



10 INDUSTRIAL AVE,  
SUITE 3  
MAHWAH NJ 07430

PHONE: 201.684.0055  
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August 2, 2016

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

Notice of Exempt Modification  
751 Higgins Road, Cheshire, CT 06410  
Latitude- 41.48760000  
Longitude- -72.92920000

Dear Ms. Bachman,

T-Mobile currently maintains (6) existing antennas at the 212' level of the existing 250' self-support tower at 751 Higgins Road in Cheshire, CT. The tower and property is owned by AT&T. T-Mobile now intends to replace (4) of its existing antennas with (4) new 2100 MHz antennas, and remove (2) existing antennas. These antennas would be installed at the same 212' level of the tower. T-Mobile also intends to install (4) remote radio heads, and (2) hybrid cables.

This facility was approved by the Town of Cheshire on July 10, 1967. This approval did not come with conditions that would be violated by this modification. This modification complies with the original approval. A copy of this approval is 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 Rob Oris, Jr., Chairman for the Town of Cheshire, as well as the tower and property owner.

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 modification will not result in an increase in the height of the existing structure
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

5. The proposed modification will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,

*Kyle Richers*

Kyle Richers  
Transcend Wireless  
10 Industrial Ave., Suite 3  
Mahwah, New Jersey 07430  
908-447-4716  
[krichers@transcendwireless.com](mailto:krichers@transcendwireless.com)

Attachments:

cc: Rob Oris, Jr.- as elected official  
AT&T- as tower and property owner

American Telephone & Telegraph Corp.  
Higgins Road  
Cheshire, Connecticut

July 10, 1967

Granted permission to erect a 250 foot J type radio transmission tower in R-2 Zone on top of underground building on Higgins Road Extension at location 169 feet from the nearest property line, with limitations.

1. Construction must be completed within 18 months.
2. Tower to be operated so as not to constitute a public nuisance.
3. Tower shall be as described at the public hearing.

Reasons for granting Tower was mention at the time the original structure was approved following public hearing. Tower is necessary for purpose of building.

Voting in Favor Beck, Byrne, Denton, Fritz, Hearing recorded between 270 & 756 of tape 1967 -,2, Side 2. (Shaw did not participate in this discussion.)

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2013.



# Town of Cheshire

*The bedding plant capital of Connecticut*

Information on the Property Records for the Municipality of Cheshire was last updated on 8/2/2016.

## Parcel Information

Location:	751 HIGGINS RD	Property Use:	Industrial	Primary Use:	Light Industrial
Unique ID:	00712600	Map Block Lot:	69 53	Acres:	19.80
Zone:	R-40	Volume / Page:	0148/0566	Developers Map / Lot:	285128
Census:	3434				

## Value Information

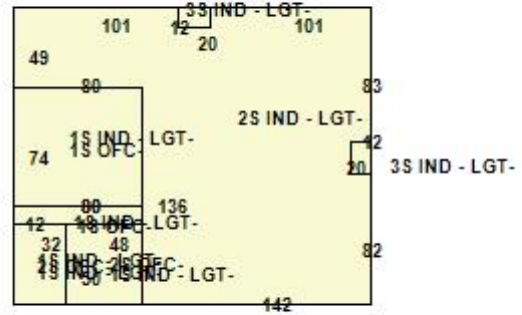
	Appraised Value	70% Assessed Value
Land	434,893	304,430
Buildings	2,489,370	1,742,560
Detached Outbuildings	29,959	20,970
Total	2,954,222	2,067,960

## Owner's Information

### Owner's Data

AMER TEL & TEL CO  
AT&T PROPERTY TAX UNIT  
P O BOX 7207  
BEDMINSTER NJ 07921

### Building 1



Category:	Industrial	Use:	Light Industrial	Stories:	2.00
Above Grade:	88,238	Below Grade:	0	Below Grade Finish:	0
Construction:	Average	Year Built:	1968	Heating:	
Fuel:		Cooling Percent:	100%	Siding:	Pre-Cast Concrete/B. V. Solid
Roof Material:	Asphalt	Beds/Units:	0		

### Special Features

### Attached Components

## Detached Outbuildings

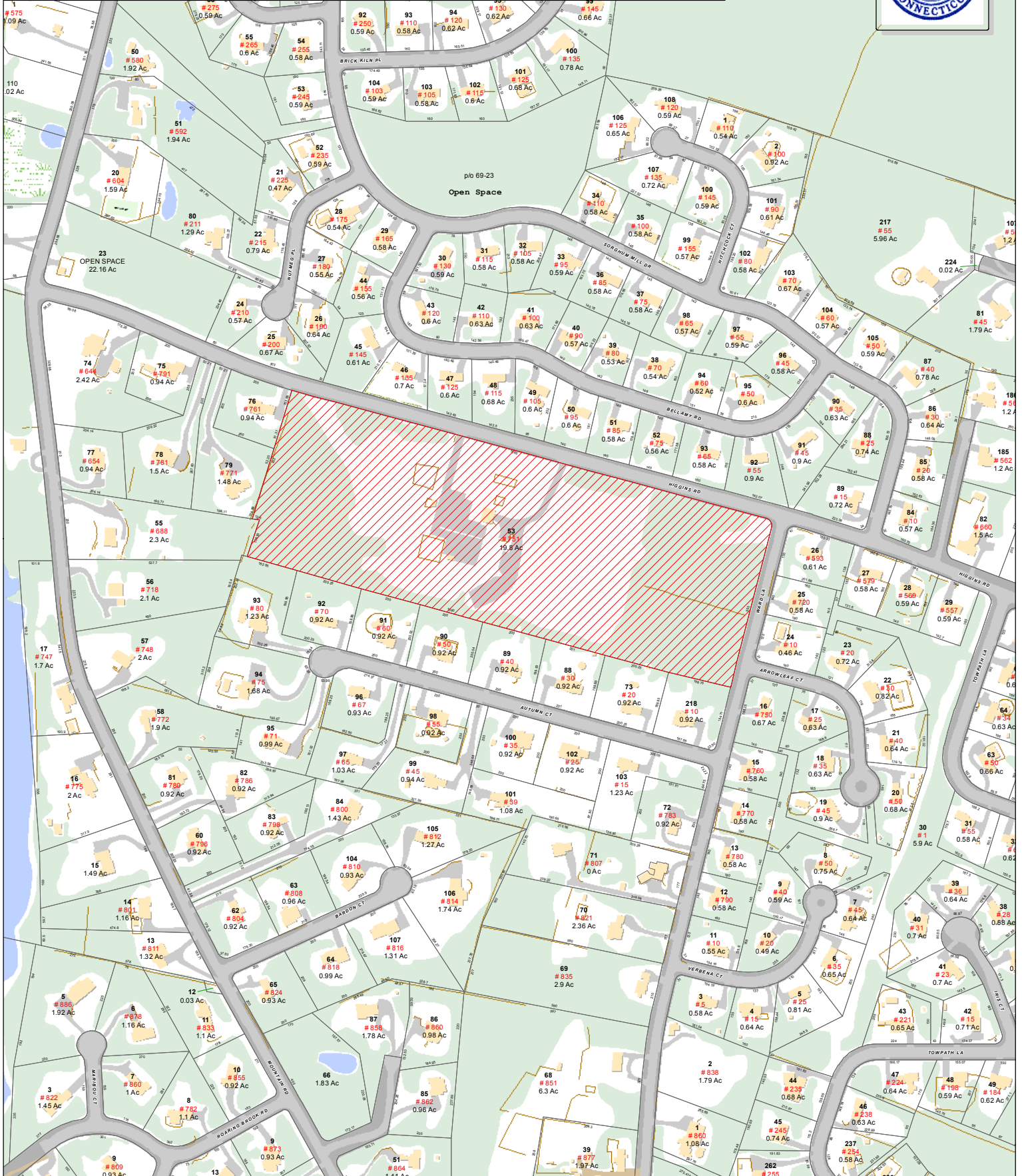
Type:	Year Built:	Length:	Width:	Area:
Fencing	1968			2,400
Fencing	1968			600
Fencing	1968			1,560
Paving	1968			43,000

Information Published With Permission From The Assessor

# Town of Cheshire, Connecticut - Assessment Parcel Map

Unique ID: 00712600

Address: 751 HIGGINS RD



**Approximate Scale:**  
1 inch = 400 feet

**Disclaimer:**  
This map is for informational purposes only.  
All information is subject to verification by any user.  
The Town of Cheshire and its mapping contractors  
assume no legal responsibility for the information contained herein.

Map Produced January 2016

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

T-Mobile Existing Facility

Site ID: CT11220A

Cheshire/ Rt - 10  
751 Higgins Road  
Cheshire, CT 06410

**June 7, 2016**

**EBI Project Number: 6216002716**

Site Compliance Summary	
Compliance Status:	<b>COMPLIANT</b>
Site total MPE% of FCC general public allowable limit:	<b>10.23 %</b>



June 7, 2016

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

Emissions Analysis for Site: **CT11220A – Cheshire/ Rt - 10**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **751 Higgins Road, Cheshire, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

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

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

General population/uncontrolled exposure limits apply to situations in which the general public 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 public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The general population exposure limit for the 700 MHz Band is  $467 \mu\text{W}/\text{cm}^2$ , and the general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is  $1000 \mu\text{W}/\text{cm}^2$ . Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

## **CALCULATIONS**

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **751 Higgins Road, Cheshire, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

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

- 1) 2 UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel
- 2) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 5) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

- 6) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 7) The antennas used in this modeling are the **Ericsson AIR21 B4A/B2P** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Ericsson AIR21 B4A/B12P** for 2100 MHz (AWS) and 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **Ericsson AIR21 B4A/B2P** has a maximum gain of **15.9 dBd** at its main lobe at 1900 MHz and 2100 Mhz. The **Ericsson AIR21 B4A/B12P** has a maximum gain of **15.9 dBd** at its main lobe at 2100 MHz and has a maximum gain of **13.6 dBd** at its main lobe at 700 MHz. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antenna mounting height centerline of the proposed antennas is **212 feet** above ground level (AGL).
- 9) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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

### T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B
Antenna #:	1	Antenna #:	1
Make / Model:	Ericsson AIR21 B4A/B2P	Make / Model:	Ericsson AIR21 B4A/B2P
Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	212	Height (AGL):	212
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	4	Channel Count	4
Total TX Power(W):	120	Total TX Power(W):	120
ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A1 MPE%	0.40	Antenna B1 MPE%	0.40
Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR21 B4A/B12P	Make / Model:	Ericsson AIR21 B4A/B12P
Gain:	15.9 / 13.6 dBd	Gain:	15.9 / 13.6 dBd
Height (AGL):	212	Height (AGL):	212
Frequency Bands	2100 MHz (AWS) / 700 MHz	Frequency Bands	2100 MHz (AWS) / 700 MHz
Channel Count	3	Channel Count	3
Total TX Power(W):	150	Total TX Power(W):	150
ERP (W):	5,355.80	ERP (W):	5,355.80
Antenna A2 MPE%	0.52	Antenna B2 MPE%	0.52

Site Composite MPE%	
Carrier	MPE%
T-Mobile	0.92 %
AT&T	2.36 %
Nextel	1.23 %
Verizon Wireless	3.76 %
Sprint	1.96 %
<b>Site Total MPE %:</b>	<b>10.23 %</b>

T-Mobile Sector 1 Total:	0.92 %
T-Mobile Sector 2 Total:	0.92 %
<b>Site Total:</b>	<b>10.23 %</b>

T-Mobile_Max per sector	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ( $\mu\text{W}/\text{cm}^2$ )	Frequency (MHz)	Allowable MPE ( $\mu\text{W}/\text{cm}^2$ )	Calculated % MPE
T-Mobile 2100 MHz (AWS) LTE	2	2334.27	212	3.96	2100	1000	0.40 %
T-Mobile 1900 MHz (PCS) UMTS	2	1167.14	212	1.98	1900	1000	0.20 %
T-Mobile 2100 MHz (AWS) UMTS	2	1167.14	212	1.98	2100	1000	0.20 %
T-Mobile 700 MHz LTE	1	687.26	212	0.58	700	467	0.12 %
						<b>Total:</b>	<b>0.92 %</b>

## Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public 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 public exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector 1:	0.92 %
Sector 2:	0.92 %
T-Mobile Total:	0.92 %
Site Total:	10.23 %
Site Compliance Status:	<b>COMPLIANT</b>

The anticipated composite MPE value for this site assuming all carriers present is **10.23%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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



Transcend Wireless  
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Mahwah, New Jersey 07430  
(908) 447-4716



GPD Engineering and Architecture  
Professional Corporation

Chris Scheks  
520 South Main Street, Suite 2531  
Akron, OH 44311  
(614) 588-8973  
[cscheks@gpdgroup.com](mailto:cscheks@gpdgroup.com)

**GPD #: 2016708.42 Rev. 1**  
June 1, 2016

## REVISED STRUCTURAL ANALYSIS REPORT

### AT&T DESIGNATION:

**Site USID:** TAG0053  
**Site FA:** 10136365  
**Site Name:** CHESHIRE  
**AT&T Project:** TMOB (L700) Wireline Tower 03-17-16

### ANALYSIS CRITERIA:

**Codes:** TIA/EIA-222-F, 2003 IBC, & 2005 CT State Building Code  
85 mph fastest-mile with 0" ice  
38 mph fastest-mile with 3/4" ice

### SITE DATA:

751 Higgins Road, Cheshire, CT 06410, New Haven County  
Latitude 41° 29' 15" N, Longitude 72° 55' 47" W  
Market: NEW ENGLAND  
250' Radio Relay Towers Self Support Tower

Mr. Thomas Wilson,

GPD is pleased to submit this Revised Structural Analysis Report to determine the structural integrity of the aforementioned tower. The purpose of the analysis is to determine the suitability of the tower with the existing and proposed loading configuration detailed in the analysis report.

### Analysis Results

Tower Stress Level with Proposed Equipment:	98.3%	Pass
Building Pedestal Ratio with Proposed Equipment:	Adequate	Pass

We at GPD appreciate the opportunity of providing our continuing professional services to you and Transcend Wireless. If you have any questions or need further assistance on this or any other projects please do not hesitate to call.

Respectfully submitted,

Christopher J Scheks, P.E.  
Connecticut #: 0030026



## SUMMARY & RESULTS

The purpose of this analysis was to verify whether the existing structure is capable of carrying the proposed loading configuration as specified by T-Mobile to Transcend Wireless. This report was commissioned by Mr. Thomas Wilson of AT&T Towers.

This analysis is limited to the above grade tower structure. A detailed analysis of the below grade building structure is beyond the scope of this report; however, based on a comparison of the existing base reactions and the base reactions from the existing, proposed, and reserved loading case the below grade building structure will see a loading increase less than 5% in capacity. Therefore the below grade building structure will be sufficient to support the proposed loading per section 3403.2 of the 2003 IBC.

**Modifications designed by GPD (Project #: 2012856.05, dated 7/25/12) have been installed and were considered in this analysis.**

**The proposed coax shall be placed in a single row on Tower Face B in order for the results of this analysis to be valid. See Appendix C for more details.**

### TOWER SUMMARY AND RESULTS

Member	Capacity	Results
Legs	71.5%	Pass
Leg Bolts	98.3%	Pass
Diagonals	60.5%	Pass
Horizontals	52.7%	Pass
Redundant Members	66.2%	Pass
Inner Bracing	73.7%	Pass
Member Bolts	97.2%	Pass
Anchor Rods	33.0%	Pass
Building Pedestals	Adequate	Pass

## ANALYSIS METHOD

RISA-3D (Version 14.0.0) and tnxTower (Version 7.0.5.1), commercially available software programs, were used to create a three-dimensional model of the tower and calculate primary member stresses for various dead, live, wind, and ice load cases. Selected output from the analysis is included in Appendix B. The following table details the information provided to complete this structural analysis. This analysis is solely based on this information and is being completed without the benefit of a recent GPD site visit.

### DOCUMENTS PROVIDED

Document	Remarks	Source
Site Lease Application	T-Mobile Application, dated 4/8/2016	Siterra
Construction Drawings	Infinigy Project #: 428-000 Rev. B, dated 4/8/2016	Siterra
Original Building Drawings	AT&T Co. L-4 Junction Building, Cheshire, CT, dated 12/1/1965	Siterra
Foundation Exploration	FDH Project #: 11-12049E-N1, dated 12/20/11	Siterra
Geotechnical Report	Not Provided	N/A
Previous Structural Analysis	GPD Project #: 2013723.01.TAG0053.06, dated 7/27/2015	Siterra
Tower Mapping	Tower Engineering Professionals Project #: 111343, dated 4/8/2011	Siterra
Tower Mapping	Hudson Design Group, Site Name: CHESHIRE, dated 2/4/2013	Siterra
Modification Drawings	GPD Project #: 2012856.05, dated 7/25/2012	Siterra
Ground Mapping	GPD Project #: 2013723.01.TAG0053.01, dated 6/14/2013	Siterra
Tower Mapping	GPD Project #: 2013723.01.TAG0053.03, dated 1/17/2014	Siterra

## ASSUMPTIONS

This structural analysis is based on the theoretical capacity of the members and is not a condition assessment of the tower. This analysis is from information supplied, and therefore, its results are based on and are as accurate as that supplied data. GPD has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural analysis.

1. The tower member sizes and shapes are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated in the materials section.
2. The antenna configuration is as supplied and/or as modeled in the analysis. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
3. Some assumptions are made regarding antennas and mount sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type and industry practice.
4. All mounts, if applicable, are considered adequate to support the loading. No actual analysis of the mount(s) is performed. This analysis is limited to analyzing the tower only.
5. The soil parameters are as per data supplied or as assumed and stated in the calculations.
6. Foundations are properly designed and constructed to resist the original design loads indicated in the documents provided.
7. The tower and structures have been properly maintained in accordance with TIA Standards and/or with manufacturer's specifications.
8. All welds and connections are assumed to develop at least the member capacity unless determined otherwise and explicitly stated in this report.
9. All prior structural modifications are assumed to be as per data supplied/available and to have been properly installed.
10. Loading interpreted from photos is accurate to  $\pm 5'$  AGL, antenna size accurate to  $\pm 3.3$  sf, and coax equal to the number of existing antennas without reserve.
11. All existing loading was obtained from the previous structural analysis by GPD (Project #: 2013723.01.TAG0053.06, dated 7/27/2015), site photos, and the provided T-Mobile Site Lease Application (dated 4/8/2016), and is assumed to be accurate.
12. The proposed coax shall be placed in a single row on Tower Face B in order for the results of this analysis to be valid.
13. The proposed loading from the Wireline Sprint Tower Only Modification 01.29.2016 project was not included at the request of Ms. Deborah Krenc of AT&T Towers.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and GPD should be allowed to review any new information to determine its effect on the structural integrity of the tower.



## DISCLAIMER OF WARRANTIES

GPD has not performed a recent site visit to the tower to verify the antenna/coax loading or the member sizes. If the existing conditions are not as represented on the tower elevation contained in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the tower or foundation. This report does not replace a full tower inspection. The tower and foundations are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by GPD in connection with this Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

This analysis is limited to the designated maximum wind and seismic conditions per the governing tower standards and code. Wind forces resulting in tower vibrations near the structure's resonant frequencies were not considered in this analysis and are outside the scope of this analysis. Lateral loading from any dynamic response was not evaluated under a time-domain based fatigue analysis.

GPD does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing tower. GPD provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the capability of adding appurtenances usually accompanied by transmission lines to the structure.

It is the owner's responsibility to determine the amount of ice accumulation in excess of the code specified amount, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed tower. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD, but are beyond the scope of this report.

Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Towers are designed to carry gravity, wind, and ice loads. All members, legs, diagonals, struts, and redundant members provide structural stability to the tower with little redundancy. Absence or removal of a member can trigger catastrophic failure unless a substitute is provided before any removal. Legs carry axial loads and derive their strength from shorter unbraced lengths by the presence of redundant members and their connection to the diagonals with bolts or welds. If the bolts or welds are removed without providing any substitute to the frame, the leg is subjected to a higher unbraced length that immediately reduces its load carrying capacity. If a diagonal is also removed in addition to the connection, the unbraced length of the leg is greatly increased, jeopardizing its load carrying capacity. Failure of one leg can result in a tower collapse because there is no redundancy. Redundant members and diagonals are critical to the stability of the tower.

GPD makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD will not be responsible whatsoever for, or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of GPD pursuant to this report will be limited to the total fee received for preparation of this report.

## **APPENDIX A**

### Tower Analysis Summary Form



## **APPENDIX B**

### Software Output Files and Calculations

<b>tnxTower</b>  <b>GPD</b> 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101	<b>Job</b>	TAG0053 CHESHIRE	<b>Page</b>	1 of 10
	<b>Project</b>	2016708.42 Rev. 1	<b>Date</b>	12:09:53 06/01/16
	<b>Client</b>	Transcend Wireless	<b>Designed by</b>	tolark

## Tower Input Data

The main tower is a 4x free standing tower with an overall height of 250.00 ft above the ground line.

The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 33.50 ft at the top and 37.00 ft at the base.

This tower is designed using the TIA/EIA-222-F standard.

The following design criteria apply:

Tower is located in New Haven County, Connecticut.

Basic wind speed of 85 mph.

Nominal ice thickness of 0.7500 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 38 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 50 mph.

Pressures are calculated at each section.

Stress ratio used in tower member design is 1.333.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

## Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
7/8" Hybrid Cable	B	Yes	Ar (CfAe)	210.00 - 8.00	0.0000	0.45	2	2	0.8750	0.8750		0.28
LDF4RN-50A (1/2 FOAM)	C	Yes	Ar (CfAe)	210.00 - 8.00	0.0000	-0.35	1	1	0.6300	0.6300		0.15
Power Cable (1/2")	C	Yes	Ar (CfAe)	250.00 - 8.00	0.0000	0.35	1	1	0.6300	0.0000		0.15
2-1/4" Conduit	C	Yes	Ar (CfAe)	250.00 - 8.00	0.0000	0.35	1	1	2.2500	2.2500		0.32
2.5" Rigid Conduit	C	Yes	Ar (CfAe)	40.00 - 8.00	0.0000	-0.3	1	1	2.5000	2.5000		3.00
LDF5-50A (7/8 FOAM)	D	Yes	Ar (CfAe)	171.00 - 8.00	8.0000	0	3	3	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	D	Yes	Ar (CfAe)	190.00 - 171.00	8.0000	0	2	2	1.0900	1.0900		0.33
LDF7-50A (1-5/8 FOAM)	D	Yes	Ar (CfAe)	198.00 - 8.00	0.0000	0.45	9	9	1.0000	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	Yes	Ar (CfAe)	210.00 - 198.00	0.0000	0.45	6	6	1.0000	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	Yes	Ar (CfAe)	225.00 - 8.00	0.0000	0.05	3	1	1.0000	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	Yes	Ar (CfAe)	225.00 - 8.00	0.0000	-0.05	3	1	1.0000	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	Yes	Ar (CfAe)	250.00 - 8.00	0.0000	0.02	18	6	1.0000	1.9800		0.82
LDF4.5-50 (5/8 FOAM)	D	Yes	Ar (CfAe)	85.00 - 8.00	6.0000	0	7	4	0.8700	0.0000		0.15
LDF4-50A (1/2 FOAM)	D	Yes	Ar (CfAe)	100.00 - 8.00	0.0000	0.055	1	1	0.6300	0.6300		0.15
Feedline Ladder Af	B	Yes	Af (CfAe)	209.00 - 8.00	0.0000	0.45	1	1	2.5000	2.5000	10.0000	7.00
Feedline Ladder Af	C	Yes	Af (CfAe)	212.00 - 8.00	2.0000	-0.42	1	1	2.5000	2.5000	10.0000	7.00
Feedline Ladder Af	D	Yes	Af (CfAe)	250.00 - 8.00	0.0000	0	1	1	2.5000	2.5000	10.0000	7.00
Feedline Ladder Af	D	No	Af (CfAe)	209.00 - 8.00	0.0000	0.43	1	1	2.5000	2.5000	10.0000	7.00
1.34" Fiber Cable	D	Yes	Ar (CfAe)	250.00 - 8.00	5.0000	0.02	1	1	1.3400	0.0000		0.82
0.645" DC Cable	D	Yes	Ar (CfAe)	250.00 - 8.00	5.0000	0.02	2	2	0.6450	0.0000		0.31
1-5/8" Fiber Cable	D	No	Ar (CfAe)	250.00 - 8.00	0.0000	0.02	3	3	1.9800	0.0000		0.82

## Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	C <sub>AA</sub>	Weight plf	
Climbing Ladder	C	No	CaAa (Out Of Face)	250.00 - 8.00	-24.0000	0	1	No Ice 1/2" Ice 1" Ice 2" Ice	0.29 0.55 0.81 1.33	7.90 10.60 13.30 18.70

<b>tnxTower</b>  <b>GPD</b> 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101	<b>Job</b>	TAG0053 CHESHIRE	<b>Page</b>	2 of 10
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Description	Face or Shield Leg	Allow	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	C <sub>AA</sub> ft <sup>2</sup> /ft	Weight plf	
Safety Line 3/8	C	No	CaAa (Out Of Face)	250.00 - 8.00	-24.0000	0	1	4" Ice	2.37	29.50
								No Ice	0.04	0.22
								1/2" Ice	0.14	0.75
								1" Ice	0.24	1.28
								2" Ice	0.44	2.34
								4" Ice	0.84	4.46

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight lb	
Tower Top Platform	C	None		0.0000	252.00	No Ice	85.00	85.00	4425.00
						1/2" Ice	97.00	97.00	5752.50
						1" Ice	110.00	110.00	7080.00
						2" Ice	135.00	135.00	9735.00
						4" Ice	183.00	183.00	15045.00
						(2) AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	D	From Face	2.00 0.00 3.00
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	A	From Face	2.00 0.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	8.26 6.37 8.81 7.18 9.36 8.00 10.50 9.70 12.88 13.33	83.24 148.46 222.18 393.50 871.17	
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	B	From Face	2.00 0.00 3.00	-10.0000	252.00	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	8.26 6.37 8.81 7.18 9.36 8.00 10.50 9.70 12.88 13.33	83.24 148.46 222.18 393.50 871.17	
SBNH-1D6565C w/ Mount Pipe	A	From Face	2.00 0.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	11.45 9.36 12.06 10.68 12.69 11.71 14.03 13.82	86.35 170.71 264.63 484.75	
SBNH-1D6565C w/ Mount Pipe	B	From Face	2.00 0.00 3.00	0.0000	252.00	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	11.45 9.36 12.06 10.68 12.69 11.71 14.03 13.82	86.35 170.71 264.63 484.75	
(2) RRUS-11	D	From Face	2.00 0.00 3.00	-41.0000	252.00	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	3.25 1.37 3.49 1.55 3.74 1.74 4.27 2.14 5.43 3.04	47.62 68.42 92.25 149.81 309.89	
(2) RRUS-11	A	From Face	2.00 0.00 3.00	-15.0000	252.00	No Ice 1/2" Ice 1" Ice 2" Ice 4" Ice	3.25 1.37 3.49 1.55 3.74 1.74 4.27 2.14 5.43 3.04	47.62 68.42 92.25 149.81 309.89	
(2) RRUS-11	B	From Face	2.00 0.00	0.0000	252.00	No Ice 1/2" Ice	3.25 1.37	47.62 68.42	

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz	Lateral					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
				3.00			1" Ice 3.74	1.74	92.25
							2" Ice 4.27	2.14	149.81
							4" Ice 5.43	3.04	309.89
DTMABP7819VG12A	D	From Face	2.00		-41.0000	252.00	No Ice 0.00	0.44	19.00
			0.00				1/2" Ice 0.00	0.56	26.12
			3.00				1" Ice 0.00	0.69	35.11
							2" Ice 0.00	0.97	59.49
							4" Ice 0.00	1.63	139.29
DTMABP7819VG12A	A	From Face	2.00		-15.0000	252.00	No Ice 0.00	0.44	19.00
			0.00				1/2" Ice 0.00	0.56	26.12
			3.00				1" Ice 0.00	0.69	35.11
							2" Ice 0.00	0.97	59.49
							4" Ice 0.00	1.63	139.29
DTMABP7819VG12A	B	From Face	2.00		-10.0000	252.00	No Ice 0.00	0.44	19.00
			0.00				1/2" Ice 0.00	0.56	26.12
			3.00				1" Ice 0.00	0.69	35.11
							2" Ice 0.00	0.97	59.49
							4" Ice 0.00	1.63	139.29
DC2-48-60-0-9E	D	From Face	2.00		-41.0000	252.00	No Ice 0.00	0.66	16.00
			0.00				1/2" Ice 0.00	0.77	24.84
			3.00				1" Ice 0.00	0.90	35.66
							2" Ice 0.00	1.17	63.99
							4" Ice 0.00	1.82	152.85
DC2-48-60-0-9E	A	From Face	2.00		-15.0000	252.00	No Ice 0.00	0.66	16.00
			0.00				1/2" Ice 0.00	0.77	24.84
			3.00				1" Ice 0.00	0.90	35.66
							2" Ice 0.00	1.17	63.99
							4" Ice 0.00	1.82	152.85
DC2-48-60-0-9E	B	From Face	2.00		0.0000	252.00	No Ice 0.00	0.66	16.00
			0.00				1/2" Ice 0.00	0.77	24.84
			3.00				1" Ice 0.00	0.90	35.66
							2" Ice 0.00	1.17	63.99
							4" Ice 0.00	1.82	152.85
FC12-PC6-10E	D	From Face	2.00		-41.0000	252.00	No Ice 2.45	1.00	20.35
			0.00				1/2" Ice 2.66	1.15	36.62
			3.00				1" Ice 2.88	1.31	55.57
							2" Ice 3.34	1.64	102.30
							4" Ice 4.37	2.43	236.51
GPS	A	From Face	2.00		0.0000	252.00	No Ice 0.17	0.17	0.87
			0.00				1/2" Ice 0.24	0.24	3.85
			2.00				1" Ice 0.32	0.32	7.85
							2" Ice 0.51	0.51	19.56
							4" Ice 1.02	1.02	62.07
SBNHH-1D65B w/ Mount Pipe	B	From Face	2.00		15.0000	252.00	No Ice 8.40	6.16	59.30
			-2.00				1/2" Ice 8.95	6.82	120.29
			2.00				1" Ice 9.51	7.51	189.03
							2" Ice 10.66	8.95	349.36
							4" Ice 13.06	12.32	787.68
SBNHH-1D65B w/ Mount Pipe	B	From Face	2.00		15.0000	252.00	No Ice 8.40	6.16	59.30
			-8.00				1/2" Ice 8.95	6.82	120.29
			2.00				1" Ice 9.51	7.51	189.03
							2" Ice 10.66	8.95	349.36
							4" Ice 13.06	12.32	787.68
4' Standoff	C	From Face	2.00		0.0000	252.00	No Ice 3.41	3.41	80.00
			2.00				1/2" Ice 4.47	4.47	104.00
			2.00				1" Ice 5.50	5.50	128.00
							2" Ice 7.49	7.49	176.00

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub>		Weight
			Horz	Vert			Front	Side	
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
SBNHH-1D65B w/ Mount Pipe	C	From Face	4.00	35.0000	252.00	4" Ice	11.08	11.08	272.00
						No Ice	8.40	6.16	59.30
						1/2" Ice	8.95	6.82	120.29
						1" Ice	9.51	7.51	189.03
						2" Ice	10.66	8.95	349.36
4' Standoff	C	From Face	2.00	0.0000	252.00	4" Ice	13.06	12.32	787.68
						No Ice	3.41	3.41	80.00
						1/2" Ice	4.47	4.47	104.00
						1" Ice	5.50	5.50	128.00
						2" Ice	7.49	7.49	176.00
SBNHH-1D65B w/ Mount Pipe	C	From Face	4.00	35.0000	252.00	4" Ice	11.08	11.08	272.00
						No Ice	8.40	6.16	59.30
						1/2" Ice	8.95	6.82	120.29
						1" Ice	9.51	7.51	189.03
						2" Ice	10.66	8.95	349.36
SBNHH-1D65B w/ Mount Pipe	A	From Face	2.00	-25.0000	252.00	4" Ice	13.06	12.32	787.68
						No Ice	8.40	6.16	59.30
						1/2" Ice	8.95	6.82	120.29
						1" Ice	9.51	7.51	189.03
						2" Ice	10.66	8.95	349.36
SBNHH-1D65B w/ Mount Pipe	A	From Face	2.00	-25.0000	252.00	4" Ice	13.06	12.32	787.68
						No Ice	8.40	6.16	59.30
						1/2" Ice	8.95	6.82	120.29
						1" Ice	9.51	7.51	189.03
						2" Ice	10.66	8.95	349.36
LPA-80063/6CF w/ Mount Pipe	B	From Face	2.00	15.0000	252.00	4" Ice	13.06	12.32	787.68
						No Ice	10.58	10.67	52.22
						1/2" Ice	11.24	11.93	144.64
						1" Ice	11.87	12.91	245.54
						2" Ice	13.16	14.92	476.36
LPA-80063/6CF w/ Mount Pipe	B	From Face	2.00	15.0000	252.00	4" Ice	15.87	19.16	1087.76
						No Ice	10.58	10.67	52.22
						1/2" Ice	11.24	11.93	144.64
						1" Ice	11.87	12.91	245.54
						2" Ice	13.16	14.92	476.36
4' Standoff	D	From Face	2.00	0.0000	252.00	4" Ice	15.87	19.16	1087.76
						No Ice	3.41	3.41	80.00
						1/2" Ice	4.47	4.47	104.00
						1" Ice	5.50	5.50	128.00
						2" Ice	7.49	7.49	176.00
LPA-80063/6CF w/ Mount Pipe	D	From Face	4.00	-55.0000	252.00	4" Ice	11.08	11.08	272.00
						No Ice	10.58	10.67	52.22
						1/2" Ice	11.24	11.93	144.64
						1" Ice	11.87	12.91	245.54
						2" Ice	13.16	14.92	476.36
4' Standoff	D	From Face	2.00	0.0000	252.00	4" Ice	15.87	19.16	1087.76
						No Ice	3.41	3.41	80.00
						1/2" Ice	4.47	4.47	104.00
						1" Ice	5.50	5.50	128.00
						2" Ice	7.49	7.49	176.00
LPA-80063/6CF w/ Mount Pipe	D	From Face	4.00	-55.0000	252.00	4" Ice	11.08	11.08	272.00
						No Ice	10.58	10.67	52.22
						1/2" Ice	11.24	11.93	144.64
						1" Ice	11.87	12.91	245.54
						2" Ice	13.16	14.92	476.36
LPA-80080/6CF w/ Mount Pipe	A	From Face	2.00	-25.0000	252.00	4" Ice	15.87	19.16	1087.76
						No Ice	4.35	10.51	42.90



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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
LPA-80080/6CF w/ Mount Pipe	A	From Face	2.00	-25.0000	252.00	1/2" Ice	4.79	11.56	107.03
						1" Ice	5.25	12.49	178.83
						2" Ice	6.17	14.40	348.74
						4" Ice	8.11	18.43	824.37
						No Ice	4.35	10.51	42.90
						1/2" Ice	4.79	11.56	107.03
						1" Ice	5.25	12.49	178.83
						2" Ice	6.17	14.40	348.74
						4" Ice	8.11	18.43	824.37
						RRH2X60-AWS	B	From Face	2.00
RRH2X60-AWS	C	From Face	2.00	35.0000	252.00	1/2" Ice	4.27	2.44	79.31
						1" Ice	4.60	2.73	107.31
						2" Ice	5.27	3.34	175.17
						4" Ice	6.72	4.66	363.78
						No Ice	3.96	2.16	55.00
						1/2" Ice	4.27	2.44	79.31
						1" Ice	4.60	2.73	107.31
						2" Ice	5.27	3.34	175.17
						4" Ice	6.72	4.66	363.78
						RRH2X60-AWS	A	From Face	2.00
RRH2X60-AWS	B	From Face	2.00	15.0000	252.00	1/2" Ice	4.27	2.44	79.31
						1" Ice	4.60	2.73	107.31
						2" Ice	5.27	3.34	175.17
						4" Ice	6.72	4.66	363.78
						No Ice	2.57	1.55	55.00
						1/2" Ice	2.79	1.74	72.91
						1" Ice	3.02	1.95	93.69
						2" Ice	3.52	2.38	144.64
						4" Ice	4.61	3.34	289.50
						RRH2X60-PCS	C	From Face	2.00
RRH2X60-PCS	A	From Face	2.00	-15.0000	252.00	1/2" Ice	2.79	1.74	72.91
						1" Ice	3.02	1.95	93.69
						2" Ice	3.52	2.38	144.64
						4" Ice	4.61	3.34	289.50
						No Ice	2.57	1.55	55.00
						1/2" Ice	2.79	1.74	72.91
						1" Ice	3.02	1.95	93.69
						2" Ice	3.52	2.38	144.64
						4" Ice	4.61	3.34	289.50
						RRH2X60-PCS	B	From Face	2.00
RRH 2X60AWS LTE	C	From Face	2.00	35.0000	252.00	1/2" Ice	2.38	1.64	60.13
						1" Ice	2.60	1.83	78.96
						2" Ice	3.06	2.24	125.51
						4" Ice	4.07	3.16	259.60
						No Ice	2.18	1.46	44.00
						1/2" Ice	2.38	1.64	60.13
						1" Ice	2.60	1.83	78.96
						2" Ice	3.06	2.24	125.51
						4" Ice	4.07	3.16	259.60
						RRH 2X60AWS LTE	A	From Face	2.00
RRH 2X60AWS LTE	B	From Face	2.00	15.0000	252.00	1/2" Ice	2.38	1.64	60.13
						1" Ice	2.60	1.83	78.96
						2" Ice	3.06	2.24	125.51
						4" Ice	4.07	3.16	259.60
						No Ice	5.60	2.33	44.00
						1/2" Ice	5.92	2.56	80.13
						1" Ice	6.24	2.79	120.22

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Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight
			Horz	Vert					
DB-T1-6Z-8AB-0Z	C	From Face	2.00	35.0000	252.00	2" Ice	6.91	3.28	213.04
						4" Ice	8.37	4.37	454.67
						No Ice	5.60	2.33	44.00
						1/2" Ice	5.92	2.56	80.13
						1" Ice	6.24	2.79	120.22
DB-T1-6Z-8AB-0Z	A	From Face	2.00	-15.0000	252.00	2" Ice	6.91	3.28	213.04
						4" Ice	8.37	4.37	454.67
						No Ice	5.60	2.33	44.00
						1/2" Ice	5.92	2.56	80.13
						1" Ice	6.24	2.79	120.22
DB980H65E-M w/ 20' Mount Pipe	B	From Face	1.00	0.0000	225.60	2" Ice	6.91	3.28	213.04
						4" Ice	8.37	4.37	454.67
						No Ice	8.11	7.94	124.30
						1/2" Ice	10.01	10.34	199.77
						1" Ice	11.94	12.76	291.06
(2) DB980H65E-M w/ 20' Mount Pipe	B	From Face	1.00	0.0000	225.60	2" Ice	15.84	17.66	513.32
						4" Ice	23.43	26.85	1159.44
						No Ice	8.11	7.94	124.30
						1/2" Ice	10.01	10.34	199.77
						1" Ice	11.94	12.76	291.06
(2) DB980H65E-M w/ 20' Mount Pipe	C	From Face	1.00	0.0000	225.60	2" Ice	15.84	17.66	513.32
						4" Ice	23.43	26.85	1159.44
						No Ice	8.11	7.94	124.30
						1/2" Ice	10.01	10.34	199.77
						1" Ice	11.94	12.76	291.06
(2) DB980H65E-M w/ 10' Mount Pipe	D	From Face	1.00	0.0000	225.60	2" Ice	15.84	17.66	513.32
						4" Ice	23.43	26.85	1159.44
						No Ice	5.24	5.07	66.40
						1/2" Ice	6.13	6.46	114.34
						1" Ice	7.04	7.88	172.79
10' x 2.5" Pipe	B	From Face	1.00	0.0000	225.60	2" Ice	8.45	9.87	317.93
						4" Ice	11.64	14.05	747.19
						No Ice	2.50	2.50	50.00
						1/2" Ice	3.53	3.53	68.64
						1" Ice	4.58	4.58	93.79
10' x 2.5" Pipe	D	From Face	1.00	0.0000	225.60	2" Ice	5.98	5.98	164.26
						4" Ice	8.54	8.54	390.10
						No Ice	2.50	2.50	50.00
						1/2" Ice	3.53	3.53	68.64
						1" Ice	4.58	4.58	93.79
(3) DB844H90E-XY w/Mount Pipe	A	From Leg	1.00	60.0000	210.00	2" Ice	5.98	5.98	164.26
						4" Ice	8.54	8.54	390.10
						No Ice	3.58	5.40	35.55
						1/2" Ice	4.20	6.49	79.42
						1" Ice	4.73	7.30	129.38
(3) DB844H90E-XY w/Mount Pipe	D	From Leg	1.00	15.0000	210.00	2" Ice	5.86	8.96	251.21
						4" Ice	8.27	12.49	616.53
						No Ice	3.58	5.40	35.55
						1/2" Ice	4.20	6.49	79.42
						1" Ice	4.73	7.30	129.38
14' T-Frame	A	From Leg	0.50	60.0000	210.00	2" Ice	5.86	8.96	251.21
						4" Ice	8.27	12.49	616.53
						No Ice	18.21	0.00	492.00
						1/2" Ice	23.76	0.00	690.25
						1" Ice	29.31	0.00	888.50
						2" Ice	40.41	0.00	1284.99
						4" Ice	62.61	0.00	2077.98

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<b>Project</b>	2016708.42 Rev. 1	<b>Date</b>	12:09:53 06/01/16
<b>Client</b>	Transcend Wireless	<b>Designed by</b>	tclark

<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert ft ft ft</i>	<i>Azimuth Adjustment °</i>	<i>Placement ft</i>	<i>C<sub>AA</sub> Front ft<sup>2</sup></i>	<i>C<sub>AA</sub> Side ft<sup>2</sup></i>	<i>Weight lb</i>
14' T-Frame	D	From Leg	0.50 0.00 0.00	15.0000	210.00	No Ice 18.21 1/2" Ice 23.76 1" Ice 29.31 2" Ice 40.41 4" Ice 62.61	0.00	492.00 690.25 888.50 1284.99 2077.98
AIR21 B4A/B2P w/ mount pipe	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 6.61 1/2" Ice 7.08 1" Ice 7.55 2" Ice 8.53 4" Ice 10.60	5.54 6.27 7.01 8.54	101.25 156.43 218.21 364.47 774.94
AIR21 B4A/B2P w/ mount pipe	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 6.61 1/2" Ice 7.08 1" Ice 7.55 2" Ice 8.53 4" Ice 10.60	5.54 6.27 7.01 8.54	101.25 156.43 218.21 364.47 774.94
KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 11.54 1/2" Ice 12.16 1" Ice 12.79 2" Ice 14.17 4" Ice 17.18	10.68 12.09 13.33 15.54 20.16	154.59 246.84 348.90 586.37 1231.59
KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 11.54 1/2" Ice 12.16 1" Ice 12.79 2" Ice 14.17 4" Ice 17.18	10.68 12.09 13.33 15.54 20.16	154.59 246.84 348.90 586.37 1231.59
RRUS 11 B12	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 3.31 1/2" Ice 3.55 1" Ice 3.80 2" Ice 4.33 4" Ice 5.50	1.36 1.54 1.73 2.13 3.04	50.70 71.57 95.49 153.24 313.85
RRUS 11 B12	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 3.31 1/2" Ice 3.55 1" Ice 3.80 2" Ice 4.33 4" Ice 5.50	1.36 1.54 1.73 2.13 3.04	50.70 71.57 95.49 153.24 313.85
RRUS 11 B2	B	From Leg	1.00 0.00 2.00	0.0000	210.00	No Ice 3.31 1/2" Ice 3.55 1" Ice 3.80 2" Ice 4.33 4" Ice 5.50	1.36 1.54 1.73 2.13 3.04	50.70 71.57 95.49 153.24 313.85
RRUS 11 B2	C	From Leg	1.00 0.00 2.00	-10.0000	210.00	No Ice 3.31 1/2" Ice 3.55 1" Ice 3.80 2" Ice 4.33 4" Ice 5.50	1.36 1.54 1.73 2.13 3.04	50.70 71.57 95.49 153.24 313.85
14' T-Frame	B	From Leg	0.50 0.00 0.00	0.0000	210.00	No Ice 18.21 1/2" Ice 23.76 1" Ice 29.31 2" Ice 40.41 4" Ice 62.61	0.00	492.00 690.25 888.50 1284.99 2077.98
14' T-Frame	C	From Leg	0.50 0.00 0.00	-10.0000	210.00	No Ice 18.21 1/2" Ice 23.76 1" Ice 29.31 2" Ice 40.41 4" Ice 62.61	0.00	492.00 690.25 888.50 1284.99 2077.98
26"x 26" Flat Panel	C	From Leg	1.00 0.00	0.0000	210.00	No Ice 5.60 1/2" Ice 5.92	0.52 0.67	15.00 38.43

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<b>Client</b>	Transcend Wireless	<b>Designed by</b>	tclark

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight lb
			-3.00			1" Ice 6.24	0.83	65.30
						2" Ice 6.91	1.21	130.11
						4" Ice 8.37	2.09	309.52
(3) DB844H90E-XY w/Mount Pipe	C	From Leg	1.00	-15.0000	198.00	No Ice 3.58	5.40	35.55
			0.00			1/2" Ice 4.20	6.49	79.42
			2.00			1" Ice 4.73	7.30	129.38
						2" Ice 5.86	8.96	251.21
						4" Ice 8.27	12.49	616.53
14' T-Frame	C	From Leg	0.50	-15.0000	198.00	No Ice 18.21	0.00	492.00
			0.00			1/2" Ice 23.76	0.00	690.25
			0.00			1" Ice 29.31	0.00	888.50
						2" Ice 40.41	0.00	1284.99
						4" Ice 62.61	0.00	2077.98
PG1-NOF-0091	A	From Leg	3.50	-45.0000	190.00	No Ice 1.40	1.40	7.50
			-3.50			1/2" Ice 2.23	2.23	18.71
			6.00			1" Ice 3.07	3.07	35.15
						2" Ice 4.13	4.13	84.32
						4" Ice 6.22	6.22	252.12
5' Standoff	A	From Leg	1.75	-45.0000	190.00	No Ice 2.72	12.93	145.70
			-1.75			1/2" Ice 4.11	17.82	223.26
			0.00			1" Ice 5.50	22.71	300.83
						2" Ice 8.28	32.49	455.95
						4" Ice 13.84	52.05	766.20
PG1-NOF-0091	B	From Leg	3.50	45.0000	190.00	No Ice 1.40	1.40	7.50
			3.50			1/2" Ice 2.23	2.23	18.71
			6.00			1" Ice 3.07	3.07	35.15
						2" Ice 4.13	4.13	84.32
						4" Ice 6.22	6.22	252.12
5' Standoff	B	From Leg	1.75	45.0000	190.00	No Ice 2.72	12.93	145.70
			1.75			1/2" Ice 4.11	17.82	223.26
			0.00			1" Ice 5.50	22.71	300.83
						2" Ice 8.28	32.49	455.95
						4" Ice 13.84	52.05	766.20
PG1-DOF-0093	B	From Leg	3.50	45.0000	171.00	No Ice 1.40	1.40	7.50
			3.50			1/2" Ice 2.23	2.23	18.71
			0.00			1" Ice 3.07	3.07	35.15
						2" Ice 4.13	4.13	84.32
						4" Ice 6.22	6.22	252.12
5' Standoff	B	From Leg	1.75	45.0000	171.00	No Ice 2.72	12.93	145.70
			1.75			1/2" Ice 4.11	17.82	223.26
			0.00			1" Ice 5.50	22.71	300.83
						2" Ice 8.28	32.49	455.95
						4" Ice 13.84	52.05	766.20
WL14-69/S	B	From Leg	1.00	-28.0000	85.00	No Ice 2.88	2.88	5.00
			0.00			1/2" Ice 3.74	3.74	6.50
			-4.00			1" Ice 4.61	4.61	8.45
						2" Ice 6.34	6.34	11.00
						4" Ice 9.79	9.79	17.00
WL14-69/S	B	From Leg	1.00	-28.0000	85.00	No Ice 2.88	2.88	5.00
			0.00			1/2" Ice 3.74	3.74	6.50
			0.00			1" Ice 4.61	4.61	8.45
						2" Ice 6.34	6.34	11.00
						4" Ice 9.79	9.79	17.00
WL14-69/S	C	From Leg	1.00	-39.0000	85.00	No Ice 2.88	2.88	5.00
			0.00			1/2" Ice 3.74	3.74	6.50
			-2.00			1" Ice 4.61	4.61	8.45
						2" Ice 6.34	6.34	11.00

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<b>Client</b>	Transcend Wireless	<b>Designed by</b>	tclark

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub>		Weight
			Horz	Vert			Front	Side	
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	lb
WL14-69/S	D	From Leg	1.00	-32.0000	85.00	4" Ice	9.79	9.79	17.00
			0.00			No Ice	2.88	2.88	5.00
			-1.00			1/2" Ice	3.74	3.74	6.50
						1" Ice	4.61	4.61	8.45
						2" Ice	6.34	6.34	11.00
WL7-13	D	From Leg	1.00	-32.0000	85.00	4" Ice	9.79	9.79	17.00
			0.00			No Ice	2.88	2.88	25.00
			3.00			1/2" Ice	3.73	3.73	32.50
						1" Ice	4.59	4.59	40.00
						2" Ice	6.29	6.29	55.00
14" Omni	C	None		0.0000	41.00	4" Ice	9.71	9.71	85.00
						No Ice	0.13	0.13	5.00
						1/2" Ice	0.22	0.22	6.76
						1" Ice	0.31	0.31	9.48
						2" Ice	0.53	0.53	18.44
GPS	C	None		0.0000	42.00	4" Ice	1.11	1.11	54.68
						No Ice	0.17	0.17	0.87
						1/2" Ice	0.24	0.24	3.85
						1" Ice	0.32	0.32	7.85
						2" Ice	0.51	0.51	19.56
Camera	B	From Leg	1.50	0.0000	37.00	4" Ice	1.02	1.02	62.07
			0.00			No Ice	0.13	0.06	2.00
			0.00			1/2" Ice	0.18	0.09	3.30
						1" Ice	0.25	0.14	5.42
						2" Ice	0.40	0.25	12.91
2.5' Box Mount	B	From Leg	1.50	0.0000	37.00	4" Ice	0.80	0.59	46.33
			0.00			No Ice	1.36	1.36	20.00
			0.00			1/2" Ice	2.45	2.45	40.00
						1" Ice	3.50	3.50	64.00
						2" Ice	5.74	5.74	103.00
GPS	D	From Face	3.00	0.0000	36.50	4" Ice	10.12	10.12	181.00
			0.00			No Ice	0.17	0.17	0.87
			0.00			1/2" Ice	0.24	0.24	3.85
						1" Ice	0.32	0.32	7.85
						2" Ice	0.51	0.51	19.56
3' Side Arm	D	From Face	1.50	0.0000	36.50	4" Ice	1.02	1.02	62.07
			0.00			No Ice	0.93	0.93	44.94
			0.00			1/2" Ice	1.13	1.13	54.87
						1" Ice	1.37	1.37	67.25
						2" Ice	1.89	1.89	99.94
Platform	B	From Face	0.00	0.0000	21.00	4" Ice	3.06	3.06	201.37
			10.00			No Ice	5.61	2.70	100.00
			0.00			1/2" Ice	7.01	3.38	125.00
						1" Ice	8.42	4.05	150.00
						2" Ice	11.22	5.40	200.00
(2) Junction Box (40"x14"x9")	B	From Face	0.00	0.0000	21.00	4" Ice	16.83	8.10	300.00
			10.00			No Ice	3.88	2.50	50.00
			0.00			1/2" Ice	3.88	2.50	50.00
						1" Ice	3.88	2.50	50.00
						2" Ice	3.88	2.50	50.00
Platform	C	None		0.0000	239.50	4" Ice	3.88	2.50	50.00
						No Ice	75.38	75.38	10500.00
						1/2" Ice	94.22	94.22	13000.00
						1" Ice	113.06	113.06	15500.00
						2" Ice	150.75	150.75	20500.00
Catwalk	B	From Face		0.0000	139.50	4" Ice	226.13	226.13	30500.00
						No Ice	75.38	4.08	1250.00

**tnxTower**

**GPD**  
520 South Main Street Suite 2531  
Akron, Ohio 44311  
Phone: (330) 572-2100  
FAX: (330) 572-2101

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<b>Client</b>	Transcend Wireless	<b>Designed by</b>	tclark

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft	C <sub>AA</sub> Front ft <sup>2</sup>	C <sub>AA</sub> Side ft <sup>2</sup>	Weight lb	
			Horz ft	Lateral ft						
			0.00				1/2" Ice	94.22	5.09	1600.00
			0.00				1" Ice	113.06	6.11	1950.00
							2" Ice	150.75	8.15	2650.00
							4" Ice	226.13	12.23	4050.00



### Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36	29000	11200	.295	.65	.49	36	1.5	58	1.2

### General Material Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E5 F)	Density[k/ft^3]
1	A36 Gen	29000	11153.846	.3	.65	.49
2	A36 Gen 1	29000	11153.846	.3	.65	.49
3	A36 Gen 2	29000	11153.846	.3	.65	.49

### Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	TWR_LEG_T1	L6x6x1/2	Column	Single Angle	A36	Typical	5.75	19.9	19.9	.501
2	TWR_LEG_OUTER...	2L2 1/2x2 1/2x1/...	Column	Single Angle	A36	Typical	2.38	3.347	1.41	.049
3	TWR_TOP_GIRT_T1	2L3x4x5/16x3/8	Beam	Wide Flange	A36	Typical	4.18	15.508	3.29	.136
4	TWR_DIAG_T1	2L3x4x5/16x3/8	Column	None	A36	Typical	4.18	15.508	3.29	.136
5	TWR_DIAG_OUTER...	2L3 1/2x4x5/16x...	Column	None	A36	Typical	4.49	15.551	5.1	.146
6	TWR_RED_HORZ_T1	L2 1/2x2 1/2x3/16	Beam	None	A36	Typical	.902	.547	.547	.011
7	TWR_RED_HORZ_2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
8	TWR_HORZ_OUTE...	W12x26	Beam	None	A36	Typical	7.65	17.3	204	.3
9	TWR_RED_HORZ_3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
10	TWR_RED_HORZ_4...	L2 1/2x2 1/2x3/16	Beam	None	A36	Typical	.902	.547	.547	.011
11	TWR_RED_DIAG_T1	L2 1/2x2 1/2x3/16	Column	Single Angle	A36	Typical	.902	.547	.547	.011
12	TWR_LEG_T2	W6x20	Column	Wide Flange	A36	Typical	5.87	13.3	41.4	.24
13	TWR_DIAG_T2	2L3x2 1/2x3/8x3...	Column	None	A36	Typical	3.84	5.153	3.31	.18
14	TWR_RED_HORZ_T2	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
15	TWR_RED_HORZ_2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
16	TWR_RED_DIAG_T2	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
17	TWR_RED_HORZ_3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
18	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
19	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
20	TWR_RED_HIP_T2	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
21	TWR_RED_HIP_2_T2	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
22	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
23	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
24	TWR_INNER_SUPP...	W10x30	Beam	Wide Flange	A36	Typical	8.84	16.7	170	.622
25	TWR_INNER_SQ_T2	W8x13	Beam	Wide Flange	A36	Typical	3.84	2.73	39.6	.087
26	TWR_INNER_CORN...	W8x13	Beam	Wide Flange	A36	Typical	3.84	2.73	39.6	.087
27	TWR_LEG_T3	W6x20	Column	Wide Flange	A36	Typical	5.87	13.3	41.4	.24
28	TWR_HORZ_T3	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
29	TWR_DIAG_T3	2L3x2 1/2x3/8x3...	Column	None	A36	Typical	3.84	5.153	3.31	.18
30	TWR_RED_HORZ_T3	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
31	TWR_RED_HORZ_2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
32	TWR_RED_DIAG_T3	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
33	TWR_RED_HORZ_3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
34	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
35	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
36	TWR_RED_HIP_T3	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
37	TWR_RED_HIP_2_T3	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
38	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
39	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
40	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
41	TWR_INNER_SQ_T3	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
42	TWR_INNER_CORN...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
43	TWR_INNER_TRI_T3	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021

### Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Ivy [in4]	Izz [in4]	J [in4]
44	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
45	TWR_INNER_LADD...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
46	TWR_LEG T4	W6x25	Column	Wide Flange	A36	Typical	7.34	17.1	53.4	.461
47	TWR_HORZ T4	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
48	TWR_DIAG T4	2L3x2-1/2x1/2x3...	Column	None	A36	Typical	5	6.999	4.167	.417
49	TWR_RED_HORZ T4	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
50	TWR_RED_HORZ 2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
51	TWR_RED_DIAG T4	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
52	TWR_RED_HORZ 3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
53	TWR_RED_DIAG 2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
54	TWR_RED_DIAG 3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
55	TWR_RED_HIP T4	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
56	TWR_RED_HIP 2 T4	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
57	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
58	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
59	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
60	TWR_INNER_SQ T4	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
61	TWR_INNER_CORN...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
62	TWR_INNER_TRI T4	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
63	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
64	TWR_INNER_LADD...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
65	TWR_LEG T5	W8x31	Column	Wide Flange	A36	Typical	9.13	37.1	110	.536
66	TWR_HORZ T5	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
67	TWR_DIAG T5	2L3x2-1/2x1/2x3...	Column	None	A36	Typical	5	6.999	4.167	.417
68	TWR_RED_HORZ T5	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
69	TWR_RED_HORZ 2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
70	TWR_RED_DIAG T5	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
71	TWR_RED_HORZ 3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
72	TWR_RED_DIAG 2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
73	TWR_RED_DIAG 3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
74	TWR_RED_HIP T5	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
75	TWR_RED_HIP 2 T5	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
76	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
77	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
78	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
79	TWR_INNER_SQ T5	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
80	TWR_INNER_CORN...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
81	TWR_INNER_TRI T5	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
82	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
83	TWR_INNER_LADD...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
84	TWR_LEG T6	W8x40	Column	Wide Flange	A36	Typical	11.7	49.1	146	1.12
85	TWR_HORZ T6	2L3x2 1/2x5/16x...	Beam	None	A36	Typical	3.242	4.255	2.845	.106
86	TWR_DIAG T6	2L4x3x3/8x3/8	Column	None	A36	Typical	4.97	8.508	7.93	.233
87	TWR_RED_HORZ T6	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
88	TWR_RED_HORZ 2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
89	TWR_RED_DIAG T6	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
90	TWR_RED_HORZ 3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
91	TWR_RED_DIAG 2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
92	TWR_RED_DIAG 3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
93	TWR_RED_HIP T6	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
94	TWR_RED_HIP 2 T6	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
95	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
96	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
97	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
98	TWR_INNER_SQ T6	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
99	TWR_INNER_CORN...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
100	TWR_INNER_TRI T6	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021



### Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
101	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
102	TWR_INNER_LADD...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
103	TWR_LEG T7	W10x54	Column	Wide Flange	A36	Typical	15.8	103	303	1.82
104	TWR_HORZ T7	2L3x2 1/2x3/8x3...	Beam	None	A36	Typical	3.84	5.153	3.31	.18
105	TWR_DIAG T7	2L4x3x3/8x3/8	Column	None	A36	Typical	4.97	8.508	7.93	.233
106	TWR_RED_HORZ_T7	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
107	TWR_RED_HORZ_2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
108	TWR_RED_DIAG_T7	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
109	TWR_RED_HORZ_3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
110	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
111	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
112	TWR_RED_HIP_T7	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
113	TWR_RED_HIP_2_T7	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
114	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
115	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
116	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
117	TWR_INNER_SQ_T7	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
118	TWR_INNER_CORN...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
119	TWR_INNER_TRI_T7	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
120	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
121	TWR_INNER_LADD...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
122	TWR_LEG T8	W10x60	Column	Wide Flange	A36	Typical	17.7	116	341	2.48
123	TWR_HORZ T8	2L3x2 1/2x3/8x3...	Beam	None	A36	Typical	3.84	5.153	3.31	.18
124	TWR_DIAG T8	2L4x3x1/2x3/8	Column	None	A36	Typical	6.5	11.536	10.1	.542
125	TWR_RED_HORZ_T8	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
126	TWR_RED_HORZ_2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
127	TWR_RED_DIAG_T8	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
128	TWR_RED_HORZ_3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
129	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
130	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
131	TWR_RED_HIP_T8	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
132	TWR_RED_HIP_2_T8	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
133	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
134	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
135	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
136	TWR_INNER_SQ_T8	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
137	TWR_INNER_CORN...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
138	TWR_INNER_TRI_T8	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
139	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
140	TWR_INNER_LADD...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
141	TWR_LEG T9	W10x68	Column	Wide Flange	A36	Typical	19.9	134	394	3.56
142	TWR_HORZ T9	2L3x2 1/2x3/8x3...	Beam	None	A36	Typical	3.84	5.153	3.31	.18
143	TWR_DIAG T9	2L4x3x1/2x3/8	Column	None	A36	Typical	6.5	11.536	10.1	.542
144	TWR_RED_HORZ_T9	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
145	TWR_RED_HORZ_2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
146	TWR_RED_DIAG_T9	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
147	TWR_RED_HORZ_3...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
148	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
149	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
150	TWR_RED_HIP_T9	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
151	TWR_RED_HIP_2_T9	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
152	TWR_RED_HIPDIA...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
153	TWR_REDHIPDIA_2...	2L2 1/2x2 1/2x3/...	Column	None	A36	Typical	1.8	2.499	1.09	.021
154	TWR_INNER_SUPP...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
155	TWR_INNER_SQ_T9	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
156	TWR_INNER_CORN...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
157	TWR_INNER_TRI_T9	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021

### Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
158	TWR_INNER_BRAC...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
159	TWR_INNER_LADD...	2L3x2 1/2x1/4x3...	Beam	None	A36	Typical	2.63	3.373	2.35	.055
160	TWR_LEG T10	W12x79	Column	Wide Flange	A36	Typical	23.2	216	662	3.84
161	TWR_HORZ T10	2L4x3x1/2x3/8	Beam	None	A36	Typical	6.5	11.536	10.1	.542
162	TWR_DIAG T10	2L4x4x1/2x3/8	Column	None	A36	Typical	7.5	25.217	11.1	.625
163	TWR_RED_HORZ_T...	L3x3x3/16	Beam	None	A36	Typical	1.09	.96	.96	.014
164	TWR_RED_HORZ_2...	2L2 1/2x2 1/2x3/...	Beam	None	A36	Typical	1.8	2.499	1.09	.021
165	TWR_RED_DIAG_T10	L3x3x3/16	Column	None	A36	Typical	1.09	.96	.96	.014
166	TWR_RED_HORZ_3...	2L2 1/2x2 1/2x1/...	Beam	None	A36	Typical	2.38	3.347	1.41	.049
167	TWR_RED_DIAG_2...	2L2 1/2x2 1/2x1/...	Column	None	A36	Typical	2.38	3.347	1.41	.049
168	TWR_RED_HORZ_4...	2L3x3x1/4x3/8	Beam	None	A36	Typical	2.88	5.535	2.49	.06
169	TWR_RED_DIAG_3...	2L2 1/2x2 1/2x1/...	Column	None	A36	Typical	2.38	3.347	1.41	.049
170	TWR_RED_DIAG_4...	2L2 1/2x2 1/2x1/...	Column	None	A36	Typical	2.38	3.347	1.41	.049
171	TWR_RED_DIAG_0...	L2.5x2.5x8	Column	None	A36	Typical	2.26	1.22	1.22	.188
172	TWR_RED_HORZ_0...	L2.5x2.5x3	Column	None	A36	Typical	.901	.535	.535	.011
173	TWR_RED_HIP_1_T...	LL4x4x8x3	Column	None	A36	Typical	7.5	25.1	11	.644
174	TWR_RED_HIP_3_T...	LL3x3x3x3	Column	None	A36	Typical	2.18	4.09	1.9	.027
175	TWR_RED_HIPDIA...	LL3x3x3x3	Column	None	A36	Typical	2.18	4.09	1.9	.027
176	TWR_RED_HIPDIA...	LL3x3x3x3	Column	None	A36	Typical	2.18	4.09	1.9	.027
177	TWR_INNER_GIRT...	C4x7.2	Column	None	A36	Typical	2.13	.425	4.58	.082

### General Section Sets

	Label	Shape	Type	Material	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	TWR INNER SUPP T1	2C12x20.7x0.375 GMA	Beam	A36_Gen	12.18	17.311	258	.74
2	TWR_HORZ T2	2C10x20x0.375 GMA	Beam	A36_Gen	11.76	13.025	157.8	.74
3	TWR INNER SUPP T2	2C12x20.7x0.375 GMA	Beam	A36_Gen	12.18	17.311	258	.74
4	TWR INNER SUPP T10	2C4x7.25x0.375 GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
5	TWR INNER SQ T10	2C4x7.25x0.375 GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
6	TWR INNER CORNER T10	2C4x7.25x0.375 GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
7	TWR INNER LADDER T10	2C4x7.25x0.375 GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
8	TWR INNER TRI T10	2C4x7.25x0.375 GMA	Beam	A36_Gen	4.26	2.647	9.18	.16
9	TWR INNER BRACE T10	2C4x7.25x0.375 GMA	Beam	A36_Gen	4.26	2.647	9.18	.16

### Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
1	M1274	N68	N843			TWR DIAG OUTER T1	Column	None	A36	Typical
2	M1275	N843	N72			TWR DIAG OUTER T1	Column	None	A36	Typical
3	M1276	N61	N841			TWR DIAG OUTER T1	Column	None	A36	Typical
4	M1277	N841	N57			TWR DIAG OUTER T1	Column	None	A36	Typical
5	M1278	N50	N840			TWR DIAG OUTER T1	Column	None	A36	Typical
6	M1279	N840	N46			TWR DIAG OUTER T1	Column	None	A36	Typical
7	M1280	N39	N842			TWR DIAG OUTER T1	Column	None	A36	Typical
8	M1281	N842	N76			TWR DIAG OUTER T1	Column	None	A36	Typical
9	M1282	N76	N844			TWR DIAG OUTER T1	Column	None	A36	Typical
10	M1283	N844	N72			TWR DIAG OUTER T1	Column	None	A36	Typical
11	M1284	N68	N845			TWR DIAG OUTER T1	Column	None	A36	Typical
12	M1285	N845	N61			TWR DIAG OUTER T1	Column	None	A36	Typical
13	M1286	N57	N846			TWR DIAG OUTER T1	Column	None	A36	Typical
14	M1287	N846	N50			TWR DIAG OUTER T1	Column	None	A36	Typical
15	M1288	N46	N847			TWR DIAG OUTER T1	Column	None	A36	Typical
16	M1289	N847	N39			TWR DIAG OUTER T1	Column	None	A36	Typical
17	M15	N13	N1			TWR DIAG T1	Column	None	A36	Typical
18	M18	N13	N3			TWR DIAG T1	Column	None	A36	Typical
19	M22	N18	N3			TWR DIAG T1	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
20	M25	N18	N5			TWR DIAG T1	Column	None	A36	Typical
21	M29	N22	N5			TWR DIAG T1	Column	None	A36	Typical
22	M32	N22	N7			TWR DIAG T1	Column	None	A36	Typical
23	M36	N26	N7			TWR DIAG T1	Column	None	A36	Typical
24	M39	N26	N1			TWR DIAG T1	Column	None	A36	Typical
25	M51	N29	N13			TWR DIAG T2	Column	None	A36	Typical
26	M59	N30	N13			TWR DIAG T2	Column	None	A36	Typical
27	M67	N30	N18			TWR DIAG T2	Column	None	A36	Typical
28	M75	N31	N18			TWR DIAG T2	Column	None	A36	Typical
29	M83	N31	N22			TWR DIAG T2	Column	None	A36	Typical
30	M91	N32	N22			TWR DIAG T2	Column	None	A36	Typical
31	M99	N32	N26			TWR DIAG T2	Column	None	A36	Typical
32	M107	N29	N26			TWR DIAG T2	Column	None	A36	Typical
33	M124	N77	N81			TWR DIAG T3	Column	None	A36	Typical
34	M132	N78	N81			TWR DIAG T3	Column	None	A36	Typical
35	M141	N78	N96			TWR DIAG T3	Column	None	A36	Typical
36	M149	N79	N96			TWR DIAG T3	Column	None	A36	Typical
37	M158	N79	N108			TWR DIAG T3	Column	None	A36	Typical
38	M166	N80	N108			TWR DIAG T3	Column	None	A36	Typical
39	M175	N80	N120			TWR DIAG T3	Column	None	A36	Typical
40	M183	N77	N120			TWR DIAG T3	Column	None	A36	Typical
41	M205	N129	N133			TWR DIAG T4	Column	None	A36	Typical
42	M213	N130	N133			TWR DIAG T4	Column	None	A36	Typical
43	M222	N130	N148			TWR DIAG T4	Column	None	A36	Typical
44	M230	N131	N148			TWR DIAG T4	Column	None	A36	Typical
45	M239	N131	N160			TWR DIAG T4	Column	None	A36	Typical
46	M247	N132	N160			TWR DIAG T4	Column	None	A36	Typical
47	M256	N132	N172			TWR DIAG T4	Column	None	A36	Typical
48	M264	N129	N172			TWR DIAG T4	Column	None	A36	Typical
49	M286	N181	N185			TWR DIAG T5	Column	None	A36	Typical
50	M294	N182	N185			TWR DIAG T5	Column	None	A36	Typical
51	M303	N182	N200			TWR DIAG T5	Column	None	A36	Typical
52	M311	N183	N200			TWR DIAG T5	Column	None	A36	Typical
53	M320	N183	N212			TWR DIAG T5	Column	None	A36	Typical
54	M328	N184	N212			TWR DIAG T5	Column	None	A36	Typical
55	M337	N184	N224			TWR DIAG T5	Column	None	A36	Typical
56	M345	N181	N224			TWR DIAG T5	Column	None	A36	Typical
57	M367	N233	N237			TWR DIAG T6	Column	None	A36	Typical
58	M375	N234	N237			TWR DIAG T6	Column	None	A36	Typical
59	M384	N234	N252			TWR DIAG T6	Column	None	A36	Typical
60	M392	N235	N252			TWR DIAG T6	Column	None	A36	Typical
61	M401	N235	N264			TWR DIAG T6	Column	None	A36	Typical
62	M409	N236	N264			TWR DIAG T6	Column	None	A36	Typical
63	M418	N236	N276			TWR DIAG T6	Column	None	A36	Typical
64	M426	N233	N276			TWR DIAG T6	Column	None	A36	Typical
65	M448	N285	N289			TWR DIAG T7	Column	None	A36	Typical
66	M456	N286	N289			TWR DIAG T7	Column	None	A36	Typical
67	M465	N286	N304			TWR DIAG T7	Column	None	A36	Typical
68	M473	N287	N304			TWR DIAG T7	Column	None	A36	Typical
69	M482	N287	N316			TWR DIAG T7	Column	None	A36	Typical
70	M490	N288	N316			TWR DIAG T7	Column	None	A36	Typical
71	M499	N288	N328			TWR DIAG T7	Column	None	A36	Typical
72	M507	N285	N328			TWR DIAG T7	Column	None	A36	Typical
73	M529	N337	N341			TWR DIAG T8	Column	None	A36	Typical
74	M537	N338	N341			TWR DIAG T8	Column	None	A36	Typical
75	M546	N338	N356			TWR DIAG T8	Column	None	A36	Typical
76	M554	N339	N356			TWR DIAG T8	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
77	M563	N339	N368			TWR DIAG T8	Column	None	A36	Typical
78	M571	N340	N368			TWR DIAG T8	Column	None	A36	Typical
79	M580	N340	N380			TWR DIAG T8	Column	None	A36	Typical
80	M588	N337	N380			TWR DIAG T8	Column	None	A36	Typical
81	M610	N389	N393			TWR DIAG T9	Column	None	A36	Typical
82	M618	N390	N393			TWR DIAG T9	Column	None	A36	Typical
83	M627	N390	N408			TWR DIAG T9	Column	None	A36	Typical
84	M635	N391	N408			TWR DIAG T9	Column	None	A36	Typical
85	M644	N391	N420			TWR DIAG T9	Column	None	A36	Typical
86	M652	N392	N420			TWR DIAG T9	Column	None	A36	Typical
87	M661	N392	N432			TWR DIAG T9	Column	None	A36	Typical
88	M669	N389	N432			TWR DIAG T9	Column	None	A36	Typical
89	M691	N441	N445		353.974	TWR DIAG T10	Column	None	A36	Typical
90	M701	N442	N445		6.026	TWR DIAG T10	Column	None	A36	Typical
91	M712	N442	N464		353.974	TWR DIAG T10	Column	None	A36	Typical
92	M722	N443	N464		6.026	TWR DIAG T10	Column	None	A36	Typical
93	M733	N443	N479		353.974	TWR DIAG T10	Column	None	A36	Typical
94	M743	N444	N479		6.026	TWR DIAG T10	Column	None	A36	Typical
95	M754	N444	N494		353.974	TWR DIAG T10	Column	None	A36	Typical
96	M764	N441	N494		6.026	TWR DIAG T10	Column	None	A36	Typical
97	M1270	N842	N843			TWR HORZ OUTER T1	Beam	None	A36	Typical
98	M1271	N843	N841			TWR HORZ OUTER T1	Beam	None	A36	Typical
99	M1272	N841	N840			TWR HORZ OUTER T1	Beam	None	A36	Typical
100	M1273	N840	N842			TWR HORZ OUTER T1	Beam	None	A36	Typical
101	M14	N2	N4			TWR HORZ T2	Beam	None	A36_Gen	Typical
102	M21	N4	N6			TWR HORZ T2	Beam	None	A36_Gen	Typical
103	M28	N6	N8			TWR HORZ T2	Beam	None	A36_Gen	Typical
104	M35	N8	N2			TWR HORZ T2	Beam	None	A36_Gen	Typical
105	M123	N29	N30			TWR HORZ T3	Beam	None	A36	Typical
106	M140	N30	N31			TWR HORZ T3	Beam	None	A36	Typical
107	M157	N31	N32			TWR HORZ T3	Beam	None	A36	Typical
108	M174	N32	N29			TWR HORZ T3	Beam	None	A36	Typical
109	M204	N77	N78			TWR HORZ T4	Beam	None	A36	Typical
110	M221	N78	N79			TWR HORZ T4	Beam	None	A36	Typical
111	M238	N79	N80			TWR HORZ T4	Beam	None	A36	Typical
112	M255	N80	N77			TWR HORZ T4	Beam	None	A36	Typical
113	M285	N129	N130			TWR HORZ T5	Beam	None	A36	Typical
114	M302	N130	N131			TWR HORZ T5	Beam	None	A36	Typical
115	M319	N131	N132			TWR HORZ T5	Beam	None	A36	Typical
116	M336	N132	N129			TWR HORZ T5	Beam	None	A36	Typical
117	M366	N181	N182			TWR HORZ T6	Beam	None	A36	Typical
118	M383	N182	N183			TWR HORZ T6	Beam	None	A36	Typical
119	M400	N183	N184			TWR HORZ T6	Beam	None	A36	Typical
120	M417	N184	N181			TWR HORZ T6	Beam	None	A36	Typical
121	M447	N233	N234			TWR HORZ T7	Beam	None	A36	Typical
122	M464	N234	N235			TWR HORZ T7	Beam	None	A36	Typical
123	M481	N235	N236			TWR HORZ T7	Beam	None	A36	Typical
124	M498	N236	N233			TWR HORZ T7	Beam	None	A36	Typical
125	M528	N285	N286			TWR HORZ T8	Beam	None	A36	Typical
126	M545	N286	N287			TWR HORZ T8	Beam	None	A36	Typical
127	M562	N287	N288			TWR HORZ T8	Beam	None	A36	Typical
128	M579	N288	N285			TWR HORZ T8	Beam	None	A36	Typical
129	M609	N337	N338			TWR HORZ T9	Beam	None	A36	Typical
130	M626	N338	N339			TWR HORZ T9	Beam	None	A36	Typical
131	M643	N339	N340			TWR HORZ T9	Beam	None	A36	Typical
132	M660	N340	N337			TWR HORZ T9	Beam	None	A36	Typical
133	M690	N389	N390		357.328	TWR_HORZ T10	Beam	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
134	M711	N390	N391		357.328	TWR HORZ T10	Beam	None	A36	Typical
135	M732	N391	N392		357.328	TWR HORZ T10	Beam	None	A36	Typical
136	M753	N392	N389		357.328	TWR HORZ T10	Beam	None	A36	Typical
137	M1221	N88	N798			TWR INNER BRACE T3	Beam	None	A36	Typical
138	M1222	N798	N128			TWR INNER BRACE T3	Beam	None	A36	Typical
139	M1223	N124	N801			TWR INNER BRACE T3	Beam	None	A36	Typical
140	M1224	N801	N119			TWR INNER BRACE T3	Beam	None	A36	Typical
141	M1225	N112	N800			TWR INNER BRACE T3	Beam	None	A36	Typical
142	M1226	N800	N107			TWR INNER BRACE T3	Beam	None	A36	Typical
143	M1169	N140	N760			TWR INNER BRACE T4	Beam	None	A36	Typical
144	M1170	N760	N180			TWR INNER BRACE T4	Beam	None	A36	Typical
145	M1171	N176	N761			TWR INNER BRACE T4	Beam	None	A36	Typical
146	M1172	N761	N171			TWR INNER BRACE T4	Beam	None	A36	Typical
147	M1173	N159	N762			TWR INNER BRACE T4	Beam	None	A36	Typical
148	M1174	N762	N164			TWR INNER BRACE T4	Beam	None	A36	Typical
149	M1117	N192	N722			TWR INNER BRACE T5	Beam	None	A36	Typical
150	M1118	N722	N232			TWR INNER BRACE T5	Beam	None	A36	Typical
151	M1119	N228	N724			TWR INNER BRACE T5	Beam	None	A36	Typical
152	M1120	N724	N223			TWR INNER BRACE T5	Beam	None	A36	Typical
153	M1121	N216	N725			TWR INNER BRACE T5	Beam	None	A36	Typical
154	M1122	N725	N211			TWR INNER BRACE T5	Beam	None	A36	Typical
155	M1065	N244	N687			TWR INNER BRACE T6	Beam	None	A36	Typical
156	M1066	N687	N284			TWR INNER BRACE T6	Beam	None	A36	Typical
157	M1067	N280	N686			TWR INNER BRACE T6	Beam	None	A36	Typical
158	M1068	N686	N275			TWR INNER BRACE T6	Beam	None	A36	Typical
159	M1069	N268	N685			TWR INNER BRACE T6	Beam	None	A36	Typical
160	M1070	N685	N263			TWR INNER BRACE T6	Beam	None	A36	Typical
161	M1013	N296	N646			TWR INNER BRACE T7	Beam	None	A36	Typical
162	M1014	N646	N336			TWR INNER BRACE T7	Beam	None	A36	Typical
163	M1015	N332	N649			TWR INNER BRACE T7	Beam	None	A36	Typical
164	M1016	N649	N327			TWR INNER BRACE T7	Beam	None	A36	Typical
165	M1017	N320	N648			TWR INNER BRACE T7	Beam	None	A36	Typical
166	M1018	N648	N315			TWR INNER BRACE T7	Beam	None	A36	Typical
167	M961	N348	N608			TWR INNER BRACE T8	Beam	None	A36	Typical
168	M962	N608	N388			TWR INNER BRACE T8	Beam	None	A36	Typical
169	M963	N384	N611			TWR INNER BRACE T8	Beam	None	A36	Typical
170	M964	N611	N379			TWR INNER BRACE T8	Beam	None	A36	Typical
171	M965	N372	N610			TWR INNER BRACE T8	Beam	None	A36	Typical
172	M966	N610	N367			TWR INNER BRACE T8	Beam	None	A36	Typical
173	M909	N400	N570			TWR INNER BRACE T9	Beam	None	A36	Typical
174	M910	N570	N440			TWR INNER BRACE T9	Beam	None	A36	Typical
175	M911	N436	N571			TWR INNER BRACE T9	Beam	None	A36	Typical
176	M912	N571	N431			TWR INNER BRACE T9	Beam	None	A36	Typical
177	M913	N424	N572			TWR INNER BRACE T9	Beam	None	A36	Typical
178	M914	N572	N419			TWR INNER BRACE T9	Beam	None	A36	Typical
179	M853	N454	N522			TWR INNER BRACE T10	Beam	None	A36_Gen	DR1
180	M854	N522	N504			TWR INNER BRACE T10	Beam	None	A36_Gen	DR1
181	M855	N499	N523			TWR INNER BRACE T10	Beam	None	A36_Gen	DR1
182	M856	N523	N493			TWR INNER BRACE T10	Beam	None	A36_Gen	DR1
183	M857	N484	N524			TWR INNER BRACE T10	Beam	None	A36_Gen	DR1
184	M858	N524	N478			TWR INNER BRACE T10	Beam	None	A36_Gen	DR1
185	M1258	N2	N836			TWR INNER CORNER T2	Beam	Wide Flange	A36	Typical
186	M1259	N839	N8			TWR INNER CORNER T2	Beam	Wide Flange	A36	Typical
187	M1260	N838	N6			TWR INNER CORNER T2	Beam	Wide Flange	A36	Typical
188	M1261	N4	N837			TWR INNER CORNER T2	Beam	Wide Flange	A36	Typical
189	M1206	N29	N798			TWR INNER CORNER T3	Beam	None	A36	Typical
190	M1207	N801	N32			TWR INNER CORNER T3	Beam	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
191	M1208	N800	N31			TWR INNER CORNER T3	Beam	None	A36	Typical
192	M1154	N760	N77			TWR INNER CORNER T4	Beam	None	A36	Typical
193	M1155	N761	N80			TWR INNER CORNER T4	Beam	None	A36	Typical
194	M1156	N762	N79			TWR INNER CORNER T4	Beam	None	A36	Typical
195	M1102	N129	N722			TWR INNER CORNER T5	Beam	None	A36	Typical
196	M1103	N724	N132			TWR INNER CORNER T5	Beam	None	A36	Typical
197	M1104	N725	N131			TWR INNER CORNER T5	Beam	None	A36	Typical
198	M1050	N181	N687			TWR INNER CORNER T6	Beam	None	A36	Typical
199	M1051	N686	N184			TWR INNER CORNER T6	Beam	None	A36	Typical
200	M1052	N685	N183			TWR INNER CORNER T6	Beam	None	A36	Typical
201	M998	N646	N233			TWR INNER CORNER T7	Beam	None	A36	Typical
202	M999	N649	N236			TWR INNER CORNER T7	Beam	None	A36	Typical
203	M1000	N648	N235			TWR INNER CORNER T7	Beam	None	A36	Typical
204	M946	N285	N608			TWR INNER CORNER T8	Beam	None	A36	Typical
205	M947	N611	N288			TWR INNER CORNER T8	Beam	None	A36	Typical
206	M948	N610	N287			TWR INNER CORNER T8	Beam	None	A36	Typical
207	M894	N572	N339			TWR INNER CORNER T9	Beam	None	A36	Typical
208	M895	N571	N340			TWR INNER CORNER T9	Beam	None	A36	Typical
209	M896	N570	N337			TWR INNER CORNER T9	Beam	None	A36	Typical
210	M827	N522	N389			TWR INNER CORNER T10	Beam	None	A36_Gen	DR1
211	M828	N523	N392			TWR INNER CORNER T10	Beam	None	A36_Gen	DR1
212	M829	N524	N391			TWR INNER CORNER T10	Beam	None	A36_Gen	DR1
213	M845	N528	N549			TWR INNER GIRT T10	Column	None	A36	Typical
214	M846	N539	N548			TWR INNER GIRT T10	Column	None	A36	Typical
215	M847	N530	N546			TWR INNER GIRT T10	Column	None	A36	Typical
216	M848	N540	N545			TWR INNER GIRT T10	Column	None	A36	Typical
217	M849	N532	N544			TWR INNER GIRT T10	Column	None	A36	Typical
218	M850	N541	N547			TWR INNER GIRT T10	Column	None	A36	Typical
219	M851	N534	N542			TWR INNER GIRT T10	Column	None	A36	Typical
220	M852	N543	N527			TWR INNER GIRT T10	Column	None	A36	Typical
221	M859	N544	N541			TWR INNER GIRT T10	Column	None	A36	Typical
222	M860	N545	N531			TWR INNER GIRT T10	Column	None	A36	Typical
223	M861	N546	N540			TWR INNER GIRT T10	Column	None	A36	Typical
224	M862	N547	N533			TWR INNER GIRT T10	Column	None	A36	Typical
225	M863	N548	N529			TWR INNER GIRT T10	Column	None	A36	Typical
226	M864	N549	N539			TWR INNER GIRT T10	Column	None	A36	Typical
227	M865	N542	N543			TWR INNER GIRT T10	Column	None	A36	Typical
228	M1227	N814	N815			TWR INNER LADDER T3	Beam	None	A36	Typical
229	M1228	N815	N799			TWR INNER LADDER T3	Beam	None	A36	Typical
230	M1229	N799	N814			TWR INNER LADDER T3	Beam	None	A36	Typical
231	M1175	N776	N763			TWR INNER LADDER T4	Beam	None	A36	Typical
232	M1176	N763	N777			TWR INNER LADDER T4	Beam	None	A36	Typical
233	M1177	N777	N776			TWR INNER LADDER T4	Beam	None	A36	Typical
234	M1123	N738	N739			TWR INNER LADDER T5	Beam	None	A36	Typical
235	M1124	N739	N723			TWR INNER LADDER T5	Beam	None	A36	Typical
236	M1125	N723	N738			TWR INNER LADDER T5	Beam	None	A36	Typical
237	M1071	N700	N684			TWR INNER LADDER T6	Beam	None	A36	Typical
238	M1072	N684	N701			TWR INNER LADDER T6	Beam	None	A36	Typical
239	M1073	N701	N700			TWR INNER LADDER T6	Beam	None	A36	Typical
240	M1019	N662	N663			TWR INNER LADDER T7	Beam	None	A36	Typical
241	M1020	N663	N647			TWR INNER LADDER T7	Beam	None	A36	Typical
242	M1021	N647	N662			TWR INNER LADDER T7	Beam	None	A36	Typical
243	M967	N624	N625			TWR INNER LADDER T8	Beam	None	A36	Typical
244	M968	N625	N609			TWR INNER LADDER T8	Beam	None	A36	Typical
245	M969	N609	N624			TWR INNER LADDER T8	Beam	None	A36	Typical
246	M915	N586	N587			TWR INNER LADDER T9	Beam	None	A36	Typical
247	M916	N587	N573			TWR INNER LADDER T9	Beam	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
248	M917	N573	N586			TWR INNER LADDER T9	Beam	None	A36	Typical
249	M830	N525	N521			TWR INNER LADDER T10	Beam	None	A36_Gen	DR1
250	M831	N521	N526			TWR INNER LADDER T10	Beam	None	A36_Gen	DR1
251	M832	N526	N525			TWR INNER LADDER T10	Beam	None	A36_Gen	DR1
252	M1254	N837	N836			TWR INNER SQ T2	Beam	Wide Flange	A36	Typical
253	M1255	N836	N839			TWR INNER SQ T2	Beam	Wide Flange	A36	Typical
254	M1256	N839	N838			TWR INNER SQ T2	Beam	Wide Flange	A36	Typical
255	M1257	N838	N837			TWR INNER SQ T2	Beam	Wide Flange	A36	Typical
256	M1202	N798	N799			TWR INNER SQ T3	Beam	None	A36	Typical
257	M1203	N799	N800			TWR INNER SQ T3	Beam	None	A36	Typical
258	M1204	N800	N801			TWR INNER SQ T3	Beam	None	A36	Typical
259	M1205	N801	N798			TWR INNER SQ T3	Beam	None	A36	Typical
260	M1150	N760	N761			TWR INNER SQ T4	Beam	None	A36	Typical
261	M1151	N761	N762			TWR INNER SQ T4	Beam	None	A36	Typical
262	M1152	N762	N763			TWR INNER SQ T4	Beam	None	A36	Typical
263	M1153	N763	N760			TWR INNER SQ T4	Beam	None	A36	Typical
264	M1098	N723	N722			TWR INNER SQ T5	Beam	None	A36	Typical
265	M1099	N722	N724			TWR INNER SQ T5	Beam	None	A36	Typical
266	M1100	N724	N725			TWR INNER SQ T5	Beam	None	A36	Typical
267	M1101	N725	N723			TWR INNER SQ T5	Beam	None	A36	Typical
268	M1046	N687	N686			TWR INNER SQ T6	Beam	None	A36	Typical
269	M1047	N686	N685			TWR INNER SQ T6	Beam	None	A36	Typical
270	M1048	N685	N684			TWR INNER SQ T6	Beam	None	A36	Typical
271	M1049	N684	N687			TWR INNER SQ T6	Beam	None	A36	Typical
272	M994	N647	N646			TWR INNER SQ T7	Beam	None	A36	Typical
273	M995	N646	N649			TWR INNER SQ T7	Beam	None	A36	Typical
274	M996	N649	N648			TWR INNER SQ T7	Beam	None	A36	Typical
275	M997	N648	N647			TWR INNER SQ T7	Beam	None	A36	Typical
276	M942	N608	N611			TWR INNER SQ T8	Beam	None	A36	Typical
277	M943	N611	N610			TWR INNER SQ T8	Beam	None	A36	Typical
278	M944	N610	N609			TWR INNER SQ T8	Beam	None	A36	Typical
279	M945	N609	N608			TWR INNER SQ T8	Beam	None	A36	Typical
280	M890	N573	N572			TWR INNER SQ T9	Beam	None	A36	Typical
281	M891	N572	N571			TWR INNER SQ T9	Beam	None	A36	Typical
282	M892	N571	N570			TWR INNER SQ T9	Beam	None	A36	Typical
283	M893	N570	N573			TWR INNER SQ T9	Beam	None	A36	Typical
284	M823	N522	N523			TWR INNER SQ T10	Beam	None	A36_Gen	DR1
285	M824	N523	N524			TWR INNER SQ T10	Beam	None	A36_Gen	DR1
286	M825	N524	N521			TWR INNER SQ T10	Beam	None	A36_Gen	DR1
287	M826	N521	N522			TWR INNER SQ T10	Beam	None	A36_Gen	DR1
288	M9	N843	N840			TWR INNER SUPP T1	Beam	None	A36_Gen	Typical
289	M11	N841	N842			TWR INNER SUPP T1	Beam	None	A36_Gen	Typical
290	M42	N13	N18			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
291	M43	N18	N22			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
292	M44	N22	N26			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
293	M45	N26	N13			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
294	M191	N81	N96			TWR INNER SUPP T3	Beam	None	A36	Typical
295	M192	N96	N108			TWR INNER SUPP T3	Beam	None	A36	Typical
296	M193	N108	N120			TWR INNER SUPP T3	Beam	None	A36	Typical
297	M194	N120	N81			TWR INNER SUPP T3	Beam	None	A36	Typical
298	M272	N133	N148			TWR INNER SUPP T4	Beam	None	A36	Typical
299	M273	N148	N160			TWR INNER SUPP T4	Beam	None	A36	Typical
300	M274	N160	N172			TWR INNER SUPP T4	Beam	None	A36	Typical
301	M275	N172	N133			TWR INNER SUPP T4	Beam	None	A36	Typical
302	M353	N185	N200			TWR INNER SUPP T5	Beam	None	A36	Typical
303	M354	N200	N212			TWR INNER SUPP T5	Beam	None	A36	Typical
304	M355	N212	N224			TWR INNER SUPP T5	Beam	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
305	M356	N224	N185			TWR INNER SUPP T5	Beam	None	A36	Typical
306	M434	N237	N252			TWR INNER SUPP T6	Beam	None	A36	Typical
307	M435	N252	N264			TWR INNER SUPP T6	Beam	None	A36	Typical
308	M436	N264	N276			TWR INNER SUPP T6	Beam	None	A36	Typical
309	M437	N276	N237			TWR INNER SUPP T6	Beam	None	A36	Typical
310	M515	N289	N304			TWR INNER SUPP T7	Beam	None	A36	Typical
311	M516	N304	N316			TWR INNER SUPP T7	Beam	None	A36	Typical
312	M517	N316	N328			TWR INNER SUPP T7	Beam	None	A36	Typical
313	M518	N328	N289			TWR INNER SUPP T7	Beam	None	A36	Typical
314	M596	N341	N356			TWR INNER SUPP T8	Beam	None	A36	Typical
315	M597	N356	N368			TWR INNER SUPP T8	Beam	None	A36	Typical
316	M598	N368	N380			TWR INNER SUPP T8	Beam	None	A36	Typical
317	M599	N380	N341			TWR INNER SUPP T8	Beam	None	A36	Typical
318	M677	N393	N408			TWR INNER SUPP T9	Beam	None	A36	Typical
319	M678	N408	N420			TWR INNER SUPP T9	Beam	None	A36	Typical
320	M679	N420	N432			TWR INNER SUPP T9	Beam	None	A36	Typical
321	M680	N432	N393			TWR INNER SUPP T9	Beam	None	A36	Typical
322	M774	N445	N464			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
323	M775	N464	N479			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
324	M776	N479	N494			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
325	M777	N494	N445			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
326	M1209	N802	N803			TWR INNER TRI T3	Beam	None	A36	Typical
327	M1210	N804	N805			TWR INNER TRI T3	Beam	None	A36	Typical
328	M1211	N806	N807			TWR INNER TRI T3	Beam	None	A36	Typical
329	M1212	N808	N809			TWR INNER TRI T3	Beam	None	A36	Typical
330	M1213	N809	N810			TWR INNER TRI T3	Beam	None	A36	Typical
331	M1214	N810	N808			TWR INNER TRI T3	Beam	None	A36	Typical
332	M1215	N802	N811			TWR INNER TRI T3	Beam	None	A36	Typical
333	M1216	N811	N803			TWR INNER TRI T3	Beam	None	A36	Typical
334	M1217	N804	N812			TWR INNER TRI T3	Beam	None	A36	Typical
335	M1218	N812	N805			TWR INNER TRI T3	Beam	None	A36	Typical
336	M1219	N806	N813			TWR INNER TRI T3	Beam	None	A36	Typical
337	M1220	N813	N807			TWR INNER TRI T3	Beam	None	A36	Typical
338	M1157	N764	N765			TWR INNER TRI T4	Beam	None	A36	Typical
339	M1158	N766	N767			TWR INNER TRI T4	Beam	None	A36	Typical
340	M1159	N768	N769			TWR INNER TRI T4	Beam	None	A36	Typical
341	M1160	N770	N771			TWR INNER TRI T4	Beam	None	A36	Typical
342	M1161	N771	N772			TWR INNER TRI T4	Beam	None	A36	Typical
343	M1162	N772	N770			TWR INNER TRI T4	Beam	None	A36	Typical
344	M1163	N764	N773			TWR INNER TRI T4	Beam	None	A36	Typical
345	M1164	N773	N765			TWR INNER TRI T4	Beam	None	A36	Typical
346	M1165	N766	N774			TWR INNER TRI T4	Beam	None	A36	Typical
347	M1166	N774	N767			TWR INNER TRI T4	Beam	None	A36	Typical
348	M1167	N768	N775			TWR INNER TRI T4	Beam	None	A36	Typical
349	M1168	N775	N769			TWR INNER TRI T4	Beam	None	A36	Typical
350	M1105	N726	N727			TWR INNER TRI T5	Beam	None	A36	Typical
351	M1106	N728	N729			TWR INNER TRI T5	Beam	None	A36	Typical
352	M1107	N730	N731			TWR INNER TRI T5	Beam	None	A36	Typical
353	M1108	N732	N733			TWR INNER TRI T5	Beam	None	A36	Typical
354	M1109	N733	N734			TWR INNER TRI T5	Beam	None	A36	Typical
355	M1110	N734	N732			TWR INNER TRI T5	Beam	None	A36	Typical
356	M1111	N731	N735			TWR INNER TRI T5	Beam	None	A36	Typical
357	M1112	N735	N730			TWR INNER TRI T5	Beam	None	A36	Typical
358	M1113	N729	N736			TWR INNER TRI T5	Beam	None	A36	Typical
359	M1114	N736	N728			TWR INNER TRI T5	Beam	None	A36	Typical
360	M1115	N727	N737			TWR INNER TRI T5	Beam	None	A36	Typical
361	M1116	N737	N726			TWR INNER TRI T5	Beam	None	A36	Typical



**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
362	M1053	N688	N689			TWR INNER TRI T6	Beam	None	A36	Typical
363	M1054	N690	N691			TWR INNER TRI T6	Beam	None	A36	Typical
364	M1055	N692	N693			TWR INNER TRI T6	Beam	None	A36	Typical
365	M1056	N694	N695			TWR INNER TRI T6	Beam	None	A36	Typical
366	M1057	N695	N696			TWR INNER TRI T6	Beam	None	A36	Typical
367	M1058	N696	N694			TWR INNER TRI T6	Beam	None	A36	Typical
368	M1059	N688	N697			TWR INNER TRI T6	Beam	None	A36	Typical
369	M1060	N697	N689			TWR INNER TRI T6	Beam	None	A36	Typical
370	M1061	N690	N698			TWR INNER TRI T6	Beam	None	A36	Typical
371	M1062	N698	N691			TWR INNER TRI T6	Beam	None	A36	Typical
372	M1063	N692	N699			TWR INNER TRI T6	Beam	None	A36	Typical
373	M1064	N699	N693			TWR INNER TRI T6	Beam	None	A36	Typical
374	M1001	N650	N651			TWR INNER TRI T7	Beam	None	A36	Typical
375	M1002	N652	N653			TWR INNER TRI T7	Beam	None	A36	Typical
376	M1003	N654	N655			TWR INNER TRI T7	Beam	None	A36	Typical
377	M1004	N656	N657			TWR INNER TRI T7	Beam	None	A36	Typical
378	M1005	N657	N658			TWR INNER TRI T7	Beam	None	A36	Typical
379	M1006	N658	N656			TWR INNER TRI T7	Beam	None	A36	Typical
380	M1007	N650	N659			TWR INNER TRI T7	Beam	None	A36	Typical
381	M1008	N659	N651			TWR INNER TRI T7	Beam	None	A36	Typical
382	M1009	N652	N660			TWR INNER TRI T7	Beam	None	A36	Typical
383	M1010	N660	N653			TWR INNER TRI T7	Beam	None	A36	Typical
384	M1011	N654	N661			TWR INNER TRI T7	Beam	None	A36	Typical
385	M1012	N661	N655			TWR INNER TRI T7	Beam	None	A36	Typical
386	M949	N612	N613			TWR INNER TRI T8	Beam	None	A36	Typical
387	M950	N614	N615			TWR INNER TRI T8	Beam	None	A36	Typical
388	M951	N616	N617			TWR INNER TRI T8	Beam	None	A36	Typical
389	M952	N618	N619			TWR INNER TRI T8	Beam	None	A36	Typical
390	M953	N619	N620			TWR INNER TRI T8	Beam	None	A36	Typical
391	M954	N620	N618			TWR INNER TRI T8	Beam	None	A36	Typical
392	M955	N612	N621			TWR INNER TRI T8	Beam	None	A36	Typical
393	M956	N621	N613			TWR INNER TRI T8	Beam	None	A36	Typical
394	M957	N614	N622			TWR INNER TRI T8	Beam	None	A36	Typical
395	M958	N622	N615			TWR INNER TRI T8	Beam	None	A36	Typical
396	M959	N616	N623			TWR INNER TRI T8	Beam	None	A36	Typical
397	M960	N623	N617			TWR INNER TRI T8	Beam	None	A36	Typical
398	M897	N574	N575			TWR INNER TRI T9	Beam	None	A36	Typical
399	M898	N576	N577			TWR INNER TRI T9	Beam	None	A36	Typical
400	M899	N578	N579			TWR INNER TRI T9	Beam	None	A36	Typical
401	M900	N580	N581			TWR INNER TRI T9	Beam	None	A36	Typical
402	M901	N581	N582			TWR INNER TRI T9	Beam	None	A36	Typical
403	M902	N582	N580			TWR INNER TRI T9	Beam	None	A36	Typical
404	M903	N579	N583			TWR INNER TRI T9	Beam	None	A36	Typical
405	M904	N583	N578			TWR INNER TRI T9	Beam	None	A36	Typical
406	M905	N577	N584			TWR INNER TRI T9	Beam	None	A36	Typical
407	M906	N584	N576			TWR INNER TRI T9	Beam	None	A36	Typical
408	M907	N575	N585			TWR INNER TRI T9	Beam	None	A36	Typical
409	M908	N585	N574			TWR INNER TRI T9	Beam	None	A36	Typical
410	M833	N527	N528			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
411	M834	N529	N530			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
412	M835	N531	N532			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
413	M836	N533	N534			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
414	M837	N534	N535			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
415	M838	N535	N533			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
416	M839	N527	N536			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
417	M840	N536	N528			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
418	M841	N529	N537			TWR INNER TRI T10	Beam	None	A36_Gen	DR1

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
419	M842	N537	N530			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
420	M843	N531	N538			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
421	M844	N538	N532			TWR INNER TRI T10	Beam	None	A36_Gen	DR1
422	M1266	N2	N842			TWR LEG OUTER T1	Column	Single Angle	A36	Typical
423	M1267	N4	N840			TWR LEG OUTER T1	Column	Single Angle	A36	Typical
424	M1268	N6	N841			TWR LEG OUTER T1	Column	Single Angle	A36	Typical
425	M1269	N8	N843			TWR LEG OUTER T1	Column	Single Angle	A36	Typical
426	M1	N2	N1		180	TWR LEG T1	Column	Single Angle	A36	Typical
427	M2	N4	N3		270	TWR LEG T1	Column	Single Angle	A36	Typical
428	M3	N6	N5			TWR LEG T1	Column	Single Angle	A36	Typical
429	M4	N8	N7		90	TWR LEG T1	Column	Single Angle	A36	Typical
430	M47	N29	N2		45	TWR LEG T2	Column	Wide Flange	A36	Typical
431	M48	N30	N4		135	TWR LEG T2	Column	Wide Flange	A36	Typical
432	M49	N31	N6		225	TWR LEG T2	Column	Wide Flange	A36	Typical
433	M50	N32	N8		315	TWR LEG T2	Column	Wide Flange	A36	Typical
434	M119	N77	N29		45	TWR LEG T3	Column	Wide Flange	A36	Typical
435	M120	N78	N30		135	TWR LEG T3	Column	Wide Flange	A36	Typical
436	M121	N79	N31		225	TWR LEG T3	Column	Wide Flange	A36	Typical
437	M122	N80	N32		315	TWR LEG T3	Column	Wide Flange	A36	Typical
438	M200	N129	N77		45	TWR LEG T4	Column	Wide Flange	A36	Typical
439	M201	N130	N78		135	TWR LEG T4	Column	Wide Flange	A36	Typical
440	M202	N131	N79		225	TWR LEG T4	Column	Wide Flange	A36	Typical
441	M203	N132	N80		315	TWR LEG T4	Column	Wide Flange	A36	Typical
442	M281	N181	N129		45	TWR LEG T5	Column	Wide Flange	A36	Typical
443	M282	N182	N130		135	TWR LEG T5	Column	Wide Flange	A36	Typical
444	M283	N183	N131		225	TWR LEG T5	Column	Wide Flange	A36	Typical
445	M284	N184	N132		315	TWR LEG T5	Column	Wide Flange	A36	Typical
446	M362	N233	N181		45	TWR LEG T6	Column	Wide Flange	A36	Typical
447	M363	N234	N182		135	TWR LEG T6	Column	Wide Flange	A36	Typical
448	M364	N235	N183		225	TWR LEG T6	Column	Wide Flange	A36	Typical
449	M365	N236	N184		315	TWR LEG T6	Column	Wide Flange	A36	Typical
450	M443	N285	N233		45	TWR LEG T7	Column	Wide Flange	A36	Typical
451	M444	N286	N234		135	TWR LEG T7	Column	Wide Flange	A36	Typical
452	M445	N287	N235		225	TWR LEG T7	Column	Wide Flange	A36	Typical
453	M446	N288	N236		315	TWR LEG T7	Column	Wide Flange	A36	Typical
454	M524	N337	N285		45	TWR LEG T8	Column	Wide Flange	A36	Typical
455	M525	N338	N286		135	TWR LEG T8	Column	Wide Flange	A36	Typical
456	M526	N339	N287		225	TWR LEG T8	Column	Wide Flange	A36	Typical
457	M527	N340	N288		315	TWR LEG T8	Column	Wide Flange	A36	Typical
458	M605	N389	N337		45	TWR LEG T9	Column	Wide Flange	A36	Typical
459	M606	N390	N338		135	TWR LEG T9	Column	Wide Flange	A36	Typical
460	M607	N391	N339		225	TWR LEG T9	Column	Wide Flange	A36	Typical
461	M608	N392	N340		315	TWR LEG T9	Column	Wide Flange	A36	Typical
462	M686	N441	N389			TWR LEG T10	Column	Wide Flange	A36	Typical
463	M687	N442	N390			TWR LEG T10	Column	Wide Flange	A36	Typical
464	M688	N443	N391			TWR LEG T10	Column	Wide Flange	A36	Typical
465	M689	N444	N392			TWR LEG T10	Column	Wide Flange	A36	Typical
466	M882	N561	N570			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
467	M883	N570	N560			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
468	M884	N565	N571			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
469	M885	N571	N564			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
470	M886	N563	N572			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
471	M887	N572	N562			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
472	M888	N559	N573			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
473	M889	N573	N558			TWR REDHIPDIA 2 T9	Column	None	A36	Typical
474	M791	N505	N456			TWR RED DIAG 0 T10	Column	None	A36	Typical
475	M792	N456	N509			TWR RED DIAG 0 T10	Column	None	A36	Typical



**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
476	M793	N506	N471			TWR RED DIAG 0 T10	Column	None	A36	Typical
477	M794	N471	N510			TWR RED DIAG 0 T10	Column	None	A36	Typical
478	M795	N512	N486			TWR RED DIAG 0 T10	Column	None	A36	Typical
479	M796	N486	N508			TWR RED DIAG 0 T10	Column	None	A36	Typical
480	M797	N507	N446			TWR RED DIAG 0 T10	Column	None	A36	Typical
481	M798	N446	N511			TWR RED DIAG 0 T10	Column	None	A36	Typical
482	M56	N36	N37			TWR RED DIAG 2 T2	Column	None	A36	Typical
483	M64	N42	N45			TWR RED DIAG 2 T2	Column	None	A36	Typical
484	M72	N48	N45			TWR RED DIAG 2 T2	Column	None	A36	Typical
485	M80	N53	N56			TWR RED DIAG 2 T2	Column	None	A36	Typical
486	M88	N59	N56			TWR RED DIAG 2 T2	Column	None	A36	Typical
487	M96	N64	N67			TWR RED DIAG 2 T2	Column	None	A36	Typical
488	M104	N70	N67			TWR RED DIAG 2 T2	Column	None	A36	Typical
489	M112	N74	N37			TWR RED DIAG 2 T2	Column	None	A36	Typical
490	M129	N85	N86			TWR RED DIAG 2 T3	Column	None	A36	Typical
491	M137	N91	N94			TWR RED DIAG 2 T3	Column	None	A36	Typical
492	M146	N98	N94			TWR RED DIAG 2 T3	Column	None	A36	Typical
493	M154	N103	N106			TWR RED DIAG 2 T3	Column	None	A36	Typical
494	M163	N110	N106			TWR RED DIAG 2 T3	Column	None	A36	Typical
495	M171	N115	N118			TWR RED DIAG 2 T3	Column	None	A36	Typical
496	M180	N122	N118			TWR RED DIAG 2 T3	Column	None	A36	Typical
497	M188	N126	N86			TWR RED DIAG 2 T3	Column	None	A36	Typical
498	M210	N137	N138			TWR RED DIAG 2 T4	Column	None	A36	Typical
499	M218	N143	N146			TWR RED DIAG 2 T4	Column	None	A36	Typical
500	M227	N150	N146			TWR RED DIAG 2 T4	Column	None	A36	Typical
501	M235	N155	N158			TWR RED DIAG 2 T4	Column	None	A36	Typical
502	M244	N162	N158			TWR RED DIAG 2 T4	Column	None	A36	Typical
503	M252	N167	N170			TWR RED DIAG 2 T4	Column	None	A36	Typical
504	M261	N174	N170			TWR RED DIAG 2 T4	Column	None	A36	Typical
505	M269	N178	N138			TWR RED DIAG 2 T4	Column	None	A36	Typical
506	M291	N189	N190			TWR RED DIAG 2 T5	Column	None	A36	Typical
507	M299	N195	N198			TWR RED DIAG 2 T5	Column	None	A36	Typical
508	M308	N202	N198			TWR RED DIAG 2 T5	Column	None	A36	Typical
509	M316	N207	N210			TWR RED DIAG 2 T5	Column	None	A36	Typical
510	M325	N214	N210			TWR RED DIAG 2 T5	Column	None	A36	Typical
511	M333	N219	N222			TWR RED DIAG 2 T5	Column	None	A36	Typical
512	M342	N226	N222			TWR RED DIAG 2 T5	Column	None	A36	Typical
513	M350	N230	N190			TWR RED DIAG 2 T5	Column	None	A36	Typical
514	M372	N241	N242			TWR RED DIAG 2 T6	Column	None	A36	Typical
515	M380	N247	N250			TWR RED DIAG 2 T6	Column	None	A36	Typical
516	M389	N254	N250			TWR RED DIAG 2 T6	Column	None	A36	Typical
517	M397	N259	N262			TWR RED DIAG 2 T6	Column	None	A36	Typical
518	M406	N266	N262			TWR RED DIAG 2 T6	Column	None	A36	Typical
519	M414	N271	N274			TWR RED DIAG 2 T6	Column	None	A36	Typical
520	M423	N278	N274			TWR RED DIAG 2 T6	Column	None	A36	Typical
521	M431	N282	N242			TWR RED DIAG 2 T6	Column	None	A36	Typical
522	M453	N293	N294			TWR RED DIAG 2 T7	Column	None	A36	Typical
523	M461	N299	N302			TWR RED DIAG 2 T7	Column	None	A36	Typical
524	M470	N306	N302			TWR RED DIAG 2 T7	Column	None	A36	Typical
525	M478	N311	N314			TWR RED DIAG 2 T7	Column	None	A36	Typical
526	M487	N318	N314			TWR RED DIAG 2 T7	Column	None	A36	Typical
527	M495	N323	N326			TWR RED DIAG 2 T7	Column	None	A36	Typical
528	M504	N330	N326			TWR RED DIAG 2 T7	Column	None	A36	Typical
529	M512	N334	N294			TWR RED DIAG 2 T7	Column	None	A36	Typical
530	M534	N345	N346			TWR RED DIAG 2 T8	Column	None	A36	Typical
531	M542	N351	N354			TWR RED DIAG 2 T8	Column	None	A36	Typical
532	M551	N358	N354			TWR RED DIAG 2 T8	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
533	M559	N363	N366			TWR RED DIAG 2 T8	Column	None	A36	Typical
534	M568	N370	N366			TWR RED DIAG 2 T8	Column	None	A36	Typical
535	M576	N375	N378			TWR RED DIAG 2 T8	Column	None	A36	Typical
536	M585	N382	N378			TWR RED DIAG 2 T8	Column	None	A36	Typical
537	M593	N386	N346			TWR RED DIAG 2 T8	Column	None	A36	Typical
538	M615	N397	N398			TWR RED DIAG 2 T9	Column	None	A36	Typical
539	M623	N403	N406			TWR RED DIAG 2 T9	Column	None	A36	Typical
540	M632	N410	N406			TWR RED DIAG 2 T9	Column	None	A36	Typical
541	M640	N415	N418			TWR RED DIAG 2 T9	Column	None	A36	Typical
542	M649	N422	N418			TWR RED DIAG 2 T9	Column	None	A36	Typical
543	M657	N427	N430			TWR RED DIAG 2 T9	Column	None	A36	Typical
544	M666	N434	N430			TWR RED DIAG 2 T9	Column	None	A36	Typical
545	M674	N438	N398			TWR RED DIAG 2 T9	Column	None	A36	Typical
546	M696	N449	N450		4.133	TWR RED DIAG 2 T10	Column	None	A36	Typical
547	M706	N457	N460		355.867	TWR RED DIAG 2 T10	Column	None	A36	Typical
548	M717	N466	N460		4.133	TWR RED DIAG 2 T10	Column	None	A36	Typical
549	M727	N472	N475		355.867	TWR RED DIAG 2 T10	Column	None	A36	Typical
550	M738	N481	N475		4.133	TWR RED DIAG 2 T10	Column	None	A36	Typical
551	M748	N487	N490		355.867	TWR RED DIAG 2 T10	Column	None	A36	Typical
552	M759	N496	N490		4.133	TWR RED DIAG 2 T10	Column	None	A36	Typical
553	M769	N501	N450		355.867	TWR RED DIAG 2 T10	Column	None	A36	Typical
554	M57	N37	N39			TWR RED DIAG 3 T2	Column	None	A36	Typical
555	M58	N38	N39			TWR RED DIAG 3 T2	Column	None	A36	Typical
556	M65	N45	N46			TWR RED DIAG 3 T2	Column	None	A36	Typical
557	M66	N44	N46			TWR RED DIAG 3 T2	Column	None	A36	Typical
558	M73	N45	N50			TWR RED DIAG 3 T2	Column	None	A36	Typical
559	M74	N49	N50			TWR RED DIAG 3 T2	Column	None	A36	Typical
560	M81	N56	N57			TWR RED DIAG 3 T2	Column	None	A36	Typical
561	M82	N55	N57			TWR RED DIAG 3 T2	Column	None	A36	Typical
562	M89	N56	N61			TWR RED DIAG 3 T2	Column	None	A36	Typical
563	M90	N60	N61			TWR RED DIAG 3 T2	Column	None	A36	Typical
564	M97	N67	N68			TWR RED DIAG 3 T2	Column	None	A36	Typical
565	M98	N66	N68			TWR RED DIAG 3 T2	Column	None	A36	Typical
566	M105	N67	N72			TWR RED DIAG 3 T2	Column	None	A36	Typical
567	M106	N71	N72			TWR RED DIAG 3 T2	Column	None	A36	Typical
568	M113	N37	N76			TWR RED DIAG 3 T2	Column	None	A36	Typical
569	M114	N75	N76			TWR RED DIAG 3 T2	Column	None	A36	Typical
570	M130	N86	N88			TWR RED DIAG 3 T3	Column	None	A36	Typical
571	M131	N87	N88			TWR RED DIAG 3 T3	Column	None	A36	Typical
572	M138	N94	N95			TWR RED DIAG 3 T3	Column	None	A36	Typical
573	M139	N93	N95			TWR RED DIAG 3 T3	Column	None	A36	Typical
574	M147	N94	N100			TWR RED DIAG 3 T3	Column	None	A36	Typical
575	M148	N99	N100			TWR RED DIAG 3 T3	Column	None	A36	Typical
576	M155	N106	N107			TWR RED DIAG 3 T3	Column	None	A36	Typical
577	M156	N105	N107			TWR RED DIAG 3 T3	Column	None	A36	Typical
578	M164	N106	N112			TWR RED DIAG 3 T3	Column	None	A36	Typical
579	M165	N111	N112			TWR RED DIAG 3 T3	Column	None	A36	Typical
580	M172	N118	N119			TWR RED DIAG 3 T3	Column	None	A36	Typical
581	M173	N117	N119			TWR RED DIAG 3 T3	Column	None	A36	Typical
582	M181	N118	N124			TWR RED DIAG 3 T3	Column	None	A36	Typical
583	M182	N123	N124			TWR RED DIAG 3 T3	Column	None	A36	Typical
584	M189	N86	N128			TWR RED DIAG 3 T3	Column	None	A36	Typical
585	M190	N127	N128			TWR RED DIAG 3 T3	Column	None	A36	Typical
586	M211	N138	N140			TWR RED DIAG 3 T4	Column	None	A36	Typical
587	M212	N139	N140			TWR RED DIAG 3 T4	Column	None	A36	Typical
588	M219	N146	N147			TWR RED DIAG 3 T4	Column	None	A36	Typical
589	M220	N145	N147			TWR RED DIAG 3 T4	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
590	M228	N146	N152			TWR RED DIAG 3 T4	Column	None	A36	Typical
591	M229	N151	N152			TWR RED DIAG 3 T4	Column	None	A36	Typical
592	M236	N158	N159			TWR RED DIAG 3 T4	Column	None	A36	Typical
593	M237	N157	N159			TWR RED DIAG 3 T4	Column	None	A36	Typical
594	M245	N158	N164			TWR RED DIAG 3 T4	Column	None	A36	Typical
595	M246	N163	N164			TWR RED DIAG 3 T4	Column	None	A36	Typical
596	M253	N170	N171			TWR RED DIAG 3 T4	Column	None	A36	Typical
597	M254	N169	N171			TWR RED DIAG 3 T4	Column	None	A36	Typical
598	M262	N170	N176			TWR RED DIAG 3 T4	Column	None	A36	Typical
599	M263	N175	N176			TWR RED DIAG 3 T4	Column	None	A36	Typical
600	M270	N138	N180			TWR RED DIAG 3 T4	Column	None	A36	Typical
601	M271	N179	N180			TWR RED DIAG 3 T4	Column	None	A36	Typical
602	M292	N190	N192			TWR RED DIAG 3 T5	Column	None	A36	Typical
603	M293	N191	N192			TWR RED DIAG 3 T5	Column	None	A36	Typical
604	M300	N198	N199			TWR RED DIAG 3 T5	Column	None	A36	Typical
605	M301	N197	N199			TWR RED DIAG 3 T5	Column	None	A36	Typical
606	M309	N198	N204			TWR RED DIAG 3 T5	Column	None	A36	Typical
607	M310	N203	N204			TWR RED DIAG 3 T5	Column	None	A36	Typical
608	M317	N210	N211			TWR RED DIAG 3 T5	Column	None	A36	Typical
609	M318	N209	N211			TWR RED DIAG 3 T5	Column	None	A36	Typical
610	M326	N210	N216			TWR RED DIAG 3 T5	Column	None	A36	Typical
611	M327	N215	N216			TWR RED DIAG 3 T5	Column	None	A36	Typical
612	M334	N222	N223			TWR RED DIAG 3 T5	Column	None	A36	Typical
613	M335	N221	N223			TWR RED DIAG 3 T5	Column	None	A36	Typical
614	M343	N222	N228			TWR RED DIAG 3 T5	Column	None	A36	Typical
615	M344	N227	N228			TWR RED DIAG 3 T5	Column	None	A36	Typical
616	M351	N190	N232			TWR RED DIAG 3 T5	Column	None	A36	Typical
617	M352	N231	N232			TWR RED DIAG 3 T5	Column	None	A36	Typical
618	M373	N242	N244			TWR RED DIAG 3 T6	Column	None	A36	Typical
619	M374	N243	N244			TWR RED DIAG 3 T6	Column	None	A36	Typical
620	M381	N250	N251			TWR RED DIAG 3 T6	Column	None	A36	Typical
621	M382	N249	N251			TWR RED DIAG 3 T6	Column	None	A36	Typical
622	M390	N250	N256			TWR RED DIAG 3 T6	Column	None	A36	Typical
623	M391	N255	N256			TWR RED DIAG 3 T6	Column	None	A36	Typical
624	M398	N262	N263			TWR RED DIAG 3 T6	Column	None	A36	Typical
625	M399	N261	N263			TWR RED DIAG 3 T6	Column	None	A36	Typical
626	M407	N262	N268			TWR RED DIAG 3 T6	Column	None	A36	Typical
627	M408	N267	N268			TWR RED DIAG 3 T6	Column	None	A36	Typical
628	M415	N274	N275			TWR RED DIAG 3 T6	Column	None	A36	Typical
629	M416	N273	N275			TWR RED DIAG 3 T6	Column	None	A36	Typical
630	M424	N274	N280			TWR RED DIAG 3 T6	Column	None	A36	Typical
631	M425	N279	N280			TWR RED DIAG 3 T6	Column	None	A36	Typical
632	M432	N242	N284			TWR RED DIAG 3 T6	Column	None	A36	Typical
633	M433	N283	N284			TWR RED DIAG 3 T6	Column	None	A36	Typical
634	M454	N294	N296			TWR RED DIAG 3 T7	Column	None	A36	Typical
635	M455	N295	N296			TWR RED DIAG 3 T7	Column	None	A36	Typical
636	M462	N302	N303			TWR RED DIAG 3 T7	Column	None	A36	Typical
637	M463	N301	N303			TWR RED DIAG 3 T7	Column	None	A36	Typical
638	M471	N302	N308			TWR RED DIAG 3 T7	Column	None	A36	Typical
639	M472	N307	N308			TWR RED DIAG 3 T7	Column	None	A36	Typical
640	M479	N314	N315			TWR RED DIAG 3 T7	Column	None	A36	Typical
641	M480	N313	N315			TWR RED DIAG 3 T7	Column	None	A36	Typical
642	M488	N314	N320			TWR RED DIAG 3 T7	Column	None	A36	Typical
643	M489	N319	N320			TWR RED DIAG 3 T7	Column	None	A36	Typical
644	M496	N326	N327			TWR RED DIAG 3 T7	Column	None	A36	Typical
645	M497	N325	N327			TWR RED DIAG 3 T7	Column	None	A36	Typical
646	M505	N326	N332			TWR RED DIAG 3 T7	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
647	M506	N331	N332			TWR RED DIAG 3 T7	Column	None	A36	Typical
648	M513	N294	N336			TWR RED DIAG 3 T7	Column	None	A36	Typical
649	M514	N335	N336			TWR RED DIAG 3 T7	Column	None	A36	Typical
650	M535	N346	N348			TWR RED DIAG 3 T8	Column	None	A36	Typical
651	M536	N347	N348			TWR RED DIAG 3 T8	Column	None	A36	Typical
652	M543	N354	N355			TWR RED DIAG 3 T8	Column	None	A36	Typical
653	M544	N353	N355			TWR RED DIAG 3 T8	Column	None	A36	Typical
654	M552	N354	N360			TWR RED DIAG 3 T8	Column	None	A36	Typical
655	M553	N359	N360			TWR RED DIAG 3 T8	Column	None	A36	Typical
656	M560	N366	N367			TWR RED DIAG 3 T8	Column	None	A36	Typical
657	M561	N365	N367			TWR RED DIAG 3 T8	Column	None	A36	Typical
658	M569	N366	N372			TWR RED DIAG 3 T8	Column	None	A36	Typical
659	M570	N371	N372			TWR RED DIAG 3 T8	Column	None	A36	Typical
660	M577	N378	N379			TWR RED DIAG 3 T8	Column	None	A36	Typical
661	M578	N377	N379			TWR RED DIAG 3 T8	Column	None	A36	Typical
662	M586	N378	N384			TWR RED DIAG 3 T8	Column	None	A36	Typical
663	M587	N383	N384			TWR RED DIAG 3 T8	Column	None	A36	Typical
664	M594	N346	N388			TWR RED DIAG 3 T8	Column	None	A36	Typical
665	M595	N387	N388			TWR RED DIAG 3 T8	Column	None	A36	Typical
666	M616	N398	N400			TWR RED DIAG 3 T9	Column	None	A36	Typical
667	M617	N399	N400			TWR RED DIAG 3 T9	Column	None	A36	Typical
668	M624	N406	N407			TWR RED DIAG 3 T9	Column	None	A36	Typical
669	M625	N405	N407			TWR RED DIAG 3 T9	Column	None	A36	Typical
670	M633	N406	N412			TWR RED DIAG 3 T9	Column	None	A36	Typical
671	M634	N411	N412			TWR RED DIAG 3 T9	Column	None	A36	Typical
672	M641	N418	N419			TWR RED DIAG 3 T9	Column	None	A36	Typical
673	M642	N417	N419			TWR RED DIAG 3 T9	Column	None	A36	Typical
674	M650	N418	N424			TWR RED DIAG 3 T9	Column	None	A36	Typical
675	M651	N423	N424			TWR RED DIAG 3 T9	Column	None	A36	Typical
676	M658	N430	N431			TWR RED DIAG 3 T9	Column	None	A36	Typical
677	M659	N429	N431			TWR RED DIAG 3 T9	Column	None	A36	Typical
678	M667	N430	N436			TWR RED DIAG 3 T9	Column	None	A36	Typical
679	M668	N435	N436			TWR RED DIAG 3 T9	Column	None	A36	Typical
680	M675	N398	N440			TWR RED DIAG 3 T9	Column	None	A36	Typical
681	M676	N439	N440			TWR RED DIAG 3 T9	Column	None	A36	Typical
682	M698	N451	N452		3.377	TWR RED DIAG 3 T10	Column	None	A36	Typical
683	M708	N459	N462		356.623	TWR RED DIAG 3 T10	Column	None	A36	Typical
684	M719	N467	N462		3.377	TWR RED DIAG 3 T10	Column	None	A36	Typical
685	M729	N474	N477		356.623	TWR RED DIAG 3 T10	Column	None	A36	Typical
686	M740	N482	N477		3.377	TWR RED DIAG 3 T10	Column	None	A36	Typical
687	M750	N489	N492		356.623	TWR RED DIAG 3 T10	Column	None	A36	Typical
688	M761	N497	N492		3.377	TWR RED DIAG 3 T10	Column	None	A36	Typical
689	M771	N502	N452		356.623	TWR RED DIAG 3 T10	Column	None	A36	Typical
690	M699	N452	N454		356.477	TWR RED DIAG 4 T10	Column	None	A36	Typical
691	M700	N453	N454		5.046	TWR RED DIAG 4 T10	Column	None	A36	Typical
692	M709	N462	N463		3.523	TWR RED DIAG 4 T10	Column	None	A36	Typical
693	M710	N461	N463		354.954	TWR RED DIAG 4 T10	Column	None	A36	Typical
694	M720	N462	N469		356.477	TWR RED DIAG 4 T10	Column	None	A36	Typical
695	M721	N468	N469		5.046	TWR RED DIAG 4 T10	Column	None	A36	Typical
696	M730	N477	N478		3.523	TWR RED DIAG 4 T10	Column	None	A36	Typical
697	M731	N476	N478		354.954	TWR RED DIAG 4 T10	Column	None	A36	Typical
698	M741	N477	N484		356.477	TWR RED DIAG 4 T10	Column	None	A36	Typical
699	M742	N483	N484		5.046	TWR RED DIAG 4 T10	Column	None	A36	Typical
700	M751	N492	N493		3.523	TWR RED DIAG 4 T10	Column	None	A36	Typical
701	M752	N491	N493		354.954	TWR RED DIAG 4 T10	Column	None	A36	Typical
702	M762	N492	N499		356.477	TWR RED DIAG 4 T10	Column	None	A36	Typical
703	M763	N498	N499		5.046	TWR RED DIAG 4 T10	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
704	M772	N452	N504		3.523	TWR RED DIAG 4 T10	Column	None	A36	Typical
705	M773	N503	N504		354.954	TWR RED DIAG 4 T10	Column	None	A36	Typical
706	M17	N9	N15		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
707	M20	N9	N16		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
708	M24	N10	N19		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
709	M27	N10	N20		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
710	M31	N11	N23		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
711	M34	N11	N24		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
712	M38	N12	N27		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
713	M41	N12	N28		90	TWR RED DIAG T1	Column	Single Angle	A36	Typical
714	M54	N34	N35			TWR RED DIAG T2	Column	None	A36	Typical
715	M62	N40	N43			TWR RED DIAG T2	Column	None	A36	Typical
716	M70	N47	N43			TWR RED DIAG T2	Column	None	A36	Typical
717	M78	N51	N54			TWR RED DIAG T2	Column	None	A36	Typical
718	M86	N58	N54			TWR RED DIAG T2	Column	None	A36	Typical
719	M94	N62	N65			TWR RED DIAG T2	Column	None	A36	Typical
720	M102	N69	N65			TWR RED DIAG T2	Column	None	A36	Typical
721	M110	N73	N35			TWR RED DIAG T2	Column	None	A36	Typical
722	M127	N83	N84			TWR RED DIAG T3	Column	None	A36	Typical
723	M135	N89	N92			TWR RED DIAG T3	Column	None	A36	Typical
724	M144	N97	N92			TWR RED DIAG T3	Column	None	A36	Typical
725	M152	N101	N104			TWR RED DIAG T3	Column	None	A36	Typical
726	M161	N109	N104			TWR RED DIAG T3	Column	None	A36	Typical
727	M169	N113	N116			TWR RED DIAG T3	Column	None	A36	Typical
728	M178	N121	N116			TWR RED DIAG T3	Column	None	A36	Typical
729	M186	N125	N84			TWR RED DIAG T3	Column	None	A36	Typical
730	M208	N135	N136			TWR RED DIAG T4	Column	None	A36	Typical
731	M216	N141	N144			TWR RED DIAG T4	Column	None	A36	Typical
732	M225	N149	N144			TWR RED DIAG T4	Column	None	A36	Typical
733	M233	N153	N156			TWR RED DIAG T4	Column	None	A36	Typical
734	M242	N161	N156			TWR RED DIAG T4	Column	None	A36	Typical
735	M250	N165	N168			TWR RED DIAG T4	Column	None	A36	Typical
736	M259	N173	N168			TWR RED DIAG T4	Column	None	A36	Typical
737	M267	N177	N136			TWR RED DIAG T4	Column	None	A36	Typical
738	M289	N187	N188			TWR RED DIAG T5	Column	None	A36	Typical
739	M297	N193	N196			TWR RED DIAG T5	Column	None	A36	Typical
740	M306	N201	N196			TWR RED DIAG T5	Column	None	A36	Typical
741	M314	N205	N208			TWR RED DIAG T5	Column	None	A36	Typical
742	M323	N213	N208			TWR RED DIAG T5	Column	None	A36	Typical
743	M331	N217	N220			TWR RED DIAG T5	Column	None	A36	Typical
744	M340	N225	N220			TWR RED DIAG T5	Column	None	A36	Typical
745	M348	N229	N188			TWR RED DIAG T5	Column	None	A36	Typical
746	M370	N239	N240			TWR RED DIAG T6	Column	None	A36	Typical
747	M378	N245	N248			TWR RED DIAG T6	Column	None	A36	Typical
748	M387	N253	N248			TWR RED DIAG T6	Column	None	A36	Typical
749	M395	N257	N260			TWR RED DIAG T6	Column	None	A36	Typical
750	M404	N265	N260			TWR RED DIAG T6	Column	None	A36	Typical
751	M412	N269	N272			TWR RED DIAG T6	Column	None	A36	Typical
752	M421	N277	N272			TWR RED DIAG T6	Column	None	A36	Typical
753	M429	N281	N240			TWR RED DIAG T6	Column	None	A36	Typical
754	M451	N291	N292			TWR RED DIAG T7	Column	None	A36	Typical
755	M459	N297	N300			TWR RED DIAG T7	Column	None	A36	Typical
756	M468	N305	N300			TWR RED DIAG T7	Column	None	A36	Typical
757	M476	N309	N312			TWR RED DIAG T7	Column	None	A36	Typical
758	M485	N317	N312			TWR RED DIAG T7	Column	None	A36	Typical
759	M493	N321	N324			TWR RED DIAG T7	Column	None	A36	Typical
760	M502	N329	N324			TWR RED DIAG T7	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
761	M510	N333	N292			TWR RED DIAG T7	Column	None	A36	Typical
762	M532	N343	N344			TWR RED DIAG T8	Column	None	A36	Typical
763	M540	N349	N352			TWR RED DIAG T8	Column	None	A36	Typical
764	M549	N357	N352			TWR RED DIAG T8	Column	None	A36	Typical
765	M557	N361	N364			TWR RED DIAG T8	Column	None	A36	Typical
766	M566	N369	N364			TWR RED DIAG T8	Column	None	A36	Typical
767	M574	N373	N376			TWR RED DIAG T8	Column	None	A36	Typical
768	M583	N381	N376			TWR RED DIAG T8	Column	None	A36	Typical
769	M591	N385	N344			TWR RED DIAG T8	Column	None	A36	Typical
770	M613	N395	N396			TWR RED DIAG T9	Column	None	A36	Typical
771	M621	N401	N404			TWR RED DIAG T9	Column	None	A36	Typical
772	M630	N409	N404			TWR RED DIAG T9	Column	None	A36	Typical
773	M638	N413	N416			TWR RED DIAG T9	Column	None	A36	Typical
774	M647	N421	N416			TWR RED DIAG T9	Column	None	A36	Typical
775	M655	N425	N428			TWR RED DIAG T9	Column	None	A36	Typical
776	M664	N433	N428			TWR RED DIAG T9	Column	None	A36	Typical
777	M672	N437	N396			TWR RED DIAG T9	Column	None	A36	Typical
778	M694	N447	N448		7.169	TWR RED DIAG T10	Column	None	A36	Typical
779	M704	N455	N458		352.831	TWR RED DIAG T10	Column	None	A36	Typical
780	M715	N465	N458		7.169	TWR RED DIAG T10	Column	None	A36	Typical
781	M725	N470	N473		352.831	TWR RED DIAG T10	Column	None	A36	Typical
782	M736	N480	N473		7.169	TWR RED DIAG T10	Column	None	A36	Typical
783	M746	N485	N488		352.831	TWR RED DIAG T10	Column	None	A36	Typical
784	M757	N495	N488		7.169	TWR RED DIAG T10	Column	None	A36	Typical
785	M767	N500	N448		352.831	TWR RED DIAG T10	Column	None	A36	Typical
786	M807	N465	N517			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
787	M808	N517	N455			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
788	M809	N447	N518			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
789	M810	N518	N500			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
790	M811	N495	N519			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
791	M812	N519	N485			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
792	M813	N480	N520			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
793	M814	N520	N470			TWR RED HIPDIA 1 T10	Column	None	A36	Typical
794	M1246	N824	N836			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
795	M1247	N836	N825			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
796	M1248	N826	N837			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
797	M1249	N837	N827			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
798	M1250	N828	N838			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
799	M1251	N838	N829			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
800	M1252	N831	N839			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
801	M1253	N839	N830			TWR RED HIPDIA 2 T2	Column	None	A36	Typical
802	M1194	N786	N798			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
803	M1195	N798	N787			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
804	M1196	N788	N799			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
805	M1197	N799	N789			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
806	M1198	N792	N800			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
807	M1199	N800	N793			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
808	M1200	N791	N801			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
809	M1201	N801	N790			TWR RED HIPDIA 2 T3	Column	None	A36	Typical
810	M1142	N748	N760			TWR RED HIPDIA 2 T4	Column	None	A36	Typical
811	M1143	N760	N749			TWR RED HIPDIA 2 T4	Column	None	A36	Typical
812	M1144	N750	N761			TWR RED HIPDIA 2 T4	Column	None	A36	Typical
813	M1145	N761	N751			TWR RED HIPDIA 2 T4	Column	None	A36	Typical
814	M1146	N754	N762			TWR RED HIPDIA 2 T4	Column	None	A36	Typical
815	M1147	N762	N755			TWR RED HIPDIA 2 T4	Column	None	A36	Typical
816	M1148	N753	N763			TWR RED HIPDIA 2 T4	Column	None	A36	Typical
817	M1149	N763	N752			TWR RED HIPDIA 2 T4	Column	None	A36	Typical



