677	2	.306	1	.045	2	.191	3
1404			min	-151.804	4	154.554	4	-102.833	1	-.433	2	-.027	1	-.262	4
1405		3	max	56.699	3	1104.203	7	230.677	2	.306	1	.06	2	.152	3
1406			min	-151.804	4	154.554	4	-102.833	1	-.433	2	-.034	1	-.272	4
1407		4	max	56.699	3	1104.203	7	230.677	2	.306	1	.074	2	.112	3
1408			min	-151.804	4	154.554	4	-102.833	1	-.433	2	-.04	1	-.282	4
1409		5	max	56.699	3	1104.203	7	230.677	2	.306	1	.088	2	.072	3
1410			min	-151.804	4	154.554	4	-102.833	1	-.433	2	-.046	1	-.336	8
1411	M142	1	max	425.551	4	-311.42	4	300.533	1	.276	4	.021	1	.329	3
1412			min	-330.444	3	-1479.92	7	-428.154	2	-.529	3	-.031	2	-.582	4
1413		2	max	425.551	4	-311.42	4	300.533	1	.276	4	.039	1	.378	3
1414			min	-330.444	3	-1479.92	7	-428.154	2	-.529	3	-.058	2	-.563	4
1415		3	max	425.551	4	-311.42	4	300.533	1	.276	4	.058	1	.428	3
1416			min	-330.444	3	-1479.92	7	-428.154	2	-.529	3	-.084	2	-.543	4
1417		4	max	425.551	4	-311.42	4	300.533	1	.276	4	.077	1	.478	3
1418			min	-330.444	3	-1479.92	7	-428.154	2	-.529	3	-.111	2	-.524	4
1419		5	max	425.551	4	-311.42	4	300.533	1	.276	4	.096	1	.527	3
1420			min	-330.444	3	-1479.92	7	-428.154	2	-.529	3	-.138	2	-.505	4
1421	M143	1	max	29.799	4	-90.299	3	414.31	7	.205	4	.041	4	-.01	3
1422			min	-200.793	7	-598.381	8	-20.509	4	-.671	7	-.071	3	-.267	8
1423		2	max	29.799	4	-90.299	3	414.31	7	.205	4	.039	4	-.004	3
1424			min	-200.793	7	-598.381	8	-20.509	4	-.671	7	-.052	3	-.23	8
1425		3	max	29.799	4	-90.299	3	414.31	7	.205	4	.038	4	.002	3
1426			min	-200.793	7	-598.381	8	-20.509	4	-.671	7	-.034	3	-.193	8
1427		4	max	29.799	4	-90.299	3	414.31	7	.205	4	.045	10	.011	10
1428			min	-200.793	7	-598.381	8	-20.509	4	-.671	7	-.03	9	-.155	8
1429		5	max	29.799	4	-90.299	3	414.31	7	.205	4	.063	10	.029	10
1430			min	-200.793	7	-598.381	8	-20.509	4	-.671	7	-.028	9	-.132	9
1431	M144	1	max	720.502	4	50.937	4	454.88	4	.103	4	.071	3	-.036	10
1432			min	-585.977	3	-256.623	7	-726.831	3	-.629	7	-.041	4	-.329	8
1433		2	max	720.502	4	50.937	4	454.88	4	.103	4	.043	1	-.038	10
1434			min	-585.977	3	-256.623	7	-726.831	3	-.629	7	-.03	2	-.316	8
1435		3	max	720.502	4	50.937	4	454.88	4	.103	4	.064	1	-.031	3
1436			min	-585.977	3	-256.623	7	-726.831	3	-.629	7	-.068	2	-.303	8
1437		4	max	720.502	4	50.937	4	454.88	4	.103	4	.085	1	-.02	3
1438			min	-585.977	3	-256.623	7	-726.831	3	-.629	7	-.106	2	-.291	8
1439		5	max	720.502	4	50.937	4	454.88	4	.103	4	.106	1	-.01	3
1440			min	-585.977	3	-256.623	7	-726.831	3	-.629	7	-.144	2	-.278	8
1441	MP3B	1	max	0	11	.011	4	.03	5	0	11	0	11	0	11
1442			min	0	1	-.015	7	-.009	2	0	1	0	1	0	1