**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
818	M1090	N710	N722			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
819	M1091	N722	N711			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
820	M1092	N712	N723			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
821	M1093	N723	N713			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
822	M1094	N717	N724			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
823	M1095	N724	N716			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
824	M1096	N714	N725			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
825	M1097	N725	N715			TWR RED HIPDIA 2 T5	Column	None	A36	Typical
826	M1038	N672	N684			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
827	M1039	N684	N673			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
828	M1040	N676	N685			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
829	M1041	N685	N677			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
830	M1042	N678	N686			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
831	M1043	N686	N679			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
832	M1044	N674	N687			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
833	M1045	N687	N675			TWR RED HIPDIA 2 T6	Column	None	A36	Typical
834	M986	N634	N646			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
835	M987	N646	N635			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
836	M988	N636	N647			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
837	M989	N647	N637			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
838	M990	N638	N648			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
839	M991	N648	N639			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
840	M992	N640	N649			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
841	M993	N649	N641			TWR RED HIPDIA 2 T7	Column	None	A36	Typical
842	M934	N596	N608			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
843	M935	N608	N597			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
844	M936	N603	N609			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
845	M937	N609	N602			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
846	M938	N600	N610			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
847	M939	N610	N601			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
848	M940	N599	N611			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
849	M941	N611	N598			TWR RED HIPDIA 2 T8	Column	None	A36	Typical
850	M815	N467	N521			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
851	M816	N521	N459			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
852	M817	N451	N522			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
853	M818	N522	N502			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
854	M819	N497	N523			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
855	M820	N523	N489			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
856	M821	N482	N524			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
857	M822	N524	N474			TWR RED HIPDIA 3 T10	Column	None	A36	Typical
858	M1238	N816	N832			TWR RED HIPDIA T2	Column	None	A36	Typical
859	M1239	N832	N817			TWR RED HIPDIA T2	Column	None	A36	Typical
860	M1240	N818	N833			TWR RED HIPDIA T2	Column	None	A36	Typical
861	M1241	N833	N819			TWR RED HIPDIA T2	Column	None	A36	Typical
862	M1242	N820	N834			TWR RED HIPDIA T2	Column	None	A36	Typical
863	M1243	N834	N821			TWR RED HIPDIA T2	Column	None	A36	Typical
864	M1244	N823	N835			TWR RED HIPDIA T2	Column	None	A36	Typical
865	M1245	N835	N822			TWR RED HIPDIA T2	Column	None	A36	Typical
866	M1186	N780	N794			TWR RED HIPDIA T3	Column	None	A36	Typical
867	M1187	N794	N781			TWR RED HIPDIA T3	Column	None	A36	Typical
868	M1188	N782	N795			TWR RED HIPDIA T3	Column	None	A36	Typical
869	M1189	N795	N783			TWR RED HIPDIA T3	Column	None	A36	Typical
870	M1190	N778	N796			TWR RED HIPDIA T3	Column	None	A36	Typical
871	M1191	N796	N779			TWR RED HIPDIA T3	Column	None	A36	Typical
872	M1192	N784	N797			TWR RED HIPDIA T3	Column	None	A36	Typical
873	M1193	N797	N785			TWR RED HIPDIA T3	Column	None	A36	Typical
874	M1134	N742	N756			TWR RED HIPDIA T4	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
875	M1135	N756	N743			TWR RED HIPDIA T4	Column	None	A36	Typical
876	M1136	N740	N757			TWR RED HIPDIA T4	Column	None	A36	Typical
877	M1137	N757	N741			TWR RED HIPDIA T4	Column	None	A36	Typical
878	M1138	N746	N758			TWR RED HIPDIA T4	Column	None	A36	Typical
879	M1139	N758	N747			TWR RED HIPDIA T4	Column	None	A36	Typical
880	M1140	N744	N759			TWR RED HIPDIA T4	Column	None	A36	Typical
881	M1141	N759	N745			TWR RED HIPDIA T4	Column	None	A36	Typical
882	M1082	N702	N718			TWR RED HIPDIA T5	Column	None	A36	Typical
883	M1083	N718	N703			TWR RED HIPDIA T5	Column	None	A36	Typical
884	M1084	N704	N719			TWR RED HIPDIA T5	Column	None	A36	Typical
885	M1085	N719	N705			TWR RED HIPDIA T5	Column	None	A36	Typical
886	M1086	N706	N720			TWR RED HIPDIA T5	Column	None	A36	Typical
887	M1087	N720	N707			TWR RED HIPDIA T5	Column	None	A36	Typical
888	M1088	N708	N721			TWR RED HIPDIA T5	Column	None	A36	Typical
889	M1089	N721	N709			TWR RED HIPDIA T5	Column	None	A36	Typical
890	M1030	N664	N680			TWR RED HIPDIA T6	Column	None	A36	Typical
891	M1031	N680	N665			TWR RED HIPDIA T6	Column	None	A36	Typical
892	M1032	N666	N681			TWR RED HIPDIA T6	Column	None	A36	Typical
893	M1033	N681	N667			TWR RED HIPDIA T6	Column	None	A36	Typical
894	M1034	N668	N682			TWR RED HIPDIA T6	Column	None	A36	Typical
895	M1035	N682	N669			TWR RED HIPDIA T6	Column	None	A36	Typical
896	M1036	N671	N683			TWR RED HIPDIA T6	Column	None	A36	Typical
897	M1037	N683	N670			TWR RED HIPDIA T6	Column	None	A36	Typical
898	M978	N626	N642			TWR RED HIPDIA T7	Column	None	A36	Typical
899	M979	N642	N627			TWR RED HIPDIA T7	Column	None	A36	Typical
900	M980	N628	N643			TWR RED HIPDIA T7	Column	None	A36	Typical
901	M981	N643	N629			TWR RED HIPDIA T7	Column	None	A36	Typical
902	M982	N632	N644			TWR RED HIPDIA T7	Column	None	A36	Typical
903	M983	N644	N633			TWR RED HIPDIA T7	Column	None	A36	Typical
904	M984	N630	N645			TWR RED HIPDIA T7	Column	None	A36	Typical
905	M985	N645	N631			TWR RED HIPDIA T7	Column	None	A36	Typical
906	M926	N588	N604			TWR RED HIPDIA T8	Column	None	A36	Typical
907	M927	N604	N589			TWR RED HIPDIA T8	Column	None	A36	Typical
908	M928	N590	N605			TWR RED HIPDIA T8	Column	None	A36	Typical
909	M929	N605	N591			TWR RED HIPDIA T8	Column	None	A36	Typical
910	M930	N592	N606			TWR RED HIPDIA T8	Column	None	A36	Typical
911	M931	N606	N593			TWR RED HIPDIA T8	Column	None	A36	Typical
912	M932	N594	N607			TWR RED HIPDIA T8	Column	None	A36	Typical
913	M933	N607	N595			TWR RED HIPDIA T8	Column	None	A36	Typical
914	M874	N550	N566			TWR RED HIPDIA T9	Column	None	A36	Typical
915	M875	N566	N551			TWR RED HIPDIA T9	Column	None	A36	Typical
916	M876	N557	N567			TWR RED HIPDIA T9	Column	None	A36	Typical
917	M877	N567	N556			TWR RED HIPDIA T9	Column	None	A36	Typical
918	M878	N554	N568			TWR RED HIPDIA T9	Column	None	A36	Typical
919	M879	N568	N555			TWR RED HIPDIA T9	Column	None	A36	Typical
920	M880	N552	N569			TWR RED HIPDIA T9	Column	None	A36	Typical
921	M881	N569	N553			TWR RED HIPDIA T9	Column	None	A36	Typical
922	M799	N480	N470			TWR RED HIP 1 T10	Column	None	A36	Typical
923	M800	N465	N455			TWR RED HIP 1 T10	Column	None	A36	Typical
924	M801	N485	N495			TWR RED HIP 1 T10	Column	None	A36	Typical
925	M806	N447	N500			TWR RED HIP 1 T10	Column	None	A36	Typical
926	M1234	N824	N825			TWR RED HIP 2 T2	Column	None	A36	Typical
927	M1235	N826	N827			TWR RED HIP 2 T2	Column	None	A36	Typical
928	M1236	N828	N829			TWR RED HIP 2 T2	Column	None	A36	Typical
929	M1237	N830	N831			TWR RED HIP 2 T2	Column	None	A36	Typical
930	M1182	N786	N787			TWR RED HIP 2 T3	Column	None	A36	Typical
931	M1183	N788	N789			TWR RED HIP 2 T3	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
932	M1184	N790	N791			TWR RED HIP 2 T3	Column	None	A36	Typical
933	M1185	N792	N793			TWR RED HIP 2 T3	Column	None	A36	Typical
934	M1130	N748	N749			TWR RED HIP 2 T4	Column	None	A36	Typical
935	M1131	N750	N751			TWR RED HIP 2 T4	Column	None	A36	Typical
936	M1132	N752	N753			TWR RED HIP 2 T4	Column	None	A36	Typical
937	M1133	N754	N755			TWR RED HIP 2 T4	Column	None	A36	Typical
938	M1078	N710	N711			TWR RED HIP 2 T5	Column	None	A36	Typical
939	M1079	N712	N713			TWR RED HIP 2 T5	Column	None	A36	Typical
940	M1080	N714	N715			TWR RED HIP 2 T5	Column	None	A36	Typical
941	M1081	N716	N717			TWR RED HIP 2 T5	Column	None	A36	Typical
942	M1026	N672	N673			TWR RED HIP 2 T6	Column	None	A36	Typical
943	M1027	N674	N675			TWR RED HIP 2 T6	Column	None	A36	Typical
944	M1028	N676	N677			TWR RED HIP 2 T6	Column	None	A36	Typical
945	M1029	N678	N679			TWR RED HIP 2 T6	Column	None	A36	Typical
946	M974	N634	N635			TWR RED HIP 2 T7	Column	None	A36	Typical
947	M975	N636	N637			TWR RED HIP 2 T7	Column	None	A36	Typical
948	M976	N638	N639			TWR RED HIP 2 T7	Column	None	A36	Typical
949	M977	N640	N641			TWR RED HIP 2 T7	Column	None	A36	Typical
950	M922	N596	N597			TWR RED HIP 2 T8	Column	None	A36	Typical
951	M923	N598	N599			TWR RED HIP 2 T8	Column	None	A36	Typical
952	M924	N600	N601			TWR RED HIP 2 T8	Column	None	A36	Typical
953	M925	N602	N603			TWR RED HIP 2 T8	Column	None	A36	Typical
954	M870	N558	N559			TWR RED HIP 2 T9	Column	None	A36	Typical
955	M871	N560	N561			TWR RED HIP 2 T9	Column	None	A36	Typical
956	M872	N562	N563			TWR RED HIP 2 T9	Column	None	A36	Typical
957	M873	N564	N565			TWR RED HIP 2 T9	Column	None	A36	Typical
958	M802	N482	N474			TWR RED HIP 3 T10	Column	None	A36	Typical
959	M803	N467	N459			TWR RED HIP 3 T10	Column	None	A36	Typical
960	M804	N489	N497			TWR RED HIP 3 T10	Column	None	A36	Typical
961	M805	N502	N451			TWR RED HIP 3 T10	Column	None	A36	Typical
962	M1230	N816	N817			TWR RED HIP T2	Column	None	A36	Typical
963	M1231	N818	N819			TWR RED HIP T2	Column	None	A36	Typical
964	M1232	N820	N821			TWR RED HIP T2	Column	None	A36	Typical
965	M1233	N822	N823			TWR RED HIP T2	Column	None	A36	Typical
966	M1178	N778	N779			TWR RED HIP T3	Column	None	A36	Typical
967	M1179	N780	N781			TWR RED HIP T3	Column	None	A36	Typical
968	M1180	N782	N783			TWR RED HIP T3	Column	None	A36	Typical
969	M1181	N784	N785			TWR RED HIP T3	Column	None	A36	Typical
970	M1126	N740	N741			TWR RED HIP T4	Column	None	A36	Typical
971	M1127	N742	N743			TWR RED HIP T4	Column	None	A36	Typical
972	M1128	N744	N745			TWR RED HIP T4	Column	None	A36	Typical
973	M1129	N746	N747			TWR RED HIP T4	Column	None	A36	Typical
974	M1074	N702	N703			TWR RED HIP T5	Column	None	A36	Typical
975	M1075	N704	N705			TWR RED HIP T5	Column	None	A36	Typical
976	M1076	N706	N707			TWR RED HIP T5	Column	None	A36	Typical
977	M1077	N708	N709			TWR RED HIP T5	Column	None	A36	Typical
978	M1022	N664	N665			TWR RED HIP T6	Column	None	A36	Typical
979	M1023	N666	N667			TWR RED HIP T6	Column	None	A36	Typical
980	M1024	N668	N669			TWR RED HIP T6	Column	None	A36	Typical
981	M1025	N670	N671			TWR RED HIP T6	Column	None	A36	Typical
982	M970	N626	N627			TWR RED HIP T7	Column	None	A36	Typical
983	M971	N628	N629			TWR RED HIP T7	Column	None	A36	Typical
984	M972	N630	N631			TWR RED HIP T7	Column	None	A36	Typical
985	M973	N632	N633			TWR RED HIP T7	Column	None	A36	Typical
986	M918	N588	N589			TWR RED HIP T8	Column	None	A36	Typical
987	M919	N590	N591			TWR RED HIP T8	Column	None	A36	Typical
988	M920	N592	N593			TWR RED HIP T8	Column	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
989	M921	N594	N595			TWR RED HIP T8	Column	None	A36	Typical
990	M866	N550	N551			TWR RED HIP T9	Column	None	A36	Typical
991	M867	N552	N553			TWR RED HIP T9	Column	None	A36	Typical
992	M868	N554	N555			TWR RED HIP T9	Column	None	A36	Typical
993	M869	N556	N557			TWR RED HIP T9	Column	None	A36	Typical
994	M783	N510	N514			TWR RED HORZ 0 T10	Column	None	A36	Typical
995	M784	N514	N506			TWR RED HORZ 0 T10	Column	None	A36	Typical
996	M785	N512	N516			TWR RED HORZ 0 T10	Column	None	A36	Typical
997	M786	N516	N508			TWR RED HORZ 0 T10	Column	None	A36	Typical
998	M787	N507	N515			TWR RED HORZ 0 T10	Column	None	A36	Typical
999	M788	N515	N511			TWR RED HORZ 0 T10	Column	None	A36	Typical
1000	M789	N505	N513			TWR RED HORZ 0 T10	Column	None	A36	Typical
1001	M790	N513	N509			TWR RED HORZ 0 T10	Column	None	A36	Typical
1002	M1262	N23	N24			TWR RED HORZ 2 T1	Beam	None	A36	Typical
1003	M1263	N19	N20			TWR RED HORZ 2 T1	Beam	None	A36	Typical
1004	M1264	N15	N16			TWR RED HORZ 2 T1	Beam	None	A36	Typical
1005	M1265	N27	N28			TWR RED HORZ 2 T1	Beam	None	A36	Typical
1006	M53	N35	N36			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1007	M61	N42	N43			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1008	M69	N43	N48			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1009	M77	N53	N54			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1010	M85	N54	N59			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1011	M93	N64	N65			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1012	M101	N65	N70			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1013	M109	N74	N35			TWR RED HORZ 2 T2	Beam	None	A36	Typical
1014	M126	N84	N85			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1015	M134	N91	N92			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1016	M143	N92	N98			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1017	M151	N103	N104			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1018	M160	N104	N110			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1019	M168	N115	N116			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1020	M177	N116	N122			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1021	M185	N126	N84			TWR RED HORZ 2 T3	Beam	None	A36	Typical
1022	M207	N136	N137			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1023	M215	N143	N144			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1024	M224	N144	N150			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1025	M232	N155	N156			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1026	M241	N156	N162			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1027	M249	N167	N168			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1028	M258	N168	N174			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1029	M266	N178	N136			TWR RED HORZ 2 T4	Beam	None	A36	Typical
1030	M288	N188	N189			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1031	M296	N195	N196			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1032	M305	N196	N202			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1033	M313	N207	N208			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1034	M322	N208	N214			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1035	M330	N219	N220			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1036	M339	N220	N226			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1037	M347	N230	N188			TWR RED HORZ 2 T5	Beam	None	A36	Typical
1038	M369	N240	N241			TWR RED HORZ 2 T6	Beam	None	A36	Typical
1039	M377	N247	N248			TWR RED HORZ 2 T6	Beam	None	A36	Typical
1040	M386	N248	N254			TWR RED HORZ 2 T6	Beam	None	A36	Typical
1041	M394	N259	N260			TWR RED HORZ 2 T6	Beam	None	A36	Typical
1042	M403	N260	N266			TWR RED HORZ 2 T6	Beam	None	A36	Typical
1043	M411	N271	N272			TWR RED HORZ 2 T6	Beam	None	A36	Typical
1044	M420	N272	N278			TWR RED HORZ 2 T6	Beam	None	A36	Typical
1045	M428	N282	N240			TWR RED HORZ 2 T6	Beam	None	A36	Typical

**Member Primary Data (Continued)**

Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
1046	M450	N292	N293		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1047	M458	N299	N300		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1048	M467	N300	N306		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1049	M475	N311	N312		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1050	M484	N312	N318		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1051	M492	N323	N324		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1052	M501	N324	N330		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1053	M509	N334	N292		TWR RED HORZ 2 T7	Beam	None	A36	Typical
1054	M531	N344	N345		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1055	M539	N351	N352		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1056	M548	N352	N358		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1057	M556	N363	N364		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1058	M565	N364	N370		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1059	M573	N375	N376		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1060	M582	N376	N382		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1061	M590	N386	N344		TWR RED HORZ 2 T8	Beam	None	A36	Typical
1062	M612	N396	N397		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1063	M620	N403	N404		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1064	M629	N404	N410		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1065	M637	N415	N416		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1066	M646	N416	N422		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1067	M654	N427	N428		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1068	M663	N428	N434		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1069	M671	N438	N396		TWR RED HORZ 2 T9	Beam	None	A36	Typical
1070	M693	N448	N449	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1071	M703	N457	N458	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1072	M714	N458	N466	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1073	M724	N472	N473	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1074	M735	N473	N481	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1075	M745	N487	N488	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1076	M756	N488	N496	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1077	M766	N501	N448	357.328	TWR RED HORZ 2 T10	Beam	None	A36	Typical
1078	M1290	N848	N849		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1079	M1291	N850	N851		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1080	M1292	N852	N853		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1081	M1293	N854	N855		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1082	M1294	N856	N857		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1083	M1295	N858	N859		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1084	M1296	N860	N861		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1085	M1297	N862	N863		TWR RED HORZ 3 T1	Beam	None	A36	Typical
1086	M55	N37	N38		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1087	M63	N44	N45		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1088	M71	N45	N49		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1089	M79	N55	N56		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1090	M87	N56	N60		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1091	M95	N66	N67		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1092	M103	N67	N71		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1093	M111	N75	N37		TWR RED HORZ 3 T2	Beam	None	A36	Typical
1094	M128	N86	N87		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1095	M136	N93	N94		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1096	M145	N94	N99		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1097	M153	N105	N106		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1098	M162	N106	N111		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1099	M170	N117	N118		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1100	M179	N118	N123		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1101	M187	N127	N86		TWR RED HORZ 3 T3	Beam	None	A36	Typical
1102	M209	N138	N139		TWR RED HORZ 3 T4	Beam	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
1103	M217	N145	N146			TWR RED HORZ 3 T4	Beam	None	A36	Typical
1104	M226	N146	N151			TWR RED HORZ 3 T4	Beam	None	A36	Typical
1105	M234	N157	N158			TWR RED HORZ 3 T4	Beam	None	A36	Typical
1106	M243	N158	N163			TWR RED HORZ 3 T4	Beam	None	A36	Typical
1107	M251	N169	N170			TWR RED HORZ 3 T4	Beam	None	A36	Typical
1108	M260	N170	N175			TWR RED HORZ 3 T4	Beam	None	A36	Typical
1109	M268	N179	N138			TWR RED HORZ 3 T4	Beam	None	A36	Typical
1110	M290	N190	N191			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1111	M298	N197	N198			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1112	M307	N198	N203			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1113	M315	N209	N210			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1114	M324	N210	N215			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1115	M332	N221	N222			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1116	M341	N222	N227			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1117	M349	N231	N190			TWR RED HORZ 3 T5	Beam	None	A36	Typical
1118	M371	N242	N243			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1119	M379	N249	N250			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1120	M388	N250	N255			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1121	M396	N261	N262			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1122	M405	N262	N267			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1123	M413	N273	N274			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1124	M422	N274	N279			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1125	M430	N283	N242			TWR RED HORZ 3 T6	Beam	None	A36	Typical
1126	M452	N294	N295			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1127	M460	N301	N302			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1128	M469	N302	N307			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1129	M477	N313	N314			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1130	M486	N314	N319			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1131	M494	N325	N326			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1132	M503	N326	N331			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1133	M511	N335	N294			TWR RED HORZ 3 T7	Beam	None	A36	Typical
1134	M533	N346	N347			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1135	M541	N353	N354			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1136	M550	N354	N359			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1137	M558	N365	N366			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1138	M567	N366	N371			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1139	M575	N377	N378			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1140	M584	N378	N383			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1141	M592	N387	N346			TWR RED HORZ 3 T8	Beam	None	A36	Typical
1142	M614	N398	N399			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1143	M622	N405	N406			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1144	M631	N406	N411			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1145	M639	N417	N418			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1146	M648	N418	N423			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1147	M656	N429	N430			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1148	M665	N430	N435			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1149	M673	N439	N398			TWR RED HORZ 3 T9	Beam	None	A36	Typical
1150	M695	N450	N451		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1151	M705	N459	N460		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1152	M716	N460	N467		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1153	M726	N474	N475		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1154	M737	N475	N482		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1155	M747	N489	N490		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1156	M758	N490	N497		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1157	M768	N502	N450		357.328	TWR RED HORZ 3 T10	Beam	None	A36	Typical
1158	M1298	N851	N864			TWR RED HORZ 4 T1	Beam	None	A36	Typical
1159	M1299	N864	N863			TWR RED HORZ 4 T1	Beam	None	A36	Typical

**Member Primary Data (Continued)**

Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
1160	M1300	N860	N865		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1161	M1301	N865	N859		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1162	M1302	N848	N866		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1163	M1303	N866	N852		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1164	M1304	N855	N867		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1165	M1305	N867	N856		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1166	M1306	N853	N854		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1167	M1307	N849	N850		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1168	M1308	N862	N861		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1169	M1309	N858	N857		TWR RED HORZ 4 T1	Beam	None	A36	Typical
1170	M697	N452	N453	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1171	M707	N461	N462	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1172	M718	N462	N468	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1173	M728	N476	N477	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1174	M739	N477	N483	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1175	M749	N491	N492	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1176	M760	N492	N498	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1177	M770	N503	N452	357.328	TWR RED HORZ 4 T10	Beam	None	A36	Typical
1178	M16	N14	N15		TWR RED HORZ T1	Beam	None	A36	Typical
1179	M19	N16	N17		TWR RED HORZ T1	Beam	None	A36	Typical
1180	M23	N17	N19		TWR RED HORZ T1	Beam	None	A36	Typical
1181	M26	N20	N21		TWR RED HORZ T1	Beam	None	A36	Typical
1182	M30	N21	N23		TWR RED HORZ T1	Beam	None	A36	Typical
1183	M33	N24	N25		TWR RED HORZ T1	Beam	None	A36	Typical
1184	M37	N25	N27		TWR RED HORZ T1	Beam	None	A36	Typical
1185	M40	N28	N14		TWR RED HORZ T1	Beam	None	A36	Typical
1186	M52	N33	N34		TWR RED HORZ T2	Beam	None	A36	Typical
1187	M60	N40	N41		TWR RED HORZ T2	Beam	None	A36	Typical
1188	M68	N41	N47		TWR RED HORZ T2	Beam	None	A36	Typical
1189	M76	N51	N52		TWR RED HORZ T2	Beam	None	A36	Typical
1190	M84	N52	N58		TWR RED HORZ T2	Beam	None	A36	Typical
1191	M92	N62	N63		TWR RED HORZ T2	Beam	None	A36	Typical
1192	M100	N63	N69		TWR RED HORZ T2	Beam	None	A36	Typical
1193	M108	N73	N33		TWR RED HORZ T2	Beam	None	A36	Typical
1194	M125	N82	N83		TWR RED HORZ T3	Beam	None	A36	Typical
1195	M133	N89	N90		TWR RED HORZ T3	Beam	None	A36	Typical
1196	M142	N90	N97		TWR RED HORZ T3	Beam	None	A36	Typical
1197	M150	N101	N102		TWR RED HORZ T3	Beam	None	A36	Typical
1198	M159	N102	N109		TWR RED HORZ T3	Beam	None	A36	Typical
1199	M167	N113	N114		TWR RED HORZ T3	Beam	None	A36	Typical
1200	M176	N114	N121		TWR RED HORZ T3	Beam	None	A36	Typical
1201	M184	N125	N82		TWR RED HORZ T3	Beam	None	A36	Typical
1202	M206	N134	N135		TWR RED HORZ T4	Beam	None	A36	Typical
1203	M214	N141	N142		TWR RED HORZ T4	Beam	None	A36	Typical
1204	M223	N142	N149		TWR RED HORZ T4	Beam	None	A36	Typical
1205	M231	N153	N154		TWR RED HORZ T4	Beam	None	A36	Typical
1206	M240	N154	N161		TWR RED HORZ T4	Beam	None	A36	Typical
1207	M248	N165	N166		TWR RED HORZ T4	Beam	None	A36	Typical
1208	M257	N166	N173		TWR RED HORZ T4	Beam	None	A36	Typical
1209	M265	N177	N134		TWR RED HORZ T4	Beam	None	A36	Typical
1210	M287	N186	N187		TWR RED HORZ T5	Beam	None	A36	Typical
1211	M295	N193	N194		TWR RED HORZ T5	Beam	None	A36	Typical
1212	M304	N194	N201		TWR RED HORZ T5	Beam	None	A36	Typical
1213	M312	N205	N206		TWR RED HORZ T5	Beam	None	A36	Typical
1214	M321	N206	N213		TWR RED HORZ T5	Beam	None	A36	Typical
1215	M329	N217	N218		TWR RED HORZ T5	Beam	None	A36	Typical
1216	M338	N218	N225		TWR RED HORZ T5	Beam	None	A36	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
1217	M346	N229	N186			TWR RED HORZ T5	Beam	None	A36	Typical
1218	M368	N238	N239			TWR RED HORZ T6	Beam	None	A36	Typical
1219	M376	N245	N246			TWR RED HORZ T6	Beam	None	A36	Typical
1220	M385	N246	N253			TWR RED HORZ T6	Beam	None	A36	Typical
1221	M393	N257	N258			TWR RED HORZ T6	Beam	None	A36	Typical
1222	M402	N258	N265			TWR RED HORZ T6	Beam	None	A36	Typical
1223	M410	N269	N270			TWR RED HORZ T6	Beam	None	A36	Typical
1224	M419	N270	N277			TWR RED HORZ T6	Beam	None	A36	Typical
1225	M427	N281	N238			TWR RED HORZ T6	Beam	None	A36	Typical
1226	M449	N290	N291			TWR RED HORZ T7	Beam	None	A36	Typical
1227	M457	N297	N298			TWR RED HORZ T7	Beam	None	A36	Typical
1228	M466	N298	N305			TWR RED HORZ T7	Beam	None	A36	Typical
1229	M474	N309	N310			TWR RED HORZ T7	Beam	None	A36	Typical
1230	M483	N310	N317			TWR RED HORZ T7	Beam	None	A36	Typical
1231	M491	N321	N322			TWR RED HORZ T7	Beam	None	A36	Typical
1232	M500	N322	N329			TWR RED HORZ T7	Beam	None	A36	Typical
1233	M508	N333	N290			TWR RED HORZ T7	Beam	None	A36	Typical
1234	M530	N342	N343			TWR RED HORZ T8	Beam	None	A36	Typical
1235	M538	N349	N350			TWR RED HORZ T8	Beam	None	A36	Typical
1236	M547	N350	N357			TWR RED HORZ T8	Beam	None	A36	Typical
1237	M555	N361	N362			TWR RED HORZ T8	Beam	None	A36	Typical
1238	M564	N362	N369			TWR RED HORZ T8	Beam	None	A36	Typical
1239	M572	N373	N374			TWR RED HORZ T8	Beam	None	A36	Typical
1240	M581	N374	N381			TWR RED HORZ T8	Beam	None	A36	Typical
1241	M589	N385	N342			TWR RED HORZ T8	Beam	None	A36	Typical
1242	M611	N394	N395			TWR RED HORZ T9	Beam	None	A36	Typical
1243	M619	N401	N402			TWR RED HORZ T9	Beam	None	A36	Typical
1244	M628	N402	N409			TWR RED HORZ T9	Beam	None	A36	Typical
1245	M636	N413	N414			TWR RED HORZ T9	Beam	None	A36	Typical
1246	M645	N414	N421			TWR RED HORZ T9	Beam	None	A36	Typical
1247	M653	N425	N426			TWR RED HORZ T9	Beam	None	A36	Typical
1248	M662	N426	N433			TWR RED HORZ T9	Beam	None	A36	Typical
1249	M670	N437	N394			TWR RED HORZ T9	Beam	None	A36	Typical
1250	M692	N446	N447		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1251	M702	N455	N456		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1252	M713	N456	N465		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1253	M723	N470	N471		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1254	M734	N471	N480		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1255	M744	N485	N486		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1256	M755	N486	N495		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1257	M765	N500	N446		357.328	TWR RED HORZ T10	Beam	None	A36	Typical
1258	M5	N1	N3			TWR TOP GIRT T1	Beam	Wide Flange	A36	Typical
1259	M6	N3	N5			TWR TOP GIRT T1	Beam	Wide Flange	A36	Typical
1260	M7	N5	N7			TWR TOP GIRT T1	Beam	Wide Flange	A36	Typical
1261	M8	N7	N1			TWR TOP GIRT T1	Beam	Wide Flange	A36	Typical
1262	M10	N10	N11			TWR INNER SUPP T1	Beam	None	A36_Gen	Typical
1263	M12	N12	N9			TWR INNER SUPP T1	Beam	None	A36_Gen	Typical
1264	M13	N9	N11			TWR INNER SUPP T1	Beam	None	A36_Gen	Typical
1265	M46	N13	N22			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
1266	M115	N46	N50			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
1267	M116	N57	N61			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
1268	M117	N68	N72			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
1269	M118	N76	N39			TWR INNER SUPP T2	Beam	Wide Flange	A36	Typical
1270	M195	N81	N108			TWR INNER SUPP T3	Beam	None	A36	Typical
1271	M196	N95	N100			TWR INNER SUPP T3	Beam	None	A36	Typical
1272	M197	N107	N112			TWR INNER SUPP T3	Beam	None	A36	Typical
1273	M198	N119	N124			TWR INNER SUPP T3	Beam	None	A36	Typical



**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(...)	Section/Shape	Type	Design List	Material	Design R...
1274	M199	N128	N88			TWR INNER SUPP T3	Beam	None	A36	Typical
1275	M276	N133	N160			TWR INNER SUPP T4	Beam	None	A36	Typical
1276	M277	N147	N152			TWR INNER SUPP T4	Beam	None	A36	Typical
1277	M278	N159	N164			TWR INNER SUPP T4	Beam	None	A36	Typical
1278	M279	N171	N176			TWR INNER SUPP T4	Beam	None	A36	Typical
1279	M280	N180	N140			TWR INNER SUPP T4	Beam	None	A36	Typical
1280	M357	N185	N212			TWR INNER SUPP T5	Beam	None	A36	Typical
1281	M358	N199	N204			TWR INNER SUPP T5	Beam	None	A36	Typical
1282	M359	N211	N216			TWR INNER SUPP T5	Beam	None	A36	Typical
1283	M360	N223	N228			TWR INNER SUPP T5	Beam	None	A36	Typical
1284	M361	N232	N192			TWR INNER SUPP T5	Beam	None	A36	Typical
1285	M438	N237	N264			TWR INNER SUPP T6	Beam	None	A36	Typical
1286	M439	N251	N256			TWR INNER SUPP T6	Beam	None	A36	Typical
1287	M440	N263	N268			TWR INNER SUPP T6	Beam	None	A36	Typical
1288	M441	N275	N280			TWR INNER SUPP T6	Beam	None	A36	Typical
1289	M442	N284	N244			TWR INNER SUPP T6	Beam	None	A36	Typical
1290	M519	N289	N316			TWR INNER SUPP T7	Beam	None	A36	Typical
1291	M520	N303	N308			TWR INNER SUPP T7	Beam	None	A36	Typical
1292	M521	N315	N320			TWR INNER SUPP T7	Beam	None	A36	Typical
1293	M522	N327	N332			TWR INNER SUPP T7	Beam	None	A36	Typical
1294	M523	N336	N296			TWR INNER SUPP T7	Beam	None	A36	Typical
1295	M600	N341	N368			TWR INNER SUPP T8	Beam	None	A36	Typical
1296	M601	N355	N360			TWR INNER SUPP T8	Beam	None	A36	Typical
1297	M602	N367	N372			TWR INNER SUPP T8	Beam	None	A36	Typical
1298	M603	N379	N384			TWR INNER SUPP T8	Beam	None	A36	Typical
1299	M604	N388	N348			TWR INNER SUPP T8	Beam	None	A36	Typical
1300	M681	N393	N420			TWR INNER SUPP T9	Beam	None	A36	Typical
1301	M682	N407	N412			TWR INNER SUPP T9	Beam	None	A36	Typical
1302	M683	N419	N424			TWR INNER SUPP T9	Beam	None	A36	Typical
1303	M684	N431	N436			TWR INNER SUPP T9	Beam	None	A36	Typical
1304	M685	N440	N400			TWR INNER SUPP T9	Beam	None	A36	Typical
1305	M778	N445	N479			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
1306	M779	N463	N469			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
1307	M780	N478	N484			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
1308	M781	N493	N499			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical
1309	M782	N504	N454			TWR INNER SUPP T10	Beam	None	A36_Gen	Typical

**Hot Rolled Steel Design Parameters**

	Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
1	M1274	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
2	M1275	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
3	M1276	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
4	M1277	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
5	M1278	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
6	M1279	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
7	M1280	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
8	M1281	TWR_DIAG_OUTER_T1	18.039	18.039	18.039	18.039	18.039	18.039	1.04	1		Lateral
9	M1282	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
10	M1283	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
11	M1284	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
12	M1285	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
13	M1286	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
14	M1287	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
15	M1288	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral
16	M1289	TWR_DIAG_OUTER_T1	15.569	15.569	15.569	15.569	15.569	15.569	1.05	1		Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
17	M15	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
18	M18	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
19	M22	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
20	M25	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
21	M29	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
22	M32	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
23	M36	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
24	M39	TWR DIAG T1	18.298	18.298	18.298	18.298	18.298	18.298	1.05	1	Lateral
25	M51	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
26	M59	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
27	M67	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
28	M75	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
29	M83	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
30	M91	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
31	M99	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
32	M107	TWR DIAG T2	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
33	M124	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
34	M132	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
35	M141	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
36	M149	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
37	M158	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
38	M166	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
39	M175	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
40	M183	TWR DIAG T3	30.093	10.031	7.523	7.523	7.523	7.523	1.09	1	Lateral
41	M205	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
42	M213	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
43	M222	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
44	M230	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
45	M239	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
46	M247	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
47	M256	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
48	M264	TWR DIAG T4	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
49	M286	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
50	M294	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
51	M303	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
52	M311	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
53	M320	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
54	M328	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
55	M337	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
56	M345	TWR DIAG T5	30.093	10.031	7.523	7.523	7.523	7.523	1.1	1	Lateral
57	M367	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
58	M375	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
59	M384	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
60	M392	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
61	M401	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
62	M409	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
63	M418	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
64	M426	TWR DIAG T6	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
65	M448	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
66	M456	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
67	M465	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
68	M473	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
69	M482	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
70	M490	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
71	M499	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
72	M507	TWR DIAG T7	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral
73	M529	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	7.523	1.08	1	Lateral



Company : GPD  
 Designer : tclark  
 Job Number : 2016708.42 Rev. 1  
 Model Name : TAG0053 CHESHIRE

June 1, 2016  
 12:47 PM  
 Checked By: \_\_\_\_\_

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbwy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
74	M537	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
75	M546	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
76	M554	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
77	M563	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
78	M571	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
79	M580	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
80	M588	TWR DIAG T8	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
81	M610	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
82	M618	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
83	M627	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
84	M635	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
85	M644	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
86	M652	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
87	M661	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
88	M669	TWR DIAG T9	30.093	10.031	7.523	7.523	7.523	1.08	1		Lateral
89	M691	TWR DIAG T10	41.787	13.929	6.965	6.965	6.965	1.02	1		Lateral
90	M701	TWR DIAG T10	41.787	13.929	6.965	6.965	6.965	1.02	1		Lateral
91	M712	TWR DIAG T10	41.451	13.817	6.909	6.909	6.909	1.02	1		Lateral
92	M722	TWR DIAG T10	41.451	13.817	6.909	6.909	6.909	1.02	1		Lateral
93	M733	TWR DIAG T10	41.787	13.929	6.965	6.965	6.965	1.02	1		Lateral
94	M743	TWR DIAG T10	41.787	13.929	6.965	6.965	6.965	1.02	1		Lateral
95	M754	TWR DIAG T10	41.451	13.817	6.909	6.909	6.909	1.02	1		Lateral
96	M764	TWR DIAG T10	41.451	13.817	6.909	6.909	6.909	1.02	1		Lateral
97	M1270	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	1	1		Lateral
98	M1271	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	1	1		Lateral
99	M1272	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	1	1		Lateral
100	M1273	TWR_HORZ_OUTER_T1	41.5	8.75	20.75	20.75	20.75	1	1		Lateral
101	M123	TWR HORZ T3	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
102	M140	TWR HORZ T3	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
103	M157	TWR HORZ T3	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
104	M174	TWR HORZ T3	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
105	M204	TWR HORZ T4	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
106	M221	TWR HORZ T4	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
107	M238	TWR HORZ T4	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
108	M255	TWR HORZ T4	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
109	M285	TWR HORZ T5	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
110	M302	TWR HORZ T5	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
111	M319	TWR HORZ T5	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
112	M336	TWR HORZ T5	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
113	M366	TWR HORZ T6	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
114	M383	TWR HORZ T6	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
115	M400	TWR HORZ T6	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
116	M417	TWR HORZ T6	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
117	M447	TWR HORZ T7	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
118	M464	TWR HORZ T7	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
119	M481	TWR HORZ T7	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
120	M498	TWR HORZ T7	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
121	M528	TWR HORZ T8	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
122	M545	TWR HORZ T8	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
123	M562	TWR HORZ T8	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
124	M579	TWR HORZ T8	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
125	M609	TWR HORZ T9	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
126	M626	TWR HORZ T9	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
127	M643	TWR HORZ T9	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
128	M660	TWR HORZ T9	33.5	8.375	8.375	8.375	8.375	1.13	1		Lateral
129	M690	TWR HORZ T10	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral
130	M711	TWR HORZ T10	33.5	8.375	8.375	8.375	8.375	1.12	1		Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
131	M732	TWR_HORZ T10	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1	Lateral
132	M753	TWR_HORZ T10	33.5	8.375	8.375	8.375	8.375	8.375	1.12	1	Lateral
133	M1221	TWR_INNER_BRACE T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
134	M1222	TWR_INNER_BRACE T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
135	M1223	TWR_INNER_BRACE T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
136	M1224	TWR_INNER_BRACE T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
137	M1225	TWR_INNER_BRACE T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
138	M1226	TWR_INNER_BRACE T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
139	M1169	TWR_INNER_BRACE T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
140	M1170	TWR_INNER_BRACE T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
141	M1171	TWR_INNER_BRACE T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
142	M1172	TWR_INNER_BRACE T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
143	M1173	TWR_INNER_BRACE T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
144	M1174	TWR_INNER_BRACE T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
145	M1117	TWR_INNER_BRACE T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
146	M1118	TWR_INNER_BRACE T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
147	M1119	TWR_INNER_BRACE T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
148	M1120	TWR_INNER_BRACE T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
149	M1121	TWR_INNER_BRACE T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
150	M1122	TWR_INNER_BRACE T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
151	M1065	TWR_INNER_BRACE T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
152	M1066	TWR_INNER_BRACE T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
153	M1067	TWR_INNER_BRACE T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
154	M1068	TWR_INNER_BRACE T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
155	M1069	TWR_INNER_BRACE T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
156	M1070	TWR_INNER_BRACE T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
157	M1013	TWR_INNER_BRACE T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
158	M1014	TWR_INNER_BRACE T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
159	M1015	TWR_INNER_BRACE T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
160	M1016	TWR_INNER_BRACE T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
161	M1017	TWR_INNER_BRACE T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
162	M1018	TWR_INNER_BRACE T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
163	M961	TWR_INNER_BRACE T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
164	M962	TWR_INNER_BRACE T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
165	M963	TWR_INNER_BRACE T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
166	M964	TWR_INNER_BRACE T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
167	M965	TWR_INNER_BRACE T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
168	M966	TWR_INNER_BRACE T8	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
169	M909	TWR_INNER_BRACE T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
170	M910	TWR_INNER_BRACE T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
171	M911	TWR_INNER_BRACE T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
172	M912	TWR_INNER_BRACE T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
173	M913	TWR_INNER_BRACE T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
174	M914	TWR_INNER_BRACE T9	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1	Lateral
175	M1258	TWR_INNER_CORNER T2	11.844			Lbyy			1	1	Lateral
176	M1259	TWR_INNER_CORNER T2	11.844			Lbyy			1	1	Lateral
177	M1260	TWR_INNER_CORNER T2	11.844			Lbyy			1	1	Lateral
178	M1261	TWR_INNER_CORNER T2	11.844			Lbyy			1	1	Lateral
179	M1206	TWR_INNER_CORNER T3	11.844			Lbyy			1.03	1	Lateral
180	M1207	TWR_INNER_CORNER T3	11.844			Lbyy			1.03	1	Lateral
181	M1208	TWR_INNER_CORNER T3	11.844			Lbyy			1.03	1	Lateral
182	M1154	TWR_INNER_CORNER T4	11.844			Lbyy			1.03	1	Lateral
183	M1155	TWR_INNER_CORNER T4	11.844			Lbyy			1.03	1	Lateral
184	M1156	TWR_INNER_CORNER T4	11.844			Lbyy			1.03	1	Lateral
185	M1102	TWR_INNER_CORNER T5	11.844			Lbyy			1.03	1	Lateral
186	M1103	TWR_INNER_CORNER T5	11.844			Lbyy			1.03	1	Lateral
187	M1104	TWR_INNER_CORNER T5	11.844			Lbyy			1.03	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
188	M1050	TWR INNER CORNER T6	11.844				Lbyy		1.03	1	Lateral
189	M1051	TWR INNER CORNER T6	11.844				Lbyy		1.03	1	Lateral
190	M1052	TWR INNER CORNER T6	11.844				Lbyy		1.03	1	Lateral
191	M998	TWR INNER CORNER T7	11.844				Lbyy		1.03	1	Lateral
192	M999	TWR INNER CORNER T7	11.844				Lbyy		1.03	1	Lateral
193	M1000	TWR INNER CORNER T7	11.844				Lbyy		1.03	1	Lateral
194	M946	TWR INNER CORNER T8	11.844				Lbyy		1.03	1	Lateral
195	M947	TWR INNER CORNER T8	11.844				Lbyy		1.03	1	Lateral
196	M948	TWR INNER CORNER T8	11.844				Lbyy		1.03	1	Lateral
197	M894	TWR INNER CORNER T9	11.844				Lbyy		1.03	1	Lateral
198	M895	TWR INNER CORNER T9	11.844				Lbyy		1.03	1	Lateral
199	M896	TWR INNER CORNER T9	11.844				Lbyy		1.03	1	Lateral
200	M845	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
201	M846	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
202	M847	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
203	M848	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
204	M849	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
205	M850	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
206	M851	TWR INNER GIRT T10	5.375	5.375	5.375	5.375	5.375	5.375	1	1	Lateral
207	M852	TWR INNER GIRT T10	5.375	5.375	5.375	5.375	5.375	5.375	1	1	Lateral
208	M859	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
209	M860	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
210	M861	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
211	M862	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
212	M863	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
213	M864	TWR INNER GIRT T10	4.188	4.188	4.188	4.188	4.188	4.188	1	1	Lateral
214	M865	TWR INNER GIRT T10	4.243	4.243	4.243	4.243	4.243	4.243	1	1	Lateral
215	M1227	TWR INNER LADDER T3	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1	Lateral
216	M1228	TWR INNER LADDER T3	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
217	M1229	TWR INNER LADDER T3	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
218	M1175	TWR INNER LADDER T4	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
219	M1176	TWR INNER LADDER T4	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
220	M1177	TWR INNER LADDER T4	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1	Lateral
221	M1123	TWR INNER LADDER T5	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1	Lateral
222	M1124	TWR INNER LADDER T5	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
223	M1125	TWR INNER LADDER T5	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
224	M1071	TWR INNER LADDER T6	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
225	M1072	TWR INNER LADDER T6	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
226	M1073	TWR INNER LADDER T6	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1	Lateral
227	M1019	TWR INNER LADDER T7	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1	Lateral
228	M1020	TWR INNER LADDER T7	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
229	M1021	TWR INNER LADDER T7	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
230	M967	TWR INNER LADDER T8	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1	Lateral
231	M968	TWR INNER LADDER T8	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
232	M969	TWR INNER LADDER T8	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
233	M915	TWR INNER LADDER T9	8.485	8.485	8.485	8.485	8.485	8.485	1.12	1	Lateral
234	M916	TWR INNER LADDER T9	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
235	M917	TWR INNER LADDER T9	8.705	8.705	8.705	8.705	8.705	8.705	1.12	1	Lateral
236	M1254	TWR INNER SQ T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1	Lateral
237	M1255	TWR INNER SQ T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1	Lateral
238	M1256	TWR INNER SQ T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1	Lateral
239	M1257	TWR INNER SQ T2	16.75	8.375	16.75	16.75	16.75	16.75	1	1	Lateral
240	M1202	TWR INNER SQ T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1	Lateral
241	M1203	TWR INNER SQ T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1	Lateral
242	M1204	TWR INNER SQ T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1	Lateral
243	M1205	TWR INNER SQ T3	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1	Lateral
244	M1150	TWR INNER SQ T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

	Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
245	M1151	TWR INNER SQ T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
246	M1152	TWR INNER SQ T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
247	M1153	TWR INNER SQ T4	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
248	M1098	TWR INNER SQ T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
249	M1099	TWR INNER SQ T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
250	M1100	TWR INNER SQ T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
251	M1101	TWR INNER SQ T5	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
252	M1046	TWR INNER SQ T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
253	M1047	TWR INNER SQ T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
254	M1048	TWR INNER SQ T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
255	M1049	TWR INNER SQ T6	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
256	M994	TWR INNER SQ T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
257	M995	TWR INNER SQ T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
258	M996	TWR INNER SQ T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
259	M997	TWR INNER SQ T7	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
260	M942	TWR INNER SQ T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
261	M943	TWR INNER SQ T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
262	M944	TWR INNER SQ T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
263	M945	TWR INNER SQ T8	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
264	M890	TWR INNER SQ T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
265	M891	TWR INNER SQ T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
266	M892	TWR INNER SQ T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
267	M893	TWR INNER SQ T9	16.75	8.375	16.75	16.75	16.75	16.75	1.06	1		Lateral
268	M42	TWR INNER SUPP T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
269	M43	TWR INNER SUPP T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
270	M44	TWR INNER SUPP T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
271	M45	TWR INNER SUPP T2	23.688	5.922	11.844	11.844	11.844	11.844	1	1		Lateral
272	M191	TWR INNER SUPP T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
273	M192	TWR INNER SUPP T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
274	M193	TWR INNER SUPP T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
275	M194	TWR INNER SUPP T3	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
276	M272	TWR INNER SUPP T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
277	M273	TWR INNER SUPP T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
278	M274	TWR INNER SUPP T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
279	M275	TWR INNER SUPP T4	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
280	M353	TWR INNER SUPP T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
281	M354	TWR INNER SUPP T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
282	M355	TWR INNER SUPP T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
283	M356	TWR INNER SUPP T5	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
284	M434	TWR INNER SUPP T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
285	M435	TWR INNER SUPP T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
286	M436	TWR INNER SUPP T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
287	M437	TWR INNER SUPP T6	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
288	M515	TWR INNER SUPP T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
289	M516	TWR INNER SUPP T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
290	M517	TWR INNER SUPP T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
291	M518	TWR INNER SUPP T7	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
292	M596	TWR INNER SUPP T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
293	M597	TWR INNER SUPP T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
294	M598	TWR INNER SUPP T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
295	M599	TWR INNER SUPP T8	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
296	M677	TWR INNER SUPP T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
297	M678	TWR INNER SUPP T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
298	M679	TWR INNER SUPP T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
299	M680	TWR INNER SUPP T9	23.688	5.922	11.844	11.844	11.844	11.844	1.24	1		Lateral
300	M1209	TWR INNER TRI T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
301	M1210	TWR INNER TRI T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral

**Hot Rolled Steel Design Parameters (Continued)**

	Label	Shape	Length[...]	Lbwy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
302	M1211	TWR INNER TRI T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
303	M1212	TWR INNER TRI T3	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
304	M1213	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
305	M1214	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
306	M1215	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
307	M1216	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
308	M1217	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
309	M1218	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
310	M1219	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
311	M1220	TWR INNER TRI T3	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
312	M1157	TWR INNER TRI T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
313	M1158	TWR INNER TRI T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
314	M1159	TWR INNER TRI T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
315	M1160	TWR INNER TRI T4	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
316	M1161	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
317	M1162	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
318	M1163	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
319	M1164	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
320	M1165	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
321	M1166	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
322	M1167	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
323	M1168	TWR INNER TRI T4	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
324	M1105	TWR INNER TRI T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
325	M1106	TWR INNER TRI T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
326	M1107	TWR INNER TRI T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
327	M1108	TWR INNER TRI T5	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
328	M1109	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
329	M1110	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
330	M1111	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
331	M1112	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
332	M1113	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
333	M1114	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
334	M1115	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
335	M1116	TWR INNER TRI T5	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
336	M1053	TWR INNER TRI T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
337	M1054	TWR INNER TRI T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
338	M1055	TWR INNER TRI T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
339	M1056	TWR INNER TRI T6	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
340	M1057	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
341	M1058	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
342	M1059	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
343	M1060	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
344	M1061	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
345	M1062	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
346	M1063	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
347	M1064	TWR INNER TRI T6	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
348	M1001	TWR INNER TRI T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
349	M1002	TWR INNER TRI T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
350	M1003	TWR INNER TRI T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
351	M1004	TWR INNER TRI T7	8.375	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
352	M1005	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
353	M1006	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
354	M1007	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
355	M1008	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
356	M1009	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
357	M1010	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
358	M1011	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral



**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
359	M1012	TWR INNER TRI T7	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
360	M949	TWR INNER TRI T8	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
361	M950	TWR INNER TRI T8	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
362	M951	TWR INNER TRI T8	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
363	M952	TWR INNER TRI T8	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
364	M953	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
365	M954	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
366	M955	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
367	M956	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
368	M957	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
369	M958	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
370	M959	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
371	M960	TWR INNER TRI T8	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
372	M897	TWR INNER TRI T9	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
373	M898	TWR INNER TRI T9	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
374	M899	TWR INNER TRI T9	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
375	M900	TWR INNER TRI T9	8.375	8.375	8.375	8.375	8.375	1.06	1		Lateral
376	M901	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
377	M902	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
378	M903	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
379	M904	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
380	M905	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
381	M906	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
382	M907	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
383	M908	TWR INNER TRI T9	5.922	5.922	5.922	5.922	5.922	1.12	1		Lateral
384	M1266	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
385	M1267	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
386	M1268	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
387	M1269	TWR_LEG_OUTER_T1	13.72	13.72	13.72	13.72	13.72	1.02	1		Lateral
388	M1	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
389	M2	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
390	M3	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
391	M4	TWR_LEG_T1	13.72	13.72	13.72	13.72	13.72	1	1		Lateral
392	M47	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	1	1		Lateral
393	M48	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	1	1		Lateral
394	M49	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	1	1		Lateral
395	M50	TWR_LEG_T2	25	6.25	6.25	6.25	6.25	1	1		Lateral
396	M119	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	1	1		Lateral
397	M120	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	1	1		Lateral
398	M121	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	1	1		Lateral
399	M122	TWR_LEG_T3	25	6.25	6.25	6.25	6.25	1	1		Lateral
400	M200	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	1	1		Lateral
401	M201	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	1	1		Lateral
402	M202	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	1	1		Lateral
403	M203	TWR_LEG_T4	25	6.25	6.25	6.25	6.25	1	1		Lateral
404	M281	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	1	1		Lateral
405	M282	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	1	1		Lateral
406	M283	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	1	1		Lateral
407	M284	TWR_LEG_T5	25	6.25	6.25	6.25	6.25	1	1		Lateral
408	M362	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	1	1		Lateral
409	M363	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	1	1		Lateral
410	M364	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	1	1		Lateral
411	M365	TWR_LEG_T6	25	6.25	6.25	6.25	6.25	1	1		Lateral
412	M443	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	1	1		Lateral
413	M444	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	1	1		Lateral
414	M445	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	1	1		Lateral
415	M446	TWR_LEG_T7	25	6.25	6.25	6.25	6.25	1	1		Lateral



**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
416	M524	TWR LEG T8	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
417	M525	TWR LEG T8	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
418	M526	TWR LEG T8	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
419	M527	TWR LEG T8	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
420	M605	TWR LEG T9	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
421	M606	TWR LEG T9	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
422	M607	TWR LEG T9	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
423	M608	TWR LEG T9	25	6.25	6.25	6.25	6.25	6.25	1	1	Lateral
424	M686	TWR LEG T10	37.546	6.258	6.258	6.258	6.258	6.258	1	1	Lateral
425	M687	TWR LEG T10	37.546	6.258	6.258	6.258	6.258	6.258	1	1	Lateral
426	M688	TWR LEG T10	37.546	6.258	6.258	6.258	6.258	6.258	1	1	Lateral
427	M689	TWR LEG T10	37.546	6.258	6.258	6.258	6.258	6.258	1	1	Lateral
428	M882	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
429	M883	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
430	M884	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
431	M885	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
432	M886	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
433	M887	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
434	M888	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
435	M889	TWR_REDHIPDIA_2_T9	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
436	M791	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1	Lateral
437	M792	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1	Lateral
438	M793	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1	Lateral
439	M794	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1	Lateral
440	M795	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1	Lateral
441	M796	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1	Lateral
442	M797	TWR_RED_DIAG_0_T10	6.795	6.795	6.795	6.795	6.795	6.795	1	1	Lateral
443	M798	TWR_RED_DIAG_0_T10	6.738	6.738	6.738	6.738	6.738	6.738	1	1	Lateral
444	M56	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
445	M64	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
446	M72	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
447	M80	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
448	M88	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
449	M96	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
450	M104	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
451	M112	TWR_RED_DIAG_2_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
452	M129	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
453	M137	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
454	M146	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
455	M154	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
456	M163	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
457	M171	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
458	M180	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
459	M188	TWR_RED_DIAG_2_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
460	M210	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
461	M218	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
462	M227	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
463	M235	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
464	M244	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
465	M252	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
466	M261	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
467	M269	TWR_RED_DIAG_2_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
468	M291	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
469	M299	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
470	M308	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
471	M316	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
472	M325	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
473	M333	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
474	M342	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
475	M350	TWR_RED_DIAG_2_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
476	M372	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
477	M380	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
478	M389	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
479	M397	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
480	M406	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
481	M414	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
482	M423	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
483	M431	TWR_RED_DIAG_2_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
484	M453	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
485	M461	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
486	M470	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
487	M478	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
488	M487	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
489	M495	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
490	M504	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
491	M512	TWR_RED_DIAG_2_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
492	M534	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
493	M542	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
494	M551	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
495	M559	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
496	M568	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
497	M576	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
498	M585	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
499	M593	TWR_RED_DIAG_2_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
500	M615	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
501	M623	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
502	M632	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
503	M640	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
504	M649	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
505	M657	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
506	M666	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
507	M674	TWR_RED_DIAG_2_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
508	M696	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1	Lateral
509	M706	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1	Lateral
510	M717	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1	Lateral
511	M727	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1	Lateral
512	M738	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1	Lateral
513	M748	TWR_RED_DIAG_2_T10	10.23	9.44	9.44	9.44	9.44	9.44	1.05	1	Lateral
514	M759	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1	Lateral
515	M769	TWR_RED_DIAG_2_T10	10.343	9.553	9.553	9.553	9.553	9.553	1.05	1	Lateral
516	M57	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
517	M58	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
518	M65	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
519	M66	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
520	M73	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
521	M74	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
522	M81	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
523	M82	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
524	M89	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
525	M90	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
526	M97	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
527	M98	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
528	M105	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
529	M106	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
530	M113	TWR_RED_DIAG_3_T2	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
531	M114	TWR_RED_DIAG_3_T2	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
532	M130	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
533	M131	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
534	M138	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
535	M139	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
536	M147	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
537	M148	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
538	M155	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
539	M156	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
540	M164	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
541	M165	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
542	M172	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
543	M173	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
544	M181	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
545	M182	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
546	M189	TWR_RED_DIAG_3_T3	10.45	10.13	10.13	10.13	10.13	10.13	1.04	1	Lateral
547	M190	TWR_RED_DIAG_3_T3	7.523	7.203	7.203	7.203	7.203	7.203	1.08	1	Lateral
548	M211	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
549	M212	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
550	M219	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
551	M220	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
552	M228	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
553	M229	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
554	M236	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
555	M237	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
556	M245	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
557	M246	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
558	M253	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
559	M254	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
560	M262	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
561	M263	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
562	M270	TWR_RED_DIAG_3_T4	10.45	10.12	10.12	10.12	10.12	10.12	1.04	1	Lateral
563	M271	TWR_RED_DIAG_3_T4	7.523	7.193	7.193	7.193	7.193	7.193	1.08	1	Lateral
564	M292	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
565	M293	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
566	M300	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
567	M301	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
568	M309	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
569	M310	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
570	M317	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
571	M318	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
572	M326	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
573	M327	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
574	M334	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
575	M335	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
576	M343	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
577	M344	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
578	M351	TWR_RED_DIAG_3_T5	10.45	10.03	10.03	10.03	10.03	10.03	1.04	1	Lateral
579	M352	TWR_RED_DIAG_3_T5	7.523	7.103	7.103	7.103	7.103	7.103	1.09	1	Lateral
580	M373	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
581	M374	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
582	M381	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
583	M382	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
584	M390	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
585	M391	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
586	M398	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
587	M399	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
588	M407	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
589	M408	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
590	M415	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
591	M416	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
592	M424	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
593	M425	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
594	M432	TWR_RED_DIAG_3_T6	10.45	10.02	10.02	10.02	10.02	10.02	1.04	1	Lateral
595	M433	TWR_RED_DIAG_3_T6	7.523	7.093	7.093	7.093	7.093	7.093	1.09	1	Lateral
596	M454	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
597	M455	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
598	M462	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
599	M463	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
600	M471	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
601	M472	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
602	M479	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
603	M480	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
604	M488	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
605	M489	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
606	M496	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
607	M497	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
608	M505	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
609	M506	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
610	M513	TWR_RED_DIAG_3_T7	10.45	9.93	9.93	9.93	9.93	9.93	1.05	1	Lateral
611	M514	TWR_RED_DIAG_3_T7	7.523	7.003	7.003	7.003	7.003	7.003	1.09	1	Lateral
612	M535	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
613	M536	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
614	M543	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
615	M544	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
616	M552	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
617	M553	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
618	M560	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
619	M561	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
620	M569	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
621	M570	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
622	M577	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
623	M578	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
624	M586	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
625	M587	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
626	M594	TWR_RED_DIAG_3_T8	10.45	9.92	9.92	9.92	9.92	9.92	1.05	1	Lateral
627	M595	TWR_RED_DIAG_3_T8	7.523	6.993	6.993	6.993	6.993	6.993	1.09	1	Lateral
628	M616	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
629	M617	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral
630	M624	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
631	M625	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral
632	M633	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
633	M634	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral
634	M641	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
635	M642	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral
636	M650	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
637	M651	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral
638	M658	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
639	M659	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral
640	M667	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
641	M668	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral
642	M675	TWR_RED_DIAG_3_T9	10.45	9.91	9.91	9.91	9.91	9.91	1.05	1	Lateral
643	M676	TWR_RED_DIAG_3_T9	7.523	6.983	6.983	6.983	6.983	6.983	1.09	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
644	M698	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1	Lateral
645	M708	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1	Lateral
646	M719	TWR_RED_DIAG_3_T10	12.679	12.019	12.019	12.019	12.019	12.019	1.03	1	Lateral
647	M729	TWR_RED_DIAG_3_T10	12.679	12.019	12.019	12.019	12.019	12.019	1.03	1	Lateral
648	M740	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1	Lateral
649	M750	TWR_RED_DIAG_3_T10	12.556	11.896	11.896	11.896	11.896	11.896	1.03	1	Lateral
650	M761	TWR_RED_DIAG_3_T10	12.679	12.266	12.266	12.266	12.266	12.266	1.03	1	Lateral
651	M771	TWR_RED_DIAG_3_T10	12.679	12.019	12.019	12.019	12.019	12.019	1.03	1	Lateral
652	M699	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1	Lateral
653	M700	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1	Lateral
654	M709	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1	Lateral
655	M710	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1	Lateral
656	M720	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1	Lateral
657	M721	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1	Lateral
658	M730	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1	Lateral
659	M731	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1	Lateral
660	M741	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1	Lateral
661	M742	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1	Lateral
662	M751	TWR_RED_DIAG_4_T10	10.675	9.995	9.995	9.995	9.995	9.995	1.05	1	Lateral
663	M752	TWR_RED_DIAG_4_T10	8.199	7.519	7.519	7.519	7.519	7.519	1.08	1	Lateral
664	M762	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1	Lateral
665	M763	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1	Lateral
666	M772	TWR_RED_DIAG_4_T10	10.565	9.885	9.885	9.885	9.885	9.885	1.05	1	Lateral
667	M773	TWR_RED_DIAG_4_T10	8.293	7.613	7.613	7.613	7.613	7.613	1.08	1	Lateral
668	M17	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
669	M20	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
670	M24	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
671	M27	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
672	M31	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
673	M34	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
674	M38	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
675	M41	TWR_RED_DIAG_T1	9.149	8.839	8.839	8.839	8.839	8.839	1	1	Lateral
676	M54	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
677	M62	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
678	M70	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
679	M78	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
680	M86	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
681	M94	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
682	M102	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
683	M110	TWR_RED_DIAG_T2	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
684	M127	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
685	M135	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
686	M144	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
687	M152	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
688	M161	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
689	M169	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
690	M178	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
691	M186	TWR_RED_DIAG_T3	7.523	7.06	7.06	7.06	7.06	7.06	1	1	Lateral
692	M208	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
693	M216	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
694	M225	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
695	M233	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
696	M242	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
697	M250	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
698	M259	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
699	M267	TWR_RED_DIAG_T4	7.523	7.05	7.05	7.05	7.05	7.05	1	1	Lateral
700	M289	TWR_RED_DIAG_T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
701	M297	TWR RED DIAG T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral
702	M306	TWR RED DIAG T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral
703	M314	TWR RED DIAG T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral
704	M323	TWR RED DIAG T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral
705	M331	TWR RED DIAG T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral
706	M340	TWR RED DIAG T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral
707	M348	TWR RED DIAG T5	7.523	6.92	6.92	6.92	6.92	6.92	1	1	Lateral
708	M370	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
709	M378	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
710	M387	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
711	M395	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
712	M404	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
713	M412	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
714	M421	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
715	M429	TWR RED DIAG T6	7.523	6.91	6.91	6.91	6.91	6.91	1	1	Lateral
716	M451	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
717	M459	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
718	M468	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
719	M476	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
720	M485	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
721	M493	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
722	M502	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
723	M510	TWR RED DIAG T7	7.523	6.77	6.77	6.77	6.77	6.77	1	1	Lateral
724	M532	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
725	M540	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
726	M549	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
727	M557	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
728	M566	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
729	M574	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
730	M583	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
731	M591	TWR RED DIAG T8	7.523	6.76	6.76	6.76	6.76	6.76	1	1	Lateral
732	M613	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
733	M621	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
734	M630	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
735	M638	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
736	M647	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
737	M655	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
738	M664	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
739	M672	TWR RED DIAG T9	7.523	6.74	6.74	6.74	6.74	6.74	1	1	Lateral
740	M694	TWR RED DIAG T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1	Lateral
741	M704	TWR RED DIAG T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1	Lateral
742	M715	TWR RED DIAG T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1	Lateral
743	M725	TWR RED DIAG T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1	Lateral
744	M736	TWR RED DIAG T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1	Lateral
745	M746	TWR RED DIAG T10	8.199	6.809	6.809	6.809	6.809	6.809	1	1	Lateral
746	M757	TWR RED DIAG T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1	Lateral
747	M767	TWR RED DIAG T10	8.293	6.903	6.903	6.903	6.903	6.903	1	1	Lateral
748	M807	TWR_RED_HIPDIA_1_T10	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1	Lateral
749	M808	TWR_RED_HIPDIA_1_T10	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1	Lateral
750	M809	TWR_RED_HIPDIA_1_T10	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1	Lateral
751	M810	TWR_RED_HIPDIA_1_T10	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1	Lateral
752	M811	TWR_RED_HIPDIA_1_T10	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1	Lateral
753	M812	TWR_RED_HIPDIA_1_T10	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1	Lateral
754	M813	TWR_RED_HIPDIA_1_T10	13.817	13.817	13.817	13.817	13.817	13.817	1.02	1	Lateral
755	M814	TWR_RED_HIPDIA_1_T10	13.929	13.929	13.929	13.929	13.929	13.929	1.02	1	Lateral
756	M1246	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral
757	M1247	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	12.14	1.03	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
758	M1248	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
759	M1249	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
760	M1250	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
761	M1251	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
762	M1252	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
763	M1253	TWR_RED_HIPDIA_2_T2	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
764	M1194	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
765	M1195	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
766	M1196	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
767	M1197	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
768	M1198	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
769	M1199	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
770	M1200	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
771	M1201	TWR_RED_HIPDIA_2_T3	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
772	M1142	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
773	M1143	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
774	M1144	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
775	M1145	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
776	M1146	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
777	M1147	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
778	M1148	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
779	M1149	TWR_RED_HIPDIA_2_T4	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
780	M1090	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
781	M1091	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
782	M1092	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
783	M1093	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
784	M1094	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
785	M1095	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
786	M1096	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
787	M1097	TWR_RED_HIPDIA_2_T5	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
788	M1038	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
789	M1039	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
790	M1040	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
791	M1041	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
792	M1042	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
793	M1043	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
794	M1044	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
795	M1045	TWR_RED_HIPDIA_2_T6	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
796	M986	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
797	M987	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
798	M988	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
799	M989	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
800	M990	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
801	M991	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
802	M992	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
803	M993	TWR_RED_HIPDIA_2_T7	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
804	M934	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
805	M935	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
806	M936	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
807	M937	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
808	M938	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
809	M939	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
810	M940	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
811	M941	TWR_RED_HIPDIA_2_T8	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
812	M815	TWR_RED_HIPDIA_3_T10	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
813	M816	TWR_RED_HIPDIA_3_T10	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral
814	M817	TWR_RED_HIPDIA_3_T10	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
815	M818	TWR_RED_HIPDIA_3_T10	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
816	M819	TWR_RED_HIPDIA_3_T10	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
817	M820	TWR_RED_HIPDIA_3_T10	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral
818	M821	TWR_RED_HIPDIA_3_T10	15.366	15.366	15.366	15.366	15.366	1.02	1		Lateral
819	M822	TWR_RED_HIPDIA_3_T10	15.567	15.567	15.567	15.567	15.567	1.02	1		Lateral
820	M1238	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
821	M1239	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
822	M1240	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
823	M1241	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
824	M1242	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
825	M1243	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
826	M1244	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
827	M1245	TWR_RED_HIPDIA_T2	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
828	M1186	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
829	M1187	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
830	M1188	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
831	M1189	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
832	M1190	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
833	M1191	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
834	M1192	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
835	M1193	TWR_RED_HIPDIA_T3	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
836	M1134	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
837	M1135	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
838	M1136	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
839	M1137	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
840	M1138	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
841	M1139	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
842	M1140	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
843	M1141	TWR_RED_HIPDIA_T4	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
844	M1082	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
845	M1083	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
846	M1084	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
847	M1085	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
848	M1086	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
849	M1087	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
850	M1088	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
851	M1089	TWR_RED_HIPDIA_T5	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
852	M1030	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
853	M1031	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
854	M1032	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
855	M1033	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
856	M1034	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
857	M1035	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
858	M1036	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
859	M1037	TWR_RED_HIPDIA_T6	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
860	M978	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
861	M979	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
862	M980	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
863	M981	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
864	M982	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
865	M983	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
866	M984	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
867	M985	TWR_RED_HIPDIA_T7	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
868	M926	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
869	M927	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
870	M928	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral
871	M929	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	1.04	1		Lateral



**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
872	M930	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
873	M931	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
874	M932	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
875	M933	TWR_RED_HIPDIA_T8	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
876	M874	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
877	M875	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
878	M876	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
879	M877	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
880	M878	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
881	M879	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
882	M880	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
883	M881	TWR_RED_HIPDIA_T9	10.031	10.031	10.031	10.031	10.031	10.031	1.04	1	Lateral
884	M799	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
885	M800	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
886	M801	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
887	M806	TWR_RED_HIP_1_T10	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
888	M1234	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
889	M1235	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
890	M1236	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
891	M1237	TWR_RED_HIP_2_T2	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
892	M1182	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
893	M1183	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
894	M1184	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
895	M1185	TWR_RED_HIP_2_T3	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
896	M1130	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
897	M1131	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
898	M1132	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
899	M1133	TWR_RED_HIP_2_T4	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
900	M1078	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
901	M1079	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
902	M1080	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
903	M1081	TWR_RED_HIP_2_T5	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
904	M1026	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
905	M1027	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
906	M1028	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
907	M1029	TWR_RED_HIP_2_T6	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
908	M974	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
909	M975	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
910	M976	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
911	M977	TWR_RED_HIP_2_T7	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
912	M922	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
913	M923	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
914	M924	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
915	M925	TWR_RED_HIP_2_T8	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
916	M870	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
917	M871	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
918	M872	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
919	M873	TWR_RED_HIP_2_T9	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
920	M802	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
921	M803	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
922	M804	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
923	M805	TWR_RED_HIP_3_T10	15.792	15.792	15.792	15.792	15.792	15.792	1.02	1	Lateral
924	M1230	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
925	M1231	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
926	M1232	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
927	M1233	TWR_RED_HIP_T2	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
928	M1178	TWR_RED_HIP_T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
929	M1179	TWR RED HIP T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
930	M1180	TWR RED HIP T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
931	M1181	TWR RED HIP T3	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
932	M1126	TWR RED HIP T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
933	M1127	TWR RED HIP T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
934	M1128	TWR RED HIP T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
935	M1129	TWR RED HIP T4	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
936	M1074	TWR RED HIP T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
937	M1075	TWR RED HIP T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
938	M1076	TWR RED HIP T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
939	M1077	TWR RED HIP T5	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
940	M1022	TWR RED HIP T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
941	M1023	TWR RED HIP T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
942	M1024	TWR RED HIP T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
943	M1025	TWR RED HIP T6	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
944	M970	TWR RED HIP T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
945	M971	TWR RED HIP T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
946	M972	TWR RED HIP T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
947	M973	TWR RED HIP T7	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
948	M918	TWR RED HIP T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
949	M919	TWR RED HIP T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
950	M920	TWR RED HIP T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
951	M921	TWR RED HIP T8	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
952	M866	TWR RED HIP T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
953	M867	TWR RED HIP T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
954	M868	TWR RED HIP T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
955	M869	TWR RED HIP T9	7.896	7.896	7.896	7.896	7.896	7.896	1.07	1	Lateral
956	M783	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
957	M784	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
958	M785	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
959	M786	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
960	M787	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
961	M788	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
962	M789	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
963	M790	TWR RED HORZ 0 T10	2.792	2.792	2.792	2.792	2.792	2.792	1	1	Lateral
964	M1262	TWR RED HORZ 2 T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1	Lateral
965	M1263	TWR RED HORZ 2 T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1	Lateral
966	M1264	TWR RED HORZ 2 T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1	Lateral
967	M1265	TWR RED HORZ 2 T1	12.75	12.75	12.75	12.75	12.75	12.75	1.03	1	Lateral
968	M53	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
969	M61	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
970	M69	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
971	M77	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
972	M85	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
973	M93	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
974	M101	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
975	M109	TWR RED HORZ 2 T2	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
976	M126	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
977	M134	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
978	M143	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
979	M151	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
980	M160	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
981	M168	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
982	M177	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
983	M185	TWR RED HORZ 2 T3	8.375	8.12	8.12	8.12	8.12	8.12	1.07	1	Lateral
984	M207	TWR RED HORZ 2 T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral
985	M215	TWR RED HORZ 2 T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
986	M224	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral
987	M232	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral
988	M241	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral
989	M249	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral
990	M258	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral
991	M266	TWR_RED_HORZ_2_T4	8.375	8.11	8.11	8.11	8.11	8.11	1.07	1	Lateral
992	M288	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
993	M296	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
994	M305	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
995	M313	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
996	M322	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
997	M330	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
998	M339	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
999	M347	TWR_RED_HORZ_2_T5	8.375	8.04	8.04	8.04	8.04	8.04	1.07	1	Lateral
1000	M369	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1001	M377	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1002	M386	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1003	M394	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1004	M403	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1005	M411	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1006	M420	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1007	M428	TWR_RED_HORZ_2_T6	8.375	8.03	8.03	8.03	8.03	8.03	1.07	1	Lateral
1008	M450	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1009	M458	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1010	M467	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1011	M475	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1012	M484	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1013	M492	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1014	M501	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1015	M509	TWR_RED_HORZ_2_T7	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1016	M531	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1017	M539	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1018	M548	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1019	M556	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1020	M565	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1021	M573	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1022	M582	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1023	M590	TWR_RED_HORZ_2_T8	8.375	7.95	7.95	7.95	7.95	7.95	1.07	1	Lateral
1024	M612	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1025	M620	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1026	M629	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1027	M637	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1028	M646	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1029	M654	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1030	M663	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1031	M671	TWR_RED_HORZ_2_T9	8.375	7.94	7.94	7.94	7.94	7.94	1.07	1	Lateral
1032	M693	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1033	M703	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1034	M714	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1035	M724	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1036	M735	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1037	M745	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1038	M756	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1039	M766	TWR_RED_HORZ_2_T10	8.375	7.855	7.855	7.855	7.855	7.855	1.07	1	Lateral
1040	M1290	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1	Lateral
1041	M1291	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1	Lateral
1042	M1292	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1	Lateral

**Hot Rolled Steel Design Parameters (Continued)**

	Label	Shape	Length[...]	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
1043	M1293	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1044	M1294	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1045	M1295	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1046	M1296	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1047	M1297	TWR_RED_HORZ_3_T1	10.375	10.375	10.375	10.375	10.375	10.375	1.04	1		Lateral
1048	M55	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1049	M63	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1050	M71	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1051	M79	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1052	M87	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1053	M95	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1054	M103	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1055	M111	TWR_RED_HORZ_3_T2	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1056	M128	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1057	M136	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1058	M145	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1059	M153	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1060	M162	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1061	M170	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1062	M179	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1063	M187	TWR_RED_HORZ_3_T3	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1064	M209	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1065	M217	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1066	M226	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1067	M234	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1068	M243	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1069	M251	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1070	M260	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1071	M268	TWR_RED_HORZ_3_T4	12.563	12.3	12.3	12.3	12.3	12.3	1.03	1		Lateral
1072	M290	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1073	M298	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1074	M307	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1075	M315	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1076	M324	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1077	M332	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1078	M341	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1079	M349	TWR_RED_HORZ_3_T5	12.563	12.23	12.23	12.23	12.23	12.23	1.03	1		Lateral
1080	M371	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1081	M379	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1082	M388	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1083	M396	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1084	M405	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1085	M413	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1086	M422	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1087	M430	TWR_RED_HORZ_3_T6	12.563	12.22	12.22	12.22	12.22	12.22	1.03	1		Lateral
1088	M452	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1089	M460	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1090	M469	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1091	M477	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1092	M486	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1093	M494	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1094	M503	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1095	M511	TWR_RED_HORZ_3_T7	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1096	M533	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1097	M541	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1098	M550	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral
1099	M558	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	12.14	1.03	1		Lateral



Company : GPD  
 Designer : tclark  
 Job Number : 2016708.42 Rev. 1  
 Model Name : TAG0053 CHESHIRE

June 1, 2016  
 12:47 PM  
 Checked By: \_\_\_\_\_

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
1100	M567	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	1.03	1		Lateral
1101	M575	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	1.03	1		Lateral
1102	M584	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	1.03	1		Lateral
1103	M592	TWR_RED_HORZ_3_T8	12.563	12.14	12.14	12.14	12.14	1.03	1		Lateral
1104	M614	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1105	M622	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1106	M631	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1107	M639	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1108	M648	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1109	M656	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1110	M665	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1111	M673	TWR_RED_HORZ_3_T9	12.563	12.13	12.13	12.13	12.13	1.03	1		Lateral
1112	M695	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1113	M705	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1114	M716	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1115	M726	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1116	M737	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1117	M747	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1118	M758	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1119	M768	TWR_RED_HORZ_3_T10	11.167	10.647	10.647	10.647	10.647	1.04	1		Lateral
1120	M1298	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1121	M1299	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1122	M1300	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1123	M1301	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1124	M1302	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1125	M1303	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1126	M1304	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1127	M1305	TWR_RED_HORZ_4_T1	4.188	4.188	4.188	4.188	4.188	1	1		Lateral
1128	M1306	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1129	M1307	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1130	M1308	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1131	M1309	TWR_RED_HORZ_4_T1	8.375	8.375	8.375	8.375	8.375	1	1		Lateral
1132	M697	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1133	M707	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1134	M718	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1135	M728	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1136	M739	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1137	M749	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1138	M760	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1139	M770	TWR_RED_HORZ_4_T10	13.958	13.438	13.438	13.438	13.438	1.02	1		Lateral
1140	M16	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1141	M19	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1142	M23	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1143	M26	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1144	M30	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1145	M33	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1146	M37	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1147	M40	TWR_RED_HORZ_T1	8.375	8.13	8.13	8.13	8.13	1	1		Lateral
1148	M52	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1149	M60	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1150	M68	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1151	M76	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1152	M84	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1153	M92	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1154	M100	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1155	M108	TWR_RED_HORZ_T2	4.188	3.93	3.93	3.93	3.93	1	1		Lateral
1156	M125	TWR_RED_HORZ_T3	4.188	3.93	3.93	3.93	3.93	1	1		Lateral

**Hot Rolled Steel Design Parameters (Continued)**

Label	Shape	Length[...]	Lbvy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
1157	M133	TWR RED HORZ T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1	Lateral
1158	M142	TWR RED HORZ T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1	Lateral
1159	M150	TWR RED HORZ T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1	Lateral
1160	M159	TWR RED HORZ T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1	Lateral
1161	M167	TWR RED HORZ T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1	Lateral
1162	M176	TWR RED HORZ T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1	Lateral
1163	M184	TWR RED HORZ T3	4.188	3.93	3.93	3.93	3.93	3.93	1	1	Lateral
1164	M206	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1165	M214	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1166	M223	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1167	M231	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1168	M240	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1169	M248	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1170	M257	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1171	M265	TWR RED HORZ T4	4.188	3.92	3.92	3.92	3.92	3.92	1	1	Lateral
1172	M287	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1173	M295	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1174	M304	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1175	M312	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1176	M321	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1177	M329	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1178	M338	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1179	M346	TWR RED HORZ T5	4.188	3.85	3.85	3.85	3.85	3.85	1	1	Lateral
1180	M368	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1181	M376	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1182	M385	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1183	M393	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1184	M402	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1185	M410	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1186	M419	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1187	M427	TWR RED HORZ T6	4.188	3.84	3.84	3.84	3.84	3.84	1	1	Lateral
1188	M449	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1189	M457	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1190	M466	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1191	M474	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1192	M483	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1193	M491	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1194	M500	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1195	M508	TWR RED HORZ T7	4.188	3.77	3.77	3.77	3.77	3.77	1	1	Lateral
1196	M530	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1197	M538	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1198	M547	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1199	M555	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1200	M564	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1201	M572	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1202	M581	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1203	M589	TWR RED HORZ T8	4.188	3.76	3.76	3.76	3.76	3.76	1	1	Lateral
1204	M611	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1205	M619	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1206	M628	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1207	M636	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1208	M645	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1209	M653	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1210	M662	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1211	M670	TWR RED HORZ T9	4.188	3.75	3.75	3.75	3.75	3.75	1	1	Lateral
1212	M692	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral
1213	M702	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral

### Hot Rolled Steel Design Parameters (Continued)

Label	Shape	Length[...]	Lbwy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kvy	Kzz	Cb	Funct...
1214	M713	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral
1215	M723	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral
1216	M734	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral
1217	M744	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral
1218	M755	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral
1219	M765	TWR_RED_HORZ_T10	5.583	5.063	5.063	5.063	5.063	5.063	1	1	Lateral
1220	M5	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1	Lateral
1221	M6	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1	Lateral
1222	M7	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1	Lateral
1223	M8	TWR_TOP_GIRT_T1	25.5	12.5	12.5	12.5	12.5	12.5	1.11	1	Lateral
1224	M46	TWR_INNER_SUPP_T2	33.5	33.5	33.5	33.5	33.5	33.5	1	1	Lateral
1225	M115	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1	Lateral
1226	M116	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1	Lateral
1227	M117	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1	Lateral
1228	M118	TWR_INNER_SUPP_T2	11.844	11.844	11.844	11.844	11.844	11.844	1	1	Lateral
1229	M195	TWR_INNER_SUPP_T3	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1	Lateral
1230	M196	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1231	M197	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1232	M198	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1233	M199	TWR_INNER_SUPP_T3	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1234	M276	TWR_INNER_SUPP_T4	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1	Lateral
1235	M277	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1236	M278	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1237	M279	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1238	M280	TWR_INNER_SUPP_T4	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1239	M357	TWR_INNER_SUPP_T5	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1	Lateral
1240	M358	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1241	M359	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1242	M360	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1243	M361	TWR_INNER_SUPP_T5	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1244	M438	TWR_INNER_SUPP_T6	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1	Lateral
1245	M439	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1246	M440	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1247	M441	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1248	M442	TWR_INNER_SUPP_T6	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1249	M519	TWR_INNER_SUPP_T7	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1	Lateral
1250	M520	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1251	M521	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1252	M522	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1253	M523	TWR_INNER_SUPP_T7	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1254	M600	TWR_INNER_SUPP_T8	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1	Lateral
1255	M601	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1256	M602	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1257	M603	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1258	M604	TWR_INNER_SUPP_T8	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1259	M681	TWR_INNER_SUPP_T9	33.5	33.5	33.5	33.5	33.5	33.5	1.01	1	Lateral
1260	M682	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1261	M683	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1262	M684	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral
1263	M685	TWR_INNER_SUPP_T9	11.844	11.844	11.844	11.844	11.844	11.844	1.06	1	Lateral

### Basic Load Cases

BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M...Surfac...
1 Dead	None		-1		40	348	40	
2 No Ice Wind 0 deg	None				40	924	120	

### Basic Load Cases (Continued)

BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M...	Surfac...
3 No Ice Wind 45 deg	None				80	928	160		
4 No Ice Wind 90 deg	None				40	950	120		
5 No Ice Wind 135 deg	None				80	904	160		
6 No Ice Wind 180 deg	None				40	924	120		
7 No Ice Wind 225 deg	None				80	928	160		
8 No Ice Wind 270 deg	None				40	950	120		
9 No Ice Wind 315 deg	None				80	904	160		
10 Ice	None				40	348	822		
11 Temperature Drop	None						1309		
12 Ice Wind 0 deg	None				40	910	112		
13 Ice Wind 45 deg	None				80	904	160		
14 Ice Wind 90 deg	None				40	938	120		
15 Ice Wind 135 deg	None				80	886	160		
16 Ice Wind 180 deg	None				40	910	112		
17 Ice Wind 225 deg	None				80	904	160		
18 Ice Wind 270 deg	None				40	938	120		
19 Ice Wind 315 deg	None				80	886	160		
20 Service Wind 0 deg	None				40	910	120		
21 Service Wind 45 deg	None				80	900	160		
22 Service Wind 90 deg	None				40	938	120		
23 Service Wind 135 deg	None				80	882	160		
24 Service Wind 180 deg	None				40	910	120		
25 Service Wind 225 deg	None				80	900	160		
26 Service Wind 270 deg	None				40	938	120		
27 Service Wind 315 deg	None				80	882	160		

### Load Combinations

Description	So...P...	S...	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..
1 Dead Only	Yes		1	1	28	1	29	1	0	0	0	0	0	0	0	0	0
2 Dead+Wind 0 deg - N...	Yes		1	1	2	1	28	1	29	1	0	0	0	0	0	0	0
3 Dead+Wind 45 deg - ...	Yes		1	1	3	1	28	1	29	1	0	0	0	0	0	0	0
4 Dead+Wind 90 deg - ...	Yes		1	1	4	1	28	1	29	1	0	0	0	0	0	0	0
5 Dead+Wind 135 deg ...	Yes		1	1	5	1	28	1	29	1	0	0	0	0	0	0	0
6 Dead+Wind 180 deg ...	Yes		1	1	6	1	28	1	29	1	0	0	0	0	0	0	0
7 Dead+Wind 225 deg ...	Yes		1	1	7	1	28	1	29	1	0	0	0	0	0	0	0
8 Dead+Wind 270 deg ...	Yes		1	1	8	1	28	1	29	1	0	0	0	0	0	0	0
9 Dead+Wind 315 deg ...	Yes		1	1	9	1	28	1	29	1	0	0	0	0	0	0	0
10 Dead+Ice+Temp	Yes		1	1	10	1	11	1	28	1	29	1	0	0	0	0	0
11 Dead+Wind 0 deg+lc...	Yes		1	1	12	1	10	1	11	1	28	1	29	1	0	0	0
12 Dead+Wind 45 deg+l...	Yes		1	1	13	1	10	1	11	1	28	1	29	1	0	0	0
13 Dead+Wind 90 deg+l...	Yes		1	1	14	1	10	1	11	1	28	1	29	1	0	0	0
14 Dead+Wind 135 deg... Yes			1	1	15	1	10	1	11	1	28	1	29	1	0	0	0
15 Dead+Wind 180 deg... Yes			1	1	16	1	10	1	11	1	28	1	29	1	0	0	0
16 Dead+Wind 225 deg... Yes			1	1	17	1	10	1	11	1	28	1	29	1	0	0	0
17 Dead+Wind 270 deg... Yes			1	1	18	1	10	1	11	1	28	1	29	1	0	0	0
18 Dead+Wind 315 deg... Yes			1	1	19	1	10	1	11	1	28	1	29	1	0	0	0
19 Dead+Wind 0 deg - S...	Yes		1	1	20	1	28	1	29	1	0	0	0	0	0	0	0
20 Dead+Wind 45 deg - ...	Yes		1	1	21	1	28	1	29	1	0	0	0	0	0	0	0
21 Dead+Wind 90 deg - ...	Yes		1	1	22	1	28	1	29	1	0	0	0	0	0	0	0
22 Dead+Wind 135 deg ...	Yes		1	1	23	1	28	1	29	1	0	0	0	0	0	0	0
23 Dead+Wind 180 deg ...	Yes		1	1	24	1	28	1	29	1	0	0	0	0	0	0	0
24 Dead+Wind 225 deg ...	Yes		1	1	25	1	28	1	29	1	0	0	0	0	0	0	0
25 Dead+Wind 270 deg ...	Yes		1	1	26	1	28	1	29	1	0	0	0	0	0	0	0
26 Dead+Wind 315 deg ...	Yes		1	1	27	1	28	1	29	1	0	0	0	0	0	0	0



**Envelope AISC 13th(360-05): ASD Steel Code Checks**

	Member	Shape	Code Check	Loc[ft]	LC	Shear	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mny/o...	Mnz/o...	Cb	Eqn
1	M1274	2L3 1/2x4...	.077	9.019	4	.003	9.019	y	12	16.359	96.79	10.674	3.569	1	H1-1b
2	M1275	2L3 1/2x4...	.079	9.019	6	.003	9.019	y	16	16.359	96.79	10.674	3.569	1	H1-1b
3	M1276	2L3 1/2x4...	.078	9.019	8	.003	9.019	y	18	16.359	96.79	10.674	3.569	1	H1-1b
4	M1277	2L3 1/2x4...	.080	9.019	6	.003	9.019	y	14	16.359	96.79	10.674	3.569	1	H1-1b
5	M1278	2L3 1/2x4...	.080	9.019	2	.003	9.019	y	12	16.359	96.79	10.674	3.569	1	H1-1b
6	M1279	2L3 1/2x4...	.078	9.019	8	.003	9.019	y	16	16.359	96.79	10.674	3.569	1	H1-1b
7	M1280	2L3 1/2x4...	.078	9.019	4	.003	9.019	y	14	16.359	96.79	10.674	3.569	1	H1-1b
8	M1281	2L3 1/2x4...	.080	9.019	2	.003	9.019	y	18	16.359	96.79	10.674	3.569	1	H1-1b
9	M1282	2L3 1/2x4...	.069	7.784	6	.002	7.784	y	7	21.962	96.79	10.674	3.569	1	H1-1b
10	M1283	2L3 1/2x4...	.070	7.784	2	.002	7.784	y	9	21.962	96.79	10.674	3.569	1	H1-1b
11	M1284	2L3 1/2x4...	.068	7.784	8	.002	7.784	y	2	21.962	96.79	10.674	3.569	1	H1-1b
12	M1285	2L3 1/2x4...	.068	7.784	4	.002	7.784	y	2	21.962	96.79	10.674	3.569	1	H1-1b
13	M1286	2L3 1/2x4...	.070	7.784	2	.002	7.784	y	3	21.962	96.79	10.674	3.569	1	H1-1b
14	M1287	2L3 1/2x4...	.070	7.784	6	.002	7.784	y	4	21.962	96.79	10.674	3.569	1	H1-1b
15	M1288	2L3 1/2x4...	.069	7.784	4	.002	7.784	y	6	21.962	96.79	10.674	3.569	1	H1-1b
16	M1289	2L3 1/2x4...	.068	7.784	8	.002	7.784	y	6	21.962	96.79	10.674	3.569	1	H1-1b
17	M15	2L3x4x5/1...	.540	9.149	4	.004	9.149	y	14	10.257	90.108	10.644	2.637	1	H1-1a
18	M18	2L3x4x5/1...	.539	9.149	8	.004	9.149	y	16	10.257	90.108	10.644	2.637	1	H1-1a
19	M22	2L3x4x5/1...	.519	9.149	2	.004	9.149	y	12	10.257	90.108	10.644	2.637	1	H1-1a
20	M25	2L3x4x5/1...	.514	9.149	6	.004	9.149	y	14	10.257	90.108	10.644	2.637	1	H1-1a
21	M29	2L3x4x5/1...	.537	9.149	8	.004	9.149	y	18	10.257	90.108	10.644	2.637	1	H1-1a
22	M32	2L3x4x5/1...	.534	9.149	4	.004	9.149	y	12	10.257	90.108	10.644	2.637	1	H1-1a
23	M36	2L3x4x5/1...	.527	9.149	6	.004	9.149	y	16	10.257	90.108	10.644	2.637	1	H1-1a
24	M39	2L3x4x5/1...	.537	9.149	2	.004	9.149	y	18	10.257	90.108	10.644	2.637	1	H1-1a
25	M51	2L3x2 1/2...	.357	15.0...	8	.003	22.5...	y	12	41.212	82.778	5.511	2.91	1	H1-1a
26	M59	2L3x2 1/2...	.356	15.0...	4	.003	22.5...	y	18	41.212	82.778	5.511	2.91	1	H1-1a
27	M67	2L3x2 1/2...	.362	15.0...	6	.003	22.5...	y	18	41.212	82.778	5.511	2.91	1	H1-1a
28	M75	2L3x2 1/2...	.363	15.0...	2	.003	22.5...	y	16	41.212	82.778	5.511	2.91	1	H1-1a
29	M83	2L3x2 1/2...	.356	15.0...	4	.003	22.5...	y	16	41.212	82.778	5.511	2.91	1	H1-1a
30	M91	2L3x2 1/2...	.356	15.0...	8	.003	22.5...	y	14	41.212	82.778	5.511	2.91	1	H1-1a
31	M99	2L3x2 1/2...	.356	15.0...	2	.003	22.5...	y	14	41.212	82.778	5.511	2.91	1	H1-1a
32	M107	2L3x2 1/2...	.356	15.0...	6	.003	22.5...	y	12	41.212	82.778	5.511	2.91	1	H1-1a
33	M124	2L3x2 1/2...	.527	0	8	.003	22.5...	y	18	41.212	82.778	5.511	2.91	1	H1-1a
34	M132	2L3x2 1/2...	.530	0	4	.003	22.5...	y	12	41.212	82.778	5.511	2.91	1	H1-1a
35	M141	2L3x2 1/2...	.525	0	6	.003	22.5...	y	16	41.212	82.778	5.511	2.91	1	H1-1a
36	M149	2L3x2 1/2...	.521	0	2	.003	22.5...	y	18	41.212	82.778	5.511	2.91	1	H1-1a
37	M158	2L3x2 1/2...	.499	0	4	.003	22.5...	y	14	41.212	82.778	5.511	2.91	1	H1-1a
38	M166	2L3x2 1/2...	.497	0	8	.003	22.5...	y	16	41.212	82.778	5.511	2.91	1	H1-1a
39	M175	2L3x2 1/2...	.512	0	2	.003	22.5...	y	12	41.212	82.778	5.511	2.91	1	H1-1a
40	M183	2L3x2 1/2...	.514	0	6	.003	22.5...	y	14	41.212	82.778	5.511	2.91	1	H1-1a
41	M205	2L3x2-1/2...	.542	0	8	.003	22.5...	y	9	55.096	107.784	7.485	3.743	1	H1-1a
42	M213	2L3x2-1/2...	.547	0	4	.003	22.5...	y	3	55.096	107.784	7.485	3.743	1	H1-1a
43	M222	2L3x2-1/2...	.540	0	6	.003	22.5...	y	7	55.096	107.784	7.485	3.743	1	H1-1a
44	M230	2L3x2-1/2...	.535	0	2	.003	22.5...	y	2	55.096	107.784	7.485	3.743	1	H1-1a
45	M239	2L3x2-1/2...	.506	0	4	.003	22.5...	y	5	55.096	107.784	7.485	3.743	1	H1-1a
46	M247	2L3x2-1/2...	.503	0	8	.003	22.5...	y	7	55.096	107.784	7.485	3.743	1	H1-1a
47	M256	2L3x2-1/2...	.524	0	2	.003	22.5...	y	3	55.096	107.784	7.485	3.743	1	H1-1a
48	M264	2L3x2-1/2...	.527	0	6	.003	22.5...	y	5	55.096	107.784	7.485	3.743	1	H1-1a
49	M286	2L3x2-1/2...	.661	0	8	.003	22.5...	y	8	55.096	107.784	7.485	3.743	1	H1-1a
50	M294	2L3x2-1/2...	.665	0	4	.003	22.5...	y	3	55.096	107.784	7.485	3.743	1	H1-1a
51	M303	2L3x2-1/2...	.658	0	6	.003	22.5...	y	7	55.096	107.784	7.485	3.743	1	H1-1a
52	M311	2L3x2-1/2...	.653	0	2	.003	22.5...	y	2	55.096	107.784	7.485	3.743	1	H1-1a
53	M320	2L3x2-1/2...	.608	0	4	.003	22.5...	y	5	55.096	107.784	7.485	3.743	1	H1-1a
54	M328	2L3x2-1/2...	.606	0	8	.003	22.5...	y	7	55.096	107.784	7.485	3.743	1	H1-1a
55	M337	2L3x2-1/2...	.643	0	2	.003	22.5...	y	2	55.096	107.784	7.485	3.743	1	H1-1a
56	M345	2L3x2-1/2...	.646	0	6	.003	22.5...	y	5	55.096	107.784	7.485	3.743	1	H1-1a



**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear..	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn	
57	M367	2L4x3x3/8...	.715	0	8	.004	0	y	6	60.338	107.138	7.672	5.24	1	H1-1a
58	M375	2L4x3x3/8...	.721	0	4	.004	0	y	6	60.338	107.138	7.672	5.24	1	H1-1a
59	M384	2L4x3x3/8...	.716	0	6	.004	0	y	4	60.338	107.138	7.672	5.24	1	H1-1a
60	M392	2L4x3x3/8...	.710	0	2	.004	0	y	4	60.338	107.138	7.672	5.24	1	H1-1a
61	M401	2L4x3x3/8...	.657	0	4	.004	0	y	2	60.338	107.138	7.672	5.24	1	H1-1a
62	M409	2L4x3x3/8...	.655	0	8	.004	0	y	2	60.338	107.138	7.672	5.24	1	H1-1a
63	M418	2L4x3x3/8...	.703	0	2	.004	0	y	8	60.338	107.138	7.672	5.24	1	H1-1a
64	M426	2L4x3x3/8...	.705	0	6	.004	0	y	8	60.338	107.138	7.672	5.24	1	H1-1a
65	M448	2L4x3x3/8...	.801	0	8	.003	0	y	6	60.338	107.138	7.672	5.24	1	H1-1a
66	M456	2L4x3x3/8...	.807	0	4	.003	0	y	6	60.338	107.138	7.672	5.24	1	H1-1a
67	M465	2L4x3x3/8...	.796	0	6	.003	0	y	4	60.338	107.138	7.672	5.24	1	H1-1a
68	M473	2L4x3x3/8...	.790	0	2	.003	0	y	4	60.338	107.138	7.672	5.24	1	H1-1a
69	M482	2L4x3x3/8...	.730	0	4	.003	0	y	2	60.338	107.138	7.672	5.24	1	H1-1a
70	M490	2L4x3x3/8...	.729	0	8	.003	0	y	2	60.338	107.138	7.672	5.24	1	H1-1a
71	M499	2L4x3x3/8...	.784	0	2	.003	0	y	8	60.338	107.138	7.672	5.24	1	H1-1a
72	M507	2L4x3x3/8...	.787	0	6	.003	0	y	8	60.338	107.138	7.672	5.24	1	H1-1a
73	M529	2L4x3x1/2...	.711	0	8	.004	0	y	7	82.457	140.12	10.402	6.788	1	H1-1a
74	M537	2L4x3x1/2...	.716	0	4	.004	0	y	5	82.457	140.12	10.402	6.788	1	H1-1a
75	M546	2L4x3x1/2...	.704	0	6	.004	0	y	5	82.457	140.12	10.402	6.788	1	H1-1a
76	M554	2L4x3x1/2...	.698	0	2	.004	0	y	3	82.457	140.12	10.402	6.788	1	H1-1a
77	M563	2L4x3x1/2...	.647	0	4	.004	0	y	3	82.457	140.12	10.402	6.788	1	H1-1a
78	M571	2L4x3x1/2...	.646	0	8	.004	0	y	9	82.457	140.12	10.402	6.788	1	H1-1a
79	M580	2L4x3x1/2...	.693	0	2	.003	0	y	9	82.457	140.12	10.402	6.788	1	H1-1a
80	M588	2L4x3x1/2...	.696	0	6	.004	0	y	7	82.457	140.12	10.402	6.788	1	H1-1a
81	M610	2L4x3x1/2...	.778	0	8	.005	0	y	6	82.457	140.12	10.402	6.788	1	H1-1a
82	M618	2L4x3x1/2...	.780	0	4	.005	0	y	6	82.457	140.12	10.402	6.788	1	H1-1a
83	M627	2L4x3x1/2...	.771	0	6	.005	0	y	4	82.457	140.12	10.402	6.788	1	H1-1a
84	M635	2L4x3x1/2...	.766	0	2	.005	0	y	4	82.457	140.12	10.402	6.788	1	H1-1a
85	M644	2L4x3x1/2...	.708	0	4	.005	0	y	2	82.457	140.12	10.402	6.788	1	H1-1a
86	M652	2L4x3x1/2...	.708	0	8	.005	0	y	2	82.457	140.12	10.402	6.788	1	H1-1a
87	M661	2L4x3x1/2...	.764	0	2	.005	0	y	8	82.457	140.12	10.402	6.788	1	H1-1a
88	M669	2L4x3x1/2...	.766	0	6	.005	22.5...	y	5	82.457	140.12	10.402	6.788	1	H1-1a
89	M691	2L4x4x1/2...	.738	0	8	.010	0	y	7	100.149	161.677	17.309	7.079	1	H1-1a
90	M701	2L4x4x1/2...	.738	0	4	.005	0	y	5	100.149	161.677	17.309	7.079	1	H1-1a
91	M712	2L4x4x1/2...	.795	0	6	.004	0	y	5	100.862	161.677	17.309	7.079	1	H1-1a
92	M722	2L4x4x1/2...	.795	0	2	.009	0	y	3	100.862	161.677	17.309	7.079	1	H1-1a
93	M733	2L4x4x1/2...	.637	0	4	.011	0	y	3	100.149	161.677	17.309	7.079	1	H1-1a
94	M743	2L4x4x1/2...	.638	0	8	.011	0	y	9	100.149	161.677	17.309	7.079	1	H1-1a
95	M754	2L4x4x1/2...	.793	0	2	.009	0	y	9	100.862	161.677	17.309	7.079	1	H1-1a
96	M764	2L4x4x1/2...	.793	0	6	.010	0	y	7	100.862	161.677	17.309	7.079	1	H1-1a
97	M1270	W12x26	.115	20.75	5	.008	41.5	y	4	126.627	164.91	14.677	34.995	1	H1-1b
98	M1271	W12x26	.115	20.75	5	.008	41.5	y	6	126.627	164.91	14.677	34.995	1	H1-1b
99	M1272	W12x26	.115	20.75	9	.008	41.5	y	8	126.627	164.91	14.677	34.995	1	H1-1b
100	M1273	W12x26	.115	20.75	9	.008	0	y	2	126.627	164.91	14.677	34.995	1	H1-1b
101	M123	2L3x2 1/2...	.303	25.1...	8	.007	25.1...	y	12	31.268	56.695	3.608	2.019	1	H1-1a
102	M140	2L3x2 1/2...	.299	8.375	2	.007	8.375	y	16	31.268	56.695	3.608	2.019	1	H1-1a
103	M157	2L3x2 1/2...	.280	17.0...	4	.004	16.75	y	13	31.268	56.695	3.608	2.019	1	H1-1a
104	M174	2L3x2 1/2...	.286	16.4...	6	.004	16.75	y	15	31.268	56.695	3.608	2.019	1	H1-1a
105	M204	2L3x2 1/2...	.459	25.1...	8	.007	25.1...	y	16	31.268	56.695	3.608	2.019	1	H1-1a
106	M221	2L3x2 1/2...	.453	5.583	2	.007	8.375	y	11	31.268	56.695	3.608	3.23	1	H1-1a
107	M238	2L3x2 1/2...	.435	16.75	8	.004	8.375	y	16	31.268	56.695	3.608	2.019	1	H1-1a
108	M255	2L3x2 1/2...	.453	16.75	6	.004	25.1...	y	12	31.268	56.695	3.608	2.019	1	H1-1a
109	M285	2L3x2 1/2...	.567	16.75	4	.007	25.1...	y	15	31.268	56.695	3.608	2.019	1	H1-1a
110	M302	2L3x2 1/2...	.556	5.932	2	.007	8.375	y	13	31.268	56.695	3.608	3.23	1	H1-1a
111	M319	2L3x2 1/2...	.527	16.75	4	.004	16.75	y	14	31.268	56.695	3.608	2.019	1	H1-1a
112	M336	2L3x2 1/2...	.556	16.75	6	.004	25.1...	y	16	31.268	56.695	3.608	2.019	1	H1-1a
113	M366	2L3x2 1/2...	.562	27.5...	8	.006	25.1...	y	14	38.13	69.891	4.55	3.957	1	H1-1a