9bj YcdYA Ya Vyf GYVjcb: cfWVg fT cbhpi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1443	2	max	50.615	1	214.431	4	62.019	3	.117	4	.458	4	.218	8	
1444		min	-198.922	7	-112.99	3	-496.515	8	-.102	3	-.171	3	-.088	3	
1445	3	max	84.348	1	385.644	4	62.019	3	.117	4	-.067	10	.101	3	
1446		min	-158.08	2	-284.203	3	-496.515	8	-.102	3	-.296	8	-.125	4	
1447	4	max	-6.248	10	15.464	3	15.431	2	0	11	.012	1	.012	3	
1448		min	-19.131	5	-15.472	4	-15.679	1	0	1	-.012	2	-.012	4	
1449	5	max	0	11	.249	3	.217	2	0	11	0	11	0	11	
1450		min	0	1	-.258	4	-.798	5	0	1	0	1	0	1	
1451	MP2B	1	max	0	.514	4	.346	5	0	11	0	11	0	11	
1452		min	0	1	-.561	7	-.313	2	0	1	0	1	0	1	
1453	2	max	1316.084	8	388.673	4	334.493	1	.04	3	.043	4	.573	3	
1454		min	254.916	3	-388.698	3	-279.906	2	-.032	4	-.454	1	-.573	4	
1455	3	max	1511.51	8	268.837	4	405.977	1	.04	3	.286	1	.457	3	
1456		min	353.246	3	-415.756	3	-351.39	2	-.032	4	-.262	2	-.237	4	
1457	4	max	-82.01	10	388.083	3	259.49	2	0	11	.14	1	.204	3	
1458		min	-304.455	5	-388.244	4	-259.498	1	0	1	-.14	2	-.204	4	
1459	5	max	0	11	-.006	10	.092	9	0	11	0	11	0	11	
1460		min	0	1	-.801	5	-.106	5	0	1	0	1	0	1	
1461	MP1B	1	max	0	.024	8	.006	1	0	11	0	11	0	11	
1462		min	0	1	-.015	3	-.015	6	0	1	0	1	0	1	
1463	2	max	-27.379	4	-21.744	2	353.641	1	.071	3	.222	2	.041	2	
1464		min	-408	7	-288.852	5	-180.704	2	-.1	4	-.413	1	-.289	5	
1465	3	max	40.668	4	-20.574	4	442.403	1	.071	3	.147	9	.158	7	
1466		min	-300.102	9	-288.852	5	-269.466	2	-.1	4	-.061	2	.022	4	
1467	4	max	-6.248	10	15.234	3	15.235	2	0	11	.011	1	.011	3	
1468		min	-19.131	5	-15.241	4	-15.231	1	0	1	-.011	2	-.011	4	
1469	5	max	0	11	.019	3	.024	6	0	11	0	11	0	11	
1470		min	0	1	-.045	8	-.016	1	0	1	0	1	0	1	
1471	M148	1	max	-11.351	9	44.559	1	103.062	3	.76	8	.117	4	-.009	9
1472		min	-102.002	7	-218.115	7	-519.553	8	-.249	3	-.102	3	-.112	10	
1473	2	max	-11.351	9	44.559	1	103.062	3	.76	8	.089	4	0	9	
1474		min	-102.002	7	-218.115	7	-519.553	8	-.249	3	-.096	3	-.107	10	
1475	3	max	-11.351	9	44.559	1	103.062	3	.76	8	.061	4	.009	9	
1476		min	-102.002	7	-218.115	7	-519.553	8	-.249	3	-.089	3	-.103	10	
1477	4	max	-11.351	9	44.559	1	103.062	3	.76	8	.034	4	.018	9	
1478		min	-102.002	7	-218.115	7	-519.553	8	-.249	3	-.083	3	-.099	10	
1479	5	max	-11.351	9	44.559	1	103.062	3	.76	8	.016	10	.03	2	
1480		min	-102.002	7	-218.115	7	-519.553	8	-.249	3	-.104	7	-.095	10	
1481	M149	1	max	457.57	3	6.812	2	674.778	4	.822	8	.102	3	.115	4
1482		min	-376.862	4	-323.921	8	-336.623	3	-.144	3	-.117	4	-.281	3	
1483	2	max	457.57	3	6.812	2	674.778	4	.822	8	.081	3	.13	4	
1484		min	-376.862	4	-323.921	8	-336.623	3	-.144	3	-.074	4	-.281	3	
1485	3	max	457.57	3	6.812	2	674.778	4	.822	8	.071	2	.144	4	
1486		min	-376.862	4	-323.921	8	-336.623	3	-.144	3	-.043	1	-.282	3	
1487	4	max	457.57	3	6.812	2	674.778	4	.822	8	.102	2	.158	4	
1488		min	-376.862	4	-323.921	8	-336.623	3	-.144	3	-.052	1	-.282	3	
1489	5	max	457.57	3	6.812	2	674.778	4	.822	8	.132	2	.173	4	
1490		min	-376.862	4	-323.921	8	-336.623	3	-.144	3	-.062	1	-.282	3	
1491	M150	1	max	64.644	3	1011.881	8	180.756	5	.68	2	.04	3	.658	4
1492		min	-168.446	4	173.543	3	-18.393	3	-.792	1	-.032	4	-.679	3	
1493	2	max	64.644	3	1011.881	8	180.756	5	.68	2	.039	3	.621	4	
1494		min	-168.446	4	173.543	3	-18.393	3	-.792	1	-.023	4	-.69	3	



9bj YcdYA Ya VYf GYWJcb: cfWg f7 cbh7bi YXL

Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mome...	LC	
1495		3	max	64.644	3	1011.881	8	180.756	5	.68	2	.038	3	.585	4
1496			min	-168.446	4	173.543	3	-18.393	3	-.792	1	-.015	4	-.701	3
1497		4	max	64.644	3	1011.881	8	180.756	5	.68	2	.046	7	.549	4
1498			min	-168.446	4	173.543	3	-18.393	3	-.792	1	-.006	4	-.712	3
1499		5	max	64.644	3	1011.881	8	180.756	5	.68	2	.057	5	.513	4
1500			min	-168.446	4	173.543	3	-18.393	3	-.792	1	-.005	2	-.723	3
1501	M151	1	max	703.186	3	-442.534	3	522.876	2	.088	2	.032	4	.004	4
1502			min	-599.382	4	-1841.412	8	-642.787	1	-.403	5	-.04	3	-.417	7
1503		2	max	703.186	3	-442.534	3	522.876	2	.088	2	.051	4	.056	4
1504			min	-599.382	4	-1841.412	8	-642.787	1	-.403	5	-.067	3	-.308	7
1505		3	max	703.186	3	-442.534	3	522.876	2	.088	2	.072	2	.109	4
1506			min	-599.382	4	-1841.412	8	-642.787	1	-.403	5	-.095	1	-.227	3
1507		4	max	703.186	3	-442.534	3	522.876	2	.088	2	.105	2	.162	4
1508			min	-599.382	4	-1841.412	8	-642.787	1	-.403	5	-.135	1	-.199	3
1509		5	max	703.186	3	-442.534	3	522.876	2	.088	2	.137	2	.215	4
1510			min	-599.382	4	-1841.412	8	-642.787	1	-.403	5	-.175	1	-.172	3
1511	M152	1	max	6.736	3	-32.889	4	401.137	5	.289	2	.071	3	.049	3
1512			min	-126.315	6	-427.212	7	-133.458	2	-.684	1	-.1	4	-.176	4
1513		2	max	6.736	3	-32.889	4	401.137	5	.289	2	.078	3	.066	3
1514			min	-126.315	6	-427.212	7	-133.458	2	-.684	1	-.09	4	-.174	4
1515		3	max	6.736	3	-32.889	4	401.137	5	.289	2	.085	3	.084	3
1516			min	-126.315	6	-427.212	7	-133.458	2	-.684	1	-.081	4	-.172	4
1517		4	max	6.736	3	-32.889	4	401.137	5	.289	2	.091	3	.101	3
1518			min	-126.315	6	-427.212	7	-133.458	2	-.684	1	-.071	4	-.17	4
1519		5	max	6.736	3	-32.889	4	401.137	5	.289	2	.098	3	.119	3
1520			min	-126.315	6	-427.212	7	-133.458	2	-.684	1	-.062	4	-.168	4
1521	M153	1	max	249.438	3	225.641	9	313.79	2	.225	2	.1	4	.073	1
1522			min	-150.521	4	-114.206	4	-569.353	1	-.601	1	-.071	3	-.24	2
1523		2	max	249.438	3	225.641	9	313.79	2	.225	2	.1	4	.078	1
1524			min	-150.521	4	-114.206	4	-569.353	1	-.601	1	-.087	3	-.247	2
1525		3	max	249.438	3	225.641	9	313.79	2	.225	2	.099	4	.084	1
1526			min	-150.521	4	-114.206	4	-569.353	1	-.601	1	-.103	3	-.254	2
1527		4	max	249.438	3	225.641	9	313.79	2	.225	2	.099	4	.09	1
1528			min	-150.521	4	-114.206	4	-569.353	1	-.601	1	-.119	3	-.261	2
1529		5	max	249.438	3	225.641	9	313.79	2	.225	2	.098	4	.096	1
1530			min	-150.521	4	-114.206	4	-569.353	1	-.601	1	-.135	3	-.268	2

9bj YcdY5-G7 % h fl * \$!%\$L '@: 8 GhY7 cXY7\ YWg

Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc...	Dir	L...phi*Pn...	phi*Pn...	phi*M...	phi*M...	Eqn		
1	MP2A	PIPE 2.0	.512	5	1	.070	5	1	14916...	32130	1.872	1.872	1..H1-1b	
2	MP2B	PIPE 2.0	.483	5	3	.068	5	3	14916...	32130	1.872	1.872	1..H1-1b	
3	MP3B	PIPE 2.0	.454	4	8	.128	4	4	20866...	32130	1.872	1.872	2..H1-1b	
4	M119	HSS4X4X4	.436	0	5	.129	0	y	5	11593...	139518	16.181	16.181	2..H1-1b
5	MP3C	PIPE 2.0	.422	4	5	.088	4	1	20866...	32130	1.872	1.872	2..H1-1b	
6	M118	HSS4X4X4	.421	0	3	.103	0	y	10	11593...	139518	16.181	16.181	1..H1-1b
7	MP3A	PIPE 2.0	.415	4	9	.112	4	2	20866...	32130	1.872	1.872	2..H1-1b	
8	MP1C	PIPE 2.0	.407	4	3	.104	4	3	20866...	32130	1.872	1.872	2..H1-1b	
9	MP2C	PIPE 2.0	.381	5	2	.066	5	2	14916...	32130	1.872	1.872	1..H1-1b	
10	MP1B	PIPE 2.0	.364	1	1	.097	4	1	20866...	32130	1.872	1.872	2..H1-1b	
11	MP1A	PIPE 2.0	.361	4	10	.110	1	2	20866...	32130	1.872	1.872	2..H1-1b	