**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear..Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Egn		
114	M383	2L3x2 1/2...	.562	5.932	2	.006	8.375	y	13	38.13	69.891	4.55	3.957	1	H1-1a
115	M400	2L3x2 1/2...	.514	16.75	4	.004	16.75	y	14	38.13	69.891	4.55	2.473	1	H1-1a
116	M417	2L3x2 1/2...	.558	16.75	6	.004	25.1...	y	16	38.13	69.891	4.55	2.473	1	H1-1a
117	M447	2L3x2 1/2...	.562	27.5...	8	.005	25.1...	y	14	44.67	82.778	5.511	4.656	1	H1-1a
118	M464	2L3x2 1/2...	.554	5.932	2	.005	8.375	y	14	44.67	82.778	5.511	4.656	1	H1-1a
119	M481	2L3x2 1/2...	.509	16.75	8	.004	16.75	y	16	44.67	82.778	5.511	2.91	1	H1-1a
120	M498	2L3x2 1/2...	.552	16.75	2	.004	16.75	y	14	44.67	82.778	5.511	2.91	1	H1-1a
121	M528	2L3x2 1/2...	.644	27.5...	8	.005	25.1...	y	6	44.67	82.778	5.511	4.656	1	H1-1a
122	M545	2L3x2 1/2...	.630	5.932	2	.006	8.375	y	4	44.67	82.778	5.511	4.656	1	H1-1a
123	M562	2L3x2 1/2...	.577	16.75	4	.004	0	y	15	44.67	82.778	5.511	2.91	1	H1-1a
124	M579	2L3x2 1/2...	.627	16.75	6	.004	16.75	y	14	44.67	82.778	5.511	2.91	1	H1-1a
125	M609	2L3x2 1/2...	.702	27.5...	8	.005	25.1...	y	14	44.67	82.778	5.511	4.656	1	H1-1a
126	M626	2L3x2 1/2...	.682	5.932	2	.005	8.375	y	4	44.67	82.778	5.511	4.656	1	H1-1a
127	M643	2L3x2 1/2...	.628	16.75	4	.004	33.5	y	6	44.67	82.778	5.511	2.91	1	H1-1a
128	M660	2L3x2 1/2...	.685	16.75	6	.004	33.5	y	4	44.67	82.778	5.511	2.91	1	H1-1a
129	M690	2L4x3x1/2...	.390	16.75	5	.006	25.1...	y	5	93.096	140.12	10.402	6.788	1	H1-1a
130	M711	2L4x3x1/2...	.369	16.75	3	.007	8.375	y	5	93.096	140.12	10.402	6.788	1	H1-1a
131	M732	2L4x3x1/2...	.362	16.75	9	.004	33.5	y	5	93.096	140.12	10.402	6.788	1	H1-1a
132	M753	2L4x3x1/2...	.378	16.75	9	.005	25.1...	y	7	93.096	140.12	10.402	6.788	1	H1-1a
133	M1221	2L2 1/2x2 ...	.031	4.188	3	.002	8.375	y	7	16.09	38.802	2.672	1.737	1	H1-1b
134	M1222	2L2 1/2x2 ...	.031	4.188	4	.002	0	y	7	16.09	38.802	2.672	1.737	1	H1-1b
135	M1223	2L2 1/2x2 ...	.031	4.188	5	.002	8.375	y	9	16.09	38.802	2.672	1.737	1	H1-1b
136	M1224	2L2 1/2x2 ...	.031	4.188	5	.002	0	y	9	16.09	38.802	2.672	1.737	1	H1-1b
137	M1225	2L2 1/2x2 ...	.031	4.188	7	.002	8.375	y	3	16.09	38.802	2.672	1.737	1	H1-1b
138	M1226	2L2 1/2x2 ...	.031	4.188	7	.002	0	y	3	16.09	38.802	2.672	1.737	1	H1-1b
139	M1169	2L2 1/2x2 ...	.032	4.188	3	.003	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
140	M1170	2L2 1/2x2 ...	.032	4.188	3	.003	0	y	8	16.09	38.802	2.672	1.737	1	H1-1b
141	M1171	2L2 1/2x2 ...	.032	4.188	5	.003	8.375	y	8	16.09	38.802	2.672	1.737	1	H1-1b
142	M1172	2L2 1/2x2 ...	.032	4.188	5	.003	0	y	2	16.09	38.802	2.672	1.737	1	H1-1b
143	M1173	2L2 1/2x2 ...	.032	4.188	7	.003	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
144	M1174	2L2 1/2x2 ...	.032	4.188	7	.003	0	y	2	16.09	38.802	2.672	1.737	1	H1-1b
145	M1117	2L2 1/2x2 ...	.032	4.188	3	.003	8.375	y	7	16.09	38.802	2.672	1.737	1	H1-1b
146	M1118	2L2 1/2x2 ...	.032	4.188	3	.003	0	y	7	16.09	38.802	2.672	1.737	1	H1-1b
147	M1119	2L2 1/2x2 ...	.032	4.188	5	.003	8.375	y	9	16.09	38.802	2.672	1.737	1	H1-1b
148	M1120	2L2 1/2x2 ...	.032	4.188	5	.003	0	y	9	16.09	38.802	2.672	1.737	1	H1-1b
149	M1121	2L2 1/2x2 ...	.032	4.188	7	.003	8.375	y	3	16.09	38.802	2.672	1.737	1	H1-1b
150	M1122	2L2 1/2x2 ...	.032	4.188	7	.003	0	y	3	16.09	38.802	2.672	1.737	1	H1-1b
151	M1065	2L2 1/2x2 ...	.032	4.188	3	.003	8.375	y	7	16.09	38.802	2.672	1.737	1	H1-1b
152	M1066	2L2 1/2x2 ...	.032	4.188	3	.003	0	y	7	16.09	38.802	2.672	1.737	1	H1-1b
153	M1067	2L2 1/2x2 ...	.032	4.188	5	.003	8.375	y	9	16.09	38.802	2.672	1.737	1	H1-1b
154	M1068	2L2 1/2x2 ...	.032	4.188	5	.003	0	y	9	16.09	38.802	2.672	1.737	1	H1-1b
155	M1069	2L2 1/2x2 ...	.032	4.188	7	.003	8.375	y	3	16.09	38.802	2.672	1.737	1	H1-1b
156	M1070	2L2 1/2x2 ...	.032	4.188	7	.003	0	y	3	16.09	38.802	2.672	1.737	1	H1-1b
157	M1013	2L2 1/2x2 ...	.032	4.188	2	.003	8.375	y	7	16.09	38.802	2.672	1.737	1	H1-1b
158	M1014	2L2 1/2x2 ...	.032	4.188	3	.003	0	y	7	16.09	38.802	2.672	1.737	1	H1-1b
159	M1015	2L2 1/2x2 ...	.032	4.188	5	.003	8.375	y	9	16.09	38.802	2.672	1.737	1	H1-1b
160	M1016	2L2 1/2x2 ...	.032	4.188	5	.003	0	y	9	16.09	38.802	2.672	1.737	1	H1-1b
161	M1017	2L2 1/2x2 ...	.032	4.188	7	.003	8.375	y	3	16.09	38.802	2.672	1.737	1	H1-1b
162	M1018	2L2 1/2x2 ...	.032	4.188	8	.003	0	y	3	16.09	38.802	2.672	1.737	1	H1-1b
163	M961	2L2 1/2x2 ...	.033	4.188	2	.003	8.375	y	7	16.09	38.802	2.672	1.737	1	H1-1b
164	M962	2L2 1/2x2 ...	.033	4.188	3	.003	0	y	7	16.09	38.802	2.672	1.737	1	H1-1b
165	M963	2L2 1/2x2 ...	.033	4.188	5	.003	8.375	y	9	16.09	38.802	2.672	1.737	1	H1-1b
166	M964	2L2 1/2x2 ...	.033	4.188	5	.003	0	y	9	16.09	38.802	2.672	1.737	1	H1-1b
167	M965	2L2 1/2x2 ...	.033	4.188	7	.003	8.375	y	3	16.09	38.802	2.672	1.737	1	H1-1b
168	M966	2L2 1/2x2 ...	.033	4.188	8	.003	0	y	3	16.09	38.802	2.672	1.737	1	H1-1b
169	M909	2L2 1/2x2 ...	.033	4.188	2	.003	0	y	2	16.09	38.802	2.672	1.737	1	H1-1b
170	M910	2L2 1/2x2 ...	.033	4.188	3	.003	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn
171	M911	2L2 1/2x2 ...	.033	4.188	5	.003	0	y	5	16.09	38.802	2.672	1.737	1 H1-1b
172	M912	2L2 1/2x2 ...	.033	4.188	5	.003	8.375	y	5	16.09	38.802	2.672	1.737	1 H1-1b
173	M913	2L2 1/2x2 ...	.033	4.188	6	.003	0	y	7	16.09	38.802	2.672	1.737	1 H1-1b
174	M914	2L2 1/2x2 ...	.033	4.188	8	.003	8.375	y	8	16.09	38.802	2.672	1.737	1 H1-1b
175	M1258	W8x13	.008	0	16	.003	0	y	9	20.313	82.778	3.862	13.884	1... H1-1b
176	M1259	W8x13	.008	0	18	.003	0	y	7	20.313	82.778	3.862	13.884	1... H1-1b
177	M1260	W8x13	.008	0	12	.003	0	y	5	20.313	82.778	3.862	13.884	1... H1-1b
178	M1261	W8x13	.008	0	14	.003	0	y	3	20.313	82.778	3.862	13.884	1... H1-1b
179	M1206	2L2 1/2x2 ...	.085	0	7	.003	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
180	M1207	2L2 1/2x2 ...	.088	0	9	.003	0	y	3	8.11	38.802	2.672	1.737	1 H1-1b
181	M1208	2L2 1/2x2 ...	.085	0	3	.003	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
182	M1154	2L2 1/2x2 ...	.084	0	7	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
183	M1155	2L2 1/2x2 ...	.090	0	9	.004	0	y	7	8.11	38.802	2.672	1.737	1 H1-1b
184	M1156	2L2 1/2x2 ...	.084	0	3	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
185	M1102	2L2 1/2x2 ...	.104	0	7	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
186	M1103	2L2 1/2x2 ...	.111	0	9	.004	0	y	7	8.11	38.802	2.672	1.737	1 H1-1b
187	M1104	2L2 1/2x2 ...	.104	0	3	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
188	M1050	2L2 1/2x2 ...	.107	0	7	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
189	M1051	2L2 1/2x2 ...	.114	0	9	.004	0	y	7	8.11	38.802	2.672	1.737	1 H1-1b
190	M1052	2L2 1/2x2 ...	.107	0	3	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
191	M998	2L2 1/2x2 ...	.109	0	7	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
192	M999	2L2 1/2x2 ...	.115	0	9	.004	0	y	7	8.11	38.802	2.672	1.737	1 H1-1b
193	M1000	2L2 1/2x2 ...	.109	0	3	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
194	M946	2L2 1/2x2 ...	.124	0	7	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
195	M947	2L2 1/2x2 ...	.131	0	9	.004	0	y	7	8.11	38.802	2.672	1.737	1 H1-1b
196	M948	2L2 1/2x2 ...	.124	0	3	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
197	M894	2L2 1/2x2 ...	.135	0	3	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
198	M895	2L2 1/2x2 ...	.143	0	9	.004	0	y	3	8.11	38.802	2.672	1.737	1 H1-1b
199	M896	2L2 1/2x2 ...	.135	0	7	.004	0	y	5	8.11	38.802	2.672	1.737	1 H1-1b
200	M845	C4x7.2	.047	2.094	7	.004	0	y	7	23.581	45.916	.969	4.717	1 H1-1b
201	M846	C4x7.2	.047	2.094	7	.002	0	y	9	23.581	45.916	.969	4.717	1 H1-1b
202	M847	C4x7.2	.047	2.094	5	.004	0	y	5	23.581	45.916	.969	4.717	1 H1-1b
203	M848	C4x7.2	.047	2.094	5	.002	0	y	7	23.581	45.916	.969	4.717	1 H1-1b
204	M849	C4x7.2	.047	2.094	3	.004	0	y	3	23.581	45.916	.969	4.717	1 H1-1b
205	M850	C4x7.2	.047	2.094	3	.002	0	y	5	23.581	45.916	.969	4.717	1 H1-1b
206	M851	C4x7.2	.050	2.688	9	.004	0	y	9	15.355	45.916	.969	4.521	1 H1-1b
207	M852	C4x7.2	.050	2.688	9	.004	5.375	y	9	15.355	45.916	.969	4.521	1 H1-1b
208	M859	C4x7.2	.047	2.094	3	.003	4.188	y	9	23.581	45.916	.969	4.717	1 H1-1b
209	M860	C4x7.2	.048	2.094	5	.004	4.188	y	5	23.581	45.916	.969	4.717	1 H1-1b
210	M861	C4x7.2	.047	2.094	5	.002	4.188	y	3	23.581	45.916	.969	4.717	1 H1-1b
211	M862	C4x7.2	.047	2.094	3	.004	4.188	y	3	23.581	45.916	.969	4.717	1 H1-1b
212	M863	C4x7.2	.047	2.094	7	.004	4.188	y	7	23.581	45.916	.969	4.717	1 H1-1b
213	M864	C4x7.2	.047	2.094	7	.002	4.188	y	5	23.581	45.916	.969	4.717	1 H1-1b
214	M865	C4x7.2	.036	2.121	9	.003	0	y	3	23.169	45.916	.969	4.708	1 H1-1b
215	M1227	2L3x2 1/2...	.059	4.243	5	.002	0	y	6	30.78	56.695	3.608	3.23	1 H1-1b
216	M1228	2L3x2 1/2...	.040	4.353	5	.003	0	y	6	29.808	56.695	3.608	3.23	1 H1-1b
217	M1229	2L3x2 1/2...	.040	4.353	5	.003	0	y	4	29.808	56.695	3.608	3.23	1 H1-1b
218	M1175	2L3x2 1/2...	.051	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1 H1-1b
219	M1176	2L3x2 1/2...	.051	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1 H1-1b
220	M1177	2L3x2 1/2...	.058	4.243	6	.003	0	y	7	30.78	56.695	3.608	3.23	1 H1-1b
221	M1123	2L3x2 1/2...	.066	4.243	6	.003	0	y	7	30.78	56.695	3.608	3.23	1 H1-1b
222	M1124	2L3x2 1/2...	.057	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1 H1-1b
223	M1125	2L3x2 1/2...	.057	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1 H1-1b
224	M1071	2L3x2 1/2...	.058	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1 H1-1b
225	M1072	2L3x2 1/2...	.058	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1 H1-1b
226	M1073	2L3x2 1/2...	.067	4.243	6	.003	0	y	7	30.78	56.695	3.608	3.23	1 H1-1b
227	M1019	2L3x2 1/2...	.067	4.243	6	.004	0	y	7	30.78	56.695	3.608	3.23	1 H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear	Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Eqn	
228	M1020	2L3x2 1/2...	.059	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1	H1-1b
229	M1021	2L3x2 1/2...	.059	4.353	9	.003	0	y	5	29.808	56.695	3.608	3.23	1	H1-1b
230	M967	2L3x2 1/2...	.072	4.243	6	.004	0	y	7	30.78	56.695	3.608	3.23	1	H1-1b
231	M968	2L3x2 1/2...	.064	4.353	9	.004	0	y	5	29.808	56.695	3.608	3.23	1	H1-1b
232	M969	2L3x2 1/2...	.064	4.353	9	.004	0	y	5	29.808	56.695	3.608	3.23	1	H1-1b
233	M915	2L3x2 1/2...	.076	4.243	6	.004	0	y	7	30.78	56.695	3.608	3.23	1	H1-1b
234	M916	2L3x2 1/2...	.067	4.353	9	.003	0	y	9	29.808	56.695	3.608	3.23	1	H1-1b
235	M917	2L3x2 1/2...	.067	4.353	9	.003	0	y	9	29.808	56.695	3.608	3.23	1	H1-1b
236	M1254	W8x13	.063	8.375	2	.004	16.75	y	4	39.183	82.778	3.862	7.792	1	H1-1b
237	M1255	W8x13	.063	8.375	4	.004	16.75	y	5	39.183	82.778	3.862	7.792	1	H1-1b
238	M1256	W8x13	.064	8.375	6	.004	0	y	5	39.183	82.778	3.862	7.792	1	H1-1b
239	M1257	W8x13	.063	8.375	8	.004	0	y	6	39.183	82.778	3.862	7.792	1	H1-1b
240	M1202	2L2 1/2x2 ...	.499	8.375	2	.006	0	y	14	4.055	38.802	2.672	1.737	1	H1-1a
241	M1203	2L2 1/2x2 ...	.498	8.375	8	.006	16.75	y	14	4.055	38.802	2.672	1.737	1	H1-1a
242	M1204	2L2 1/2x2 ...	.455	8.375	6	.006	16.75	y	12	4.055	38.802	2.672	1.737	1	H1-1a
243	M1205	2L2 1/2x2 ...	.454	8.375	4	.006	0	y	16	4.055	38.802	2.672	1.737	1	H1-1a
244	M1150	2L2 1/2x2 ...	.460	8.375	4	.006	16.75	y	16	4.055	38.802	2.672	1.737	1	H1-1a
245	M1151	2L2 1/2x2 ...	.463	8.375	6	.006	0	y	12	4.055	38.802	2.672	1.737	1	H1-1a
246	M1152	2L2 1/2x2 ...	.670	8.375	9	.006	0	y	14	4.055	38.802	2.672	1.737	1	H1-1a
247	M1153	2L2 1/2x2 ...	.678	8.375	9	.006	16.75	y	14	4.055	38.802	2.672	1.737	1	H1-1a
248	M1098	2L2 1/2x2 ...	.797	8.375	9	.006	16.75	y	4	4.055	38.802	2.672	1.737	1	H1-1a
249	M1099	2L2 1/2x2 ...	.511	8.375	4	.006	16.75	y	6	4.055	38.802	2.672	1.737	1	H1-1a
250	M1100	2L2 1/2x2 ...	.515	8.375	6	.006	16.75	y	9	4.055	38.802	2.672	1.737	1	H1-1a
251	M1101	2L2 1/2x2 ...	.787	8.375	9	.006	0	y	6	4.055	38.802	2.672	1.737	1	H1-1a
252	M1046	2L2 1/2x2 ...	.513	8.375	4	.006	0	y	2	4.055	38.802	2.672	1.737	1	H1-1a
253	M1047	2L2 1/2x2 ...	.525	8.375	6	.006	16.75	y	8	4.055	38.802	2.672	1.737	1	H1-1a
254	M1048	2L2 1/2x2 ...	.794	8.375	9	.006	0	y	6	4.055	38.802	2.672	1.737	1	H1-1a
255	M1049	2L2 1/2x2 ...	.823	8.375	9	.006	16.75	y	4	4.055	38.802	2.672	1.737	1	H1-1a
256	M994	2L2 1/2x2 ...	.825	8.375	9	.006	16.75	y	5	4.055	38.802	2.672	1.737	1	H1-1a
257	M995	2L2 1/2x2 ...	.516	8.375	4	.006	0	y	9	4.055	38.802	2.672	1.737	1	H1-1a
258	M996	2L2 1/2x2 ...	.526	8.375	6	.006	16.75	y	9	4.055	38.802	2.672	1.737	1	H1-1a
259	M997	2L2 1/2x2 ...	.800	8.375	9	.006	0	y	6	4.055	38.802	2.672	1.737	1	H1-1a
260	M942	2L2 1/2x2 ...	.555	8.375	4	.006	0	y	2	4.055	38.802	2.672	1.737	1	H1-1a
261	M943	2L2 1/2x2 ...	.565	8.375	6	.006	16.75	y	8	4.055	38.802	2.672	1.737	1	H1-1a
262	M944	2L2 1/2x2 ...	.893	8.375	9	.006	0	y	6	4.055	38.802	2.672	1.737	1	H1-1a
263	M945	2L2 1/2x2 ...	.917	8.375	9	.006	16.75	y	4	4.055	38.802	2.672	1.737	1	H1-1a
264	M890	2L2 1/2x2 ...	.957	8.375	9	.007	16.75	y	2	4.055	38.802	2.672	1.737	1	H1-1a
265	M891	2L2 1/2x2 ...	.594	8.375	6	.007	0	y	3	4.055	38.802	2.672	1.737	1	H1-1a
266	M892	2L2 1/2x2 ...	.584	8.375	4	.007	16.75	y	7	4.055	38.802	2.672	1.737	1	H1-1a
267	M893	2L2 1/2x2 ...	.982	8.375	9	.007	0	y	7	4.055	38.802	2.672	1.737	1	H1-1a
268	M42	W10x30	.021	11.8...	5	.008	11.8...	y	14	165.546	190.563	15.88	55.688	1	H1-1b
269	M43	W10x30	.021	11.8...	3	.008	11.8...	y	12	165.546	190.563	15.88	55.688	1	H1-1b
270	M44	W10x30	.022	11.8...	9	.008	11.8...	y	18	165.546	190.563	15.88	55.688	1	H1-1b
271	M45	W10x30	.021	11.8...	7	.008	11.8...	y	16	165.546	190.563	15.88	55.688	1	H1-1b
272	M191	2L3x2 1/2...	.208	11.8...	16	.008	11.8...	y	13	17.486	56.695	3.608	2.019	1	H1-1b
273	M192	2L3x2 1/2...	.208	11.8...	17	.008	11.8...	y	13	17.486	56.695	3.608	2.019	1	H1-1b
274	M193	2L3x2 1/2...	.207	11.8...	15	.008	11.8...	y	11	17.486	56.695	3.608	2.019	1	H1-1b
275	M194	2L3x2 1/2...	.208	11.8...	11	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
276	M272	2L3x2 1/2...	.211	11.8...	11	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
277	M273	2L3x2 1/2...	.210	11.8...	17	.008	11.8...	y	13	17.486	56.695	3.608	2.019	1	H1-1b
278	M274	2L3x2 1/2...	.209	11.8...	15	.008	11.8...	y	17	17.486	56.695	3.608	2.019	1	H1-1b
279	M275	2L3x2 1/2...	.210	11.8...	11	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
280	M353	2L3x2 1/2...	.214	11.8...	11	.009	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
281	M354	2L3x2 1/2...	.212	11.8...	17	.008	11.8...	y	13	17.486	56.695	3.608	2.019	1	H1-1b
282	M355	2L3x2 1/2...	.211	11.8...	15	.008	11.8...	y	11	17.486	56.695	3.608	2.019	1	H1-1b
283	M356	2L3x2 1/2...	.213	11.8...	11	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
284	M434	2L3x2 1/2...	.205	11.8...	11	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn	
285	M435	2L3x2 1/2...	.203	11.8...	17	.008	11.8...	y	13	17.486	56.695	3.608	2.019	1	H1-1b
286	M436	2L3x2 1/2...	.202	11.8...	18	.008	11.8...	y	11	17.486	56.695	3.608	2.019	1	H1-1b
287	M437	2L3x2 1/2...	.205	11.8...	18	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
288	M515	2L3x2 1/2...	.205	11.8...	11	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
289	M516	2L3x2 1/2...	.203	11.8...	17	.008	11.8...	y	13	17.486	56.695	3.608	2.019	1	H1-1b
290	M517	2L3x2 1/2...	.203	11.8...	18	.008	11.8...	y	11	17.486	56.695	3.608	2.019	1	H1-1b
291	M518	2L3x2 1/2...	.205	11.8...	18	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
292	M596	2L3x2 1/2...	.207	11.8...	11	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
293	M597	2L3x2 1/2...	.205	11.8...	17	.008	11.8...	y	13	17.486	56.695	3.608	2.019	1	H1-1b
294	M598	2L3x2 1/2...	.204	11.8...	18	.008	11.8...	y	11	17.486	56.695	3.608	2.019	1	H1-1b
295	M599	2L3x2 1/2...	.208	11.8...	18	.008	11.8...	y	15	17.486	56.695	3.608	2.019	1	H1-1b
296	M677	2L3x2 1/2...	.201	11.8...	11	.009	11.8...	y	14	17.486	56.695	3.608	2.019	1	H1-1b
297	M678	2L3x2 1/2...	.199	11.8...	17	.009	11.8...	y	12	17.486	56.695	3.608	2.019	1	H1-1b
298	M679	2L3x2 1/2...	.197	11.8...	15	.009	11.8...	y	18	17.486	56.695	3.608	2.019	1	H1-1b
299	M680	2L3x2 1/2...	.204	11.8...	9	.009	11.8...	y	16	17.486	56.695	3.608	2.019	1	H1-1b
300	M1209	2L2 1/2x2 ...	.031	4.188	6	.002	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
301	M1210	2L2 1/2x2 ...	.031	4.188	8	.002	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
302	M1211	2L2 1/2x2 ...	.031	4.188	2	.002	0	y	4	16.09	38.802	2.672	1.737	1	H1-1b
303	M1212	2L2 1/2x2 ...	.031	4.188	4	.002	0	y	6	16.09	38.802	2.672	1.737	1	H1-1b
304	M1213	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	13	24.773	38.802	2.672	1.737	1	H1-1b
305	M1214	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
306	M1215	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	15	24.773	38.802	2.672	1.737	1	H1-1b
307	M1216	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
308	M1217	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	17	24.773	38.802	2.672	1.737	1	H1-1b
309	M1218	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	17	24.773	38.802	2.672	1.737	1	H1-1b
310	M1219	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	11	24.773	38.802	2.672	1.737	1	H1-1b
311	M1220	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	11	24.773	38.802	2.672	1.737	1	H1-1b
312	M1157	2L2 1/2x2 ...	.031	4.188	9	.002	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
313	M1158	2L2 1/2x2 ...	.031	4.188	8	.002	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
314	M1159	2L2 1/2x2 ...	.031	4.188	2	.002	0	y	4	16.09	38.802	2.672	1.737	1	H1-1b
315	M1160	2L2 1/2x2 ...	.031	4.188	9	.002	0	y	6	16.09	38.802	2.672	1.737	1	H1-1b
316	M1161	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
317	M1162	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
318	M1163	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	15	24.773	38.802	2.672	1.737	1	H1-1b
319	M1164	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
320	M1165	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
321	M1166	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
322	M1167	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
323	M1168	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
324	M1105	2L2 1/2x2 ...	.031	4.188	9	.003	0	y	4	16.09	38.802	2.672	1.737	1	H1-1b
325	M1106	2L2 1/2x2 ...	.031	4.188	9	.003	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
326	M1107	2L2 1/2x2 ...	.031	4.188	2	.003	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
327	M1108	2L2 1/2x2 ...	.031	4.188	8	.003	0	y	6	16.09	38.802	2.672	1.737	1	H1-1b
328	M1109	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
329	M1110	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
330	M1111	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
331	M1112	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
332	M1113	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
333	M1114	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
334	M1115	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
335	M1116	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
336	M1053	2L2 1/2x2 ...	.031	4.188	9	.003	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
337	M1054	2L2 1/2x2 ...	.031	4.188	8	.003	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
338	M1055	2L2 1/2x2 ...	.031	4.188	2	.003	0	y	4	16.09	38.802	2.672	1.737	1	H1-1b
339	M1056	2L2 1/2x2 ...	.031	4.188	9	.003	0	y	6	16.09	38.802	2.672	1.737	1	H1-1b
340	M1057	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
341	M1058	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear	Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Eqn	
342	M1059	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
343	M1060	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
344	M1061	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
345	M1062	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
346	M1063	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
347	M1064	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
348	M1001	2L2 1/2x2 ...	.031	4.188	9	.003	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
349	M1002	2L2 1/2x2 ...	.031	4.188	8	.003	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
350	M1003	2L2 1/2x2 ...	.031	4.188	2	.003	0	y	4	16.09	38.802	2.672	1.737	1	H1-1b
351	M1004	2L2 1/2x2 ...	.031	4.188	9	.003	0	y	6	16.09	38.802	2.672	1.737	1	H1-1b
352	M1005	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
353	M1006	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
354	M1007	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
355	M1008	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
356	M1009	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
357	M1010	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
358	M1011	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
359	M1012	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
360	M949	2L2 1/2x2 ...	.032	4.188	9	.003	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
361	M950	2L2 1/2x2 ...	.031	4.188	8	.003	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
362	M951	2L2 1/2x2 ...	.031	4.188	2	.003	0	y	4	16.09	38.802	2.672	1.737	1	H1-1b
363	M952	2L2 1/2x2 ...	.031	4.188	9	.003	0	y	6	16.09	38.802	2.672	1.737	1	H1-1b
364	M953	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
365	M954	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
366	M955	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	14	24.773	38.802	2.672	1.737	1	H1-1b
367	M956	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
368	M957	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	16	24.773	38.802	2.672	1.737	1	H1-1b
369	M958	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
370	M959	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	18	24.773	38.802	2.672	1.737	1	H1-1b
371	M960	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	12	24.773	38.802	2.672	1.737	1	H1-1b
372	M897	2L2 1/2x2 ...	.032	4.188	9	.003	8.375	y	8	16.09	38.802	2.672	1.737	1	H1-1b
373	M898	2L2 1/2x2 ...	.031	4.188	8	.003	8.375	y	6	16.09	38.802	2.672	1.737	1	H1-1b
374	M899	2L2 1/2x2 ...	.031	4.188	2	.003	8.375	y	4	16.09	38.802	2.672	1.737	1	H1-1b
375	M900	2L2 1/2x2 ...	.032	4.188	9	.003	8.375	y	2	16.09	38.802	2.672	1.737	1	H1-1b
376	M901	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	3	24.773	38.802	2.672	1.737	1	H1-1b
377	M902	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	5	24.773	38.802	2.672	1.737	1	H1-1b
378	M903	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	9	24.773	38.802	2.672	1.737	1	H1-1b
379	M904	2L2 1/2x2 ...	.016	2.961	3	.002	0	y	3	24.773	38.802	2.672	1.737	1	H1-1b
380	M905	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	7	24.773	38.802	2.672	1.737	1	H1-1b
381	M906	2L2 1/2x2 ...	.016	2.961	9	.002	0	y	9	24.773	38.802	2.672	1.737	1	H1-1b
382	M907	2L2 1/2x2 ...	.016	2.961	5	.002	0	y	5	24.773	38.802	2.672	1.737	1	H1-1b
383	M908	2L2 1/2x2 ...	.016	2.961	7	.002	0	y	7	24.773	38.802	2.672	1.737	1	H1-1b
384	M1266	2L2 1/2x2 ...	.330	6.86	16	.001	6.86	y	9	7.819	51.305	3.58	1.419	1	H1-1a
385	M1267	2L2 1/2x2 ...	.332	6.86	14	.001	6.86	y	3	7.819	51.305	3.58	1.419	1	H1-1a
386	M1268	2L2 1/2x2 ...	.332	6.86	12	.001	6.86	y	5	7.819	51.305	3.58	1.419	1	H1-1a
387	M1269	2L2 1/2x2 ...	.333	6.86	18	.001	6.86	y	7	7.819	51.305	3.58	1.419	1	H1-1a
388	M1	L6x6x1/2	.243	1.286	16	.070	13.72	y	3	44.396	123.952	3.534	16.267	1	H2-1
389	M2	L6x6x1/2	.240	1.286	14	.071	13.72	z	9	44.396	123.952	3.534	16.267	1	H2-1
390	M3	L6x6x1/2	.234	1.286	12	.069	13.72	y	7	44.396	123.952	3.534	16.267	1	H2-1
391	M4	L6x6x1/2	.235	1.286	18	.072	13.72	z	5	44.396	123.952	3.534	16.267	1	H2-1
392	M47	W6x20	.123	0	5	.024	12.5	y	3	111.036	126.539	12.072	26.946	1	H1-1b
393	M48	W6x20	.126	0	7	.024	12.5	y	9	111.036	126.539	12.072	26.946	1	H1-1b
394	M49	W6x20	.114	0	9	.024	12.5	y	7	111.036	126.539	12.072	26.946	1	H1-1b
395	M50	W6x20	.117	0	3	.024	12.5	y	5	111.036	126.539	12.072	26.946	1	H1-1b
396	M119	W6x20	.334	0	16	.039	25	y	3	111.036	126.539	12.072	26.946	1	H1-1a
397	M120	W6x20	.352	0	14	.037	25	y	9	111.036	126.539	12.072	26.946	1	H1-1a
398	M121	W6x20	.330	22.3...	3	.039	25	y	7	111.036	126.539	12.072	26.946	1	H1-1a

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear..	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn	
399	M122	W6x20	.328	22.3...	9	.036	25	y	5	111.036	126.539	12.072	26.946	1	H1-1a
400	M200	W6x25	.487	0	7	.029	6.25	y	7	139.341	158.228	15.377	33.952	1	H1-1a
401	M201	W6x25	.506	0	5	.031	6.25	y	5	139.341	158.228	15.377	33.952	1	H1-1a
402	M202	W6x25	.485	0	3	.029	6.25	y	3	139.341	158.228	15.377	33.952	1	H1-1a
403	M203	W6x25	.479	0	9	.028	6.25	y	9	139.341	158.228	15.377	33.952	1	H1-1a
404	M281	W8x31	.571	6.25	7	.049	6.25	y	7	182.982	196.814	25.329	54.611	1	H1-1a
405	M282	W8x31	.584	0	5	.051	6.25	y	5	182.982	196.814	25.329	54.611	1	H1-1a
406	M283	W8x31	.577	0	3	.048	6.25	y	3	182.982	196.814	25.329	54.611	1	H1-1a
407	M284	W8x31	.572	0	9	.048	6.25	y	9	182.982	196.814	25.329	54.611	1	H1-1a
408	M362	W8x40	.642	0	7	.047	6.25	y	7	235.032	252.216	33.234	71.497	1	H1-1a
409	M363	W8x40	.656	0	5	.049	6.25	y	5	235.032	252.216	33.234	71.497	1	H1-1a
410	M364	W8x40	.643	0	3	.047	6.25	y	3	235.032	252.216	33.234	71.497	1	H1-1a
411	M365	W8x40	.639	0	9	.046	6.25	y	9	235.032	252.216	33.234	71.497	1	H1-1a
412	M443	W10x54	.622	25	7	.045	6.25	y	7	325.473	340.599	56.228	119.641	1	H1-1a
413	M444	W10x54	.634	25	5	.047	6.25	y	5	325.473	340.599	56.228	119.641	1	H1-1a
414	M445	W10x54	.622	25	3	.045	6.25	y	3	325.473	340.599	56.228	119.641	1	H1-1a
415	M446	W10x54	.620	25	9	.044	6.25	y	9	325.473	340.599	56.228	119.641	1	H1-1a
416	M524	W10x60	.735	0	7	.064	6.25	y	7	364.7	381.557	62.874	134.012	1	H1-1a
417	M525	W10x60	.747	0	5	.066	6.25	y	5	364.7	381.557	62.874	134.012	1	H1-1a
418	M526	W10x60	.734	0	3	.064	6.25	y	3	364.7	381.557	62.874	134.012	1	H1-1a
419	M527	W10x60	.733	0	9	.064	6.25	y	9	364.7	381.557	62.874	134.012	1	H1-1a
420	M605	W10x68	.835	25	7	.068	6.25	y	7	410.526	428.982	72.036	153.234	1	H1-1a
421	M606	W10x68	.847	25	5	.069	6.25	y	5	410.526	428.982	72.036	153.234	1	H1-1a
422	M607	W10x68	.836	0	3	.068	6.25	y	3	410.526	428.982	72.036	153.234	1	H1-1a
423	M608	W10x68	.834	0	9	.068	6.25	y	9	410.526	428.982	72.036	153.234	1	H1-1a
424	M686	W12x79	.945	6.258	7	.064	6.258	y	7	484.425	500.12	97.545	213.772	1	H1-1a
425	M687	W12x79	.953	6.258	5	.064	6.258	y	5	484.425	500.12	97.545	213.772	1	H1-1a
426	M688	W12x79	.934	6.258	3	.065	6.258	y	3	484.425	500.12	97.545	213.772	1	H1-1a
427	M689	W12x79	.933	6.258	9	.064	6.258	y	9	484.425	500.12	97.545	213.772	1	H1-1a
428	M882	2L2 1/2x2 ...	.092	12.14	9	.003	12.14	y	3	7.72	38.802	2.672	1.086	1	H1-1b
429	M883	2L2 1/2x2 ...	.089	12.14	16	.003	0	y	3	7.72	38.802	2.672	1.086	1	H1-1b
430	M884	2L2 1/2x2 ...	.089	12.14	7	.003	12.14	y	5	7.72	38.802	2.672	1.086	1	H1-1b
431	M885	2L2 1/2x2 ...	.089	0	3	.003	0	y	5	7.72	38.802	2.672	1.086	1	H1-1b
432	M886	2L2 1/2x2 ...	.091	12.14	9	.003	12.14	y	7	7.72	38.802	2.672	1.086	1	H1-1b
433	M887	2L2 1/2x2 ...	.088	12.14	12	.003	0	y	7	7.72	38.802	2.672	1.086	1	H1-1b
434	M888	2L2 1/2x2 ...	.089	12.14	3	.003	0	y	14	7.72	38.802	2.672	1.086	1	H1-1b
435	M889	2L2 1/2x2 ...	.089	0	7	.003	12.14	y	14	7.72	38.802	2.672	1.086	1	H1-1b
436	M791	L2.5x2.5x8	.674	0	5	.003	0	y	6	11.821	48.719	1.241	2.85	1	H2-1
437	M792	L2.5x2.5x8	.862	6.738	5	.003	6.738	y	4	12.021	48.719	1.241	2.853	1	H2-1
438	M793	L2.5x2.5x8	.669	0	3	.006	0	y	3	11.821	48.719	1.241	2.85	1	H2-1
439	M794	L2.5x2.5x8	.882	6.738	3	.007	6.738	y	3	12.021	48.719	1.241	2.853	1	H2-1
440	M795	L2.5x2.5x8	.880	0	9	.007	0	y	9	12.021	48.719	1.241	2.853	1	H2-1
441	M796	L2.5x2.5x8	.668	6.795	9	.006	6.795	y	9	11.821	48.719	1.241	2.85	1	H2-1
442	M797	L2.5x2.5x8	.684	0	7	.006	0	y	7	11.821	48.719	1.241	2.85	1	H2-1
443	M798	L2.5x2.5x8	.864	6.738	7	.006	6.738	y	7	12.021	48.719	1.241	2.853	1	H2-1
444	M56	2L2 1/2x2 ...	.095	5.225	13	.005	0	y	12	11.087	38.802	2.672	1.737	1	H1-1b
445	M64	2L2 1/2x2 ...	.095	5.225	17	.005	10.45	y	18	11.087	38.802	2.672	1.737	1	H1-1b
446	M72	2L2 1/2x2 ...	.095	5.225	11	.005	10.45	y	18	11.087	38.802	2.672	1.737	1	H1-1b
447	M80	2L2 1/2x2 ...	.095	5.225	15	.005	10.45	y	16	11.087	38.802	2.672	1.737	1	H1-1b
448	M88	2L2 1/2x2 ...	.095	5.225	17	.005	0	y	16	11.087	38.802	2.672	1.737	1	H1-1b
449	M96	2L2 1/2x2 ...	.095	5.225	13	.005	0	y	14	11.087	38.802	2.672	1.737	1	H1-1b
450	M104	2L2 1/2x2 ...	.095	5.225	15	.005	0	y	14	11.087	38.802	2.672	1.737	1	H1-1b
451	M112	2L2 1/2x2 ...	.095	5.225	11	.005	0	y	12	11.087	38.802	2.672	1.737	1	H1-1b
452	M129	2L2 1/2x2 ...	.088	5.225	13	.005	0	y	14	11.087	38.802	2.672	1.737	1	H1-1b
453	M137	2L2 1/2x2 ...	.088	5.225	17	.005	0	y	17	11.087	38.802	2.672	1.737	1	H1-1b
454	M146	2L2 1/2x2 ...	.087	5.225	12	.005	10.45	y	13	11.087	38.802	2.672	1.737	1	H1-1b
455	M154	2L2 1/2x2 ...	.087	5.225	16	.005	10.45	y	13	11.087	38.802	2.672	1.737	1	H1-1b



**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear..	Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Eqn	
456	M163	2L2 1/2x2 ...	.087	5.225	18	.005	0	y	17	11.087	38.802	2.672	1.737	1	H1-1b
457	M171	2L2 1/2x2 ...	.087	5.225	14	.005	10.45	y	12	11.087	38.802	2.672	1.737	1	H1-1b
458	M180	2L2 1/2x2 ...	.087	5.225	14	.005	10.45	y	16	11.087	38.802	2.672	1.737	1	H1-1b
459	M188	2L2 1/2x2 ...	.087	5.225	18	.005	0	y	18	11.087	38.802	2.672	1.737	1	H1-1b
460	M210	2L2 1/2x2 ...	.087	5.225	12	.005	0	y	18	11.109	38.802	2.672	1.737	1	H1-1b
461	M218	2L2 1/2x2 ...	.087	5.225	17	.005	10.45	y	12	11.109	38.802	2.672	1.737	1	H1-1b
462	M227	2L2 1/2x2 ...	.087	5.225	11	.005	0	y	16	11.109	38.802	2.672	1.737	1	H1-1b
463	M235	2L2 1/2x2 ...	.088	5.225	16	.005	10.45	y	18	11.109	38.802	2.672	1.737	1	H1-1b
464	M244	2L2 1/2x2 ...	.087	5.225	17	.005	10.45	y	15	11.109	38.802	2.672	1.737	1	H1-1b
465	M252	2L2 1/2x2 ...	.087	5.225	14	.005	10.45	y	15	11.109	38.802	2.672	1.737	1	H1-1b
466	M261	2L2 1/2x2 ...	.087	5.225	14	.005	10.45	y	12	11.109	38.802	2.672	1.737	1	H1-1b
467	M269	2L2 1/2x2 ...	.087	5.225	18	.005	10.45	y	14	11.109	38.802	2.672	1.737	1	H1-1b
468	M291	2L2 1/2x2 ...	.087	5.225	12	.005	0	y	18	11.309	38.802	2.672	1.737	1	H1-1b
469	M299	2L2 1/2x2 ...	.087	5.225	18	.005	0	y	12	11.309	38.802	2.672	1.737	1	H1-1b
470	M308	2L2 1/2x2 ...	.086	5.225	11	.005	0	y	16	11.309	38.802	2.672	1.737	1	H1-1b
471	M316	2L2 1/2x2 ...	.087	5.225	16	.005	10.45	y	18	11.309	38.802	2.672	1.737	1	H1-1b
472	M325	2L2 1/2x2 ...	.087	5.225	16	.005	10.45	y	15	11.309	38.802	2.672	1.737	1	H1-1b
473	M333	2L2 1/2x2 ...	.087	5.225	15	.005	0	y	16	11.309	38.802	2.672	1.737	1	H1-1b
474	M342	2L2 1/2x2 ...	.087	5.225	14	.005	10.45	y	12	11.309	38.802	2.672	1.737	1	H1-1b
475	M350	2L2 1/2x2 ...	.086	5.225	11	.005	0	y	14	11.309	38.802	2.672	1.737	1	H1-1b
476	M372	2L2 1/2x2 ...	.087	5.225	12	.005	0	y	18	11.332	38.802	2.672	1.737	1	H1-1b
477	M380	2L2 1/2x2 ...	.087	5.225	18	.005	10.45	y	12	11.332	38.802	2.672	1.737	1	H1-1b
478	M389	2L2 1/2x2 ...	.086	5.225	18	.005	0	y	16	11.332	38.802	2.672	1.737	1	H1-1b
479	M397	2L2 1/2x2 ...	.087	5.225	16	.005	10.45	y	18	11.332	38.802	2.672	1.737	1	H1-1b
480	M406	2L2 1/2x2 ...	.087	5.225	15	.005	0	y	14	11.332	38.802	2.672	1.737	1	H1-1b
481	M414	2L2 1/2x2 ...	.087	5.225	14	.005	10.45	y	16	11.332	38.802	2.672	1.737	1	H1-1b
482	M423	2L2 1/2x2 ...	.087	5.225	14	.005	0	y	12	11.332	38.802	2.672	1.737	1	H1-1b
483	M431	2L2 1/2x2 ...	.086	5.225	12	.005	10.45	y	14	11.332	38.802	2.672	1.737	1	H1-1b
484	M453	2L2 1/2x2 ...	.086	5.225	11	.005	10.45	y	18	11.538	38.802	2.672	1.737	1	H1-1b
485	M461	2L2 1/2x2 ...	.086	5.225	11	.005	10.45	y	12	11.538	38.802	2.672	1.737	1	H1-1b
486	M470	2L2 1/2x2 ...	.086	5.225	17	.005	10.45	y	16	11.538	38.802	2.672	1.737	1	H1-1b
487	M478	2L2 1/2x2 ...	.087	5.225	17	.005	10.45	y	18	11.538	38.802	2.672	1.737	1	H1-1b
488	M487	2L2 1/2x2 ...	.087	5.225	15	.005	0	y	15	11.538	38.802	2.672	1.737	1	H1-1b
489	M495	2L2 1/2x2 ...	.087	5.225	15	.005	0	y	15	11.538	38.802	2.672	1.737	1	H1-1b
490	M504	2L2 1/2x2 ...	.087	5.225	13	.005	10.45	y	12	11.538	38.802	2.672	1.737	1	H1-1b
491	M512	2L2 1/2x2 ...	.086	5.225	13	.005	0	y	13	11.538	38.802	2.672	1.737	1	H1-1b
492	M534	2L2 1/2x2 ...	.081	5.225	12	.004	0	y	18	11.562	38.802	2.672	1.737	1	H1-1b
493	M542	2L2 1/2x2 ...	.081	5.116	14	.004	10.45	y	12	11.562	38.802	2.672	1.737	1	H1-1b
494	M551	2L2 1/2x2 ...	.081	5.225	18	.004	10.45	y	16	11.562	38.802	2.672	1.737	1	H1-1b
495	M559	2L2 1/2x2 ...	.082	5.225	16	.004	0	y	18	11.562	38.802	2.672	1.737	1	H1-1b
496	M568	2L2 1/2x2 ...	.082	5.225	16	.004	0	y	14	11.562	38.802	2.672	1.737	1	H1-1b
497	M576	2L2 1/2x2 ...	.082	5.225	14	.004	0	y	16	11.562	38.802	2.672	1.737	1	H1-1b
498	M585	2L2 1/2x2 ...	.082	5.225	14	.004	0	y	12	11.562	38.802	2.672	1.737	1	H1-1b
499	M593	2L2 1/2x2 ...	.081	5.225	12	.004	10.45	y	14	11.562	38.802	2.672	1.737	1	H1-1b
500	M615	2L2 1/2x2 ...	.097	5.116	6	.004	10.45	y	18	11.585	38.802	2.672	1.737	1	H1-1b
501	M623	2L2 1/2x2 ...	.097	5.116	6	.004	0	y	12	11.585	38.802	2.672	1.737	1	H1-1b
502	M632	2L2 1/2x2 ...	.088	5.116	4	.004	0	y	16	11.585	38.802	2.672	1.737	1	H1-1b
503	M640	2L2 1/2x2 ...	.090	5.116	4	.004	0	y	18	11.585	38.802	2.672	1.737	1	H1-1b
504	M649	2L2 1/2x2 ...	.096	5.116	2	.004	10.45	y	14	11.585	38.802	2.672	1.737	1	H1-1b
505	M657	2L2 1/2x2 ...	.096	5.116	2	.004	0	y	16	11.585	38.802	2.672	1.737	1	H1-1b
506	M666	2L2 1/2x2 ...	.090	5.116	8	.004	10.45	y	12	11.585	38.802	2.672	1.737	1	H1-1b
507	M674	2L2 1/2x2 ...	.088	5.116	8	.004	0	y	14	11.585	38.802	2.672	1.737	1	H1-1b
508	M696	2L2 1/2x2 ...	.072	5.115	12	.004	10.23	y	18	16.516	51.305	3.58	2.271	1	H1-1b
509	M706	2L2 1/2x2 ...	.072	5.115	18	.004	10.23	y	12	16.516	51.305	3.58	2.271	1	H1-1b
510	M717	2L2 1/2x2 ...	.073	5.171	18	.004	10.3...	y	12	16.127	51.305	3.58	2.271	1	H1-1b
511	M727	2L2 1/2x2 ...	.074	5.171	16	.004	0	y	18	16.127	51.305	3.58	2.271	1	H1-1b
512	M738	2L2 1/2x2 ...	.072	5.115	16	.004	10.23	y	14	16.516	51.305	3.58	2.271	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear..	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn
513	M748	2L2 1/2x2 ...	.073	5.115	14	.004	10.23	y	16	16.516	51.305	3.58	2.271	1 H1-1b
514	M759	2L2 1/2x2 ...	.074	5.171	14	.004	10.3...	y	12	16.127	51.305	3.58	2.271	1 H1-1b
515	M769	2L2 1/2x2 ...	.073	5.171	12	.004	0	y	14	16.127	51.305	3.58	2.271	1 H1-1b
516	M57	2L2 1/2x2 ...	.121	5.116	14	.005	10.45	y	18	11.087	38.802	2.672	1.737	1 H1-1b
517	M58	2L2 1/2x2 ...	.041	3.683	16	.003	7.523	y	15	20.143	38.802	2.672	1.737	1 H1-1b
518	M65	2L2 1/2x2 ...	.122	5.116	16	.005	0	y	12	11.087	38.802	2.672	1.737	1 H1-1b
519	M66	2L2 1/2x2 ...	.041	3.683	13	.003	7.523	y	15	20.143	38.802	2.672	1.737	1 H1-1b
520	M73	2L2 1/2x2 ...	.122	5.116	12	.005	10.45	y	16	11.087	38.802	2.672	1.737	1 H1-1b
521	M74	2L2 1/2x2 ...	.041	3.683	15	.003	0	y	13	20.143	38.802	2.672	1.737	1 H1-1b
522	M81	2L2 1/2x2 ...	.122	5.116	14	.005	0	y	18	11.087	38.802	2.672	1.737	1 H1-1b
523	M82	2L2 1/2x2 ...	.041	3.683	11	.003	0	y	13	20.143	38.802	2.672	1.737	1 H1-1b
524	M89	2L2 1/2x2 ...	.121	5.116	18	.005	10.45	y	14	11.087	38.802	2.672	1.737	1 H1-1b
525	M90	2L2 1/2x2 ...	.040	3.683	13	.003	0	y	11	20.143	38.802	2.672	1.737	1 H1-1b
526	M97	2L2 1/2x2 ...	.120	5.116	12	.005	10.45	y	16	11.087	38.802	2.672	1.737	1 H1-1b
527	M98	2L2 1/2x2 ...	.040	3.683	17	.003	0	y	11	20.143	38.802	2.672	1.737	1 H1-1b
528	M105	2L2 1/2x2 ...	.121	5.116	17	.005	0	y	12	11.087	38.802	2.672	1.737	1 H1-1b
529	M106	2L2 1/2x2 ...	.040	3.683	11	.003	0	y	17	20.143	38.802	2.672	1.737	1 H1-1b
530	M113	2L2 1/2x2 ...	.121	5.116	18	.005	0	y	14	11.087	38.802	2.672	1.737	1 H1-1b
531	M114	2L2 1/2x2 ...	.041	3.683	15	.003	7.523	y	17	20.143	38.802	2.672	1.737	1 H1-1b
532	M130	2L2 1/2x2 ...	.105	5.116	13	.005	0	y	11	11.087	38.802	2.672	1.737	1 H1-1b
533	M131	2L2 1/2x2 ...	.035	3.683	17	.002	7.523	y	15	20.143	38.802	2.672	1.737	1 H1-1b
534	M138	2L2 1/2x2 ...	.106	5.116	17	.005	0	y	12	11.087	38.802	2.672	1.737	1 H1-1b
535	M139	2L2 1/2x2 ...	.035	3.683	13	.002	0	y	16	20.143	38.802	2.672	1.737	1 H1-1b
536	M147	2L2 1/2x2 ...	.104	5.116	11	.005	10.45	y	16	11.087	38.802	2.672	1.737	1 H1-1b
537	M148	2L2 1/2x2 ...	.035	3.683	15	.002	0	y	13	20.143	38.802	2.672	1.737	1 H1-1b
538	M155	2L2 1/2x2 ...	.104	5.116	15	.005	10.45	y	17	11.087	38.802	2.672	1.737	1 H1-1b
539	M156	2L2 1/2x2 ...	.034	3.683	11	.002	0	y	13	20.143	38.802	2.672	1.737	1 H1-1b
540	M164	2L2 1/2x2 ...	.102	5.116	17	.005	0	y	15	11.087	38.802	2.672	1.737	1 H1-1b
541	M165	2L2 1/2x2 ...	.033	3.683	13	.002	0	y	11	20.143	38.802	2.672	1.737	1 H1-1b
542	M172	2L2 1/2x2 ...	.102	5.116	13	.005	10.45	y	15	11.087	38.802	2.672	1.737	1 H1-1b
543	M173	2L2 1/2x2 ...	.033	3.683	17	.002	0	y	11	20.143	38.802	2.672	1.737	1 H1-1b
544	M181	2L2 1/2x2 ...	.103	5.116	15	.005	0	y	12	11.087	38.802	2.672	1.737	1 H1-1b
545	M182	2L2 1/2x2 ...	.034	3.683	11	.002	0	y	17	20.143	38.802	2.672	1.737	1 H1-1b
546	M189	2L2 1/2x2 ...	.103	5.116	11	.005	10.45	y	13	11.087	38.802	2.672	1.737	1 H1-1b
547	M190	2L2 1/2x2 ...	.034	3.683	15	.002	7.523	y	17	20.143	38.802	2.672	1.737	1 H1-1b
548	M211	2L2 1/2x2 ...	.098	5.116	12	.005	10.45	y	18	11.109	38.802	2.672	1.737	1 H1-1b
549	M212	2L2 1/2x2 ...	.035	3.683	16	.002	0	y	17	20.179	38.802	2.672	1.737	1 H1-1b
550	M219	2L2 1/2x2 ...	.098	5.116	18	.005	0	y	11	11.109	38.802	2.672	1.737	1 H1-1b
551	M220	2L2 1/2x2 ...	.036	3.683	14	.002	0	y	14	20.179	38.802	2.672	1.737	1 H1-1b
552	M228	2L2 1/2x2 ...	.097	5.116	11	.005	10.45	y	17	11.109	38.802	2.672	1.737	1 H1-1b
553	M229	2L2 1/2x2 ...	.035	3.683	15	.002	0	y	14	20.179	38.802	2.672	1.737	1 H1-1b
554	M236	2L2 1/2x2 ...	.098	5.116	16	.005	0	y	18	11.109	38.802	2.672	1.737	1 H1-1b
555	M237	2L2 1/2x2 ...	.035	3.683	12	.002	7.523	y	11	20.179	38.802	2.672	1.737	1 H1-1b
556	M245	2L2 1/2x2 ...	.096	5.116	16	.005	0	y	14	11.109	38.802	2.672	1.737	1 H1-1b
557	M246	2L2 1/2x2 ...	.034	3.683	12	.002	7.523	y	12	20.179	38.802	2.672	1.737	1 H1-1b
558	M253	2L2 1/2x2 ...	.097	5.116	15	.005	10.45	y	16	11.109	38.802	2.672	1.737	1 H1-1b
559	M254	2L2 1/2x2 ...	.034	3.683	11	.002	0	y	18	20.179	38.802	2.672	1.737	1 H1-1b
560	M262	2L2 1/2x2 ...	.099	5.116	14	.005	0	y	12	11.109	38.802	2.672	1.737	1 H1-1b
561	M263	2L2 1/2x2 ...	.034	3.683	18	.002	0	y	11	20.179	38.802	2.672	1.737	1 H1-1b
562	M270	2L2 1/2x2 ...	.096	5.116	18	.005	0	y	14	11.109	38.802	2.672	1.737	1 H1-1b
563	M271	2L2 1/2x2 ...	.034	3.683	14	.002	0	y	16	20.179	38.802	2.672	1.737	1 H1-1b
564	M292	2L2 1/2x2 ...	.094	5.116	12	.005	10.45	y	18	11.309	38.802	2.672	1.737	1 H1-1b
565	M293	2L2 1/2x2 ...	.038	3.683	16	.002	0	y	16	20.501	38.802	2.672	1.737	1 H1-1b
566	M300	2L2 1/2x2 ...	.094	5.116	18	.005	0	y	18	11.309	38.802	2.672	1.737	1 H1-1b
567	M301	2L2 1/2x2 ...	.039	3.683	14	.002	7.523	y	14	20.501	38.802	2.672	1.737	1 H1-1b
568	M309	2L2 1/2x2 ...	.093	5.116	18	.005	0	y	14	11.309	38.802	2.672	1.737	1 H1-1b
569	M310	2L2 1/2x2 ...	.038	3.683	14	.002	7.523	y	14	20.501	38.802	2.672	1.737	1 H1-1b



**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear..	Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Eqn	
570	M317	2L2 1/2x2 ...	.095	5.116	16	.005	0	y	14	11.309	38.802	2.672	1.737	1	H1-1b
571	M318	2L2 1/2x2 ...	.037	3.683	12	.002	7.523	y	12	20.501	38.802	2.672	1.737	1	H1-1b
572	M326	2L2 1/2x2 ...	.093	5.116	16	.005	0	y	13	11.309	38.802	2.672	1.737	1	H1-1b
573	M327	2L2 1/2x2 ...	.036	3.683	12	.002	7.523	y	12	20.501	38.802	2.672	1.737	1	H1-1b
574	M334	2L2 1/2x2 ...	.094	5.116	14	.005	10.45	y	12	11.309	38.802	2.672	1.737	1	H1-1b
575	M335	2L2 1/2x2 ...	.036	3.683	18	.002	7.523	y	18	20.501	38.802	2.672	1.737	1	H1-1b
576	M343	2L2 1/2x2 ...	.096	5.116	14	.005	10.45	y	16	11.309	38.802	2.672	1.737	1	H1-1b
577	M344	2L2 1/2x2 ...	.037	3.683	18	.002	0	y	18	20.501	38.802	2.672	1.737	1	H1-1b
578	M351	2L2 1/2x2 ...	.092	5.116	12	.005	10.45	y	14	11.309	38.802	2.672	1.737	1	H1-1b
579	M352	2L2 1/2x2 ...	.037	3.683	16	.002	0	y	16	20.501	38.802	2.672	1.737	1	H1-1b
580	M373	2L2 1/2x2 ...	.089	5.116	12	.005	0	y	18	11.332	38.802	2.672	1.737	1	H1-1b
581	M374	2L2 1/2x2 ...	.041	3.683	16	.002	7.523	y	16	20.537	38.802	2.672	1.737	1	H1-1b
582	M381	2L2 1/2x2 ...	.089	5.116	18	.005	0	y	13	11.332	38.802	2.672	1.737	1	H1-1b
583	M382	2L2 1/2x2 ...	.042	3.683	14	.002	7.523	y	14	20.537	38.802	2.672	1.737	1	H1-1b
584	M390	2L2 1/2x2 ...	.088	5.116	18	.005	0	y	15	11.332	38.802	2.672	1.737	1	H1-1b
585	M391	2L2 1/2x2 ...	.041	3.683	14	.002	0	y	14	20.537	38.802	2.672	1.737	1	H1-1b
586	M398	2L2 1/2x2 ...	.091	5.116	17	.005	0	y	18	11.332	38.802	2.672	1.737	1	H1-1b
587	M399	2L2 1/2x2 ...	.040	3.683	13	.002	0	y	12	20.537	38.802	2.672	1.737	1	H1-1b
588	M407	2L2 1/2x2 ...	.091	5.116	15	.005	10.45	y	14	11.332	38.802	2.672	1.737	1	H1-1b
589	M408	2L2 1/2x2 ...	.039	3.683	11	.002	7.523	y	12	20.537	38.802	2.672	1.737	1	H1-1b
590	M415	2L2 1/2x2 ...	.091	5.116	15	.005	0	y	16	11.332	38.802	2.672	1.737	1	H1-1b
591	M416	2L2 1/2x2 ...	.039	3.683	11	.002	7.523	y	18	20.537	38.802	2.672	1.737	1	H1-1b
592	M424	2L2 1/2x2 ...	.092	5.116	13	.005	10.45	y	12	11.332	38.802	2.672	1.737	1	H1-1b
593	M425	2L2 1/2x2 ...	.039	3.683	17	.002	7.523	y	18	20.537	38.802	2.672	1.737	1	H1-1b
594	M432	2L2 1/2x2 ...	.088	5.116	12	.005	10.45	y	14	11.332	38.802	2.672	1.737	1	H1-1b
595	M433	2L2 1/2x2 ...	.040	3.683	17	.002	0	y	16	20.537	38.802	2.672	1.737	1	H1-1b
596	M454	2L2 1/2x2 ...	.086	5.225	15	.005	0	y	14	11.538	38.802	2.672	1.737	1	H1-1b
597	M455	2L2 1/2x2 ...	.044	3.683	15	.002	0	y	16	20.86	38.802	2.672	1.737	1	H1-1b
598	M462	2L2 1/2x2 ...	.086	5.225	15	.005	10.45	y	17	11.538	38.802	2.672	1.737	1	H1-1b
599	M463	2L2 1/2x2 ...	.045	3.683	15	.002	7.523	y	14	20.86	38.802	2.672	1.737	1	H1-1b
600	M471	2L2 1/2x2 ...	.086	5.225	13	.005	0	y	11	11.538	38.802	2.672	1.737	1	H1-1b
601	M472	2L2 1/2x2 ...	.044	3.683	13	.002	7.523	y	14	20.86	38.802	2.672	1.737	1	H1-1b
602	M479	2L2 1/2x2 ...	.088	5.116	17	.005	10.45	y	14	11.538	38.802	2.672	1.737	1	H1-1b
603	M480	2L2 1/2x2 ...	.043	3.683	13	.002	7.523	y	12	20.86	38.802	2.672	1.737	1	H1-1b
604	M488	2L2 1/2x2 ...	.088	5.116	15	.005	10.45	y	18	11.538	38.802	2.672	1.737	1	H1-1b
605	M489	2L2 1/2x2 ...	.042	3.683	11	.002	0	y	12	20.86	38.802	2.672	1.737	1	H1-1b
606	M496	2L2 1/2x2 ...	.089	5.116	15	.005	10.45	y	12	11.538	38.802	2.672	1.737	1	H1-1b
607	M497	2L2 1/2x2 ...	.042	3.683	11	.002	0	y	18	20.86	38.802	2.672	1.737	1	H1-1b
608	M505	2L2 1/2x2 ...	.089	5.116	13	.005	10.45	y	16	11.538	38.802	2.672	1.737	1	H1-1b
609	M506	2L2 1/2x2 ...	.042	3.683	17	.002	0	y	18	20.86	38.802	2.672	1.737	1	H1-1b
610	M513	2L2 1/2x2 ...	.086	5.225	17	.005	0	y	18	11.538	38.802	2.672	1.737	1	H1-1b
611	M514	2L2 1/2x2 ...	.043	3.683	17	.002	0	y	16	20.86	38.802	2.672	1.737	1	H1-1b
612	M535	2L2 1/2x2 ...	.082	5.225	15	.004	10.45	y	14	11.562	38.802	2.672	1.737	1	H1-1b
613	M536	2L2 1/2x2 ...	.044	3.683	15	.002	7.523	y	16	20.896	38.802	2.672	1.737	1	H1-1b
614	M543	2L2 1/2x2 ...	.082	5.225	15	.004	10.45	y	16	11.562	38.802	2.672	1.737	1	H1-1b
615	M544	2L2 1/2x2 ...	.045	3.683	15	.002	0	y	13	20.896	38.802	2.672	1.737	1	H1-1b
616	M552	2L2 1/2x2 ...	.082	5.225	13	.004	10.45	y	12	11.562	38.802	2.672	1.737	1	H1-1b
617	M553	2L2 1/2x2 ...	.045	3.683	13	.002	0	y	15	20.896	38.802	2.672	1.737	1	H1-1b
618	M560	2L2 1/2x2 ...	.082	5.116	17	.004	10.45	y	14	11.562	38.802	2.672	1.737	1	H1-1b
619	M561	2L2 1/2x2 ...	.043	3.683	13	.002	0	y	11	20.896	38.802	2.672	1.737	1	H1-1b
620	M569	2L2 1/2x2 ...	.083	5.116	15	.004	0	y	18	11.562	38.802	2.672	1.737	1	H1-1b
621	M570	2L2 1/2x2 ...	.043	3.683	11	.002	0	y	12	20.896	38.802	2.672	1.737	1	H1-1b
622	M577	2L2 1/2x2 ...	.083	5.116	15	.004	0	y	12	11.562	38.802	2.672	1.737	1	H1-1b
623	M578	2L2 1/2x2 ...	.042	3.683	11	.002	0	y	18	20.896	38.802	2.672	1.737	1	H1-1b
624	M586	2L2 1/2x2 ...	.083	5.116	13	.004	0	y	16	11.562	38.802	2.672	1.737	1	H1-1b
625	M587	2L2 1/2x2 ...	.042	3.683	17	.002	0	y	18	20.896	38.802	2.672	1.737	1	H1-1b
626	M594	2L2 1/2x2 ...	.082	5.225	17	.004	10.45	y	18	11.562	38.802	2.672	1.737	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn	
627	M595	2L2 1/2x2 ...	.044	3.683	17	.002	7.523	y	16	20.896	38.802	2.672	1.737	1	H1-1b
628	M616	2L2 1/2x2 ...	.094	5.116	2	.004	10.45	y	14	11.585	38.802	2.672	1.737	1	H1-1b
629	M617	2L2 1/2x2 ...	.048	3.683	15	.002	7.523	y	16	20.932	38.802	2.672	1.737	1	H1-1b
630	M624	2L2 1/2x2 ...	.096	5.116	2	.004	10.45	y	17	11.585	38.802	2.672	1.737	1	H1-1b
631	M625	2L2 1/2x2 ...	.049	3.683	15	.002	7.523	y	13	20.932	38.802	2.672	1.737	1	H1-1b
632	M633	2L2 1/2x2 ...	.091	5.116	8	.004	10.45	y	11	11.585	38.802	2.672	1.737	1	H1-1b
633	M634	2L2 1/2x2 ...	.048	3.683	13	.003	0	y	15	20.932	38.802	2.672	1.737	1	H1-1b
634	M641	2L2 1/2x2 ...	.092	5.116	8	.004	10.45	y	14	11.585	38.802	2.672	1.737	1	H1-1b
635	M642	2L2 1/2x2 ...	.046	3.683	13	.002	0	y	11	20.932	38.802	2.672	1.737	1	H1-1b
636	M650	2L2 1/2x2 ...	.096	5.116	6	.004	10.45	y	18	11.585	38.802	2.672	1.737	1	H1-1b
637	M651	2L2 1/2x2 ...	.046	3.683	11	.002	7.523	y	12	20.932	38.802	2.672	1.737	1	H1-1b
638	M658	2L2 1/2x2 ...	.096	5.116	6	.004	10.45	y	12	11.585	38.802	2.672	1.737	1	H1-1b
639	M659	2L2 1/2x2 ...	.046	3.683	11	.002	0	y	18	20.932	38.802	2.672	1.737	1	H1-1b
640	M667	2L2 1/2x2 ...	.093	5.116	4	.004	0	y	16	11.585	38.802	2.672	1.737	1	H1-1b
641	M668	2L2 1/2x2 ...	.045	3.683	17	.002	7.523	y	18	20.932	38.802	2.672	1.737	1	H1-1b
642	M675	2L2 1/2x2 ...	.090	5.116	4	.004	10.45	y	18	11.585	38.802	2.672	1.737	1	H1-1b
643	M676	2L2 1/2x2 ...	.047	3.683	17	.003	0	y	16	20.932	38.802	2.672	1.737	1	H1-1b
644	M698	2L2 1/2x2 ...	.121	6.278	12	.005	0	y	18	10.4	51.305	3.58	2.271	1	H1-1b
645	M708	2L2 1/2x2 ...	.120	6.278	18	.005	12.5...	y	12	10.4	51.305	3.58	2.271	1	H1-1b
646	M719	2L2 1/2x2 ...	.122	6.339	11	.005	12.6...	y	12	10.188	51.305	3.58	2.271	1	H1-1b
647	M729	2L2 1/2x2 ...	.123	6.339	16	.005	12.6...	y	14	10.188	51.305	3.58	2.271	1	H1-1b
648	M740	2L2 1/2x2 ...	.121	6.278	16	.005	12.5...	y	14	10.4	51.305	3.58	2.271	1	H1-1b
649	M750	2L2 1/2x2 ...	.121	6.278	14	.005	0	y	16	10.4	51.305	3.58	2.271	1	H1-1b
650	M761	2L2 1/2x2 ...	.122	6.339	14	.005	0	y	16	9.782	51.305	3.58	2.271	1	H1-1b
651	M771	2L2 1/2x2 ...	.122	6.339	11	.005	0	y	18	10.188	51.305	3.58	2.271	1	H1-1b
652	M699	2L2 1/2x2 ...	.092	5.337	2	.004	10.6...	y	13	14.732	51.305	3.58	2.271	1	H1-1b
653	M700	2L2 1/2x2 ...	.051	4.014	15	.003	8.199	y	17	24.888	51.305	3.58	2.271	1	H1-1b
654	M709	2L2 1/2x2 ...	.095	5.337	2	.004	0	y	17	14.732	51.305	3.58	2.271	1	H1-1b
655	M710	2L2 1/2x2 ...	.052	4.014	15	.003	8.199	y	13	24.888	51.305	3.58	2.271	1	H1-1b
656	M720	2L2 1/2x2 ...	.089	5.283	8	.004	0	y	14	15.062	51.305	3.58	2.271	1	H1-1b
657	M721	2L2 1/2x2 ...	.054	4.06	13	.003	0	y	15	24.439	51.305	3.58	2.271	1	H1-1b
658	M730	2L2 1/2x2 ...	.090	5.283	17	.004	0	y	15	15.062	51.305	3.58	2.271	1	H1-1b
659	M731	2L2 1/2x2 ...	.052	4.06	13	.003	0	y	15	24.439	51.305	3.58	2.271	1	H1-1b
660	M741	2L2 1/2x2 ...	.093	5.337	15	.004	10.6...	y	17	14.732	51.305	3.58	2.271	1	H1-1b
661	M742	2L2 1/2x2 ...	.050	4.014	11	.003	0	y	13	24.888	51.305	3.58	2.271	1	H1-1b
662	M751	2L2 1/2x2 ...	.094	5.337	15	.004	0	y	13	14.732	51.305	3.58	2.271	1	H1-1b
663	M752	2L2 1/2x2 ...	.050	4.014	11	.003	8.199	y	17	24.888	51.305	3.58	2.271	1	H1-1b
664	M762	2L2 1/2x2 ...	.091	5.283	13	.004	0	y	15	15.062	51.305	3.58	2.271	1	H1-1b
665	M763	2L2 1/2x2 ...	.052	4.06	17	.003	0	y	15	24.439	51.305	3.58	2.271	1	H1-1b
666	M772	2L2 1/2x2 ...	.088	5.283	13	.004	0	y	15	15.062	51.305	3.58	2.271	1	H1-1b
667	M773	2L2 1/2x2 ...	.053	4.06	17	.003	8.293	y	11	24.439	51.305	3.58	2.271	1	H1-1b
668	M17	L2 1/2x2 1...	.286	9.149	4	.005	9.149	z	15	2.953	19.444	.233	.871	1	H2-1
669	M20	L2 1/2x2 1...	.288	9.149	8	.005	9.149	z	15	2.953	19.444	.233	.871	1	H2-1
670	M24	L2 1/2x2 1...	.224	9.149	2	.005	9.149	z	13	2.953	19.444	.233	.871	1	H2-1
671	M27	L2 1/2x2 1...	.215	9.149	6	.005	9.149	z	13	2.953	19.444	.233	.871	1	H2-1
672	M31	L2 1/2x2 1...	.275	9.149	8	.005	9.149	z	11	2.953	19.444	.233	.871	1	H2-1
673	M34	L2 1/2x2 1...	.274	9.149	4	.005	9.149	z	11	2.953	19.444	.233	.871	1	H2-1
674	M38	L2 1/2x2 1...	.216	9.149	6	.005	0	z	17	2.953	19.444	.233	.871	1	H2-1
675	M41	L2 1/2x2 1...	.224	9.149	2	.005	0	z	17	2.953	19.444	.233	.871	1	H2-1
676	M54	L3x3x3/16	.017	0	13	.004	0	y	12	8.108	23.497	.339	1.395	1	H2-1
677	M62	L3x3x3/16	.017	0	17	.004	7.523	y	18	8.108	23.497	.339	1.395	1	H2-1
678	M70	L3x3x3/16	.017	0	11	.004	0	y	18	8.108	23.497	.339	1.395	1	H2-1
679	M78	L3x3x3/16	.016	0	6	.004	7.523	y	16	8.108	23.497	.339	1.395	1	H2-1
680	M86	L3x3x3/16	.022	0	8	.004	7.523	y	16	8.108	23.497	.339	1.395	1	H2-1
681	M94	L3x3x3/16	.021	0	4	.004	7.523	y	14	8.108	23.497	.339	1.395	1	H2-1
682	M102	L3x3x3/16	.018	0	6	.004	0	y	14	8.108	23.497	.339	1.395	1	H2-1
683	M110	L3x3x3/16	.019	0	2	.004	7.523	y	12	8.108	23.497	.339	1.395	1	H2-1