Company : Tower Engineering Solutions, LLC
 Designer :
 Job Number : TES Project No. 121399
 Model Name : CT13060-A-SBA_MT_LO_Loads Only_G

Jan 5, 2022
 6:13 PM
 Checked By: _____

9bj YcdY5=G7 % h fl * \$!\$L @F : 8 GhYY '7cXY7\ YWg'f7 cbh7bi YXL

Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc...	Dir	L...	phi*Pn...	phi*Pn...	phi*M...	phi*M...	Eqn	
12	M35	PL3/8x4	.354	.565	4	.027	.565	y	1	44539...	48600	.38	3.963	1..H1-1b
13	M120	HSS4X4X4	.353	0	6	.105	0	y	9	11593...	139518	16.181	16.181	2..H1-1b
14	M125	PIPE 3.0	.275	6.771	7	.077	11...		8	28250...	65205	5.749	5.749	2..H1-1b
15	M21	PIPE 3.0	.267	6.073	8	.084	6.0...		8	53523...	65205	5.749	5.749	2..H1-1b
16	M126	PIPE 3.0	.256	6.771	5	.084	6.7...		3	28250...	65205	5.749	5.749	2..H1-1b
17	M128	L3X3X4	.232	1.5	1	.061	0	y	1	44386...	46656	1.688	3.756	2..H2-1
18	M16	PIPE 3.0	.225	6.073	10	.086	6.0...		5	53523...	65205	5.749	5.749	2..H1-1b
19	M127	L3X3X4	.207	0	1	.067	1.5	y	1	44386...	46656	1.688	3.756	2..H2-1
20	M1	PIPE 3.0	.205	6.073	9	.113	1.7...		9	53523...	65205	5.749	5.749	1..H1-1b
21	M124	PIPE 3.0	.204	6.771	2	.098	10...		1	28250...	65205	5.749	5.749	1..H1-1b
22	M39	PL3/8x4	.202	0	1	.080	.565	y	9	44539...	48600	.38	4.05	1..H1-1b
23	M4	PL3/8x4	.194	0	4	.076	0	y	4	47933...	48600	.38	4.05	1..H1-1b
24	M10	L2x2x4	.189	0	4	.012	2.9...	y	4	25500...	30585.6	.691	1.577	2..H2-1
25	M129	L3X3X4	.189	0	3	.059	1.5	y	3	44386...	46656	1.688	3.756	2..H2-1
26	M36	PL3/8x4	.186	.225	3	.078	.225	y	4	47933...	48600	.38	4.05	1..H1-1b
27	M5	PL3/8x4	.179	.354	4	.050	0	y	3	46675...	48600	.38	4.05	1..H1-1b
28	M9	L2x2x4	.179	0	4	.012	2.9...	z	4	25500...	30585.6	.691	1.577	1..H2-1
29	M37	PL3/8x4	.177	.565	1	.046	0	y	10	44539...	48600	.38	4.05	2..H1-1b
30	M34	PL3/8x4	.161	.225	1	.052	.225	y	2	47933...	48600	.38	4.05	1..H1-1b
31	M28	PL3/8x4	.160	0	9	.087	.225	y	9	47933...	48600	.38	4.05	1..H1-1b
32	M17	PIPE 3.0	.159	0	5	.129	0		6	53523...	65205	5.749	5.749	2..H1-1b
33	M2	PL3/8x4	.147	.398	1	.061	0	y	1	47149...	48600	.38	4.05	2..H1-1b
34	M38	PL3/8x4	.145	.225	4	.071	0	y	10	47933...	48600	.38	4.05	1..H1-1b
35	M3	PL3/8x4	.144	3.852	5	.053	4.25	y	1	47149...	48600	.38	4.05	2..H1-1b
36	M22	PIPE 3.0	.127	0	9	.177	0		7	53523...	65205	5.749	5.749	2..H1-1b
37	M31	PL3/8x4	.126	0	1	.040	0	y	3	47933...	48600	.38	4.05	1..H1-1b
38	M12	PIPE 3.0	.126	4.302	10	.161	0		5	53523...	65205	5.749	5.749	1..H1-1b
39	M11	L2x2x4	.117	0	1	.010	2.9...	z	2	25500...	30585.6	.691	1.577	2..H2-1
40	M6	L2x2x4	.107	0	2	.012	2.9...	y	1	25500...	30585.6	.691	1.577	2..H2-1
41	M8	L2x2x4	.100	0	1	.008	2.9...	y	1	25500...	30585.6	.691	1.577	2..H2-1
42	M7	L2x2x4	.088	0	4	.011	2.9...	z	1	25500...	30585.6	.691	1.577	2..H2-1