**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear..	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyv/o...	Mnzz/o...	Cb	Egn
684	M127	L3x3x3/16	.058	0	7	.004	7.523	y	18	8.108	23.497	.339	1.395	1 H2-1
685	M135	L3x3x3/16	.062	0	5	.004	0	y	12	8.108	23.497	.339	1.395	1 H2-1
686	M144	L3x3x3/16	.060	0	6	.004	0	y	16	8.108	23.497	.339	1.395	1 H2-1
687	M152	L3x3x3/16	.062	0	3	.004	7.523	y	18	8.108	23.497	.339	1.395	1 H2-1
688	M161	L3x3x3/16	.045	0	12	.004	0	y	14	8.108	23.497	.339	1.395	1 H2-1
689	M169	L3x3x3/16	.047	0	9	.004	0	y	16	8.108	23.497	.339	1.395	1 H2-1
690	M178	L3x3x3/16	.060	0	9	.004	0	y	12	8.108	23.497	.339	1.395	1 H2-1
691	M186	L3x3x3/16	.053	0	6	.004	7.523	y	14	8.108	23.497	.339	1.395	1 H2-1
692	M208	L3x3x3/16	.110	0	7	.004	7.523	y	18	8.131	23.497	.339	1.396	1 H2-1
693	M216	L3x3x3/16	.110	0	5	.004	7.523	y	12	8.131	23.497	.339	1.396	1 H2-1
694	M225	L3x3x3/16	.113	0	5	.004	0	y	16	8.131	23.497	.339	1.396	1 H2-1
695	M233	L3x3x3/16	.113	0	3	.004	7.523	y	18	8.131	23.497	.339	1.396	1 H2-1
696	M242	L3x3x3/16	.095	0	3	.004	7.523	y	14	8.131	23.497	.339	1.396	1 H2-1
697	M250	L3x3x3/16	.099	0	9	.004	0	y	16	8.131	23.497	.339	1.396	1 H2-1
698	M259	L3x3x3/16	.105	0	9	.004	0	y	12	8.131	23.497	.339	1.396	1 H2-1
699	M267	L3x3x3/16	.100	0	7	.004	0	y	14	8.131	23.497	.339	1.396	1 H2-1
700	M289	L3x3x3/16	.177	0	7	.004	7.523	y	17	8.438	23.497	.339	1.406	1 H2-1
701	M297	L3x3x3/16	.187	0	5	.004	0	y	12	8.438	23.497	.339	1.406	1 H2-1
702	M306	L3x3x3/16	.192	0	5	.004	0	y	16	8.438	23.497	.339	1.406	1 H2-1
703	M314	L3x3x3/16	.188	0	3	.004	7.523	y	11	8.438	23.497	.339	1.406	1 H2-1
704	M323	L3x3x3/16	.172	0	3	.004	0	y	14	8.438	23.497	.339	1.406	1 H2-1
705	M331	L3x3x3/16	.168	0	9	.004	0	y	17	8.438	23.497	.339	1.406	1 H2-1
706	M340	L3x3x3/16	.187	0	9	.004	0	y	11	8.438	23.497	.339	1.406	1 H2-1
707	M348	L3x3x3/16	.185	0	7	.004	7.523	y	14	8.438	23.497	.339	1.406	1 H2-1
708	M370	L3x3x3/16	.239	0	6	.004	0	y	18	8.46	23.497	.339	1.407	1 H2-1
709	M378	L3x3x3/16	.248	0	6	.004	0	y	12	8.46	23.497	.339	1.407	1 H2-1
710	M387	L3x3x3/16	.246	0	4	.004	0	y	16	8.46	23.497	.339	1.407	1 H2-1
711	M395	L3x3x3/16	.238	0	4	.004	0	y	11	8.46	23.497	.339	1.407	1 H2-1
712	M404	L3x3x3/16	.240	0	2	.004	0	y	14	8.46	23.497	.339	1.407	1 H2-1
713	M412	L3x3x3/16	.234	0	2	.004	0	y	16	8.46	23.497	.339	1.407	1 H2-1
714	M421	L3x3x3/16	.234	0	8	.004	7.523	y	11	8.46	23.497	.339	1.407	1 H2-1
715	M429	L3x3x3/16	.239	0	8	.004	7.523	y	14	8.46	23.497	.339	1.407	1 H2-1
716	M451	L3x3x3/16	.310	0	6	.004	7.523	y	18	8.781	23.497	.339	1.418	1 H2-1
717	M459	L3x3x3/16	.320	0	6	.004	7.523	y	12	8.781	23.497	.339	1.418	1 H2-1
718	M468	L3x3x3/16	.320	0	4	.004	7.523	y	16	8.781	23.497	.339	1.418	1 H2-1
719	M476	L3x3x3/16	.299	0	4	.004	0	y	18	8.781	23.497	.339	1.418	1 H2-1
720	M485	L3x3x3/16	.310	0	2	.004	7.523	y	14	8.781	23.497	.339	1.418	1 H2-1
721	M493	L3x3x3/16	.304	0	2	.004	7.523	y	16	8.781	23.497	.339	1.418	1 H2-1
722	M502	L3x3x3/16	.295	0	8	.004	7.523	y	12	8.781	23.497	.339	1.418	1 H2-1
723	M510	L3x3x3/16	.313	0	8	.004	0	y	14	8.781	23.497	.339	1.418	1 H2-1
724	M532	L3x3x3/16	.414	0	7	.004	7.523	y	17	8.805	23.497	.339	1.418	1 H2-1
725	M540	L3x3x3/16	.425	0	5	.004	7.523	y	13	8.805	23.497	.339	1.418	1 H2-1
726	M549	L3x3x3/16	.426	0	5	.004	7.523	y	15	8.805	23.497	.339	1.418	1 H2-1
727	M557	L3x3x3/16	.407	0	3	.004	0	y	11	8.805	23.497	.339	1.418	1 H2-1
728	M566	L3x3x3/16	.419	0	3	.004	0	y	13	8.805	23.497	.339	1.418	1 H2-1
729	M574	L3x3x3/16	.417	0	9	.004	7.523	y	17	8.805	23.497	.339	1.418	1 H2-1
730	M583	L3x3x3/16	.406	0	9	.004	0	y	11	8.805	23.497	.339	1.418	1 H2-1
731	M591	L3x3x3/16	.417	0	7	.004	7.523	y	15	8.805	23.497	.339	1.418	1 H2-1
732	M613	L3x3x3/16	.565	0	6	.004	7.523	y	17	8.851	23.497	.339	1.42	1 H2-1
733	M621	L3x3x3/16	.573	0	6	.004	0	y	13	8.851	23.497	.339	1.42	1 H2-1
734	M630	L3x3x3/16	.534	0	4	.004	7.523	y	16	8.851	23.497	.339	1.42	1 H2-1
735	M638	L3x3x3/16	.506	0	4	.004	0	y	11	8.851	23.497	.339	1.42	1 H2-1
736	M647	L3x3x3/16	.560	0	2	.004	7.523	y	13	8.851	23.497	.339	1.42	1 H2-1
737	M655	L3x3x3/16	.556	0	2	.004	0	y	17	8.851	23.497	.339	1.42	1 H2-1
738	M664	L3x3x3/16	.502	0	8	.004	7.523	y	11	8.851	23.497	.339	1.42	1 H2-1
739	M672	L3x3x3/16	.527	0	8	.004	7.523	y	14	8.851	23.497	.339	1.42	1 H2-1
740	M694	L3x3x3/16	.134	0	6	.004	0	y	17	8.691	23.497	.339	1.415	1 H2-1

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn
741	M704	L3x3x3/16	.136	0	6	.004	0	y	12	8.691	23.497	.339	1.415	1 H2-1
742	M715	L3x3x3/16	.064	0	4	.004	0	y	16	8.476	23.497	.339	1.407	1 H2-1
743	M725	L3x3x3/16	.068	0	3	.004	8.293	y	12	8.476	23.497	.339	1.407	1 H2-1
744	M736	L3x3x3/16	.134	0	2	.004	0	y	13	8.691	23.497	.339	1.415	1 H2-1
745	M746	L3x3x3/16	.132	0	2	.004	0	y	17	8.691	23.497	.339	1.415	1 H2-1
746	M757	L3x3x3/16	.068	0	9	.004	0	y	11	8.476	23.497	.339	1.407	1 H2-1
747	M767	L3x3x3/16	.063	0	7	.004	8.293	y	16	8.476	23.497	.339	1.407	1 H2-1
748	M807	LL3x3x3x3	.042	6.674	7	.002	0	y	6	10.222	46.994	3.688	2.496	1 H1-1b
749	M808	LL3x3x3x3	.039	7.196	3	.002	13.8...	y	4	10.388	46.994	3.688	2.496	1 H1-1b
750	M809	LL3x3x3x3	.039	6.621	9	.002	13.8...	y	6	10.388	46.994	3.688	2.496	1 H1-1b
751	M810	LL3x3x3x3	.042	7.255	5	.002	0	y	8	10.222	46.994	3.688	2.496	1 H1-1b
752	M811	LL3x3x3x3	.040	6.674	3	.002	13.9...	y	8	10.222	46.994	3.688	2.496	1 H1-1b
753	M812	LL3x3x3x3	.037	7.196	7	.002	0	y	2	10.388	46.994	3.688	2.496	1 H1-1b
754	M813	LL3x3x3x3	.037	6.621	5	.002	13.8...	y	2	10.388	46.994	3.688	2.496	1 H1-1b
755	M814	LL3x3x3x3	.040	7.255	9	.002	13.9...	y	4	10.222	46.994	3.688	2.496	1 H1-1b
756	M1246	2L2 1/2x2 ...	.098	5.944	16	.002	12.14	y	13	7.72	38.802	2.672	1.737	1 H1-1b
757	M1247	2L2 1/2x2 ...	.098	6.196	16	.002	12.14	y	11	7.72	38.802	2.672	1.737	1 H1-1b
758	M1248	2L2 1/2x2 ...	.098	5.944	14	.002	12.14	y	17	7.72	38.802	2.672	1.737	1 H1-1b
759	M1249	2L2 1/2x2 ...	.098	6.196	14	.002	0	y	11	7.72	38.802	2.672	1.737	1 H1-1b
760	M1250	2L2 1/2x2 ...	.098	5.944	12	.002	0	y	15	7.72	38.802	2.672	1.737	1 H1-1b
761	M1251	2L2 1/2x2 ...	.098	6.196	12	.002	12.14	y	16	7.72	38.802	2.672	1.737	1 H1-1b
762	M1252	2L2 1/2x2 ...	.098	5.944	18	.002	0	y	13	7.72	38.802	2.672	1.737	1 H1-1b
763	M1253	2L2 1/2x2 ...	.098	6.196	18	.002	0	y	15	7.72	38.802	2.672	1.737	1 H1-1b
764	M1194	2L2 1/2x2 ...	.076	5.944	14	.002	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
765	M1195	2L2 1/2x2 ...	.076	6.196	18	.002	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
766	M1196	2L2 1/2x2 ...	.076	5.944	16	.002	0	y	18	7.72	38.802	2.672	1.737	1 H1-1b
767	M1197	2L2 1/2x2 ...	.076	6.196	12	.002	12.14	y	18	7.72	38.802	2.672	1.737	1 H1-1b
768	M1198	2L2 1/2x2 ...	.076	5.944	13	.002	0	y	3	7.72	38.802	2.672	1.737	1 H1-1b
769	M1199	2L2 1/2x2 ...	.076	6.196	18	.002	12.14	y	3	7.72	38.802	2.672	1.737	1 H1-1b
770	M1200	2L2 1/2x2 ...	.076	5.944	12	.002	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
771	M1201	2L2 1/2x2 ...	.076	6.196	16	.002	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
772	M1142	2L2 1/2x2 ...	.076	5.944	15	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
773	M1143	2L2 1/2x2 ...	.076	6.196	18	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
774	M1144	2L2 1/2x2 ...	.076	5.944	16	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
775	M1145	2L2 1/2x2 ...	.076	6.196	12	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
776	M1146	2L2 1/2x2 ...	.076	5.944	13	.003	12.14	y	3	7.72	38.802	2.672	1.737	1 H1-1b
777	M1147	2L2 1/2x2 ...	.076	6.196	18	.003	0	y	3	7.72	38.802	2.672	1.737	1 H1-1b
778	M1148	2L2 1/2x2 ...	.076	5.944	12	.002	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
779	M1149	2L2 1/2x2 ...	.076	6.196	16	.002	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
780	M1090	2L2 1/2x2 ...	.076	5.944	15	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
781	M1091	2L2 1/2x2 ...	.076	6.196	18	.003	0	y	7	7.72	38.802	2.672	1.737	1 H1-1b
782	M1092	2L2 1/2x2 ...	.076	5.944	15	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
783	M1093	2L2 1/2x2 ...	.076	6.196	13	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
784	M1094	2L2 1/2x2 ...	.076	5.944	17	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
785	M1095	2L2 1/2x2 ...	.076	6.196	12	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
786	M1096	2L2 1/2x2 ...	.076	5.944	13	.003	12.14	y	3	7.72	38.802	2.672	1.737	1 H1-1b
787	M1097	2L2 1/2x2 ...	.076	6.196	18	.003	0	y	3	7.72	38.802	2.672	1.737	1 H1-1b
788	M1038	2L2 1/2x2 ...	.075	5.944	16	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
789	M1039	2L2 1/2x2 ...	.075	6.196	12	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
790	M1040	2L2 1/2x2 ...	.076	5.944	14	.003	0	y	3	7.72	38.802	2.672	1.737	1 H1-1b
791	M1041	2L2 1/2x2 ...	.076	6.196	18	.003	12.14	y	3	7.72	38.802	2.672	1.737	1 H1-1b
792	M1042	2L2 1/2x2 ...	.076	5.944	12	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
793	M1043	2L2 1/2x2 ...	.076	6.196	16	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
794	M1044	2L2 1/2x2 ...	.076	5.944	15	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
795	M1045	2L2 1/2x2 ...	.076	6.196	18	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
796	M986	2L2 1/2x2 ...	.076	5.944	14	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
797	M987	2L2 1/2x2 ...	.076	6.196	18	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear..	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Eqn
798	M988	2L2 1/2x2 ...	.075	5.944	16	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
799	M989	2L2 1/2x2 ...	.075	6.196	12	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
800	M990	2L2 1/2x2 ...	.076	5.944	14	.003	12.14	y	3	7.72	38.802	2.672	1.737	1 H1-1b
801	M991	2L2 1/2x2 ...	.076	6.196	18	.003	12.14	y	3	7.72	38.802	2.672	1.737	1 H1-1b
802	M992	2L2 1/2x2 ...	.076	5.944	12	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
803	M993	2L2 1/2x2 ...	.076	6.196	16	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
804	M934	2L2 1/2x2 ...	.076	5.944	15	.003	0	y	7	7.72	38.802	2.672	1.737	1 H1-1b
805	M935	2L2 1/2x2 ...	.076	6.196	18	.003	12.14	y	7	7.72	38.802	2.672	1.737	1 H1-1b
806	M936	2L2 1/2x2 ...	.075	5.944	16	.003	12.14	y	9	7.72	38.802	2.672	1.737	1 H1-1b
807	M937	2L2 1/2x2 ...	.075	6.196	12	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
808	M938	2L2 1/2x2 ...	.076	5.944	14	.003	0	y	3	7.72	38.802	2.672	1.737	1 H1-1b
809	M939	2L2 1/2x2 ...	.076	6.196	18	.003	0	y	7	7.72	38.802	2.672	1.737	1 H1-1b
810	M940	2L2 1/2x2 ...	.076	5.944	12	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
811	M941	2L2 1/2x2 ...	.076	6.196	16	.003	0	y	9	7.72	38.802	2.672	1.737	1 H1-1b
812	M815	LL3x3x3x3	.097	7.621	12	.003	15.5...	y	5	8.184	46.994	3.688	2.496	1 H1-1b
813	M816	LL3x3x3x3	.090	7.843	16	.003	0	y	5	8.399	46.994	3.688	2.496	1 H1-1b
814	M817	LL3x3x3x3	.093	7.523	14	.003	15.3...	y	4	8.399	46.994	3.688	2.496	1 H1-1b
815	M818	LL3x3x3x3	.100	7.946	18	.003	0	y	2	8.184	46.994	3.688	2.496	1 H1-1b
816	M819	LL3x3x3x3	.101	7.621	16	.003	0	y	6	8.184	46.994	3.688	2.496	1 H1-1b
817	M820	LL3x3x3x3	.093	7.843	12	.003	15.3...	y	4	8.399	46.994	3.688	2.496	1 H1-1b
818	M821	LL3x3x3x3	.093	7.523	18	.003	15.3...	y	8	8.399	46.994	3.688	2.496	1 H1-1b
819	M822	LL3x3x3x3	.101	7.946	14	.003	15.5...	y	6	8.184	46.994	3.688	2.496	1 H1-1b
820	M1238	2L2 1/2x2 ...	.029	4.911	5	.002	10.0...	y	3	11.307	38.802	2.672	1.737	1 H1-1b
821	M1239	2L2 1/2x2 ...	.029	5.12	9	.002	10.0...	y	3	11.307	38.802	2.672	1.737	1 H1-1b
822	M1240	2L2 1/2x2 ...	.029	4.911	7	.002	0	y	9	11.307	38.802	2.672	1.737	1 H1-1b
823	M1241	2L2 1/2x2 ...	.029	5.12	3	.002	0	y	9	11.307	38.802	2.672	1.737	1 H1-1b
824	M1242	2L2 1/2x2 ...	.029	4.911	5	.002	0	y	7	11.307	38.802	2.672	1.737	1 H1-1b
825	M1243	2L2 1/2x2 ...	.029	5.12	9	.002	10.0...	y	7	11.307	38.802	2.672	1.737	1 H1-1b
826	M1244	2L2 1/2x2 ...	.029	4.911	3	.002	0	y	5	11.307	38.802	2.672	1.737	1 H1-1b
827	M1245	2L2 1/2x2 ...	.029	5.12	7	.002	0	y	5	11.307	38.802	2.672	1.737	1 H1-1b
828	M1186	2L2 1/2x2 ...	.029	4.911	7	.002	10.0...	y	17	11.307	38.802	2.672	1.737	1 H1-1b
829	M1187	2L2 1/2x2 ...	.029	5.12	3	.002	0	y	11	11.307	38.802	2.672	1.737	1 H1-1b
830	M1188	2L2 1/2x2 ...	.029	4.911	5	.002	0	y	15	11.307	38.802	2.672	1.737	1 H1-1b
831	M1189	2L2 1/2x2 ...	.029	5.12	9	.002	10.0...	y	17	11.307	38.802	2.672	1.737	1 H1-1b
832	M1190	2L2 1/2x2 ...	.029	4.911	5	.002	10.0...	y	13	11.307	38.802	2.672	1.737	1 H1-1b
833	M1191	2L2 1/2x2 ...	.029	5.12	9	.002	0	y	12	11.307	38.802	2.672	1.737	1 H1-1b
834	M1192	2L2 1/2x2 ...	.029	4.911	7	.002	0	y	15	11.307	38.802	2.672	1.737	1 H1-1b
835	M1193	2L2 1/2x2 ...	.029	5.12	3	.002	0	y	13	11.307	38.802	2.672	1.737	1 H1-1b
836	M1134	2L2 1/2x2 ...	.030	4.911	7	.002	10.0...	y	14	11.307	38.802	2.672	1.737	1 H1-1b
837	M1135	2L2 1/2x2 ...	.030	5.12	3	.002	0	y	18	11.307	38.802	2.672	1.737	1 H1-1b
838	M1136	2L2 1/2x2 ...	.029	4.911	5	.002	0	y	12	11.307	38.802	2.672	1.737	1 H1-1b
839	M1137	2L2 1/2x2 ...	.029	5.12	9	.002	10.0...	y	12	11.307	38.802	2.672	1.737	1 H1-1b
840	M1138	2L2 1/2x2 ...	.029	4.911	7	.002	0	y	14	11.307	38.802	2.672	1.737	1 H1-1b
841	M1139	2L2 1/2x2 ...	.029	5.12	3	.002	0	y	14	11.307	38.802	2.672	1.737	1 H1-1b
842	M1140	2L2 1/2x2 ...	.029	4.911	5	.002	10.0...	y	16	11.307	38.802	2.672	1.737	1 H1-1b
843	M1141	2L2 1/2x2 ...	.029	5.12	9	.002	10.0...	y	16	11.307	38.802	2.672	1.737	1 H1-1b
844	M1082	2L2 1/2x2 ...	.030	4.911	5	.002	10.0...	y	16	11.307	38.802	2.672	1.737	1 H1-1b
845	M1083	2L2 1/2x2 ...	.030	5.12	9	.002	10.0...	y	12	11.307	38.802	2.672	1.737	1 H1-1b
846	M1084	2L2 1/2x2 ...	.030	4.911	7	.002	0	y	15	11.307	38.802	2.672	1.737	1 H1-1b
847	M1085	2L2 1/2x2 ...	.030	5.12	3	.002	0	y	18	11.307	38.802	2.672	1.737	1 H1-1b
848	M1086	2L2 1/2x2 ...	.030	4.911	5	.002	0	y	16	11.307	38.802	2.672	1.737	1 H1-1b
849	M1087	2L2 1/2x2 ...	.030	5.12	9	.002	0	y	16	11.307	38.802	2.672	1.737	1 H1-1b
850	M1088	2L2 1/2x2 ...	.030	4.911	3	.002	0	y	11	11.307	38.802	2.672	1.737	1 H1-1b
851	M1089	2L2 1/2x2 ...	.030	5.12	7	.002	10.0...	y	14	11.307	38.802	2.672	1.737	1 H1-1b
852	M1030	2L2 1/2x2 ...	.031	4.911	5	.002	10.0...	y	18	11.307	38.802	2.672	1.737	1 H1-1b
853	M1031	2L2 1/2x2 ...	.031	5.12	9	.002	0	y	13	11.307	38.802	2.672	1.737	1 H1-1b
854	M1032	2L2 1/2x2 ...	.031	4.911	7	.002	10.0...	y	13	11.307	38.802	2.672	1.737	1 H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear..	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn	
855	M1033	2L2 1/2x2 ...	.031	5.12	3	.002	10.0...	y	16	11.307	38.802	2.672	1.737	1	H1-1b
856	M1034	2L2 1/2x2 ...	.031	4.911	5	.002	10.0...	y	11	11.307	38.802	2.672	1.737	1	H1-1b
857	M1035	2L2 1/2x2 ...	.031	5.12	9	.002	10.0...	y	16	11.307	38.802	2.672	1.737	1	H1-1b
858	M1036	2L2 1/2x2 ...	.031	4.911	3	.002	10.0...	y	14	11.307	38.802	2.672	1.737	1	H1-1b
859	M1037	2L2 1/2x2 ...	.031	5.12	7	.002	0	y	11	11.307	38.802	2.672	1.737	1	H1-1b
860	M978	2L2 1/2x2 ...	.032	4.911	5	.002	0	y	12	11.307	38.802	2.672	1.737	1	H1-1b
861	M979	2L2 1/2x2 ...	.032	5.12	9	.002	10.0...	y	12	11.307	38.802	2.672	1.737	1	H1-1b
862	M980	2L2 1/2x2 ...	.032	4.911	7	.002	10.0...	y	18	11.307	38.802	2.672	1.737	1	H1-1b
863	M981	2L2 1/2x2 ...	.032	5.12	3	.002	0	y	18	11.307	38.802	2.672	1.737	1	H1-1b
864	M982	2L2 1/2x2 ...	.032	4.911	7	.002	10.0...	y	14	11.307	38.802	2.672	1.737	1	H1-1b
865	M983	2L2 1/2x2 ...	.032	5.12	3	.002	10.0...	y	14	11.307	38.802	2.672	1.737	1	H1-1b
866	M984	2L2 1/2x2 ...	.032	4.911	5	.002	0	y	16	11.307	38.802	2.672	1.737	1	H1-1b
867	M985	2L2 1/2x2 ...	.032	5.12	9	.002	10.0...	y	16	11.307	38.802	2.672	1.737	1	H1-1b
868	M926	2L2 1/2x2 ...	.033	4.911	5	.002	10.0...	y	16	11.307	38.802	2.672	1.737	1	H1-1b
869	M927	2L2 1/2x2 ...	.032	5.12	9	.002	0	y	16	11.307	38.802	2.672	1.737	1	H1-1b
870	M928	2L2 1/2x2 ...	.033	4.911	7	.002	0	y	14	11.307	38.802	2.672	1.737	1	H1-1b
871	M929	2L2 1/2x2 ...	.033	5.12	3	.002	0	y	14	11.307	38.802	2.672	1.737	1	H1-1b
872	M930	2L2 1/2x2 ...	.033	4.911	5	.002	10.0...	y	12	11.307	38.802	2.672	1.737	1	H1-1b
873	M931	2L2 1/2x2 ...	.032	5.12	9	.002	0	y	12	11.307	38.802	2.672	1.737	1	H1-1b
874	M932	2L2 1/2x2 ...	.032	4.911	3	.002	0	y	18	11.307	38.802	2.672	1.737	1	H1-1b
875	M933	2L2 1/2x2 ...	.032	5.12	7	.002	10.0...	y	18	11.307	38.802	2.672	1.737	1	H1-1b
876	M874	2L2 1/2x2 ...	.037	4.911	5	.002	10.0...	y	4	11.307	38.802	2.672	1.737	1	H1-1b
877	M875	2L2 1/2x2 ...	.037	5.12	9	.002	10.0...	y	2	11.307	38.802	2.672	1.737	1	H1-1b
878	M876	2L2 1/2x2 ...	.037	4.911	7	.002	10.0...	y	9	11.307	38.802	2.672	1.737	1	H1-1b
879	M877	2L2 1/2x2 ...	.037	5.12	3	.002	10.0...	y	9	11.307	38.802	2.672	1.737	1	H1-1b
880	M878	2L2 1/2x2 ...	.037	4.911	5	.002	10.0...	y	6	11.307	38.802	2.672	1.737	1	H1-1b
881	M879	2L2 1/2x2 ...	.036	5.12	9	.002	0	y	6	11.307	38.802	2.672	1.737	1	H1-1b
882	M880	2L2 1/2x2 ...	.036	4.911	7	.002	0	y	6	11.307	38.802	2.672	1.737	1	H1-1b
883	M881	2L2 1/2x2 ...	.036	5.12	3	.002	0	y	4	11.307	38.802	2.672	1.737	1	H1-1b
884	M799	LL4x4x8x3	.018	3.948	3	.003	0	y	5	117.137	161.677	17.228	11.212	1	H1-1b
885	M800	LL4x4x8x3	.018	3.948	5	.003	0	y	3	117.137	161.677	17.228	11.212	1	H1-1b
886	M801	LL4x4x8x3	.018	3.948	9	.003	7.896	y	7	117.137	161.677	17.228	11.212	1	H1-1b
887	M806	LL4x4x8x3	.018	3.948	7	.003	0	y	9	117.137	161.677	17.228	11.212	1	H1-1b
888	M1234	2L2 1/2x2 ...	.103	7.896	7	.002	0	z	5	4.562	38.802	2.672	1.086	1	H1-1b
889	M1235	2L2 1/2x2 ...	.103	7.896	5	.002	0	z	7	4.562	38.802	2.672	1.086	1	H1-1b
890	M1236	2L2 1/2x2 ...	.103	7.896	3	.002	7.896	z	9	4.562	38.802	2.672	1.086	1	H1-1b
891	M1237	2L2 1/2x2 ...	.103	7.896	9	.002	7.896	z	3	4.562	38.802	2.672	1.086	1	H1-1b
892	M1182	2L2 1/2x2 ...	.103	7.896	7	.002	0	z	5	4.562	38.802	2.672	1.086	1	H1-1b
893	M1183	2L2 1/2x2 ...	.103	7.896	5	.002	0	z	7	4.562	38.802	2.672	1.086	1	H1-1b
894	M1184	2L2 1/2x2 ...	.103	7.896	9	.002	7.896	z	3	4.562	38.802	2.672	1.086	1	H1-1b
895	M1185	2L2 1/2x2 ...	.103	7.896	3	.002	0	z	5	4.562	38.802	2.672	1.086	1	H1-1b
896	M1130	2L2 1/2x2 ...	.103	7.896	7	.002	7.896	z	8	4.562	38.802	2.672	1.086	1	H1-1b
897	M1131	2L2 1/2x2 ...	.103	7.896	9	.002	7.896	z	2	4.562	38.802	2.672	1.086	1	H1-1b
898	M1132	2L2 1/2x2 ...	.103	7.896	5	.002	7.896	z	4	4.562	38.802	2.672	1.086	1	H1-1b
899	M1133	2L2 1/2x2 ...	.103	7.896	3	.002	7.896	z	2	4.562	38.802	2.672	1.086	1	H1-1b
900	M1078	2L2 1/2x2 ...	.107	7.896	7	.002	0	z	6	4.562	38.802	2.672	1.086	1	H1-1b
901	M1079	2L2 1/2x2 ...	.107	7.896	5	.002	0	z	6	4.562	38.802	2.672	1.086	1	H1-1b
902	M1080	2L2 1/2x2 ...	.107	7.896	3	.002	7.896	z	2	4.562	38.802	2.672	1.086	1	H1-1b
903	M1081	2L2 1/2x2 ...	.107	7.896	9	.002	0	z	2	4.562	38.802	2.672	1.086	1	H1-1b
904	M1026	2L2 1/2x2 ...	.111	7.896	5	.002	7.896	z	4	4.562	38.802	2.672	1.086	1	H1-1b
905	M1027	2L2 1/2x2 ...	.112	7.896	7	.002	7.896	z	8	4.562	38.802	2.672	1.086	1	H1-1b
906	M1028	2L2 1/2x2 ...	.111	7.896	3	.002	7.896	z	2	4.562	38.802	2.672	1.086	1	H1-1b
907	M1029	2L2 1/2x2 ...	.112	7.896	9	.002	7.896	z	2	4.562	38.802	2.672	1.086	1	H1-1b
908	M974	2L2 1/2x2 ...	.116	7.896	7	.002	7.896	z	8	4.562	38.802	2.672	1.086	1	H1-1b
909	M975	2L2 1/2x2 ...	.116	7.896	5	.002	7.896	z	4	4.562	38.802	2.672	1.086	1	H1-1b
910	M976	2L2 1/2x2 ...	.116	7.896	3	.002	7.896	z	2	4.562	38.802	2.672	1.086	1	H1-1b
911	M977	2L2 1/2x2 ...	.116	7.896	9	.002	0	z	2	4.562	38.802	2.672	1.086	1	H1-1b





**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear	Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Eqn
912	M922	2L2 1/2x2 ...	.112	7.896	7	.002	7.896	z	8	4.562	38.802	2.672	1.086	1 H1-1b
913	M923	2L2 1/2x2 ...	.112	7.896	9	.002	7.896	z	2	4.562	38.802	2.672	1.086	1 H1-1b
914	M924	2L2 1/2x2 ...	.112	7.896	3	.002	7.896	z	2	4.562	38.802	2.672	1.086	1 H1-1b
915	M925	2L2 1/2x2 ...	.112	7.896	5	.002	0	z	4	4.562	38.802	2.672	1.086	1 H1-1b
916	M870	2L2 1/2x2 ...	.115	7.896	5	.002	0	z	3	4.562	38.802	2.672	1.086	1 H1-1b
917	M871	2L2 1/2x2 ...	.115	7.896	7	.002	7.896	y	7	4.562	38.802	2.672	1.086	1 H1-1b
918	M872	2L2 1/2x2 ...	.115	7.896	3	.002	7.896	y	3	4.562	38.802	2.672	1.086	1 H1-1b
919	M873	2L2 1/2x2 ...	.115	7.896	9	.002	7.896	y	9	4.562	38.802	2.672	1.086	1 H1-1b
920	M802	LL3x3x3x3	.124	7.896	3	.003	7.896	y	3	7.952	46.994	3.688	1.56	1 H1-1b
921	M803	LL3x3x3x3	.124	7.896	5	.003	7.896	y	5	7.952	46.994	3.688	1.56	1 H1-1b
922	M804	LL3x3x3x3	.124	7.896	9	.003	7.896	y	9	7.952	46.994	3.688	1.56	1 H1-1b
923	M805	LL3x3x3x3	.124	7.896	7	.003	7.896	y	7	7.952	46.994	3.688	1.56	1 H1-1b
924	M1230	2L2 1/2x2 ...	.028	3.948	3	.002	7.896	y	5	17.709	38.802	2.672	1.737	1 H1-1b
925	M1231	2L2 1/2x2 ...	.028	3.948	9	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
926	M1232	2L2 1/2x2 ...	.028	3.948	7	.002	7.896	y	5	17.709	38.802	2.672	1.737	1 H1-1b
927	M1233	2L2 1/2x2 ...	.028	3.948	5	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
928	M1178	2L2 1/2x2 ...	.028	3.948	16	.002	7.896	y	5	17.709	38.802	2.672	1.737	1 H1-1b
929	M1179	2L2 1/2x2 ...	.028	3.948	14	.002	7.896	y	7	17.709	38.802	2.672	1.737	1 H1-1b
930	M1180	2L2 1/2x2 ...	.028	3.948	3	.002	7.896	y	5	17.709	38.802	2.672	1.737	1 H1-1b
931	M1181	2L2 1/2x2 ...	.028	3.948	9	.002	7.896	y	7	17.709	38.802	2.672	1.737	1 H1-1b
932	M1126	2L2 1/2x2 ...	.029	3.948	7	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
933	M1127	2L2 1/2x2 ...	.029	3.948	5	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
934	M1128	2L2 1/2x2 ...	.029	3.948	3	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
935	M1129	2L2 1/2x2 ...	.029	3.948	9	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
936	M1074	2L2 1/2x2 ...	.029	3.948	7	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
937	M1075	2L2 1/2x2 ...	.029	3.948	5	.002	7.896	y	7	17.709	38.802	2.672	1.737	1 H1-1b
938	M1076	2L2 1/2x2 ...	.029	3.948	3	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
939	M1077	2L2 1/2x2 ...	.029	3.948	9	.002	7.896	y	7	17.709	38.802	2.672	1.737	1 H1-1b
940	M1022	2L2 1/2x2 ...	.029	3.948	7	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
941	M1023	2L2 1/2x2 ...	.029	3.948	5	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
942	M1024	2L2 1/2x2 ...	.029	3.948	3	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
943	M1025	2L2 1/2x2 ...	.029	3.948	9	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
944	M970	2L2 1/2x2 ...	.029	3.948	7	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
945	M971	2L2 1/2x2 ...	.029	3.948	5	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
946	M972	2L2 1/2x2 ...	.029	3.948	3	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
947	M973	2L2 1/2x2 ...	.029	3.948	9	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
948	M918	2L2 1/2x2 ...	.030	3.948	7	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
949	M919	2L2 1/2x2 ...	.030	3.948	5	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
950	M920	2L2 1/2x2 ...	.030	3.948	3	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
951	M921	2L2 1/2x2 ...	.030	3.948	9	.002	7.896	y	7	17.709	38.802	2.672	1.737	1 H1-1b
952	M866	2L2 1/2x2 ...	.030	3.948	7	.002	7.896	y	9	17.709	38.802	2.672	1.737	1 H1-1b
953	M867	2L2 1/2x2 ...	.030	3.948	9	.002	7.896	y	7	17.709	38.802	2.672	1.737	1 H1-1b
954	M868	2L2 1/2x2 ...	.030	3.948	3	.002	7.896	y	5	17.709	38.802	2.672	1.737	1 H1-1b
955	M869	2L2 1/2x2 ...	.030	3.948	5	.002	7.896	y	3	17.709	38.802	2.672	1.737	1 H1-1b
956	M783	L2.5x2.5x3	.401	1.396	3	.002	0	y	3	14.868	19.423	.581	1.221	1 H2-1
957	M784	L2.5x2.5x3	.287	1.396	3	.002	0	y	3	14.868	19.423	.581	1.221	1 H2-1
958	M785	L2.5x2.5x3	.407	1.396	5	.002	2.792	y	9	14.868	19.423	.581	1.221	1 H2-1
959	M786	L2.5x2.5x3	.289	1.396	5	.002	0	y	9	14.868	19.423	.581	1.221	1 H2-1
960	M787	L2.5x2.5x3	.293	1.396	7	.002	0	y	7	14.868	19.423	.581	1.221	1 H2-1
961	M788	L2.5x2.5x3	.393	1.396	7	.003	2.792	y	7	14.868	19.423	.581	1.221	1 H2-1
962	M789	L2.5x2.5x3	.293	1.396	5	.002	0	y	4	14.868	19.423	.581	1.221	1 H2-1
963	M790	L2.5x2.5x3	.395	1.396	5	.002	2.792	y	6	14.868	19.423	.581	1.221	1 H2-1
964	M1262	2L2 1/2x2 ...	.086	6.375	2	.004	12.75	y	8	6.999	38.802	2.672	1.737	1 H1-1b
965	M1263	2L2 1/2x2 ...	.078	6.375	17	.004	0	y	6	6.999	38.802	2.672	1.737	1 H1-1b
966	M1264	2L2 1/2x2 ...	.089	6.375	6	.004	0	y	8	6.999	38.802	2.672	1.737	1 H1-1b
967	M1265	2L2 1/2x2 ...	.078	6.375	13	.004	12.75	y	6	6.999	38.802	2.672	1.737	1 H1-1b
968	M53	2L2 1/2x2 ...	.080	4.188	13	.005	0	y	16	16.945	38.802	2.672	1.737	1 H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear..	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn	
969	M61	2L2 1/2x2 ...	.080	4.188	17	.005	0	y	14	16.945	38.802	2.672	1.737	1	H1-1b
970	M69	2L2 1/2x2 ...	.081	4.188	11	.005	0	y	14	16.945	38.802	2.672	1.737	1	H1-1b
971	M77	2L2 1/2x2 ...	.081	4.188	15	.005	0	y	13	16.945	38.802	2.672	1.737	1	H1-1b
972	M85	2L2 1/2x2 ...	.081	4.188	17	.005	0	y	11	16.945	38.802	2.672	1.737	1	H1-1b
973	M93	2L2 1/2x2 ...	.081	4.188	13	.005	0	y	11	16.945	38.802	2.672	1.737	1	H1-1b
974	M101	2L2 1/2x2 ...	.080	4.188	15	.005	0	y	18	16.945	38.802	2.672	1.737	1	H1-1b
975	M109	2L2 1/2x2 ...	.080	4.188	11	.005	0	y	16	16.945	38.802	2.672	1.737	1	H1-1b
976	M126	2L2 1/2x2 ...	.072	4.188	13	.005	8.375	y	18	16.945	38.802	2.672	1.737	1	H1-1b
977	M134	2L2 1/2x2 ...	.072	4.188	17	.005	0	y	12	16.945	38.802	2.672	1.737	1	H1-1b
978	M143	2L2 1/2x2 ...	.071	4.188	12	.005	8.375	y	16	16.945	38.802	2.672	1.737	1	H1-1b
979	M151	2L2 1/2x2 ...	.072	4.188	16	.005	0	y	18	16.945	38.802	2.672	1.737	1	H1-1b
980	M160	2L2 1/2x2 ...	.070	4.188	18	.005	8.375	y	14	16.945	38.802	2.672	1.737	1	H1-1b
981	M168	2L2 1/2x2 ...	.070	4.188	14	.005	0	y	16	16.945	38.802	2.672	1.737	1	H1-1b
982	M177	2L2 1/2x2 ...	.071	4.188	14	.005	0	y	12	16.945	38.802	2.672	1.737	1	H1-1b
983	M185	2L2 1/2x2 ...	.071	4.188	18	.005	0	y	14	16.945	38.802	2.672	1.737	1	H1-1b
984	M207	2L2 1/2x2 ...	.071	4.188	12	.005	0	y	17	16.978	38.802	2.672	1.737	1	H1-1b
985	M215	2L2 1/2x2 ...	.070	4.188	17	.005	0	y	12	16.978	38.802	2.672	1.737	1	H1-1b
986	M224	2L2 1/2x2 ...	.071	4.188	11	.005	8.375	y	15	16.978	38.802	2.672	1.737	1	H1-1b
987	M232	2L2 1/2x2 ...	.072	4.188	16	.005	0	y	11	16.978	38.802	2.672	1.737	1	H1-1b
988	M241	2L2 1/2x2 ...	.069	4.188	17	.005	8.375	y	14	16.978	38.802	2.672	1.737	1	H1-1b
989	M249	2L2 1/2x2 ...	.070	4.188	14	.005	0	y	17	16.978	38.802	2.672	1.737	1	H1-1b
990	M258	2L2 1/2x2 ...	.071	4.188	14	.005	8.375	y	12	16.978	38.802	2.672	1.737	1	H1-1b
991	M266	2L2 1/2x2 ...	.070	4.188	11	.005	0	y	14	16.978	38.802	2.672	1.737	1	H1-1b
992	M288	2L2 1/2x2 ...	.069	4.188	12	.005	8.375	y	17	17.216	38.802	2.672	1.737	1	H1-1b
993	M296	2L2 1/2x2 ...	.069	4.188	18	.005	0	y	13	17.216	38.802	2.672	1.737	1	H1-1b
994	M305	2L2 1/2x2 ...	.068	4.188	11	.005	8.375	y	15	17.216	38.802	2.672	1.737	1	H1-1b
995	M313	2L2 1/2x2 ...	.071	4.188	16	.005	0	y	11	17.216	38.802	2.672	1.737	1	H1-1b
996	M322	2L2 1/2x2 ...	.069	4.188	15	.005	8.375	y	13	17.216	38.802	2.672	1.737	1	H1-1b
997	M330	2L2 1/2x2 ...	.069	4.188	15	.005	0	y	17	17.216	38.802	2.672	1.737	1	H1-1b
998	M339	2L2 1/2x2 ...	.071	4.188	14	.005	8.375	y	11	17.216	38.802	2.672	1.737	1	H1-1b
999	M347	2L2 1/2x2 ...	.069	4.188	11	.005	0	y	15	17.216	38.802	2.672	1.737	1	H1-1b
1000	M369	2L2 1/2x2 ...	.069	4.188	12	.005	8.375	y	15	17.25	38.802	2.672	1.737	1	H1-1b
1001	M377	2L2 1/2x2 ...	.068	4.188	18	.005	8.375	y	15	17.25	38.802	2.672	1.737	1	H1-1b
1002	M386	2L2 1/2x2 ...	.068	4.188	18	.005	8.375	y	13	17.25	38.802	2.672	1.737	1	H1-1b
1003	M394	2L2 1/2x2 ...	.070	4.188	16	.005	8.375	y	13	17.25	38.802	2.672	1.737	1	H1-1b
1004	M403	2L2 1/2x2 ...	.069	4.188	15	.005	8.375	y	12	17.25	38.802	2.672	1.737	1	H1-1b
1005	M411	2L2 1/2x2 ...	.069	4.188	15	.005	0	y	18	17.25	38.802	2.672	1.737	1	H1-1b
1006	M420	2L2 1/2x2 ...	.070	4.188	14	.005	0	y	17	17.25	38.802	2.672	1.737	1	H1-1b
1007	M428	2L2 1/2x2 ...	.068	4.188	12	.005	8.375	y	17	17.25	38.802	2.672	1.737	1	H1-1b
1008	M450	2L2 1/2x2 ...	.069	4.188	15	.005	0	y	14	17.524	38.802	2.672	1.737	1	H1-1b
1009	M458	2L2 1/2x2 ...	.069	4.188	15	.005	8.375	y	15	17.524	38.802	2.672	1.737	1	H1-1b
1010	M467	2L2 1/2x2 ...	.069	4.188	13	.005	8.375	y	13	17.524	38.802	2.672	1.737	1	H1-1b
1011	M475	2L2 1/2x2 ...	.071	4.188	17	.005	0	y	14	17.524	38.802	2.672	1.737	1	H1-1b
1012	M484	2L2 1/2x2 ...	.070	4.188	15	.005	8.375	y	11	17.524	38.802	2.672	1.737	1	H1-1b
1013	M492	2L2 1/2x2 ...	.071	4.188	15	.005	8.375	y	11	17.524	38.802	2.672	1.737	1	H1-1b
1014	M501	2L2 1/2x2 ...	.071	4.188	13	.005	0	y	17	17.524	38.802	2.672	1.737	1	H1-1b
1015	M509	2L2 1/2x2 ...	.069	4.188	17	.005	8.375	y	17	17.524	38.802	2.672	1.737	1	H1-1b
1016	M531	2L2 1/2x2 ...	.067	4.188	16	.004	8.375	y	14	17.524	38.802	2.672	1.737	1	H1-1b
1017	M539	2L2 1/2x2 ...	.067	4.188	14	.004	8.375	y	16	17.524	38.802	2.672	1.737	1	H1-1b
1018	M548	2L2 1/2x2 ...	.067	4.188	14	.004	8.375	y	12	17.524	38.802	2.672	1.737	1	H1-1b
1019	M556	2L2 1/2x2 ...	.068	4.188	16	.004	8.375	y	14	17.524	38.802	2.672	1.737	1	H1-1b
1020	M565	2L2 1/2x2 ...	.067	4.188	16	.004	0	y	16	17.524	38.802	2.672	1.737	1	H1-1b
1021	M573	2L2 1/2x2 ...	.068	4.188	14	.004	8.375	y	14	17.524	38.802	2.672	1.737	1	H1-1b
1022	M582	2L2 1/2x2 ...	.068	4.188	14	.004	0	y	16	17.524	38.802	2.672	1.737	1	H1-1b
1023	M590	2L2 1/2x2 ...	.066	4.188	16	.004	8.375	y	17	17.524	38.802	2.672	1.737	1	H1-1b
1024	M612	2L2 1/2x2 ...	.068	4.188	15	.005	8.375	y	14	17.558	38.802	2.672	1.737	1	H1-1b
1025	M620	2L2 1/2x2 ...	.069	4.188	15	.005	8.375	y	16	17.558	38.802	2.672	1.737	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear..Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/o...	Mnzz/o...	Cb	Eqn		
1026	M629	2L2 1/2x2 ...	.067	4.188	13	.005	8.375	y	12	17.558	38.802	2.672	1.737	1	H1-1b
1027	M637	2L2 1/2x2 ...	.070	4.188	17	.005	8.375	y	14	17.558	38.802	2.672	1.737	1	H1-1b
1028	M646	2L2 1/2x2 ...	.072	4.188	15	.005	8.375	y	18	17.558	38.802	2.672	1.737	1	H1-1b
1029	M654	2L2 1/2x2 ...	.072	4.188	15	.005	8.375	y	12	17.558	38.802	2.672	1.737	1	H1-1b
1030	M663	2L2 1/2x2 ...	.071	4.188	13	.005	0	y	16	17.558	38.802	2.672	1.737	1	H1-1b
1031	M671	2L2 1/2x2 ...	.067	4.188	17	.005	8.375	y	18	17.558	38.802	2.672	1.737	1	H1-1b
1032	M693	2L2 1/2x2 ...	.075	4.187	12	.004	8.375	y	14	17.851	38.802	2.672	1.737	1	H1-1b
1033	M703	2L2 1/2x2 ...	.075	4.187	18	.004	8.375	y	13	17.851	38.802	2.672	1.737	1	H1-1b
1034	M714	2L2 1/2x2 ...	.072	4.188	18	.004	0	y	15	17.851	38.802	2.672	1.737	1	H1-1b
1035	M724	2L2 1/2x2 ...	.073	4.187	16	.004	8.375	y	14	17.851	38.802	2.672	1.737	1	H1-1b
1036	M735	2L2 1/2x2 ...	.075	4.187	16	.004	8.375	y	18	17.851	38.802	2.672	1.737	1	H1-1b
1037	M745	2L2 1/2x2 ...	.076	4.187	14	.004	8.375	y	12	17.851	38.802	2.672	1.737	1	H1-1b
1038	M756	2L2 1/2x2 ...	.073	4.187	14	.004	8.375	y	16	17.851	38.802	2.672	1.737	1	H1-1b
1039	M766	2L2 1/2x2 ...	.072	4.187	12	.004	8.375	y	18	17.851	38.802	2.672	1.737	1	H1-1b
1040	M1290	2L2 1/2x2 ...	.051	5.188	4	.005	0	y	5	10.57	38.802	2.672	1.737	1	H1-1b
1041	M1291	2L2 1/2x2 ...	.051	5.188	4	.005	10.3...	y	3	10.57	38.802	2.672	1.737	1	H1-1b
1042	M1292	2L2 1/2x2 ...	.051	5.188	6	.005	0	y	5	10.57	38.802	2.672	1.737	1	H1-1b
1043	M1293	2L2 1/2x2 ...	.051	5.188	6	.005	10.3...	y	7	10.57	38.802	2.672	1.737	1	H1-1b
1044	M1294	2L2 1/2x2 ...	.051	5.188	8	.005	0	y	7	10.57	38.802	2.672	1.737	1	H1-1b
1045	M1295	2L2 1/2x2 ...	.051	5.188	8	.005	10.3...	y	9	10.57	38.802	2.672	1.737	1	H1-1b
1046	M1296	2L2 1/2x2 ...	.051	5.188	2	.005	0	y	9	10.57	38.802	2.672	1.737	1	H1-1b
1047	M1297	2L2 1/2x2 ...	.051	5.188	2	.005	10.3...	y	3	10.57	38.802	2.672	1.737	1	H1-1b
1048	M55	2L2 1/2x2 ...	.169	6.281	17	.007	12.5...	y	14	7.52	38.802	2.672	1.737	1	H1-1b
1049	M63	2L2 1/2x2 ...	.169	6.281	13	.007	12.5...	y	16	7.52	38.802	2.672	1.737	1	H1-1b
1050	M71	2L2 1/2x2 ...	.169	6.281	15	.007	12.5...	y	11	7.52	38.802	2.672	1.737	1	H1-1b
1051	M79	2L2 1/2x2 ...	.169	6.281	11	.007	12.5...	y	14	7.52	38.802	2.672	1.737	1	H1-1b
1052	M87	2L2 1/2x2 ...	.168	6.281	13	.007	12.5...	y	18	7.52	38.802	2.672	1.737	1	H1-1b
1053	M95	2L2 1/2x2 ...	.168	6.281	17	.007	12.5...	y	13	7.52	38.802	2.672	1.737	1	H1-1b
1054	M103	2L2 1/2x2 ...	.168	6.281	11	.007	12.5...	y	16	7.52	38.802	2.672	1.737	1	H1-1b
1055	M111	2L2 1/2x2 ...	.169	6.281	15	.007	12.5...	y	18	7.52	38.802	2.672	1.737	1	H1-1b
1056	M128	2L2 1/2x2 ...	.155	6.281	17	.007	0	y	11	7.52	38.802	2.672	1.737	1	H1-1b
1057	M136	2L2 1/2x2 ...	.155	6.281	13	.007	0	y	11	7.52	38.802	2.672	1.737	1	H1-1b
1058	M145	2L2 1/2x2 ...	.155	6.281	15	.007	0	y	17	7.52	38.802	2.672	1.737	1	H1-1b
1059	M153	2L2 1/2x2 ...	.155	6.281	11	.007	0	y	17	7.52	38.802	2.672	1.737	1	H1-1b
1060	M162	2L2 1/2x2 ...	.154	6.281	13	.007	0	y	15	7.52	38.802	2.672	1.737	1	H1-1b
1061	M170	2L2 1/2x2 ...	.154	6.281	17	.007	0	y	15	7.52	38.802	2.672	1.737	1	H1-1b
1062	M179	2L2 1/2x2 ...	.154	6.281	11	.007	0	y	13	7.52	38.802	2.672	1.737	1	H1-1b
1063	M187	2L2 1/2x2 ...	.155	6.281	15	.007	0	y	13	7.52	38.802	2.672	1.737	1	H1-1b
1064	M209	2L2 1/2x2 ...	.155	6.281	16	.007	0	y	12	7.52	38.802	2.672	1.737	1	H1-1b
1065	M217	2L2 1/2x2 ...	.156	6.281	14	.007	0	y	18	7.52	38.802	2.672	1.737	1	H1-1b
1066	M226	2L2 1/2x2 ...	.156	6.281	15	.007	0	y	18	7.52	38.802	2.672	1.737	1	H1-1b
1067	M234	2L2 1/2x2 ...	.155	6.281	12	.007	0	y	16	7.52	38.802	2.672	1.737	1	H1-1b
1068	M243	2L2 1/2x2 ...	.155	6.281	13	.007	0	y	16	7.52	38.802	2.672	1.737	1	H1-1b
1069	M251	2L2 1/2x2 ...	.155	6.281	18	.007	0	y	14	7.52	38.802	2.672	1.737	1	H1-1b
1070	M260	2L2 1/2x2 ...	.155	6.281	18	.007	0	y	14	7.52	38.802	2.672	1.737	1	H1-1b
1071	M268	2L2 1/2x2 ...	.155	6.281	14	.007	0	y	12	7.52	38.802	2.672	1.737	1	H1-1b
1072	M290	2L2 1/2x2 ...	.157	6.281	16	.007	0	y	12	7.607	38.802	2.672	1.737	1	H1-1b
1073	M298	2L2 1/2x2 ...	.158	6.281	14	.007	0	y	18	7.607	38.802	2.672	1.737	1	H1-1b
1074	M307	2L2 1/2x2 ...	.157	6.281	14	.007	0	y	18	7.607	38.802	2.672	1.737	1	H1-1b
1075	M315	2L2 1/2x2 ...	.157	6.281	12	.007	0	y	16	7.607	38.802	2.672	1.737	1	H1-1b
1076	M324	2L2 1/2x2 ...	.156	6.281	12	.007	0	y	16	7.607	38.802	2.672	1.737	1	H1-1b
1077	M332	2L2 1/2x2 ...	.156	6.281	18	.007	0	y	14	7.607	38.802	2.672	1.737	1	H1-1b
1078	M341	2L2 1/2x2 ...	.157	6.281	18	.007	0	y	14	7.607	38.802	2.672	1.737	1	H1-1b
1079	M349	2L2 1/2x2 ...	.157	6.281	16	.007	0	y	12	7.607	38.802	2.672	1.737	1	H1-1b
1080	M371	2L2 1/2x2 ...	.159	6.281	16	.007	0	y	12	7.619	38.802	2.672	1.737	1	H1-1b
1081	M379	2L2 1/2x2 ...	.159	6.281	14	.007	0	y	18	7.619	38.802	2.672	1.737	1	H1-1b
1082	M388	2L2 1/2x2 ...	.159	6.281	14	.007	0	y	18	7.619	38.802	2.672	1.737	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn	
1083	M396	2L2 1/2x2 ...	.158	6.281	12	.007	0	y	16	7.619	38.802	2.672	1.737	1	H1-1b
1084	M405	2L2 1/2x2 ...	.158	6.281	12	.007	0	y	16	7.619	38.802	2.672	1.737	1	H1-1b
1085	M413	2L2 1/2x2 ...	.158	6.281	18	.007	0	y	14	7.619	38.802	2.672	1.737	1	H1-1b
1086	M422	2L2 1/2x2 ...	.158	6.281	18	.007	0	y	14	7.619	38.802	2.672	1.737	1	H1-1b
1087	M430	2L2 1/2x2 ...	.158	6.281	16	.007	0	y	12	7.619	38.802	2.672	1.737	1	H1-1b
1088	M452	2L2 1/2x2 ...	.160	6.281	15	.007	0	y	12	7.72	38.802	2.672	1.737	1	H1-1b
1089	M460	2L2 1/2x2 ...	.161	6.281	15	.007	0	y	18	7.72	38.802	2.672	1.737	1	H1-1b
1090	M469	2L2 1/2x2 ...	.161	6.281	13	.007	0	y	18	7.72	38.802	2.672	1.737	1	H1-1b
1091	M477	2L2 1/2x2 ...	.160	6.281	13	.007	0	y	16	7.72	38.802	2.672	1.737	1	H1-1b
1092	M486	2L2 1/2x2 ...	.160	6.281	11	.007	0	y	16	7.72	38.802	2.672	1.737	1	H1-1b
1093	M494	2L2 1/2x2 ...	.159	6.281	11	.007	0	y	14	7.72	38.802	2.672	1.737	1	H1-1b
1094	M503	2L2 1/2x2 ...	.160	6.281	17	.007	0	y	14	7.72	38.802	2.672	1.737	1	H1-1b
1095	M511	2L2 1/2x2 ...	.160	6.281	17	.007	0	y	12	7.72	38.802	2.672	1.737	1	H1-1b
1096	M533	2L2 1/2x2 ...	.151	6.281	15	.006	0	y	12	7.72	38.802	2.672	1.737	1	H1-1b
1097	M541	2L2 1/2x2 ...	.151	6.281	15	.006	0	y	18	7.72	38.802	2.672	1.737	1	H1-1b
1098	M550	2L2 1/2x2 ...	.151	6.281	13	.006	0	y	18	7.72	38.802	2.672	1.737	1	H1-1b
1099	M558	2L2 1/2x2 ...	.150	6.281	13	.006	0	y	16	7.72	38.802	2.672	1.737	1	H1-1b
1100	M567	2L2 1/2x2 ...	.150	6.281	11	.006	0	y	16	7.72	38.802	2.672	1.737	1	H1-1b
1101	M575	2L2 1/2x2 ...	.149	6.281	11	.006	0	y	14	7.72	38.802	2.672	1.737	1	H1-1b
1102	M584	2L2 1/2x2 ...	.150	6.281	17	.006	0	y	14	7.72	38.802	2.672	1.737	1	H1-1b
1103	M592	2L2 1/2x2 ...	.150	6.281	17	.006	0	y	12	7.72	38.802	2.672	1.737	1	H1-1b
1104	M614	2L2 1/2x2 ...	.153	6.281	15	.006	0	y	16	7.733	38.802	2.672	1.737	1	H1-1b
1105	M622	2L2 1/2x2 ...	.154	6.281	14	.006	0	y	14	7.733	38.802	2.672	1.737	1	H1-1b
1106	M631	2L2 1/2x2 ...	.153	6.281	14	.006	0	y	14	7.733	38.802	2.672	1.737	1	H1-1b
1107	M639	2L2 1/2x2 ...	.152	6.281	12	.006	0	y	12	7.733	38.802	2.672	1.737	1	H1-1b
1108	M648	2L2 1/2x2 ...	.152	6.281	11	.006	0	y	12	7.733	38.802	2.672	1.737	1	H1-1b
1109	M656	2L2 1/2x2 ...	.151	6.281	11	.006	0	y	18	7.733	38.802	2.672	1.737	1	H1-1b
1110	M665	2L2 1/2x2 ...	.151	6.281	18	.006	0	y	18	7.733	38.802	2.672	1.737	1	H1-1b
1111	M673	2L2 1/2x2 ...	.152	6.281	16	.006	0	y	16	7.733	38.802	2.672	1.737	1	H1-1b
1112	M695	2L2 1/2x2 ...	.135	5.583	12	.005	11.1...	y	14	12.983	51.305	3.58	2.271	1	H1-1b
1113	M705	2L2 1/2x2 ...	.133	5.583	18	.005	11.1...	y	17	12.983	51.305	3.58	2.271	1	H1-1b
1114	M716	2L2 1/2x2 ...	.128	5.583	11	.005	11.1...	y	11	12.983	51.305	3.58	2.271	1	H1-1b
1115	M726	2L2 1/2x2 ...	.131	5.583	16	.005	11.1...	y	14	12.983	51.305	3.58	2.271	1	H1-1b
1116	M737	2L2 1/2x2 ...	.134	5.583	16	.005	11.1...	y	18	12.983	51.305	3.58	2.271	1	H1-1b
1117	M747	2L2 1/2x2 ...	.135	5.583	14	.005	11.1...	y	12	12.983	51.305	3.58	2.271	1	H1-1b
1118	M758	2L2 1/2x2 ...	.130	5.583	14	.005	11.1...	y	16	12.983	51.305	3.58	2.271	1	H1-1b
1119	M768	2L2 1/2x2 ...	.128	5.583	11	.005	11.1...	y	18	12.983	51.305	3.58	2.271	1	H1-1b
1120	M1298	L2 1/2x2 1...	.001	0	4	.001	0	y	6	11.212	19.444	.233	1.13	1	H2-1
1121	M1299	L2 1/2x2 1...	.001	0	2	.001	4.188	y	8	11.212	19.444	.233	1.13	1	H2-1
1122	M1300	L2 1/2x2 1...	.001	0	2	.001	0	y	4	11.212	19.444	.233	1.13	1	H2-1
1123	M1301	L2 1/2x2 1...	.001	0	8	.001	4.188	y	6	11.212	19.444	.233	1.13	1	H2-1
1124	M1302	L2 1/2x2 1...	.001	0	4	.001	0	y	2	11.212	19.444	.233	1.13	1	H2-1
1125	M1303	L2 1/2x2 1...	.001	0	6	.001	4.188	y	8	11.212	19.444	.233	1.13	1	H2-1
1126	M1304	L2 1/2x2 1...	.001	0	6	.001	0	y	4	11.212	19.444	.233	1.13	1	H2-1
1127	M1305	L2 1/2x2 1...	.001	0	8	.001	4.188	y	2	11.212	19.444	.233	1.13	1	H2-1
1128	M1306	L2 1/2x2 1...	.005	0	6	.002	8.375	y	4	3.289	19.444	.233	.893	1	H2-1
1129	M1307	L2 1/2x2 1...	.005	0	4	.002	8.375	y	6	3.289	19.444	.233	.893	1	H2-1
1130	M1308	L2 1/2x2 1...	.005	0	2	.002	0	y	8	3.289	19.444	.233	.893	1	H2-1
1131	M1309	L2 1/2x2 1...	.005	0	8	.002	0	y	6	3.289	19.444	.233	.893	1	H2-1
1132	M697	2L3x3x1/4...	.134	6.979	15	.006	0	y	14	14.393	62.084	4.991	3.315	1	H1-1b
1133	M707	2L3x3x1/4...	.135	6.979	15	.006	0	y	17	14.393	62.084	4.991	3.315	1	H1-1b
1134	M718	2L3x3x1/4...	.135	6.979	13	.006	0	y	11	14.393	62.084	4.991	3.315	1	H1-1b
1135	M728	2L3x3x1/4...	.134	6.979	13	.006	0	y	14	14.393	62.084	4.991	3.315	1	H1-1b
1136	M739	2L3x3x1/4...	.134	6.979	11	.006	0	y	18	14.393	62.084	4.991	3.315	1	H1-1b
1137	M749	2L3x3x1/4...	.134	6.979	11	.006	0	y	12	14.393	62.084	4.991	3.315	1	H1-1b
1138	M760	2L3x3x1/4...	.134	6.979	17	.006	0	y	16	14.393	62.084	4.991	3.315	1	H1-1b
1139	M770	2L3x3x1/4...	.134	6.979	17	.006	0	y	18	14.393	62.084	4.991	3.315	1	H1-1b

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc(ft)	LC	Shear..	Loc(ft)	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyv/o...	Mnzz/o...	Cb	Egn
1140	M16	L2 1/2x2 1...	.369	0	5	.008	0	y	14	3.49	19.444	.233	.905	1 H2-1
1141	M19	L2 1/2x2 1...	.356	0	7	.008	0	y	16	3.49	19.444	.233	.905	1 H2-1
1142	M23	L2 1/2x2 1...	.258	0	2	.008	0	y	12	3.49	19.444	.233	.905	1 H2-1
1143	M26	L2 1/2x2 1...	.249	0	6	.008	0	y	14	3.49	19.444	.233	.905	1 H2-1
1144	M30	L2 1/2x2 1...	.344	0	9	.008	0	y	18	3.49	19.444	.233	.905	1 H2-1
1145	M33	L2 1/2x2 1...	.339	0	3	.008	0	y	12	3.49	19.444	.233	.905	1 H2-1
1146	M37	L2 1/2x2 1...	.246	0	6	.008	0	y	16	3.49	19.444	.233	.905	1 H2-1
1147	M40	L2 1/2x2 1...	.258	0	2	.008	0	y	18	3.49	19.444	.233	.905	1 H2-1
1148	M52	L3x3x3/16	.011	0	13	.004	0	y	14	15.86	23.497	.339	1.673	1 H2-1
1149	M60	L3x3x3/16	.011	0	17	.004	4.188	y	16	15.86	23.497	.339	1.673	1 H2-1
1150	M68	L3x3x3/16	.011	0	18	.004	4.188	y	13	15.86	23.497	.339	1.673	1 H2-1
1151	M76	L3x3x3/16	.010	0	15	.004	4.188	y	13	15.86	23.497	.339	1.673	1 H2-1
1152	M84	L3x3x3/16	.011	0	17	.004	0	y	11	15.86	23.497	.339	1.673	1 H2-1
1153	M92	L3x3x3/16	.011	0	13	.004	0	y	11	15.86	23.497	.339	1.673	1 H2-1
1154	M100	L3x3x3/16	.011	0	15	.004	0	y	16	15.86	23.497	.339	1.673	1 H2-1
1155	M108	L3x3x3/16	.011	0	12	.004	0	y	17	15.86	23.497	.339	1.673	1 H2-1
1156	M125	L3x3x3/16	.024	0	7	.004	0	y	13	15.86	23.497	.339	1.673	1 H2-1
1157	M133	L3x3x3/16	.026	0	5	.004	4.188	y	16	15.86	23.497	.339	1.673	1 H2-1
1158	M142	L3x3x3/16	.025	0	6	.004	4.188	y	13	15.86	23.497	.339	1.673	1 H2-1
1159	M150	L3x3x3/16	.026	0	3	.004	4.188	y	14	15.86	23.497	.339	1.673	1 H2-1
1160	M159	L3x3x3/16	.020	0	12	.004	0	y	11	15.86	23.497	.339	1.673	1 H2-1
1161	M167	L3x3x3/16	.020	0	18	.004	0	y	18	15.86	23.497	.339	1.673	1 H2-1
1162	M176	L3x3x3/16	.025	0	9	.004	0	y	17	15.86	23.497	.339	1.673	1 H2-1
1163	M184	L3x3x3/16	.023	0	15	.004	0	y	17	15.86	23.497	.339	1.673	1 H2-1
1164	M206	L3x3x3/16	.042	0	7	.004	0	y	14	15.884	23.497	.339	1.675	1 H2-1
1165	M214	L3x3x3/16	.042	0	5	.004	4.188	y	16	15.884	23.497	.339	1.675	1 H2-1
1166	M223	L3x3x3/16	.043	0	5	.004	0	y	12	15.884	23.497	.339	1.675	1 H2-1
1167	M231	L3x3x3/16	.044	0	3	.004	4.188	y	14	15.884	23.497	.339	1.675	1 H2-1
1168	M240	L3x3x3/16	.037	0	3	.004	0	y	11	15.884	23.497	.339	1.675	1 H2-1
1169	M248	L3x3x3/16	.038	0	9	.004	4.188	y	12	15.884	23.497	.339	1.675	1 H2-1
1170	M257	L3x3x3/16	.041	0	9	.004	0	y	16	15.884	23.497	.339	1.675	1 H2-1
1171	M265	L3x3x3/16	.039	0	7	.004	4.188	y	18	15.884	23.497	.339	1.675	1 H2-1
1172	M287	L3x3x3/16	.071	0	7	.004	0	y	14	16.053	23.497	.339	1.682	1 H2-1
1173	M295	L3x3x3/16	.074	0	5	.004	4.188	y	16	16.053	23.497	.339	1.682	1 H2-1
1174	M304	L3x3x3/16	.076	0	5	.004	0	y	13	16.053	23.497	.339	1.682	1 H2-1
1175	M312	L3x3x3/16	.075	0	3	.004	4.188	y	14	16.053	23.497	.339	1.682	1 H2-1
1176	M321	L3x3x3/16	.069	0	3	.004	0	y	11	16.053	23.497	.339	1.682	1 H2-1
1177	M329	L3x3x3/16	.067	0	9	.004	4.188	y	12	16.053	23.497	.339	1.682	1 H2-1
1178	M338	L3x3x3/16	.075	0	9	.004	0	y	16	16.053	23.497	.339	1.682	1 H2-1
1179	M346	L3x3x3/16	.074	0	7	.004	0	y	17	16.053	23.497	.339	1.682	1 H2-1
1180	M368	L3x3x3/16	.092	0	6	.004	0	y	14	16.077	23.497	.339	1.683	1 H2-1
1181	M376	L3x3x3/16	.095	0	6	.004	4.188	y	16	16.077	23.497	.339	1.683	1 H2-1
1182	M385	L3x3x3/16	.094	0	4	.004	0	y	12	16.077	23.497	.339	1.683	1 H2-1
1183	M393	L3x3x3/16	.092	0	4	.004	4.188	y	14	16.077	23.497	.339	1.683	1 H2-1
1184	M402	L3x3x3/16	.092	0	2	.004	0	y	11	16.077	23.497	.339	1.683	1 H2-1
1185	M410	L3x3x3/16	.090	0	2	.004	4.188	y	12	16.077	23.497	.339	1.683	1 H2-1
1186	M419	L3x3x3/16	.090	0	8	.004	0	y	16	16.077	23.497	.339	1.683	1 H2-1
1187	M427	L3x3x3/16	.092	0	8	.004	4.188	y	18	16.077	23.497	.339	1.683	1 H2-1
1188	M449	L3x3x3/16	.127	0	6	.003	0	y	14	16.245	23.497	.339	1.69	1 H2-1
1189	M457	L3x3x3/16	.131	0	6	.003	4.188	y	16	16.245	23.497	.339	1.69	1 H2-1
1190	M466	L3x3x3/16	.131	0	4	.003	4.188	y	13	16.245	23.497	.339	1.69	1 H2-1
1191	M474	L3x3x3/16	.123	0	4	.003	4.188	y	14	16.245	23.497	.339	1.69	1 H2-1
1192	M483	L3x3x3/16	.127	0	2	.003	0	y	11	16.245	23.497	.339	1.69	1 H2-1
1193	M491	L3x3x3/16	.124	0	2	.003	0	y	11	16.245	23.497	.339	1.69	1 H2-1
1194	M500	L3x3x3/16	.121	0	8	.003	0	y	16	16.245	23.497	.339	1.69	1 H2-1
1195	M508	L3x3x3/16	.128	0	8	.003	0	y	17	16.245	23.497	.339	1.69	1 H2-1
1196	M530	L3x3x3/16	.167	0	6	.003	0	y	14	16.269	23.497	.339	1.691	1 H2-1

**Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)**

Member	Shape	Code Check	Loc[ft]	LC	Shear...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/o...	Mnzz/o...	Cb	Eqn
1197	M538	L3x3x3/16	.171	0	6	.003	4.188	y	16	16.269	23.497	.339	1.691	1 H2-1
1198	M547	L3x3x3/16	.171	0	5	.003	4.188	y	13	16.269	23.497	.339	1.691	1 H2-1
1199	M555	L3x3x3/16	.164	0	3	.003	4.188	y	14	16.269	23.497	.339	1.691	1 H2-1
1200	M564	L3x3x3/16	.169	0	3	.003	0	y	11	16.269	23.497	.339	1.691	1 H2-1
1201	M572	L3x3x3/16	.168	0	9	.003	0	y	11	16.269	23.497	.339	1.691	1 H2-1
1202	M581	L3x3x3/16	.163	0	9	.003	0	y	16	16.269	23.497	.339	1.691	1 H2-1
1203	M589	L3x3x3/16	.168	0	7	.003	0	y	17	16.269	23.497	.339	1.691	1 H2-1
1204	M611	L3x3x3/16	.230	0	6	.004	0	y	14	16.293	23.497	.339	1.692	1 H2-1
1205	M619	L3x3x3/16	.233	0	6	.004	4.188	y	16	16.293	23.497	.339	1.692	1 H2-1
1206	M628	L3x3x3/16	.218	0	4	.004	0	y	12	16.293	23.497	.339	1.692	1 H2-1
1207	M636	L3x3x3/16	.207	0	4	.004	4.188	y	14	16.293	23.497	.339	1.692	1 H2-1
1208	M645	L3x3x3/16	.228	0	2	.004	4.188	y	12	16.293	23.497	.339	1.692	1 H2-1
1209	M653	L3x3x3/16	.227	0	2	.004	0	y	18	16.293	23.497	.339	1.692	1 H2-1
1210	M662	L3x3x3/16	.205	0	8	.004	0	y	16	16.293	23.497	.339	1.692	1 H2-1
1211	M670	L3x3x3/16	.215	0	8	.004	4.188	y	18	16.293	23.497	.339	1.692	1 H2-1
1212	M692	L3x3x3/16	.097	0	3	.004	5.583	y	18	13.008	23.497	.339	1.563	1 H2-1
1213	M702	L3x3x3/16	.097	0	9	.004	5.583	y	14	13.008	23.497	.339	1.563	1 H2-1
1214	M713	L3x3x3/16	.056	0	9	.004	0	y	14	13.008	23.497	.339	1.563	1 H2-1
1215	M723	L3x3x3/16	.060	0	7	.004	5.583	y	18	13.008	23.497	.339	1.563	1 H2-1
1216	M734	L3x3x3/16	.099	0	7	.004	5.583	y	14	13.008	23.497	.339	1.563	1 H2-1
1217	M744	L3x3x3/16	.101	0	5	.004	5.583	y	16	13.008	23.497	.339	1.563	1 H2-1
1218	M755	L3x3x3/16	.061	0	5	.004	5.583	y	12	13.008	23.497	.339	1.563	1 H2-1
1219	M765	L3x3x3/16	.057	0	3	.004	5.583	y	14	13.008	23.497	.339	1.563	1 H2-1
1220	M5	2L3x4x5/1...	.259	12.75	13	.008	12.75	y	17	21.978	90.108	10.644	2.637	1 H1-1b
1221	M6	2L3x4x5/1...	.261	12.75	12	.008	12.75	y	15	21.978	90.108	10.644	2.637	1 H1-1b
1222	M7	2L3x4x5/1...	.262	12.75	17	.008	12.75	y	17	21.978	90.108	10.644	2.637	1 H1-1b
1223	M8	2L3x4x5/1...	.262	12.75	18	.008	12.75	y	15	21.978	90.108	10.644	2.637	1 H1-1b

**Envelope Joint Reactions**

Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N441	max	41.669	7	475.161	7	32.718	2	0	.423	9	0	1
2		min	-34.696	3	-355.466	3	-36.966	6	0	-.377	5	0	1
3	N442	max	34.811	9	478.682	5	32.776	2	0	.377	7	0	1
4		min	-41.775	5	-355.126	9	-37.092	6	0	-.424	3	0	1
5	N443	max	31.827	7	472.368	3	37.06	2	0	.289	5	0	1
6		min	-38.467	3	-356.691	7	-32.738	6	0	-.246	9	0	1
7	N444	max	38.563	9	472.229	9	36.991	2	0	.243	3	0	1
8		min	-31.928	5	-360.534	5	-32.749	6	0	-.286	7	0	1
9	Totals:	max	136.305	8	373.128	13	139.545	2					
10		min	-136.305	4	235.026	7	-139.545	6					



**Bolt Checks**

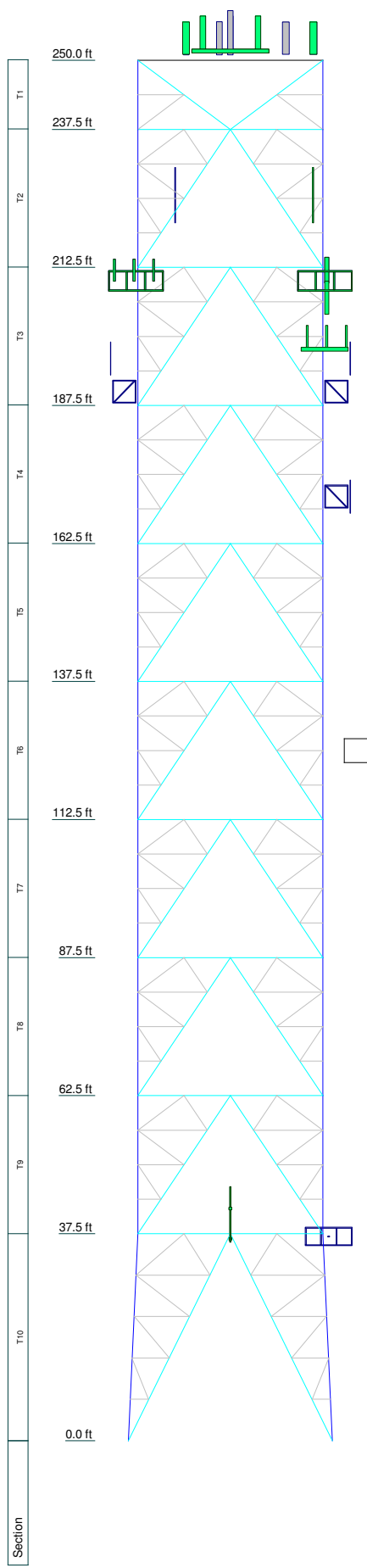
Section #	Elevation	Component Type	Bolt Grade	Bolt Size (in)	# of Bolts	Maximum Load (k)	Maximum Load per Bolt (k)	Allowable Load per Bolt (k)	Ratio	Allowable Ratio	% Capacity	Criteria
T1	250	Leg	A307	0.75	12	11.003	0.917	8.836	0.104	1.000	10.4%	Bolt Tension
		Leg Outer	A307	0.75	3	2.563	0.854	8.836	0.097	1.000	9.7%	Bolt Shear
		Diagonal	A307	0.75	2	5.037	2.518	8.836	0.285	1.333	21.4%	Bolt Shear
		Diagonal Outer	A307	0.75	2	1.879	0.94	8.836	0.106	1.333	8.0%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	1.288	0.644	4.418	0.146	1.333	10.9%	Bolt Shear
		Horizontal Outer	A307	0.75	2	1.539	0.77	4.418	0.174	1.333	13.1%	Bolt Shear
		Inner Supp	A307	0.75	2	2.789	1.394	4.418	0.316	1.333	23.7%	Bolt Shear
T2	237.5	Leg	A307	0.75	16	17.013	2.127	8.836	0.241	1.000	24.1%	Bolt DS
		Diagonal	A307	0.75	4	14.123	3.531	8.836	0.400	1.333	30.0%	Bolt Shear
		Horizontal	A307	0.75	4	2.881	0.72	8.836	0.082	1.333	6.1%	Bolt Shear
T3	212.5	Leg	A307	0.75	16	33.645	4.206	8.836	0.476	1.333	35.7%	Bolt DS
		Horizontal	A307	0.75	3	11.152	3.717	8.836	0.421	1.333	31.6%	Bolt Shear
		Diagonal	A307	0.75	4	20.448	5.112	8.836	0.579	1.333	43.4%	Bolt Shear
		Inner Square	A307	0.75	2	2.813	1.406	8.836	0.159	1.333	11.9%	Bolt Shear
		Inner Corner	A307	0.75	2	3.433	1.716	8.836	0.194	1.333	14.6%	Bolt Shear
T4	187.5	Leg	A307	0.75	22	60.224	5.475	8.836	0.620	1.333	46.5%	Bolt DS
		Horizontal	A307	0.75	3	13.788	4.596	8.836	0.520	1.333	39.0%	Bolt Shear
		Diagonal	A307	0.75	5	27.042	5.408	8.836	0.612	1.333	45.9%	Bolt Shear
		Inner Square	A307	0.75	2	2.92	1.46	8.836	0.165	1.333	12.4%	Bolt Shear
		Inner Corner	A307	0.75	2	3.506	1.753	8.836	0.198	1.333	14.9%	Bolt Shear
T5	162.5	Leg	A307	1	22	94.544	8.595	15.708	0.547	1.333	41.0%	Bolt DS
		Horizontal	A307	0.75	3	17.056	5.685	8.836	0.643	1.333	48.3%	Bolt Shear
		Diagonal	A307	0.75	5	33.72	6.744	8.836	0.763	1.333	57.3%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	1.792	0.896	4.418	0.203	1.333	15.2%	Bolt Shear
		Redundant Diagonal	A307	0.75	2	1.62	0.81	4.418	0.183	1.333	13.8%	Bolt Shear
		Inner Square	A307	0.75	2	3.601	1.8	8.836	0.204	1.333	15.3%	Bolt Shear
		Inner Corner	A307	0.75	2	4.322	2.161	8.836	0.245	1.333	18.3%	Bolt Shear
		Inner Ladder	A307	0.75	2	2.503	1.252	8.836	0.142	1.333	10.6%	Bolt Shear
T6	137.5	Leg	A307	1	24	137.118	11.426	15.708	0.727	1.333	54.6%	Bolt DS
		Horizontal	A307	0.75	3	20.418	6.806	8.836	0.770	1.333	57.8%	Bolt Shear
		Diagonal	A307	0.75	4	39.981	9.995	8.836	1.131	1.333	84.9%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	2.237	1.118	4.418	0.253	1.333	19.0%	Bolt Shear
		Redundant Diagonal	A307	0.75	2	2.101	1.05	4.418	0.238	1.333	17.8%	Bolt Shear
		Inner Square	A307	0.75	2	3.731	1.866	8.836	0.211	1.333	15.8%	Bolt Shear
		Inner Corner	A307	0.75	2	4.422	2.211	8.836	0.250	1.333	18.8%	Bolt Shear
		Inner Ladder	A307	0.75	2	2.576	1.288	8.836	0.146	1.333	10.9%	Bolt Shear
T7	112.5	Leg	A307	1	24	188.153	15.679	15.708	0.998	1.333	74.9%	Bolt DS
		Horizontal	A307	0.75	4	23.792	5.948	8.836	0.673	1.333	50.5%	Bolt Shear
		Diagonal	A307	0.75	4	45.791	11.448	8.836	1.296	1.333	97.2%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	3.068	1.534	4.418	0.347	1.333	26.0%	Bolt Shear
		Redundant Diagonal	A307	0.75	2	2.81	1.405	4.418	0.318	1.333	23.9%	Bolt Shear
		Inner Square	A307	0.75	2	3.736	1.868	8.836	0.211	1.333	15.9%	Bolt Shear
		Inner Corner	A307	0.75	2	4.449	2.224	8.836	0.252	1.333	18.9%	Bolt Shear
		Inner Ladder	A307	0.75	2	2.584	1.292	8.836	0.146	1.333	11.0%	Bolt Shear
T8	87.5	Leg	A307	1	24	246.944	20.579	15.708	1.310	1.333	98.3%	Bolt DS
		Horizontal	A307	0.75	4	27.253	6.813	8.836	0.771	1.333	57.8%	Bolt Shear
		Diagonal	A307	0.75	5	53.433	10.687	8.836	1.209	1.333	90.7%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	4.021	2.01	4.418	0.455	1.333	34.1%	Bolt Shear
		Redundant Diagonal	A307	0.75	2	3.753	1.876	4.418	0.425	1.333	31.9%	Bolt Shear
		Inner Square	A307	0.75	2	4.247	2.124	8.836	0.240	1.333	18.0%	Bolt Shear
		Inner Corner	A307	0.75	2	5.067	2.534	8.836	0.287	1.333	21.5%	Bolt Shear
		Inner Ladder	A307	0.75	2	2.996	1.498	8.836	0.170	1.333	12.7%	Bolt Shear
T9	62.5	Leg	A307	1	32	314.074	19.63	15.708	1.250	1.333	93.7%	Bolt DS
		Horizontal	A307	0.75	4	29.773	7.443	8.836	0.842	1.333	63.2%	Bolt Shear
		Diagonal	A307	0.75	6	58.444	9.741	8.836	1.102	1.333	82.7%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	5.48	2.74	4.418	0.620	1.333	46.5%	Bolt Shear
		Redundant Diagonal	A307	0.75	2	5.07	2.535	4.418	0.574	1.333	43.0%	Bolt Shear
		Inner Supp	A307	0.75	2	2.499	1.25	8.836	0.141	1.333	10.6%	Bolt Shear
		Inner Square	A307	0.75	2	4.623	2.312	8.836	0.262	1.333	19.6%	Bolt Shear
		Inner Corner	A307	0.75	2	5.535	2.768	8.836	0.313	1.333	23.5%	Bolt Shear
		Inner Ladder	A307	0.75	2	3.283	1.642	8.836	0.186	1.333	13.9%	Bolt Shear
T10	37.5	Leg	A307	1	40	388.048	19.402	15.708	1.235	1.333	92.7%	Bolt DS
		Horizontal	A307	0.75	4	30.5	7.625	8.836	0.863	1.333	64.7%	Bolt Shear
		Diagonal	A307	0.75	8	72.969	9.121	8.836	1.032	1.333	77.4%	Bolt Shear
		Redundant Horizontal	A307	0.75	2	1.45	0.725	4.418	0.164	1.333	12.3%	Bolt Shear
		Redundant Diagonal	A307	0.75	2	1.398	0.699	4.418	0.158	1.333	11.9%	Bolt Shear
		Redundant Diagonal 0	A307	0.75	2	9.578	4.789	4.418	1.084	1.333	81.3%	Bolt Shear
		Redundant Horizontal 0	A307	0.75	2	7.688	3.844	4.418	0.870	1.333	65.3%	Bolt Shear
		Inner Girt	A307	0.75	2	2.815	1.408	4.418	0.319	1.000	31.9%	Bolt Shear
		Inner Supp	A307	0.75	2	2.954	1.477	4.418	0.334	1.333	25.1%	Bolt Shear
		Inner Square	A307	0.75	2	3.333	1.666	4.418	0.377	1.333	28.3%	Bolt Shear
		Inner Corner	A307	0.75	2	5.863	2.932	4.418	0.664	1.333	49.8%	Bolt Shear
		Inner Ladder	A307	0.75	2	3.375	1.688	4.418	0.382	1.333	28.7%	Bolt Shear
		Inner Triangle	A307	0.75	2	2.456	1.228	4.418	0.278	1.000	27.8%	Bolt Shear
		Anchor Rods	C1015	2.25	12	388.048	32.337	73.478	0.440	1.333	33.0%	Bolt Tension

Maximum Capacity	98.3%
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## APPENDIX C

### Tower Elevation Drawing



**DESIGNED APPURTENANCE LOADING**

TYPE	ELEVATION	TYPE	ELEVATION
Tower Top Platform	252	DB-T1-6Z-8AB-0Z	252
(2) AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	252	Platform	239.5
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	252	(2) DB980H65E-M w/ 20' Mount Pipe	225.6
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	252	(2) DB980H65E-M w/ 20' Mount Pipe	225.6
AM-X-CD-16-65-00T-RET w/ 6' Mount Pipe	252	(2) DB980H65E-M w/ 10' Mount Pipe	225.6
SBNH-1D6565C w/ Mount Pipe	252	10' x 2.5" Pipe	225.6
SBNH-1D6565C w/ Mount Pipe	252	10' x 2.5" Pipe	225.6
(2) RRUS-11	252	DB980H65E-M w/ 20' Mount Pipe	225.6
(2) RRUS-11	252	(3) DB844H90E-XY w/Mount Pipe	210
(2) RRUS-11	252	14' T-Frame	210
DTMABP7819VG12A	252	14' T-Frame	210
DTMABP7819VG12A	252	AIR21 B4A/B2P w/ mount pipe	210
DTMABP7819VG12A	252	AIR21 B4A/B2P w/ mount pipe	210
DC2-48-60-0-9E	252	KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	210
DC2-48-60-0-9E	252	KRC 118 048/1 B4A/B12P-B8P w/ Mount Pipe	210
DC2-48-60-0-9E	252	RRUS 11 B12	210
FC12-PC6-10E	252	RRUS 11 B12	210
GPS	252	RRUS 11 B2	210
SBNHH-1D65B w/ Mount Pipe	252	RRUS 11 B2	210
SBNHH-1D65B w/ Mount Pipe	252	14' T-Frame	210
4' Standoff	252	14' T-Frame	210
SBNHH-1D65B w/ Mount Pipe	252	26"x 26" Flat Panel	210
4' Standoff	252	(3) DB844H90E-XY w/Mount Pipe	210
SBNHH-1D65B w/ Mount Pipe	252	14' T-Frame	198
SBNHH-1D65B w/ Mount Pipe	252	(3) DB844H90E-XY w/Mount Pipe	198
SBNHH-1D65B w/ Mount Pipe	252	5' Standoff	190
LPA-80063/6CF w/ Mount Pipe	252	PG1-NOF-0091	190
LPA-80063/6CF w/ Mount Pipe	252	5' Standoff	190
4' Standoff	252	PG1-NOF-0091	190
LPA-80063/6CF w/ Mount Pipe	252	5' Standoff	171
4' Standoff	252	PG1-DOF-0093	171
LPA-80063/6CF w/ Mount Pipe	252	Catwalk	139.5
LPA-80080/6CF w/ Mount Pipe	252	WL14-69/S	85
LPA-80080/6CF w/ Mount Pipe	252	WL14-69/S	85
RRH2X60-AWS	252	WL7-13	85
RRH2X60-AWS	252	WL14-69/S	85
RRH2X60-AWS	252	WL14-69/S	85
RRH2X60-PCS	252	GPS	42
RRH2X60-PCS	252	14" Omni	41
RRH2X60-PCS	252	2.5' Box Mount	37
RRH 2X60AWS LTE	252	Camera	37
RRH 2X60AWS LTE	252	GPS	36.5
RRH 2X60AWS LTE	252	3' Side Arm	36.5
DB-T1-6Z-8AB-0Z	252	Platform	21
DB-T1-6Z-8AB-0Z	252	(2) Junction Box (40"x14"x9")	21

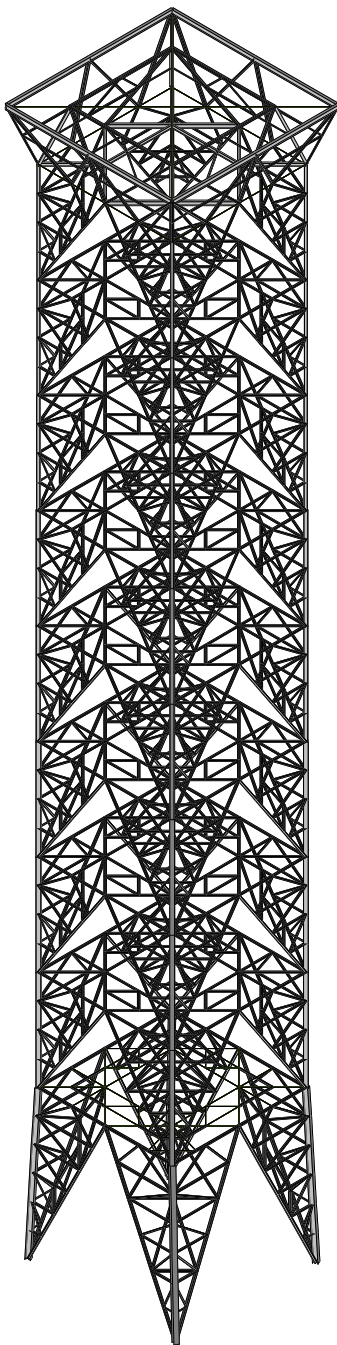
**MATERIAL STRENGTH**

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi			

**TOWER DESIGN NOTES**

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 38 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50 mph wind.

<p align="center"><b>GPD</b></p> <p align="center">520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101</p> <p align="left">GPD Group</p>	<p><b>Job: TAG0053 CHESHIRE</b></p> <p><b>Project: 2016708.42 Rev. 1</b></p>		
	<p>Client: Transcend Wireless</p> <p>Code: TIA/EIA-222-F</p> <p>Path: T:\ATandT\TAG0053\13 2016708.42 Transcend Wireless Return\Software Analysis\TIA0053_Final.rvt</p>	<p>Drawn by: tclark</p> <p>Date: 06/01/16</p>	<p>App'd:</p> <p>Scale: NTS</p> <p>Dwg No. E-1</p>

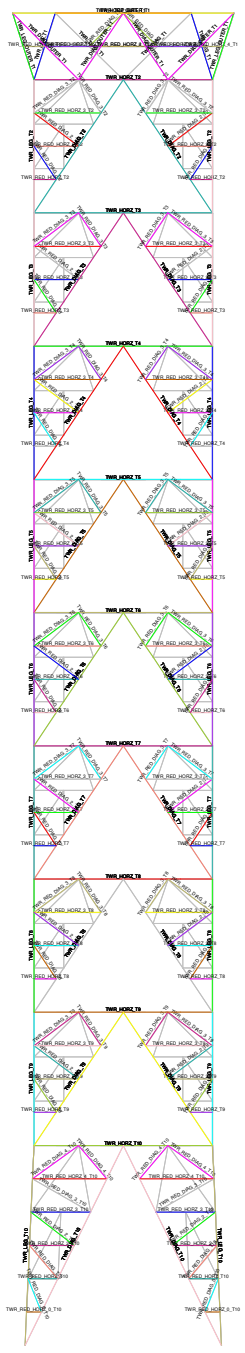


Envelope Only Solution

GPD  
tclark  
2016708.42 Rev. 1

TAG0053 CHESHIRE

SK - 1  
June 1, 2016 at 12:49 PM  
TAG0053.r3



THRU JOIST T1	THRU JOIST T1
THRU JOIST T2	THRU JOIST T2
THRU JOIST T3	THRU JOIST T3
THRU JOIST T4	THRU JOIST T4
THRU JOIST T5	THRU JOIST T5
THRU JOIST T6	THRU JOIST T6
THRU JOIST T7	THRU JOIST T7
THRU JOIST T8	THRU JOIST T8
THRU JOIST T9	THRU JOIST T9
THRU JOIST T10	THRU JOIST T10

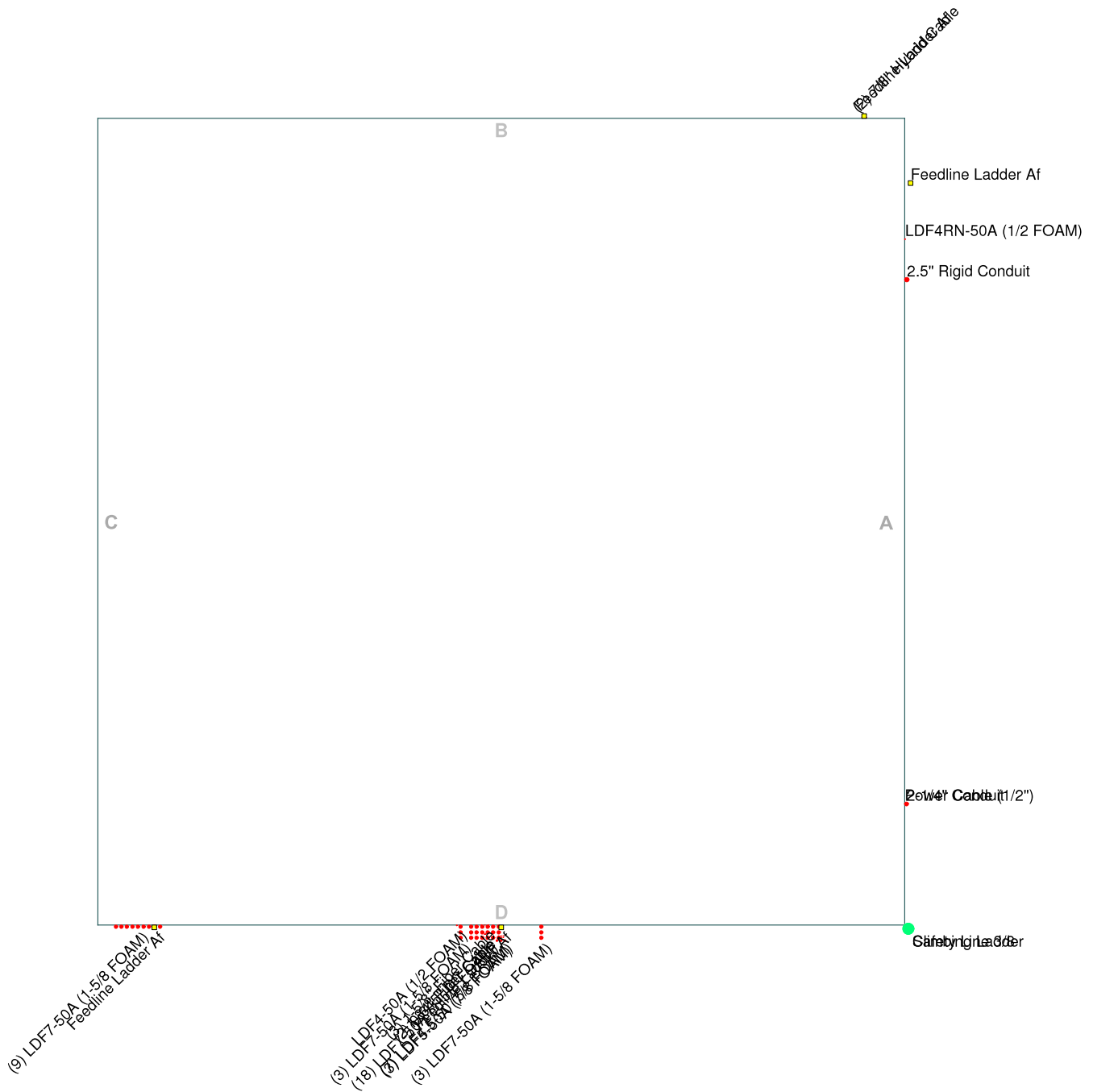
GPD  
tclark  
2016708.42 Rev. 1

TAG0053 CHESHIRE

SK - 2  
June 1, 2016 at 12:50 PM  
TAG0053.rt3

# Feed Line Plan

— Round   
 — Flat   
 — App In Face   
 — App Out Face



<b>GPD</b>		<b>Job: TAG0053 CHESHIRE</b>	
520 South Main Street Suite 2531		Project: <b>2016708.42</b>	
Akron, Ohio 44311		Client: Transcend Wireless	Drawn by: tclark
Phone: (330) 572-2100		Code: TIA/EIA-222-F	Date: 05/13/16
FAX: (330) 572-2101		Path:	Scale: NTS
GPD Group		Dwg No. E-7	

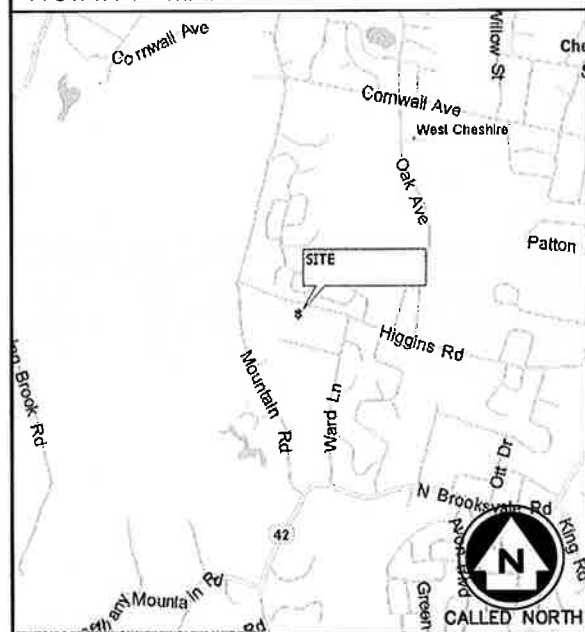
# T-MOBILE NORTHEAST LLC

## CT11220A CHESHIRE/ RT -10

751 HIGGINS ROAD  
CHESHIRE, CT 06410

(701D\_WU21 CONFIGURATION)

VICINITY MAP



### DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



CALL:

"CALL BEFORE YOU DIG"  
WWW.CBYD.COM  
CALL 811 OR 1-800-922-4455

CALL THREE WORKING DAYS PRIOR TO DIGGING

SAFETY PRECAUTIONS SHALL BE IMPLEMENTED BY CONTRACTORS AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

#### COLOR CODE FOR UTILITY LOCATIONS

ELECTRIC - RED	SEWER - GREEN	
GAS/OIL - YELLOW	SURVEY - PINK	
TEL/CATV - ORANGE	PROPOSED EXCAVATION - WHITE	
WATER - BLUE	RECLAIMED WATER - PURPLE	

### 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 CONSTRUCT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE T-MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF 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 ADDENDUM 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 CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
11. 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.
12. 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 PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
14. THE CONTRACTOR SHALL NOTIFY THE T-MOBILE 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 T-MOBILE REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
16. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

### PROJECT SUMMARY

SITE NUMBER:	CT11220A	APPLICANT:	T-MOBILE NORTHEAST LLC 103 MONARCH DRIVE LIVERPOOL, NY 13088
SITE NAME:	CHESHIRE/ RT -10	PROJECT MANAGER:	TRANSCEND WIRELESS 10 INDUSTRIAL AVE, SUITE 3 MAHWAH, NJ 07430
SITE ADDRESS:	751 HIGGINS ROAD CHESHIRE, CT 06410	CONTACT:	JAMIE MARCHINI (973) 885-0660
PROPERTY OWNER:	TBD	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING 1033 WATERVLJET SHAKER ROAD ALBANY, NY 12205
PARCEL:	TBD	CONTACT:	ALEX WELLER 518-690-0790
ZONING:	TBD		
JURISDICTION:	CONNECTICUT SITING COUNCIL		
LAT./LONG.:	N 41.4876° / W -72.9292°		
CONSTRUCTION TYPE:	L700 UPGRADE		

### PROJECT DESCRIPTION

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> EXISTING MONOPOLE                 | <input checked="" type="checkbox"/> EXISTING CABINET(S) | <input checked="" type="checkbox"/> OUTDOOR               |
| <input checked="" type="checkbox"/> EXISTING LATTICE TOWER | <input type="checkbox"/> EXISTING RBS 6201              | <input type="checkbox"/> INDOOR                           |
| <input type="checkbox"/> EXISTING TRANSMISSION TOWER       | <input checked="" type="checkbox"/> PROPOSED RBS 3106   | <input checked="" type="checkbox"/> PROPOSED CONCRETE PAD |
| <input type="checkbox"/> EXISTING BILLBOARD                | <input checked="" type="checkbox"/> EXISTING S8000      | <input type="checkbox"/> EXISTING STEEL PLATFORM          |
| <input type="checkbox"/> EXISTING ROOFTOP                  | <input type="checkbox"/> SITE SUPPORT KIT               | <input checked="" type="checkbox"/> PROPOSED PPC          |
| <input type="checkbox"/> EXISTING FLAGPOLE                 | <input type="checkbox"/> SITE SUPPORT CABINET           | <input type="checkbox"/> PANELBOARD                       |
| <input type="checkbox"/> EXISTING FORT WORTH               | <input checked="" type="checkbox"/> PROPOSED GPS        |   |

T-MOBILE NORTHEAST LLC PROPOSES THE MODIFICATION OF AN UNMANNED WIRELESS BROADBAND FACILITY. ADDITION OF PROPOSED PANEL ANTENNAS. ADDITION OF ICE BRIDGE, CONCRETE EQUIPMENT PAD, COAXIAL CABLES, GPS ANTENNA AND 3106 EQUIPMENT CABINET.

### SHEET INDEX

SHEET	DESCRIPTION	REVISION
T-1	TITLE SHEET	0
C-1	SITE PLAN	0
C-2	COMPOUND PLAN & ELEVATION	0
C-3	EQUIPMENT DETAILS	0
C-4	EQUIPMENT SPECIFICATIONS	0
C-5	EQUIPMENT SPECIFICATIONS	0
E-1	ELECTRICAL SITE PLAN	0
E-2	ELECTRICAL DETAILS	0
E-3	COAX/FIBER PLUMBING DIAGRAM	0
G-1	GROUNDING AND POWER DIAGRAMS	0
G-2	GROUNDING DETAILS	0
G-3	GROUNDING DETAILS	0
N-1	GENERAL AND ELECTRICAL NOTES	0



T-MOBILE NORTHEAST LLC  
103 MONARCH DRIVE  
LIVERPOOL, NY 13088

INFINIGY

1033 Watervljet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

#### SUBMITTALS

DATE	DESCRIPTION	REVISION
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DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN			
ZONING			
DPS			
CONSTR			
SITE AC			

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SITE NUMBER:  
CT11220A

SITE NAME:  
CHESHIRE/RT-10  
751 HIGGINS ROAD  
CHESHIRE, CT 06410

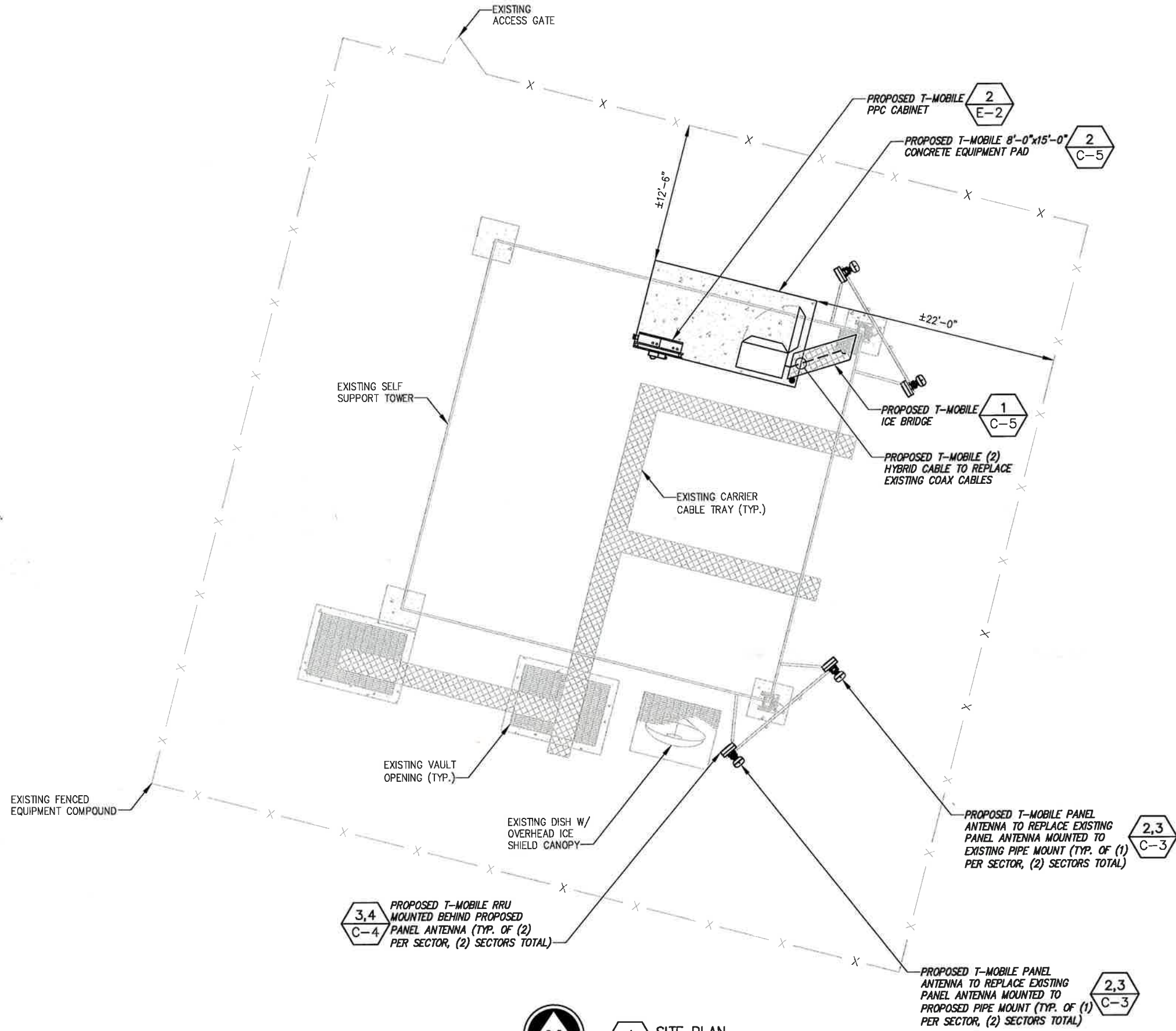
SHEET TITLE

**TITLE SHEET**

SHEET NUMBER

**T-1**

SHEET 1 OF 13 SHEETS



**GENERAL SITE NOTES:**

1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINIGY. BOUNDARY INFORMATION IF SHOWN WAS OBTAINED FROM INFORMATION PROVIDED BY OTHERS. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. BASEMAPPING INFORMATION BASED ON PROVIDED INFORMATION.
3. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
5. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
6. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
7. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
8. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT MISS UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
9. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

**SITE LEGEND**

- SITE PROPERTY LINE
- STREET OR ROAD
- x - x - CHAIN LINK FENCE
- OPAQUE WOODEN FENCE
- ⊙ TREES/SHRUBS
- ~ TREE LINE
- ⊗ UTILITY POLE
- (E) EXISTING
- (N) NEW
- (P) PROPOSED
- (F) FUTURE



**INFINIGY**

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Albany, NY 12205  
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Fax # (518) 680-0793

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8/3/16	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
R/E			
R/E MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

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PROFESSIONAL SEAL

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CT11220A

SITE NAME:  
CHESHIRE/RT-10

751 HIGGINS ROAD  
CHESHIRE, CT 06410

SHEET TITLE

**SITE PLAN**

SHEET NUMBER

**C-1**

SHEET 2 OF 13 SHEETS

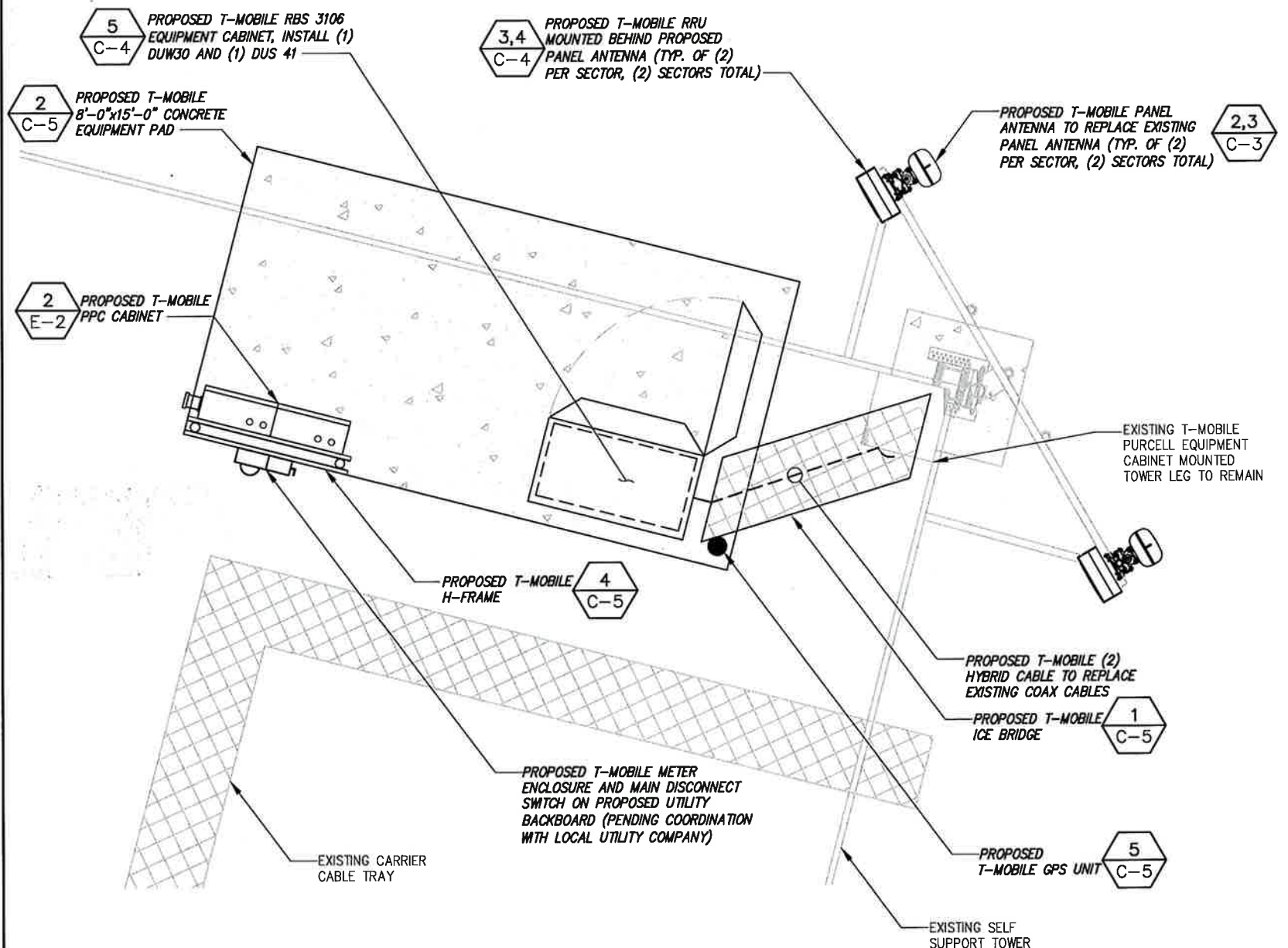
**1** SITE PLAN  
SCALE: AS NOTED

CALLLED NORTH

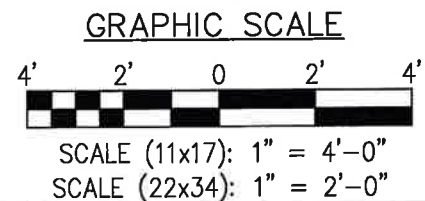
**GRAPHIC SCALE**

SCALE (11x17): 1" = 10'-0"  
SCALE (22x34): 1" = 5'-0"

**NOTE:**  
 CONTRACTOR TO REMOVE EXISTING T-MOBILE EQUIPMENT CABINETS FROM TOWER EQUIPMENT PLATFORM LOCATED @ 40' AGL ON EXISTING SELF SUPPORT TOWER. EXISTING T-MOBILE PURCELL CABINET MOUNTED TO TOWER LEG AT GROUND LEVEL TO REMAIN.

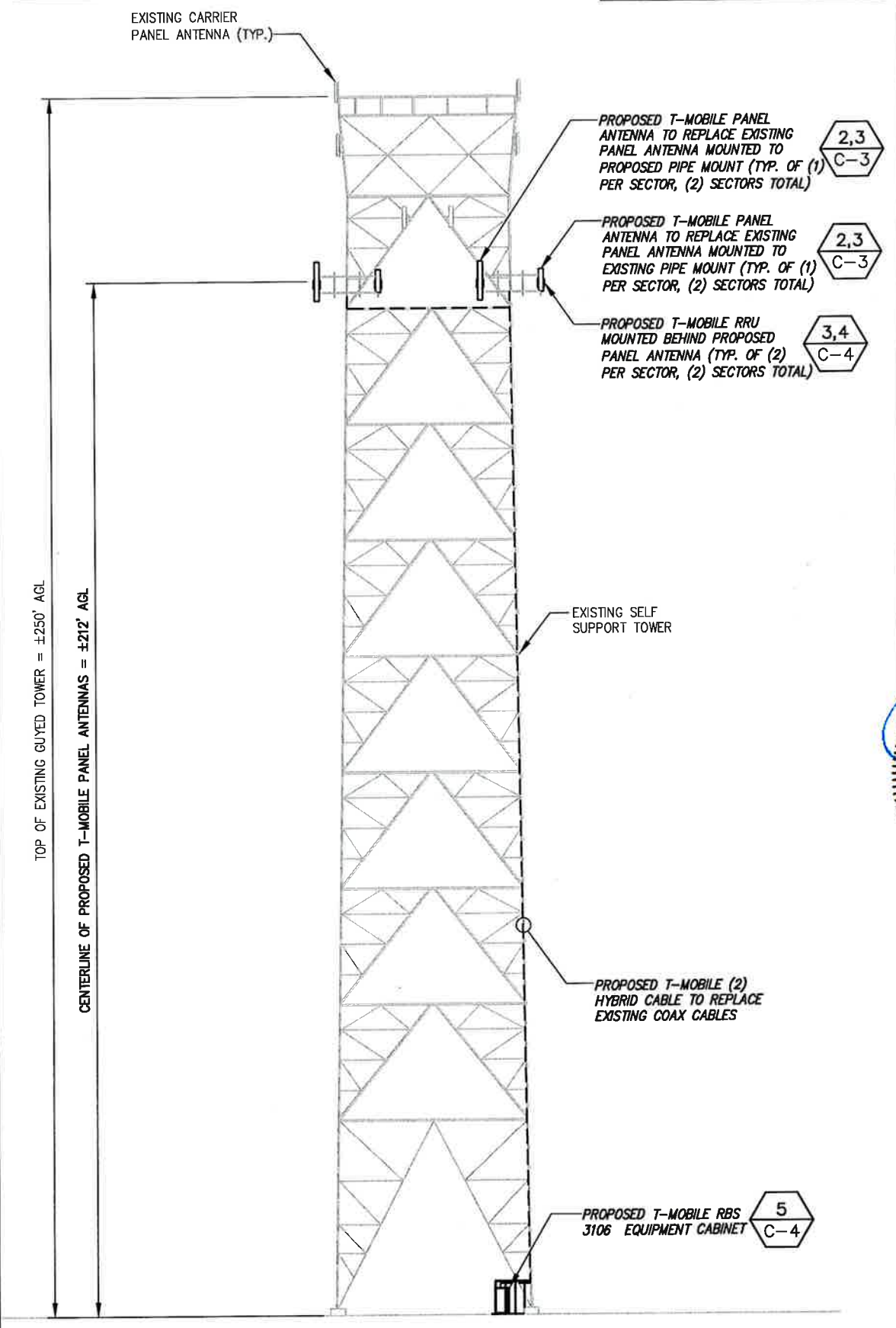


1 PLATFORM PLAN  
 SCALE: AS NOTED



INFINIGY HAS NOT EVALUATED THE EXISTING OR PROPOSED MOUNT LOADING AND ASSUMES NO RESPONSIBILITY FOR THE STRUCTURAL INTEGRITY OF THE ANTENNA MOUNT.

FOR ADDITIONAL STRUCTURAL INFORMATION, SEE 'STRUCTURAL ANALYSIS REPORT' COMPLETED BY GDP GROUP, DATED 6/1/16



2 BUILDING ELEVATION  
 NOT TO SCALE



**INFINIGY**  
 1033 Waterville Shaker Rd  
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 Office # (518) 660-0790  
 Fax # (518) 660-0793

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DEPT.	DATE	APP'D	REVISIONS
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RF MAINT			
ZONING			
OPS			
CONSTR.			
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 CT11220A

SITE NAME:  
 CHESHIRE/RT-10  
 751 HIGGINS ROAD  
 CHESHIRE, CT 06410

SHEET TITLE  
**COMPOUND PLAN & ELEVATION**

SHEET NUMBER  
**C-2**

SHEET 3 OF 13 SHEETS



RF SYSTEM SCHEDULE (701D\_WoutU21 CONFIGURATION)

SECTOR	TECHNOLOGY	ANTENNA PORT	BAND	ANTENNA MODEL #	VENDOR	QTY (REMOVED)	QTY (NEW)	AZIMUTH	M-TILT	E-TILT	ANTENNA CENTERLINE	TMA MODEL #	VENDOR	RRU MODEL #	VENDOR	CABLE LENGTH	CABLE DIAMETER	CABLE QTY.	CABLE TYPE	CABLE MODEL #	VENDOR	CABLE TAGGING	COLOR CODING	JUMPER TYPE	JUMPER TAGGING	COLOR CODING
A	LTE	TBD	B4A	AIR21 B4A/B2P	ERICSSON	1	1	60°	0°	4°	212°-0°	-	-	-	-	TBD	-	-	HYBRID	MASTERLINE EXTREME HYBRID (9/18)	ERICSSON	FIBER 1	0	FIBER	--	-
	UMTS	TBD	B2P						0°	4°				(PROPOSED) RRUS 11 B2	ERICSSON								FIBER	--	-	
	UMTS	TBD	B4A	KRC 118 048/1 B4A/B12P-B5P, 8'	ERICSSON	2	1	60°	0°	4°	212°-0°	-	-	-	-								FIBER	--	-	
	LTE 700	TBD	B12P						0°	2°				(PROPOSED) RRUS 11 B12	ERICSSON								FIBER	--	-	
B	LTE	TBD	B4A	AIR21 B4A/B2P	ERICSSON	1	1	140°	0°	4°	212°-0°	-	-	-	-	TBD	-	-	HYBRID	MASTERLINE EXTREME HYBRID (9/18)	ERICSSON	FIBER 2	0	FIBER	--	-
	UMTS	TBD	B2P						0°	4°				(PROPOSED) RRUS 11 B2	ERICSSON								FIBER	--	-	
	UMTS	TBD	B4A	KRC 118 048/1 B4A/B12P-B5P, 8'	ERICSSON	2	1	140°	0°	4°	212°-0°	-	-	-	-								FIBER	--	-	
	LTE 700	TBD	B12P						0°	2°				(PROPOSED) RRUS 11 B12	ERICSSON								FIBER	--	-	

KEY

EXISTING	R - RED - GSM
PROPOSED	G - GREEN - UMS 1900
FIBER CONNECTION	B - BLUE - UMS AWS
	Y - YELLOW - LTE
	O - ORANGE - FIBER CABLE

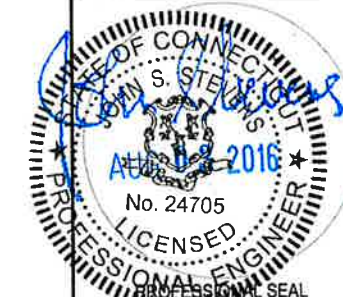
1 RF SCHEDULE  
 NOT TO SCALE

SUBMITTALS

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DEPT.	DATE	APP'D	REVISIONS
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DPS			
CONSTR.			
SITE AC.			