EXHIBIT 9
EME Report



Radio Frequency Emissions Analysis Report

February 11, 2022

Centerline Communications on behalf of T-Mobile

Site Name: CT259/OPTNewton_RL#1

Site Address: 3 Edmund Road, Newtown, CT 06470

Site Compliance Summary

Compliance Status:	Compliant
Carrier MPE%	8.29569300%
of FCC General Population Allowable Limit:	
Composite MPE%	8.29657300%
of FCC General Population Allowable Limit:	



February 11, 2022

T-Mobile

Emissions Analysis for Site: **CT259/OPTNewton_RL#1**

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed T-Mobile facility to be located a monopole near **3 Edmund Road, Newtown CT 06470** for the purpose of determining whether the emissions from the proposed facility are within specified federal limits.

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

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

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

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600MHz is $400 \mu\text{W}/\text{cm}^2$, the 700 MHz is $466.67 \mu\text{W}/\text{cm}^2$, and the 1900 MHz, 2100 MHz, and 2500 MHz bands is $1000 \mu\text{W}/\text{cm}^2$, and the

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, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.



Calculations

Calculations were performed for the proposed facility using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing focused omnidirectional antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. This is a very conservative estimate since the gain reduction in actual applications is typically greater than 10 dB in the direction of ground immediately surrounding the facility. Real world emissions values from this facility are expected to be lower than values listed in this report at ground level. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

RRH #	Frequency Band	Technology	Channel Count	Transmit Power per Channel (W)
1	2500	LTE	1	90
1	2500	NR	1	90
1	2500	LTE	1	30
1	2500	NR	1	30
2	700	LTE	4	40
2	600	LTE	2	40
2	600	NR	2	30
3	1900	LTE	2	140
3	1900	GSM	1	15
3	2100	LTE	2	140
3	2100	UMTS	1	40
4	700	LTE	4	40
4	600	LTE	2	40
4	600	NR	2	30
5	2500	LTE	1	90
5	2500	NR	1	90
5	2500	LTE	1	30
5	2500	NR	1	30



6	1900	LTE	2	140
6	1900	GSM	1	15
6	2100	LTE	2	140
6	2100	UMTS	1	40
7	2500	LTE	1	90
7	2500	NR	1	90
7	2500	LTE	1	30
7	2500	NR	1	30
8	700	LTE	4	40
8	600	LTE	2	40
8	600	NR	2	30
9	1900	LTE	2	140
9	1900	GSM	1	15
9	2100	LTE	2	140
9	2100	UMTS	1	40
10	850	UMTS	1	40
11	700	LTE	4	40
12	1900	LTE	4	40
11	850	LTE	4	40
12	2100	LTE	4	40
13	2300	LTE	4	25
14	850	UMTS	1	40
15	850	UMTS	1	40
16	700	LTE	4	40
17	1900	LTE	4	40
16	850	LTE	4	40
17	2100	LTE	4	40
18	2300	LTE	4	25
19	850	UMTS	1	40
20	850	UMTS	1	40
21	700	LTE	4	40
22	1900	LTE	4	40
21	850	LTE	4	40
22	2100	LTE	4	40
23	2300	LTE	4	25
24	850	UMTS	1	40
25	600	NR	4	40



26	2007	NR	4	40
26	2100	NR	4	40
27	600	NR	4	40
28	2007	NR	4	40
28	2100	NR	4	40
29	600	NR	4	40
30	2007	NR	4	40
30	2100	NR	4	40

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

Table 1: Channel Data Table



The following antennas listed in Table 2 were used in the modeling for transmission in the 600MHz, 700 MHz, 1900 MHz, 2100 MHz, 2300 MHz, and 2500 MHz frequency bands. This is based on information from the carrier with regard to anticipated antenna selection.

Sector	Antenna Number	Make / Model	Centerline (ft)
A	1	ERICSSON SON_AIR6449 2500 LTE TB	127.5
A	1	ERICSSON SON_AIR6449 2500 NR TB	127.5
A	1	ERICSSON AIR6449 LTE BrM 02DT	127.5
A	1	ERICSSON AIR6449 NR BrM 02DT	127.5
A	2	RFS APXVAALL24 43-U-NA20	127.5
A	2	RFS APXVAALL24 43-U-NA20	127.5
A	2	RFS APXVAALL24 43-U-NA20	127.5
A	3	COMMSCOPE VV-65A-R1B	127.5
A	3	COMMSCOPE VV-65A-R1B	127.5
A	3	COMMSCOPE VV-65A-R1B	127.5
A	3	COMMSCOPE VV-65A-R1B	127.5
B	4	RFS APXVAALL24 43-U-NA20	127.5
B	4	RFS APXVAALL24 43-U-NA20	127.5
B	4	RFS APXVAALL24 43-U-NA20	127.5
B	5	ERICSSON SON_AIR6449 2500 LTE TB	127.5
B	5	ERICSSON SON_AIR6449 2500 NR TB	127.5
B	5	ERICSSON AIR6449 LTE BrM 02DT	127.5
B	5	ERICSSON AIR6449 NR BrM 02DT	127.5
B	6	COMMSCOPE VV-65A-R1B	127.5
B	6	COMMSCOPE VV-65A-R1B	127.5
B	6	COMMSCOPE VV-65A-R1B	127.5
B	6	COMMSCOPE VV-65A-R1B	127.5
C	7	ERICSSON SON_AIR6449 2500 LTE TB	127.5
C	7	ERICSSON SON_AIR6449 2500 NR TB	127.5
C	7	ERICSSON AIR6449 LTE BrM 02DT	127.5
C	7	ERICSSON AIR6449 NR BrM 02DT	127.5
C	8	RFS APXVAALL24 43-U-NA20	127.5
C	8	RFS APXVAALL24 43-U-NA20	127.5
C	8	RFS APXVAALL24 43-U-NA20	127.5
C	9	COMMSCOPE VV-65A-R1B	127.5
C	9	COMMSCOPE VV-65A-R1B	127.5
C	9	COMMSCOPE VV-65A-R1B	127.5
C	9	COMMSCOPE VV-65A-R1B	127.5
A	10	POWERWAVE 7770 00	119.6



A	11	QUINTEL QS66512-2	119.6
A	11	QUINTEL QS66512-2	119.6
A	12	CCI HPA-65R-BUU-H6	119.6
A	12	CCI HPA-65R-BUU-H6-	119.6
A	12	CCI HPA-65R-BUU-H6-	119.6
A	13	POWERWAVE 7770 00	119.6
B	14	POWERWAVE 7770 00	119.6
B	15	QUINTEL QS66512-2	119.6
B	15	QUINTEL QS66512-2	119.6
B	16	CCI HPA-65R-BUU-H6	119.6
B	16	CCI HPA-65R-BUU-H6-	119.6
B	16	CCI HPA-65R-BUU-H6-	119.6
B	17	POWERWAVE 7770 00	119.6
C	18	POWERWAVE 7770 00	119.6
C	19	QUINTEL QS66512-2	119.6
C	19	QUINTEL QS66512-2	119.6
C	20	CCI HPA-65R-BUU-H6	119.6
C	20	CCI HPA-65R-BUU-H6-	119.6
C	20	CCI HPA-65R-BUU-H6-	119.6
C	21	POWERWAVE 7770 00	119.6
A	22	COMMSCOPE FFVV-65B-R2	109.4
A	22	COMMSCOPE FFVV-65B-R2	109.4
A	22	COMMSCOPE FFVV-65B-R2	109.4
B	23	COMMSCOPE FFVV-65B-R2	109.4
B	23	COMMSCOPE FFVV-65B-R2	109.4
B	23	COMMSCOPE FFVV-65B-R2	109.4
C	24	COMMSCOPE FFVV-65B-R2	109.4
C	24	COMMSCOPE FFVV-65B-R2	109.4
C	24	COMMSCOPE FFVV-65B-R2	109.4

Table 2: Antenna Data

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



Results

Per the calculations completed for the proposed T-Mobile configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

ID	Make / Model	Frequency Band	Gain (dBd)	Centerline (ft)	Channel Count	TX Power (W)	ERP (W)	MPE %
T-Mobile 1	ERICSSON SON AIR6449	2500	22.35	127.5	1	90	15461.1755	1.382540000
T-Mobile 1	ERICSSON SON AIR6449	2500	22.35	127.5	1	90	15461.1755	1.382540000
T-Mobile 1	ERICSSON SON AIR6449	2500	15.15	127.5	1	30	982.0221	0.000004000
T-Mobile 1	ERICSSON SON AIR6449	2500	15.15	127.5	1	30	982.0221	0.000004000
T-Mobile 2	RFS APXVAALL24 43-U-NA20	700	13.65	127.5	4	40	3707.8314	0.000039000
T-Mobile 2	RFS APXVAALL24 43-U-NA20	600	12.95	127.5	2	40	1577.9382	0.000020000
T-Mobile 2	RFS APXVAALL24 43-U-NA20	600	12.95	127.5	2	30	1183.4536	0.000015000
T-Mobile 3	COMMSCOPE VV-65A-R1B	1900	15.25	127.5	2	140	9379.0323	0.000036000
T-Mobile 3	COMMSCOPE VV-65A-R1B	1900	15.25	127.5	1	15	502.4482	0.000002000
T-Mobile 3	COMMSCOPE VV-65A-R1B	2100	15.87	127.5	2	140	10818.2754	0.000034000
T-Mobile 3	COMMSCOPE VV-65A-R1B	2100	15.87	127.5	1	40	1545.4679	0.000005000
T-Mobile 4	RFS APXVAALL24 43-U-NA20	700	13.65	127.5	4	40	3707.8314	0.000039000
T-Mobile 4	RFS APXVAALL24 43-U-NA20	600	12.95	127.5	2	40	1577.9382	0.000020000
T-Mobile 4	RFS APXVAALL24 43-U-NA20	600	12.95	127.5	2	30	1183.4536	0.000015000
T-Mobile 5	ERICSSON SON AIR6449	2500	22.35	127.5	1	90	15461.1755	1.382540000
T-Mobile 5	ERICSSON SON AIR6449	2500	22.35	127.5	1	90	15461.1755	1.382540000
T-Mobile 5	ERICSSON SON AIR6449	2500	15.15	127.5	1	30	982.0221	0.000004000
T-Mobile 5	ERICSSON SON AIR6449	2500	15.15	127.5	1	30	982.0221	0.000004000
T-Mobile 6	COMMSCOPE VV-65A-R1B	1900	15.25	127.5	2	140	9379.0323	0.000036000
T-Mobile 6	COMMSCOPE VV-65A-R1B	1900	15.25	127.5	1	15	502.4482	0.000002000
T-Mobile 6	COMMSCOPE VV-65A-R1B	2100	15.87	127.5	2	140	10818.2754	0.000036000
T-Mobile 6	COMMSCOPE VV-65A-R1B	2100	15.87	127.5	1	40	1545.4679	0.000005000
T-Mobile 7	ERICSSON SON AIR6449	2500	22.35	127.5	1	90	15461.1755	1.382527000
T-Mobile 7	ERICSSON SON AIR6449	2500	22.35	127.5	1	90	15461.1755	1.382527000
T-Mobile 7	ERICSSON SON AIR6449	2500	15.15	127.5	1	30	982.0221	0.000004000
T-Mobile 7	ERICSSON SON AIR6449	2500	15.15	127.5	1	30	982.0221	0.000004000
T-Mobile 8	RFS APXVAALL24 43-U-NA20	700	13.65	127.5	4	40	3707.8314	0.000038000
T-Mobile 8	RFS APXVAALL24 43-U-NA20	600	12.95	127.5	2	40	1577.9382	0.000020000
T-Mobile 8	RFS APXVAALL24 43-U-NA20	600	12.95	127.5	2	30	1183.4536	0.000015000
T-Mobile 9	COMMSCOPE VV-65A-R1B	1900	15.25	127.5	2	140	9379.0323	0.000036000
T-Mobile 9	COMMSCOPE VV-65A-R1B	1900	15.25	127.5	1	15	502.4482	0.000002000
T-Mobile 9	COMMSCOPE VV-65A-R1B	2100	15.87	127.5	2	140	10818.2754	0.000035000
T-Mobile 9	COMMSCOPE VV-65A-R1B	2100	15.87	127.5	1	40	1545.4679	0.000005000
T-Mobile MPE%								8.295693%
AT&T 10	POWERWAVE 7770 00	850	11.35	119.6	1	40	545.8333	0.000006000
AT&T 11	QUINTEL QS66512-2	700	11.45	119.6	4	40	2234.1894	0.000049000
AT&T 11	QUINTEL QS66512-2	1900	14.15	119.6	4	40	4160.2553	0.000023000
AT&T 12	CCI HPA-65R-BUU-H6	850	12.74	119.6	4	40	3006.9069	0.000033000
AT&T 12	CCI HPA-65R-BUU-H6-	2100	15.02	119.6	4	40	5082.9985	0.000019000
AT&T 12	CCI HPA-65R-BUU-H6-	2300	14.77	119.6	4	25	2999.1625	0.000013000
AT&T 13	POWERWAVE 7770 00	850	11.35	119.6	1	40	545.8333	0.000006000
AT&T 14	POWERWAVE 7770 00	850	11.35	119.6	1	40	545.8333	0.000007000
AT&T 15	QUINTEL QS66512-2	700	11.45	119.6	4	40	2234.1894	0.000050000
AT&T 15	QUINTEL QS66512-2	1900	14.15	119.6	4	40	4160.2553	0.000024000
AT&T 16	CCI HPA-65R-BUU-H6	850	12.74	119.6	4	40	3006.9069	0.000034000
AT&T 16	CCI HPA-65R-BUU-H6-	2100	15.02	119.6	4	40	5082.9985	0.000020000
AT&T 16	CCI HPA-65R-BUU-H6-	2300	14.77	119.6	4	25	2999.1625	0.000013000
AT&T 17	POWERWAVE 7770 00	850	11.35	119.6	1	40	545.8333	0.000007000



AT&T 18	POWERWAVE 7770 00	850	11.35	119.6	1	40	545.8333	0.000006000
AT&T 19	QUINTEL QS66512-2	700	11.45	119.6	4	40	2234.1894	0.000050000
AT&T 19	QUINTEL QS66512-2	1900	14.15	119.6	4	40	4160.2553	0.000023000
AT&T 20	CCI HPA-65R-BUU-H6	850	12.74	119.6	4	40	3006.9069	0.000033000
AT&T 20	CCI HPA-65R-BUU-H6-	2100	15.02	119.6	4	40	5082.9985	0.000019000
AT&T 20	CCI HPA-65R-BUU-H6-	2300	14.77	119.6	4	25	2999.1625	0.000013000
AT&T 21	POWERWAVE 7770 00	850	11.35	119.6	1	40	545.8333	0.000006000
AT&T MPE%								0.000454%
Dish 22	COMMSCOPE FFVV-65B-R2	600	11.22	109.4	4	40	2118.9465	0.000080000
Dish 22	COMMSCOPE FFVV-65B-R2	2007	15.87	109.4	4	40	6181.8716	0.000029000
Dish 22	COMMSCOPE FFVV-65B-R2	2100	15.97	109.4	4	40	6325.8659	0.000031000
Dish 23	COMMSCOPE FFVV-65B-R2	600	11.22	109.4	4	40	2118.9465	0.000085000
Dish 23	COMMSCOPE FFVV-65B-R2	2007	15.87	109.4	4	40	6181.8716	0.000028000
Dish 23	COMMSCOPE FFVV-65B-R2	2100	15.97	109.4	4	40	6325.8659	0.000031000
Dish 24	COMMSCOPE FFVV-65B-R2	600	11.22	109.4	4	40	2118.9465	0.000083000
Dish 24	COMMSCOPE FFVV-65B-R2	2007	15.87	109.4	4	40	6181.8716	0.000028000
Dish 24	COMMSCOPE FFVV-65B-R2	2100	15.97	109.4	4	40	6325.8659	0.000031000
Dish MPE%								0.000426%

Table 3: T-Mobile Antenna Inventory & Power Level



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 4* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated T-Mobile sector(s).

Frequency Band	Technology	Centerline (ft.)	# of Channels	ERP W (Per Channel)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	MPE %
2500	LTE	127.5	1	15461.17548	13.8253990	1000	1.38254000
2500	NR	127.5	1	15461.17548	13.8253990	1000	1.38254000
2500	LTE	127.5	1	982.0220846	0.0000380	1000	0.00000400
2500	NR	127.5	1	982.0220846	0.0000380	1000	0.00000400
700	LTE	127.5	4	926.95786	0.0001800	467	0.00003900
600	LTE	127.5	2	788.9690944	0.0000780	400	0.00002000
600	NR	127.5	2	591.7268208	0.0000590	400	0.00001500
1900	LTE	127.5	2	4689.516148	0.0003550	1000	0.00003600
1900	GSM	127.5	1	502.4481587	0.0000190	1000	0.00000200
2100	LTE	127.5	2	5409.137679	0.0003430	1000	0.00003400
2100	UMTS	127.5	1	1545.467908	0.0000490	1000	0.00000500
700	LTE	127.5	4	926.95786	0.0001800	467	0.00003900
600	LTE	127.5	2	788.9690944	0.0000820	400	0.00002000
600	NR	127.5	2	591.7268208	0.0000610	400	0.00001500
2500	LTE	127.5	1	15461.17548	13.8253990	1000	1.38254000
2500	NR	127.5	1	15461.17548	13.8253990	1000	1.38254000
2500	LTE	127.5	1	982.0220846	0.0000380	1000	0.00000400
2500	NR	127.5	1	982.0220846	0.0000380	1000	0.00000400
1900	LTE	127.5	2	4689.516148	0.0003650	1000	0.00003600
1900	GSM	127.5	1	502.4481587	0.0000200	1000	0.00000200
2100	LTE	127.5	2	5409.137679	0.0003600	1000	0.00003600
2100	UMTS	127.5	1	1545.467908	0.0000510	1000	0.00000500
2500	LTE	127.5	1	15461.17548	13.8252690	1000	1.38252700
2500	NR	127.5	1	15461.17548	13.8252690	1000	1.38252700
2500	LTE	127.5	1	982.0220846	0.0000380	1000	0.00000400
2500	NR	127.5	1	982.0220846	0.0000380	1000	0.00000400
700	LTE	127.5	4	926.95786	0.0001790	467	0.00003800
600	LTE	127.5	2	788.9690944	0.0000800	400	0.00002000
600	NR	127.5	2	591.7268208	0.0000600	400	0.00001500
1900	LTE	127.5	2	4689.516148	0.0003580	1000	0.00003600
1900	GSM	127.5	1	502.4481587	0.0000190	1000	0.00000200
2100	LTE	127.5	2	5409.137679	0.0003500	1000	0.00003500
2100	UMTS	127.5	1	1545.467908	0.0000500	1000	0.00000500
T-Mobile MPE%							8.29569300 %

Table 4: T-Mobile Maximum Sector MPE Power Values



Summary

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

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

Carrier	Predicted MPE %
AT&T	0.00045400%
T-Mobile	8.29569300%
Dish	0.00042600%
Composite	8.29657300%

Table 5: Total Predicted MPE(%) by Carrier

Compliance Status:

The anticipated composite MPE value for this site assuming all carriers present is **8.29657300%** of the allowable FCC established general population limit sampled at the ground level.

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.

A handwritten signature in black ink that reads 'Samuel Cosgrove'.

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