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 751 HIGGINS ROAD  
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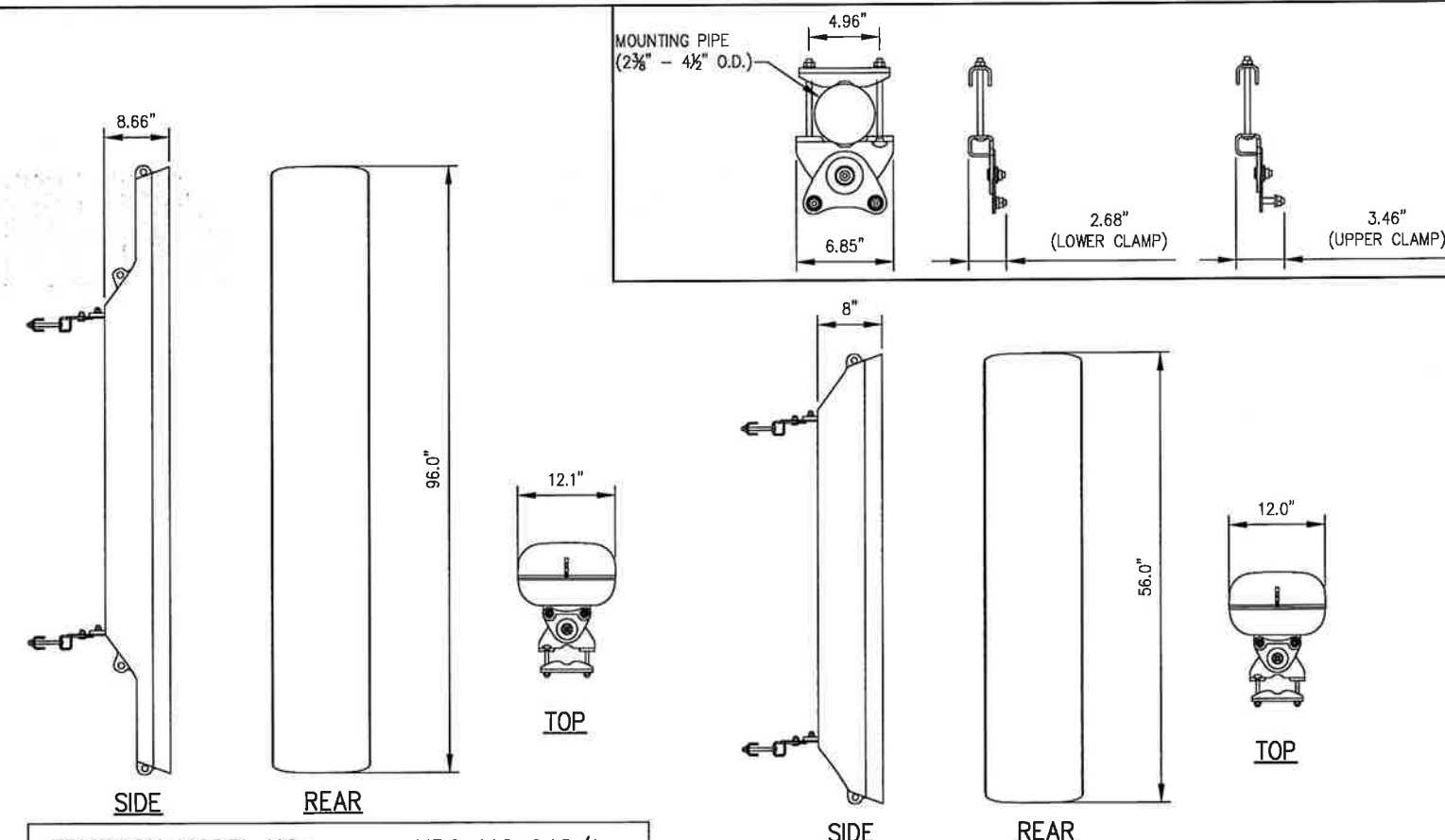
SHEET TITLE

**ANTENNA DETAIL & RF SCHEDULE**

SHEET NUMBER

C-3

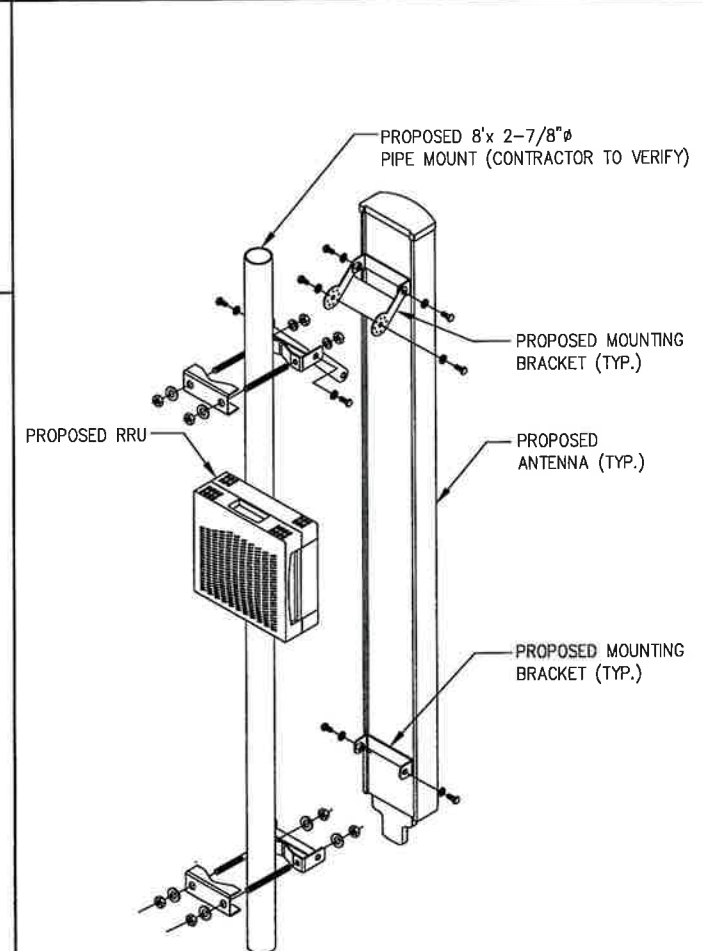
SHEET 4 OF 13 SHEETS



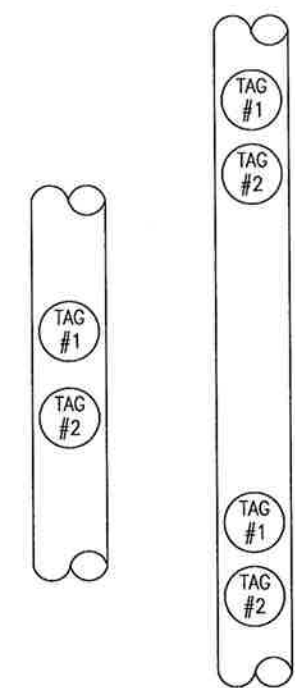
ERICSSON MODEL NO.: KRC 118 048/1 B4A/B12P-B5P  
 RADOME MATERIAL: FIBERGLASS, UV RESISTANT  
 RADOME COLOR: LIGHT GRAY  
 DIMENSIONS, HXWXD: 96"X12.1"X8.66"  
 WEIGHT, W/ PRE-MOUNTED BRACKETS: 121LBS  
 CONNECTOR: (2) 7-16 DIN FEMALE

ERICSSON MODEL NO.: AIR21 B4A/B2P  
 RADOME MATERIAL: FIBERGLASS, UV RESISTANT  
 RADOME COLOR: LIGHT GRAY  
 DIMENSIONS, HXWXD: 54"X12"X8"  
 WEIGHT, W/ PRE-MOUNTED BRACKETS: 90LBS  
 CONNECTOR: (2) 7-16 DIN FEMALE

2 ANTENNA DETAIL  
 NOT TO SCALE



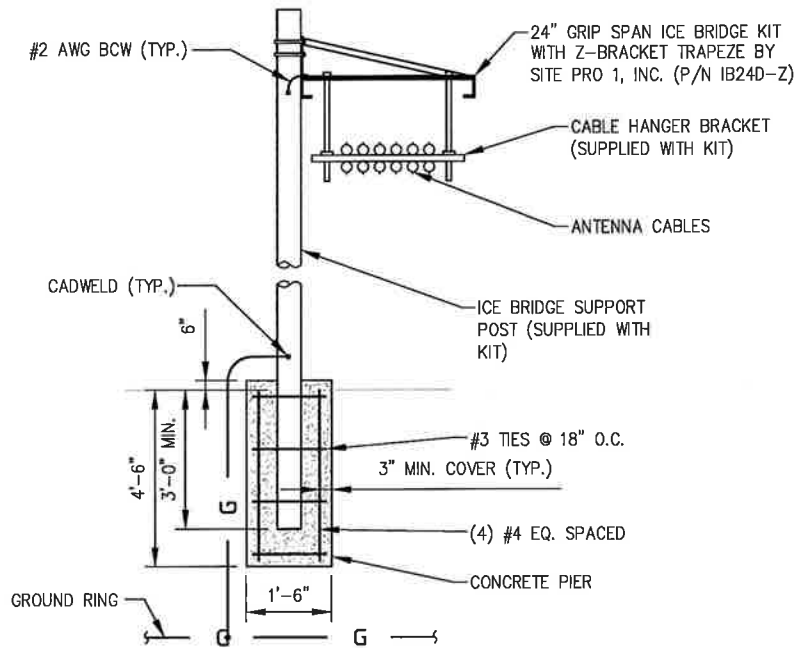
3 MOUNTING DETAIL  
 NOT TO SCALE



- METALLIC TAG NOTES:
- TWO METALLIC TAGS SHALL BE ATTACHED AT EACH END OF EVERY CABLE LONGER THAN (3) THREE FEET.
  - CABLES LESS THAN (3) THREE FEET WILL HAVE TWO METALLIC TAGS ATTACHED AT THE CENTER OF THE CABLE.
  - TAGS WILL BE FASTENED WITH STAINLESS STEEL ZIP TIES APPROPRIATE FOR CABLE DIAMETER.
  - STANDARDIZED METALLIC TAG KITS WILL BE ASSEMBLED WITH TAGS ALREADY ENGRAVED TO ACCOMMODATE ALL CONFIGURATIONS.

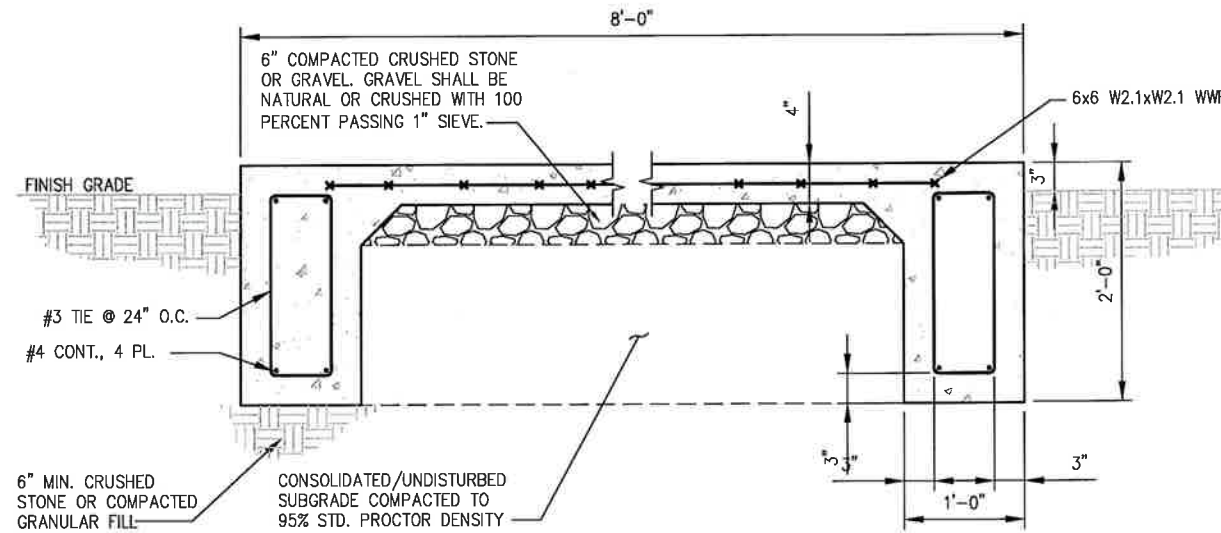
4 METALLIC TAG DETAIL  
 NOT TO SCALE





- NOTES:**
1. USE SITE PRO PARTS OR APPROVED EQUIVALENT.
  2. SUPPORT POSTS SHALL BE LOCATED ON ALTERNATING SIDES OF ICE BRIDGE SPACED NO MORE THAN 6'-0".
  3. ANY SPLICES OR CANTILEVERED SECTIONS OF THE ICE BRIDGE SHALL BE LOCATED WITHIN 2'-0" OF A SUPPORT POST.

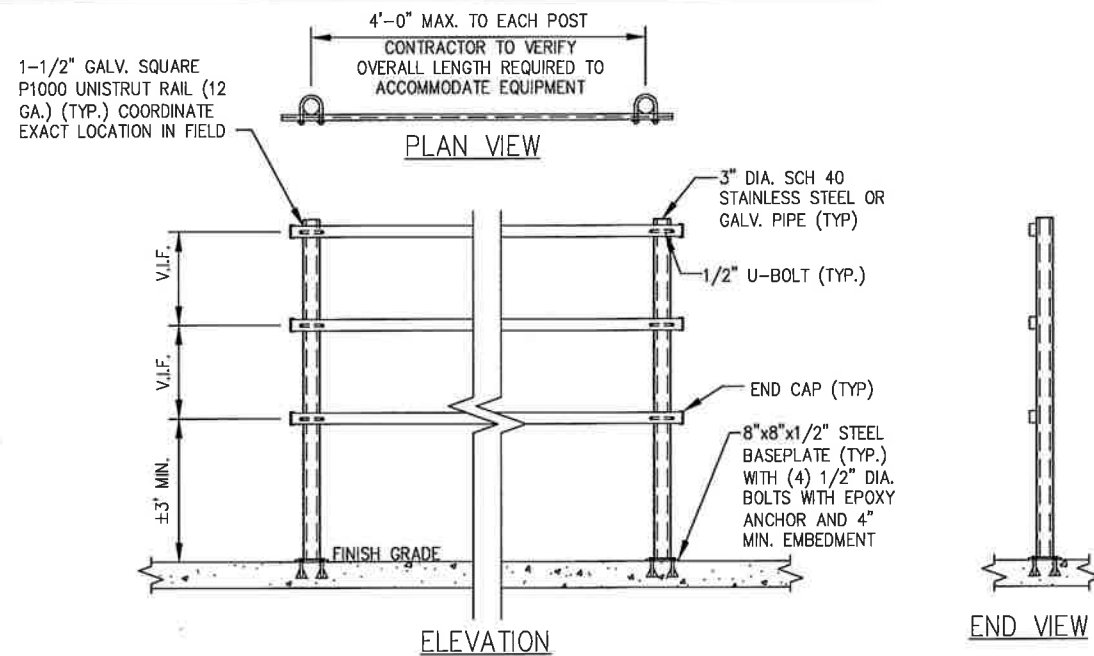
**1 ICE BRIDGE DETAIL**  
--- NOT TO SCALE



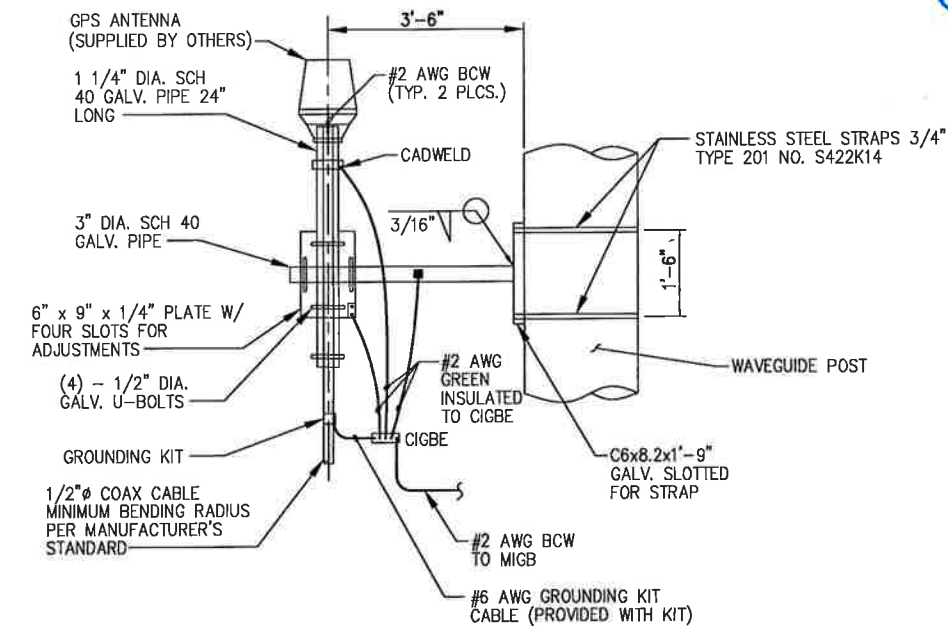
- NOTES:**
1. SURFACE OF FINISHED SLAB SHALL BE LEVEL AND FLAT WITHIN 1/8".
  2. CONCRETE SHALL BE 4,000 PSI AFTER 28 DAYS

**2 CONCRETE PAD DETAIL**  
--- NOT TO SCALE

**3 DETAIL NOT USED**  
--- NOT TO SCALE



**4 H-FRAME DETAIL**  
--- NOT TO SCALE



- NOTES:**
1. THE ELEVATION AND LOCATION OF THE GPS ANTENNA SHALL BE IN ACCORDANCE WITH THE FINAL RF REPORTS.
  2. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1-1/4" DIAMETER, SCHEDULE 40 GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MINIMUM OF 18 INCHES) USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.

**5 GPS DETAIL**  
--- NOT TO SCALE

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DATE	DESCRIPTION	REVISION
8/3/16	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
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RF MAN			
ZONING			
OPS			
CONSTR.			
SITE AC.			

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SITE NUMBER: CT11220A  
SITE NAME: CHESHIRE/RT-10  
751 HIGGINS ROAD  
CHESHIRE, CT 06410

SHEET TITLE  
**EQUIPMENT SPECIFICATIONS**

SHEET NUMBER  
**C-5**  
SHEET 6 OF 13 SHEETS

**CODED DRAWING NOTES:**

- 1 T-MOBILE RBS 3106 EQUIPMENT CABINET.
- 2 PROPOSED PPC.
- 3 ELECTRIC FEEDER - (1) 2" RGS CONDUIT WITH (3) 3/0 AWG AND (1) #6 AWG GROUND.
- 4 NEW FIBER SERVICE - PROVIDE (1) 2" PVC CONDUIT FROM EXISTING FIBER DEMARC TO PROPOSED T-MOBILE PPC. (PENDING COORDINATION WITH UTILITY COMPANY)
- 5 PROVIDE (2) 2" PVC CONDUITS FROM PROPOSED PPC TO PROPOSED CABINET FOR POWER AND TELCO.
- 6 PROPOSED METER ENCLOSURE AND MAIN DISCONNECT SWITCH MOUNT TO PROPOSED UTILITY BACKBOARD (PENDING COORDINATION WITH UTILITY COMPANY)
- 7 NEW POWER SERVICE - PROVIDE (1) 2" PVC CONDUIT FROM ELECTRICAL DEMARC TO PROPOSED T-MOBILE PPC. (PENDING COORDINATION WITH UTILITY COMPANY)

**ABBREVIATIONS**

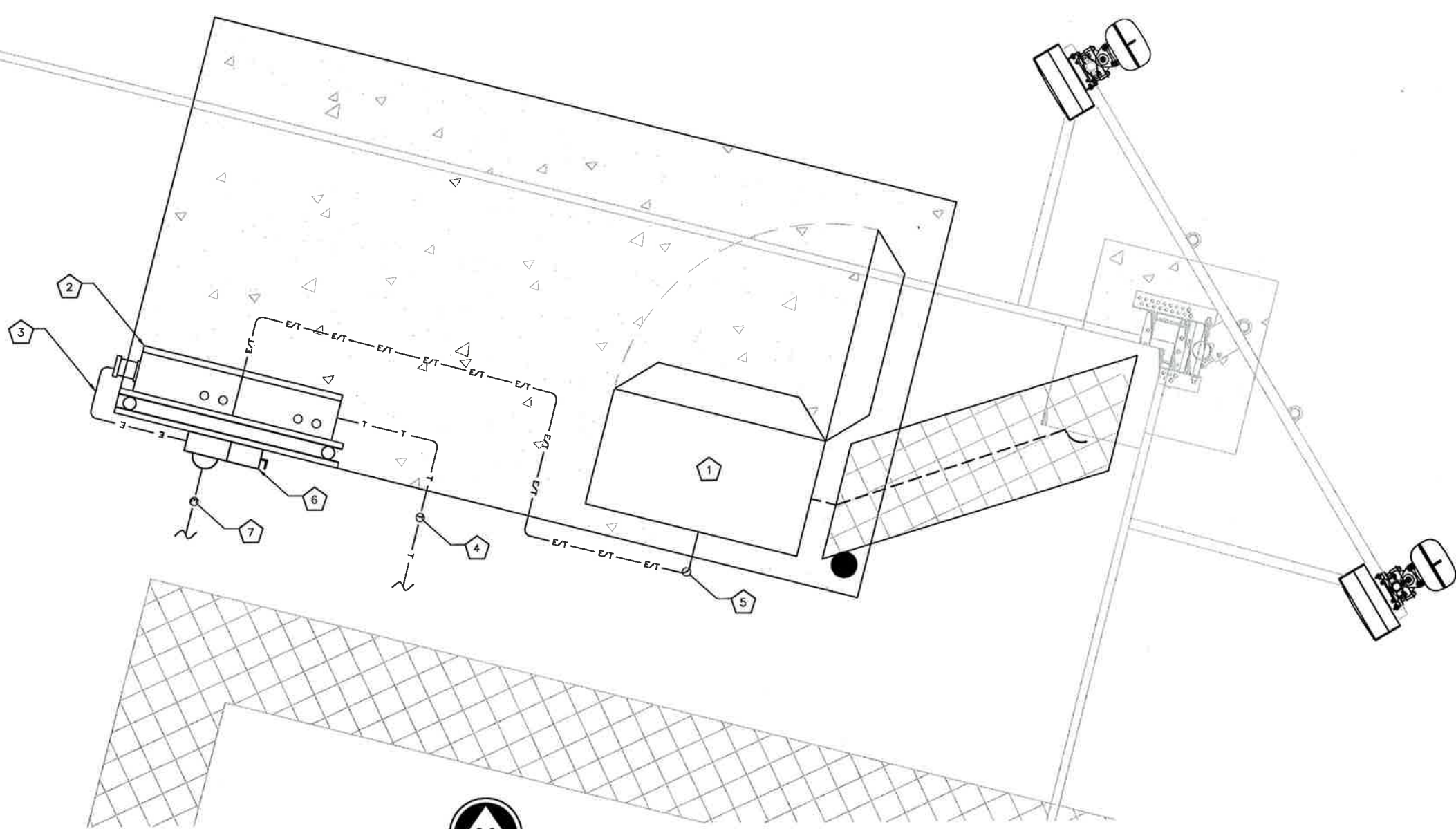
GIGBE	COAX ISOLATED GROUND BAR EXTERNAL
SST	SELF SUPPORTING TOWER
GPS	GLOBAL POSITIONING SYSTEM
TYP.	TYPICAL
DWG	DRAWING
BCW	BARE COPPER WIRE
BFG	BELOW FINISH GRADE
W/	WITH
PVC	POLYVINYL CHLORIDE
CAB	CABINET
C	CONDUIT
SS	STAINLESS STEEL
G	GROUND
AWG	AMERICAN WIRE GAUGE
RGS	RIGID GALVANIZED STEEL

**ELECTRICAL SYMBOLS**

⚡	RECEPTACLE
—	BURIED POWER CONDUIT
—	BURIED TELCO CONDUIT
(M)	ELECTRICAL METER
(#)	INDICATES CODED NUMBER
□	SAFETY SWITCH
⊘	UTILITY POLE

**GENERAL ELECTRICAL NOTES:**

1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES, LAWS, AND ORDINANCES.
2. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE INDICATED. CONDUITS EXPOSED ABOVE GROUND SHALL BE RIGID GALVANIZED STEEL. ALL UNDERGROUND CONDUIT SHALL TRANSITION FROM PVC TO RIGID ABOVE GRADE. PROVIDE 36" SEPARATION BETWEEN UNDERGROUND POWER AND TELEPHONE CONDUITS. SUPPLY UTILITY MARKING TAPE BURIED 12" BELOW GRADE ALONG ENTIRE LENGTH OF UNDERGROUND CONDUITS.
3. ALL CONDUCTORS SHALL BE COPPER WITH THHN/THWN INSULATION. CONTROL CONDUCTORS SHALL BE STRANDED, POWER & LIGHTING CONDUCTORS SHALL BE SOLID FOR #10 & #12 CONDUCTORS AND STRANDED FOR ALL OTHER SIZES.
4. ELECTRICAL DRAWINGS ARE IN PART DIAGRAMMATIC. COORDINATE ELECTRICAL WORK WITH SITE CONDITIONS.
5. LOCATE ALL UNDERGROUND UTILITIES BEFORE TRENCHING. IF CONFLICTS ARISE, CONTACT UTILITY COMPANY AND ENGINEER IMMEDIATELY.
6. ALL EXPOSED CONDUITS SHALL HAVE WEATHERPROOF CAPS NOT DUCT TAPE.
7. PROVIDE 200 LB TEST PULL WIRES IN EACH TELEPHONE AND POWER CONDUIT.
8. PULL BOXES SHALL BE INSTALLED AS NEEDED PER NEC UTILITY REQUIREMENTS.



CALL TO NORTH

1 ELECTRICAL SITE PLAN  
SCALE: NOT TO SCALE



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103 MCKINCHY DRIVE  
LIVERPOOL, NY 13085

**INFINIGY**

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Fax # (518) 880-0793

**SUBMITTALS**

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8/3/16		0

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R/E			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 428-000  
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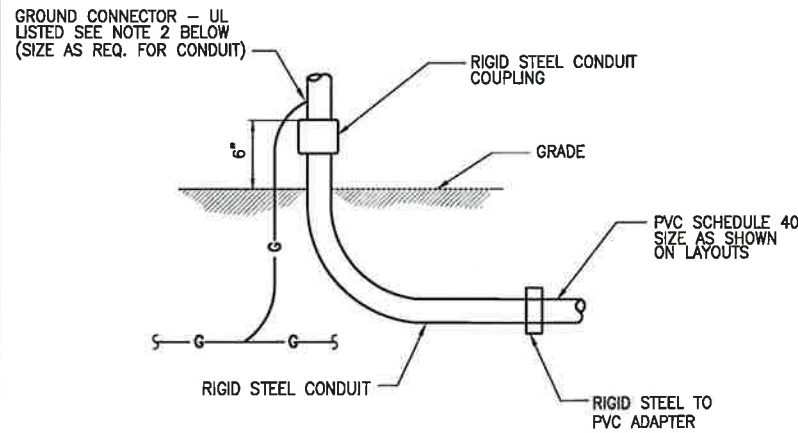
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SITE NUMBER:  
CT11220A  
SITE NAME:  
CHESHIRE/ RT -10  
751 HIGGINS ROAD  
CHESHIRE, CT 06410

SHEET TITLE  
**ELECTRICAL SITE PLAN**

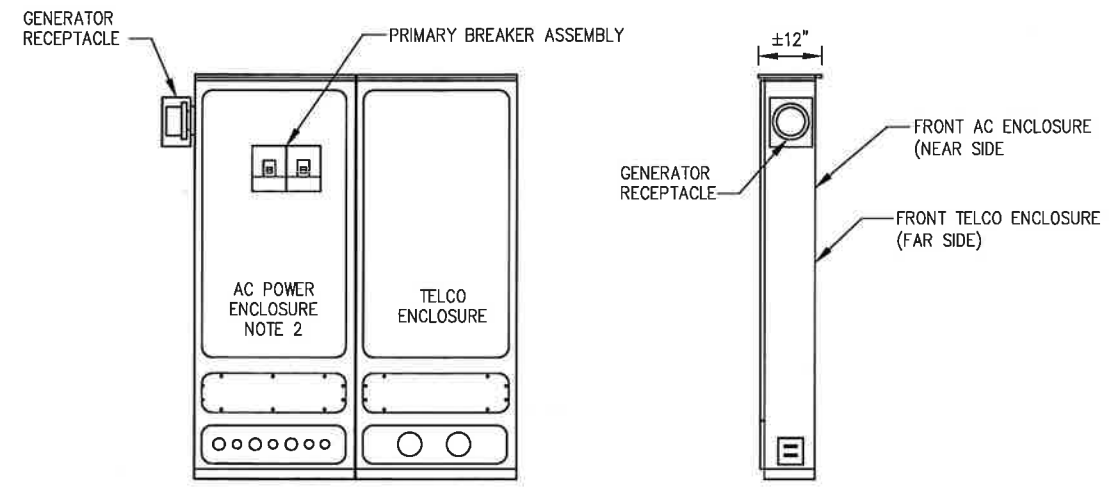
SHEET NUMBER  
**E-1**  
SHEET 7 OF 13 SHEETS



**NOTES**

1. ALL CONDUIT ABOVE GRADE MUST BE RIGID STEEL.
2. ALL NEW STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 G90 AFTER FABRICATION.
3. FIELD ABRASIONS SHALL BE TOUCH UP PAINTED WITH ZINC RICH GALVANIZING REPAIR PAINT IN ACCORDANCE WITH ASTM A780.
4. ALL EXPOSED ENDS OF CONDUITS SHALL HAVE WEATHER PROOF CAPS. DO NOT USE DUCT TAPE.
5. PROVIDE 200LB. TEST PULL WIRES IN EACH TELEPHONE AND POWER CONDUIT. STUB CONDUITS INTO ENCLOSURE AND LABEL.

**1 UNDERGROUND CONDUIT STUB-UP**  
SCALE: NOT TO SCALE



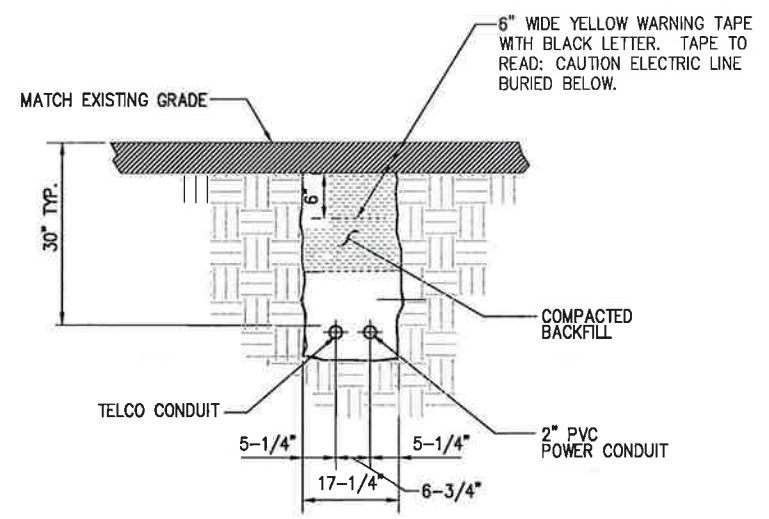
**FRONT VIEW**

**SIDE VIEW**

**NOTES**

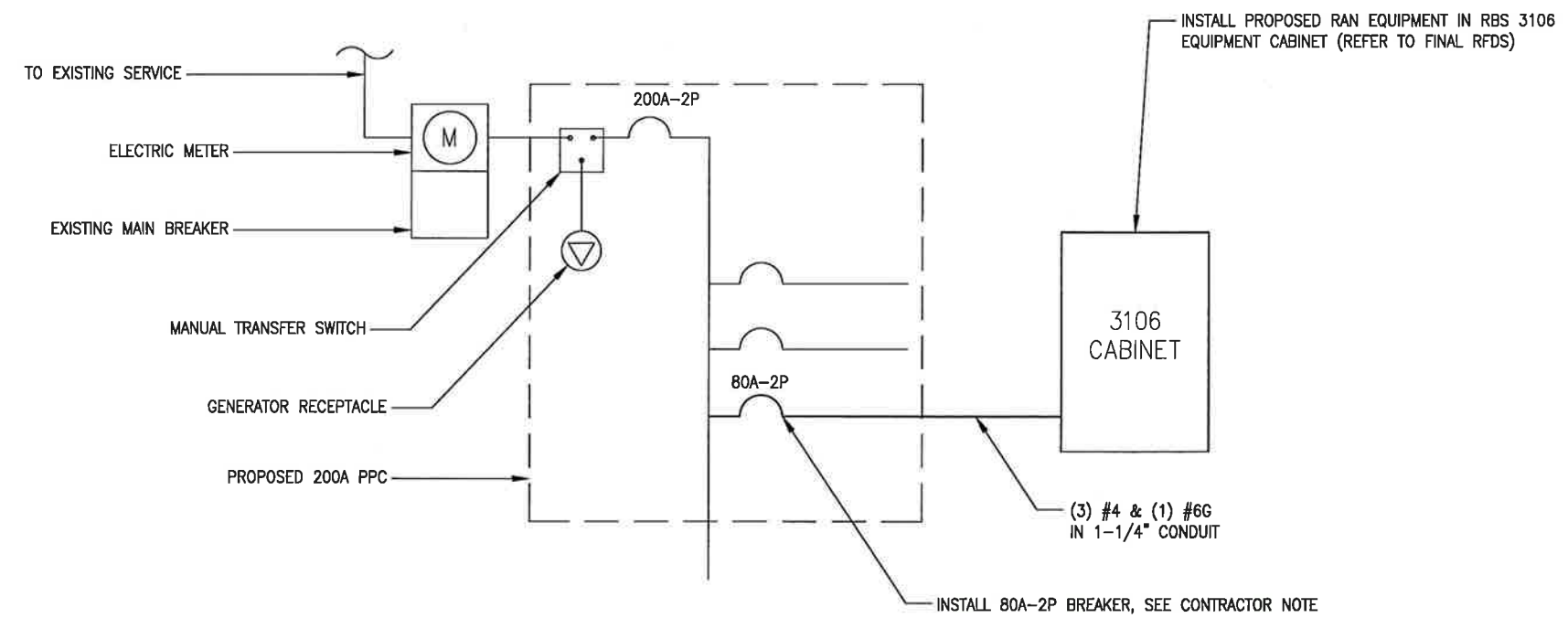
1. METER SOCKET BY THIS CONTRACT. METER TO BE SUPPLIED BY LOCAL UTILITY COMPANY.
2. AC POWER ENCLOSURE.
3. ALL EQUIPMENT SHALL BE GROUNDED PER LATEST EDITION OF NEC AND AS INDICATED.
4. ELECTRICAL EQUIPMENT SHALL BE MIN. 3'-0" FROM ANY STRUCTURE AND AS REQUIRED BY LOCAL UTILITY COMPANIES AND AHJ.
5. CONTRACTOR MUST LABEL ALIKE BREAKERS IN POWER CABINET.
6. REFER TO ACTUAL EQUIPMENT DRAWINGS.

**2 PPC DETAIL**  
SCALE: NOT TO SCALE



**NOTE:**  
NUMBER AND SIZE OF CONDUITS MAY VARY. SEE DWG E1 FOR CONDUIT SIZE AND LOCATION. CONFIRM DIMENSIONS SHOWN WITH UTILITY COMPANY.

**3 CONDUIT TRENCH DETAIL**  
SCALE: NOT TO SCALE



**4 POWER DIAGRAM**  
SCALE: NOT TO SCALE

**CONTRACTOR NOTE:**  
CONTRACTOR TO VERIFY THAT THE EXISTING CONDUITS AND WIRE SIZES ARE ADEQUATE FOR THE PROPOSED LOADING IN ACCORDANCE WITH NEC AND INCLUDE ELECTRICAL UPGRADES IN THE SCOPE OF WORK AS REQUIRED.

**SUBMITTALS**

DATE	DESCRIPTION	REVISION
8/3/16	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
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RF MATH			
ZONING			
OPS			
CONSTR.			
SITE AC.			

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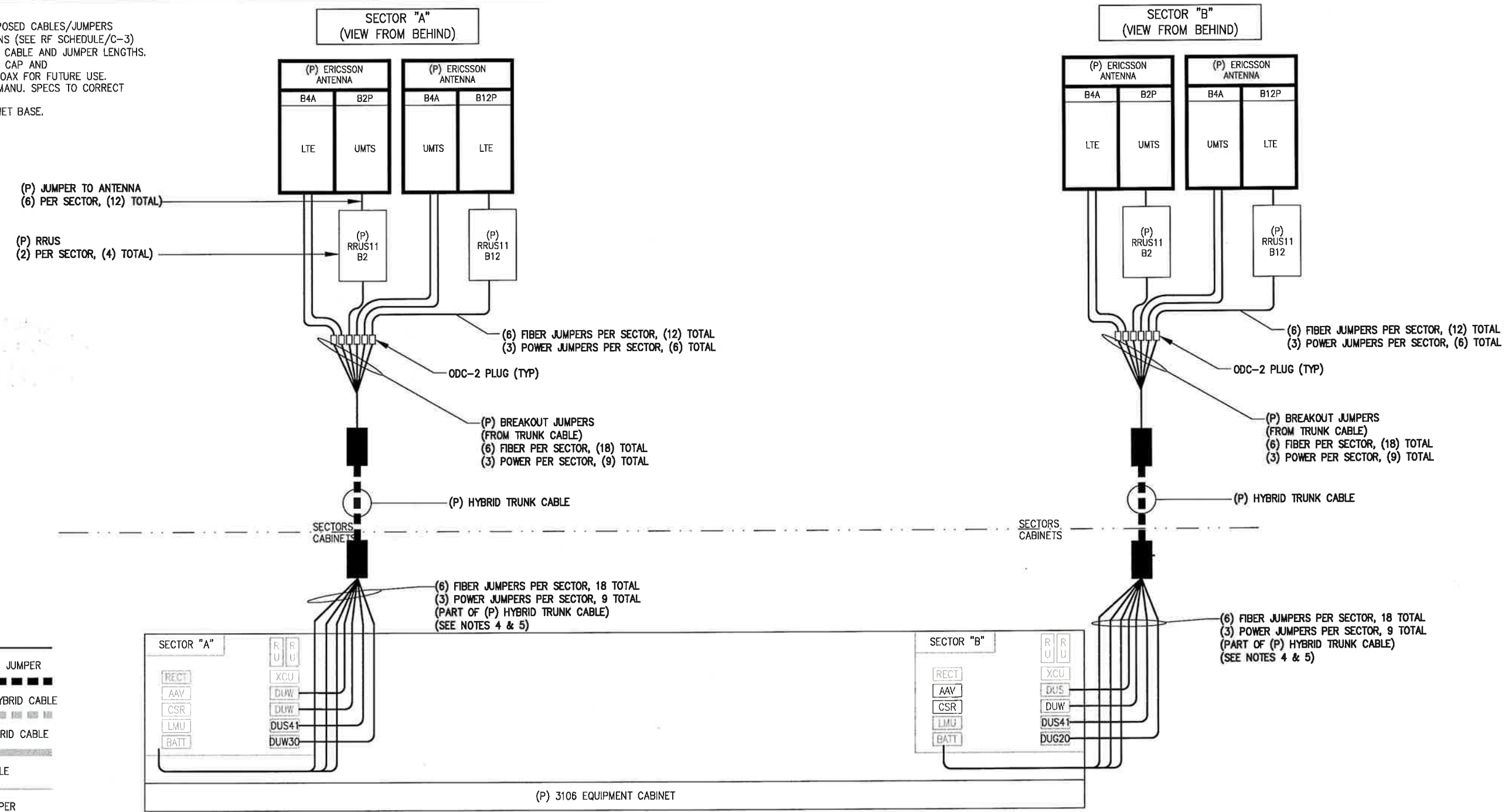
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SITE NAME: CHESHIRE/RT-10  
751 HIGGINS ROAD  
CHESHIRE, CT 06410

SHEET TITLE  
**ELECTRICAL DETAILS**

SHEET NUMBER  
**E-2**  
SHEET 8 OF 13 SHEETS

- NOTES:**
1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER METRO PCS SPECIFICATIONS (SEE RF SCHEDULE/C-3)
  2. SEE RF SCHEDULE/C-3 FOR CABLE AND JUMPER LENGTHS.
  3. IF NEW GPS ADDED TO SITE, CAP AND WEATHERPROOF ANY UNUSED COAX FOR FUTURE USE.
  4. TRIM POWER JUMPERS PER MANU. SPECS TO CORRECT LENGTH FOR CONNECTION.
  5. COIL EXCESS FIBER IN CABINET BASE.



**SUBMITTALS**

DATE	DESCRIPTION	REVISION
8/3/16	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RF MGR.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 428-000  
DRAWN BY: JLM  
CHECKED BY: ASW



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SITE NUMBER:  
CT11220A  
SITE NAME:  
CHESHIRE/ RT-10  
751 HIGGINS ROAD  
CHESHIRE, CT 06410

SHEET TITLE  
**COAX/FIBER PLUMBING DIAGRAM**

SHEET NUMBER  
**E-3**  
SHEET 9 OF 13 SHEETS

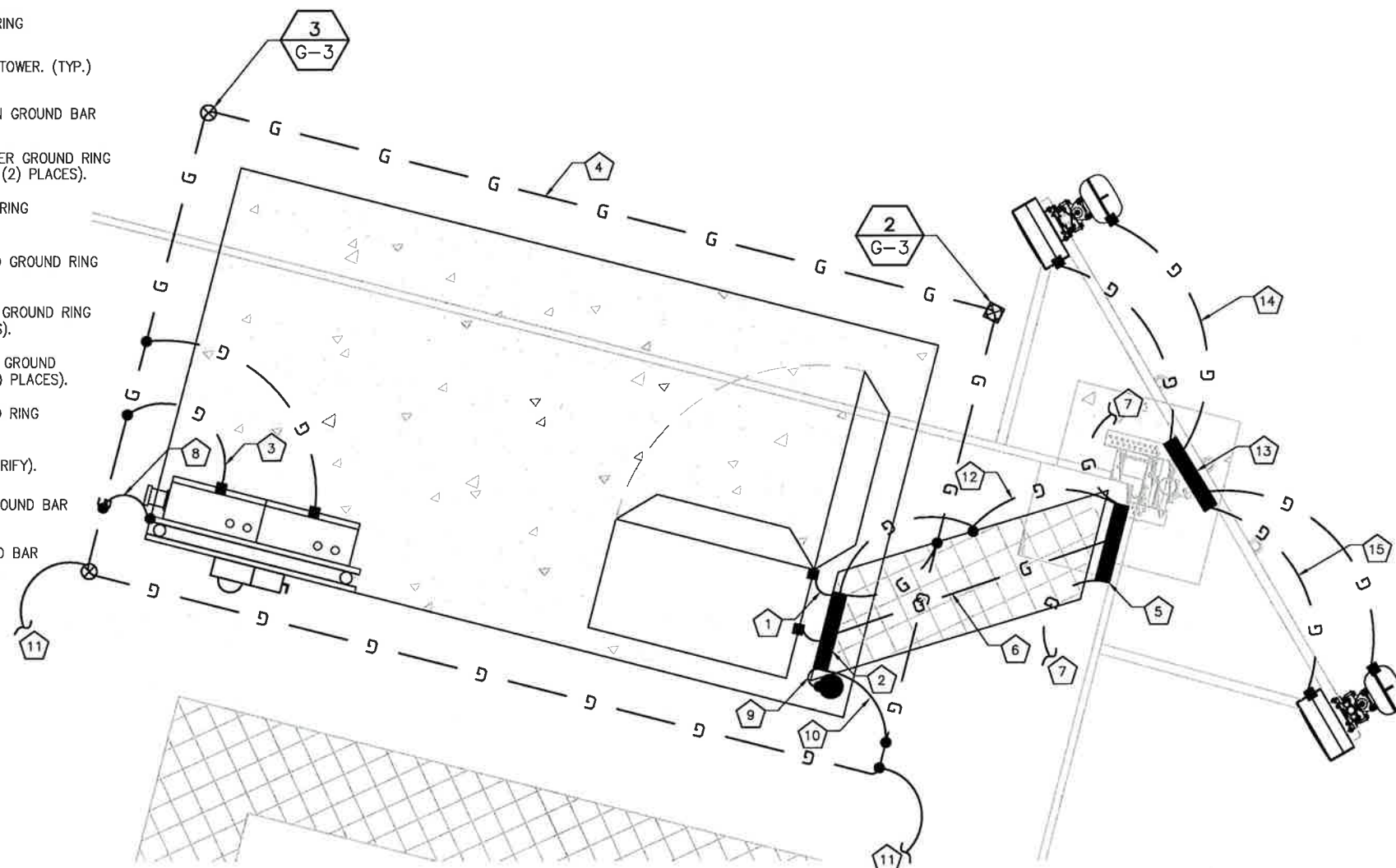
1 701D\_WU21 CONFIGURATION COAX/FIBER PLUMBING DIAGRAM  
NOT TO SCALE

**CODED DRAWING NOTES**

- 1 PROPOSED T-MOBILE RBS 3106 EQUIPMENT CABINET TO BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS.
- 2 PROPOSED MAIN GROUND BAR, NEAR PROPOSED EQUIPMENT.
- 3 BOND PROPOSED PPC CABINET TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW PER MANUFACTURER'S SPECIFICATIONS
- 4 PROPOSED #4 SOLID TINNED BCW BURIED GROUND RING
- 5 PROPOSED SECONDARY GROUND BAR, AT BASE OF TOWER. (TYP.)
- 6 BOND PROPOSED SECONDARY GROUND BAR TO MAIN GROUND BAR
- 7 BOND PROPOSED SECONDARY GROUND BAR TO TOWER GROUND RING WITH PROPOSED #2/0 SOLID TINNED BCW (TYP. OF (2) PLACES).
- 8 BOND PROPOSED H-FRAME TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW (TYP.).
- 9 BOND PROPOSED T-MOBILE GPS UNIT TO PROPOSED GROUND RING PER MANUFACTURER'S SPECIFICATIONS.
- 10 BOND PROPOSED MAIN GROUND BAR TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW (TYP. OF (2) PLACES).
- 11 BOND PROPOSED GROUND RING TO EXISTING TOWER GROUND SYSTEM WITH #2/0 SOLID TINNED BCW (TYP. OF (2) PLACES).
- 12 BOND PROPOSED ICE BRIDGE TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW AS REQUIRED.
- 13 EXISTING TOWER GROUND BAR, (CONTRACTOR TO VERIFY).
- 14 BOND PROPOSED ANTENNAS TO EXISTING TOWER GROUND BAR WITH #2/0 SOLID TINNED BCW AS REQUIRED (TYP.).
- 15 BOND PROPOSED RRU'S TO EXISTING TOWER GROUND BAR WITH #2/0 SOLID TINNED BCW AS REQUIRED (TYP.).

**GROUNDING SYMBOLS**

- ⊗ GROUND ROD
- ACCESS WELL
- ⊠ GROUND ROD WITH ACCESS
- COMPRESSION TYPE CONNECTION
- EXOTHERMIC WELD TYPE CONNECTION
- G- #2/0 BTS COPPER CONDUCTOR BURIED GROUND CABLE
- # INDICATES CODED NOTE



1 GROUNDING SITE PLAN  
SCALE: NOT TO SCALE

**GENERAL GROUNDING NOTES:**

1. TO ENSURE PROPER BONDING, ALL CONNECTIONS SHALL BE AS FOLLOWS:
  - #2/0 BARE TINNED SOLID COPPER CONDUCTOR: EXOTHERMIC WELD TO RODS OR GROUND RING
  - LUGS AND BUS BAR (UNLESS NOTED OTHERWISE): SANDED CLEAN, COATED WITH OXIDE INHIBITOR AND BOLTED FOR MAXIMUM SURFACE CONTACT. ALL LUGS SHALL BE COPPER (NO ALUMINUM SHALL BE PERMITTED). PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
2. ALL GROUNDING CABLE IN CONCRETE OR THROUGH WALLS SHALL BE IN 3/4" PVC CONDUIT. SEAL AROUND CONDUIT THROUGH WALLS. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTORS.
3. OWNER'S REPRESENTATIVE WILL INSPECT EXOTHERMIC WELD AND CONDUCT MEGGER TEST PRIOR TO BURIAL. MAXIMUM 5 OHMS RESISTANCE IS REQUIRED.
4. DO NOT INSTALL GROUND RING OUTSIDE OF LEASED AREA.
5. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. ALL BENDS SHALL BE A MINIMUM 8" RADIUS AND NO GREATER THAN 90 DEGREES.
6. ALL CADWELDS TO BURIED GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND RODS WHICH SHALL BE THE TEE TYPE.
7. BOND SERVICE CONDUITS TO GROUND RING AS THEY CROSS. DO NOT EXOTHERMICALLY WELD TO CONDUITS.
8. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE GROUNDING SYSTEM IS COMPLETE. THE CONSTRUCTION MANAGER SHALL INSPECT THE GROUNDING SYSTEM PRIOR TO BACKFILLING.
9. THE MINIMUM SPACING BETWEEN GROUND RODS SHALL BE 10'-0" (MAX. 15'-0").
10. BOND GIGBE TO EXTERNAL GROUND RING WITH 2 RUNS OF #2 BARE, TINNED, SOLID COPPER CONDUCTOR IN PVC. CONNECT BAR END WITH 2 HOLE LUG, AND "CADWELD" THE OTHER END TO THE EXTERNAL GROUND ROD.
11. THE PREFERRED LOCATION FOR COAX GROUNDING IS AT THE BASE OF THE TOWER PRIOR TO THE COAX BEND.
12. BONDING OF THE GROUNDED CONDUCTOR (NEUTRAL) AND THE GROUNDING CONDUCTOR SHALL BE AT THE SERVICE DISCONNECTING MEANS. BONDING JUMPER SHALL BE INSTALLED PER N.E.C. ARTICLE 250-30.



T-MOBILE NORTHEAST LLC  
100 MONARCH DRIVE  
LIVERPOOL, NY 13088

INFINIGY

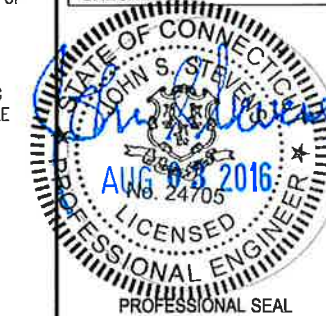
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

**SUBMITTALS**

DATE	DESCRIPTION	REVISION
8/3/18	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

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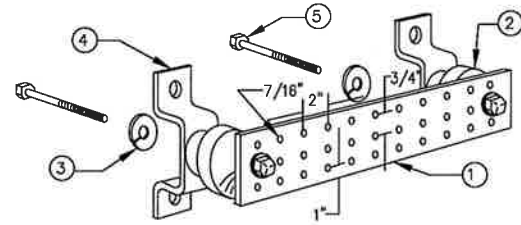
SHEET TITLE

**GROUNDING &  
POWER  
DIAGRAMS**

SHEET NUMBER

**G-1**

SHEET 10 OF 13 SHEETS



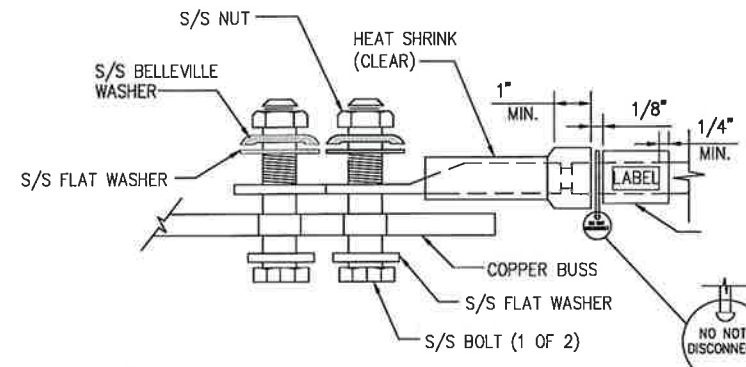
LEGEND

1. TINNED COPPER GROUND BAR, 1/4"x4"x20", NEWTON INSTRUMENT CO., HARGER TGB14420M, OR EQUIVALENT. HOLE CENTERS TO MATCH
2. NEMA DOUBLE LUG CONFIGURATION.
3. INSULATORS, NEWTON INSTRUMENT CO. CAT. NO. 3061-4 OR HARGER EQUIVALENT.
4. 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8 OR EQUIVALENT.
5. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. A-6056 OR HARGER EQUIVALENT.
6. 5/8-11"x1" H.H.C.S. BOLTS, NEWTON INSTRUMENT CO. CAT. NO. 3012-1 OR HARGER EQUIVALENT.

NOTE:

- 1) ALL MOUNTING HARDWARE CAN ALSO BE USED ON 6", 12", 18", ETC. GROUND BARS.
- 2) ENTIRE ESSEMBLY AVAILABLE FROM NEWTON INSTRUMENT CO. CAT. NO. 2106060010 OR AS HARGER TGB14420M.

**1** GROUND BAR  
SCALE: NOT TO SCALE

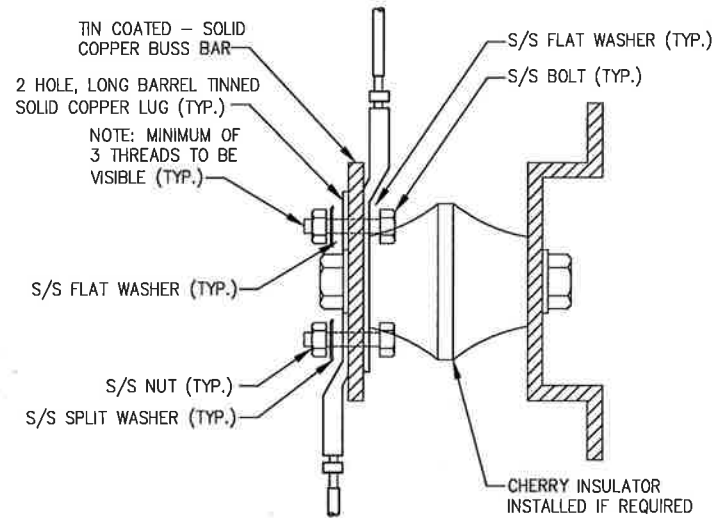


NOTE:

ALL MECHANICAL EXTERNAL TERMINATION SURFACES SHALL BE TREATED WITH T&B KOPR-SHIELD CP8 ANTI-OXIDATION COMPOUND.

"DO NOT DISCONNECT" TAG ON ALL GROUND BAR INTERCONNECTS

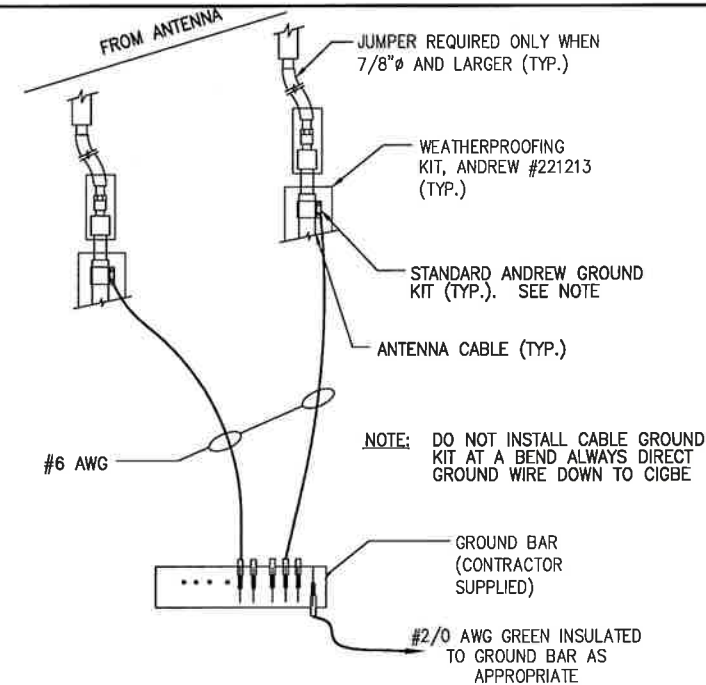
**4** EQUIPMENT GROUND CONNECTION  
SCALE: NOT TO SCALE



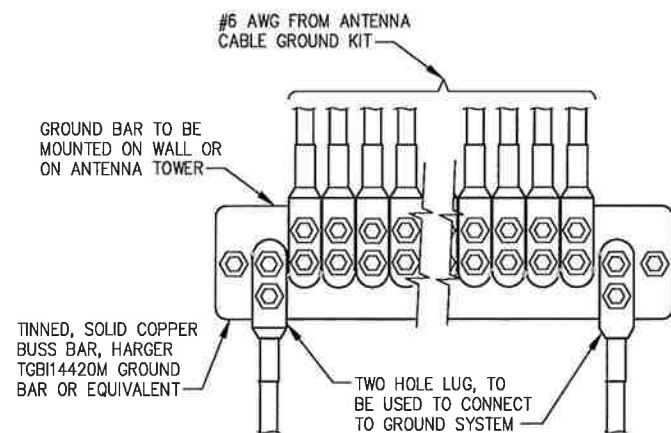
NOTE:

- 1) ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING SPLIT WASHERS.
- 2) COAT WIRE END WITH ANTI-OXIDATION COMPOUND PRIOR TO INSERTION INTO LUG BARREL AND CRIMPING.
- 3) APPLY ANTI-OXIDATION COMPOUND BETWEEN ALL LUGS AND BUSS BARS PRIOR TO MATING AND BOLTING.

**2** GROUND LUG  
SCALE: NOT TO SCALE



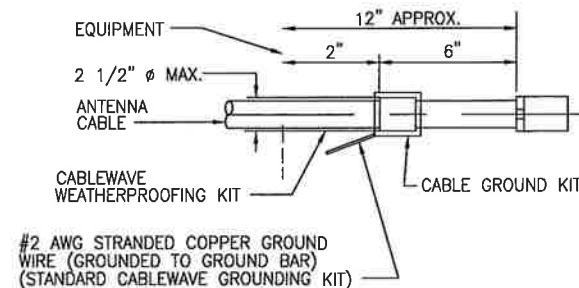
**5** CONNECTION OF GROUND WIRES TO GROUNDING BARS @ ANTENNAS  
SCALE: NOT TO SCALE



NOTE:

CONTRACTOR TO UTILIZE KOPR-SHIELD (THOMAS & BETTS) OR EQUIVALENT ON ALL LUG CONNECTIONS

**3** ANTENNA GROUND BAR  
SCALE: NOT TO SCALE



TO ANTENNA CABLE

NOTE:

DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

**6** CABLE GROUND KIT CONNECTION  
SCALE: NOT TO SCALE

SUBMITTALS

DATE	DESCRIPTION	REVISION
8/3/16	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 428-000  
DRAWN BY: JLM  
CHECKED BY: ASW



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751 HIGGINS ROAD  
CHESHIRE, CT 06410

SHEET TITLE

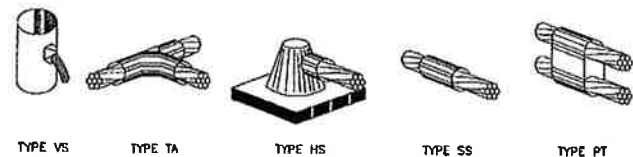
**GROUNDING  
DETAILS**

SHEET NUMBER

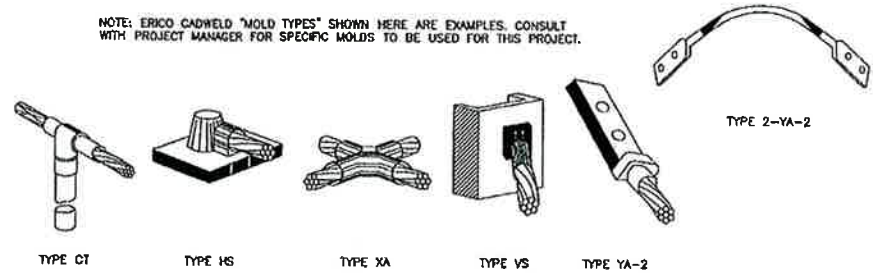
**G-2**

SHEET 11 OF 13 SHEETS



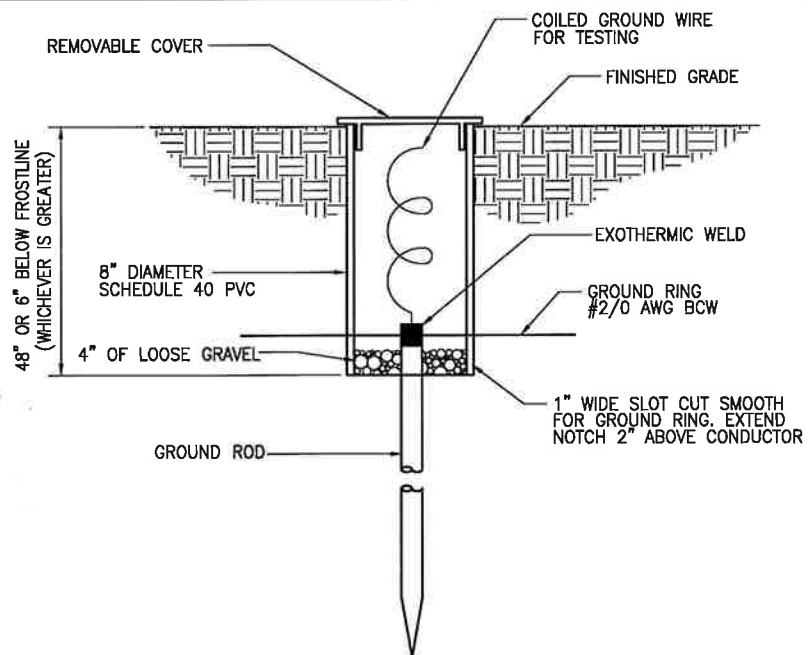


NOTE: ERICO CADWELD "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.



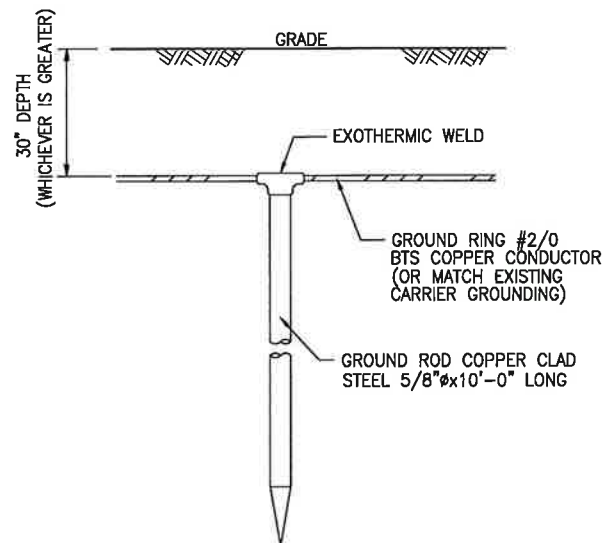
**1** EQUIPMENT GROUND CONNECTIONS  
SCALE: NOT TO SCALE

**4** DETAIL NOT USED  
SCALE: NOT TO SCALE



**2** INSPECTION SLEEVE DETAIL  
SCALE: NOT TO SCALE

**5** DETAIL NOT USED  
SCALE: NOT TO SCALE



**3** GROUND ROD DETAIL  
SCALE: NOT TO SCALE

**6** DETAIL NOT USED  
SCALE: NOT TO SCALE

SUBMITTALS		
DATE	DESCRIPTION	REVISION
8/3/16	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RF MAN.			
ZONING			
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SHEET TITLE

**GROUNDING  
DETAILS**

SHEET NUMBER

**G-3**

SHEET 12 OF 13 SHEETS

**ELECTRICAL NOTES:**

**WORK INCLUDED**  
1. INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:  
A. PREPARE AND SUBMIT SHOP DRAWINGS, DIAGRAMS AND ILLUSTRATIONS.  
B. PROCURE ALL NECESSARY PERMITS AND APPROVALS AND PAY ALL REQUIRED FEES AND CHARGES IN CONNECTION WITH THE WORK OF THIS CONTRACT.  
C. SUBMIT AS-BUILT DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUALS.  
D. EXECUTE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING OF EXISTING OR NEWLY INSTALLED CONSTRUCTION REQUIRED FOR THE WORK OF THIS CONTRACT. FOR SLAB PENETRATIONS THROUGH POST TENSION SLABS, X-RAY EXACT AREA OF PENETRATION PRIOR TO PERFORMING WORK. COORDINATE ALL X-RAY WORK WITH BUILDING ENGINEER.  
E. PROVIDE HANGERS, SUPPORTS, FOUNDATIONS, STRUCTURAL FRAMING SUPPORTS, AND BASES FOR CONDUIT AND EQUIPMENT PROVIDED OR INSTALLED UNDER THE WORK OF HIS CONTRACT. PROVIDE COUNTER FLASHING, SLEEVES AND SEALS FOR FLOOR AND WALL PENETRATIONS.  
F. MAINTAIN ALL EXISTING ELECTRICAL SERVICES IN THE BUILDING AREAS NOT AFFECTED BY THE ALTERATION DURING THE PROGRESS OF THE WORK INCLUDING PROVIDING ALL TEMPORARY JUMPERS, CONDUITS, CAPS, PROTECTIVE DEVICES, CONNECTIONS AND EQUIPMENT REQUIRED. PROVIDE TEMPORARY LIGHT AND POWER FOR CONSTRUCTION PURPOSES.  
2. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF AN ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT. FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT USUALLY FURNISHED OR NEEDED TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

**GENERAL REQUIREMENTS**  
1. PROVIDE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL AND STATE ELECTRICAL CODES.  
2. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING.  
3. LOAD CALCULATIONS ARE BASED ON EXISTING BUILDING INFORMATION/DRAWINGS PROVIDED TO ENGINEERING. CONTRACTOR IS TO VERIFY ALL EXISTING RATINGS AND LOADS PRIOR TO PURCHASING OF SPECIFIED EQUIPMENT FOR COMPLIANCE TO NEC. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES AND REQUEST FURTHER DIRECTION BY ENGINEER.  
4. EXISTING BUILDING EQUIPMENT IS NOTED ON THE DRAWINGS. NEW OR RELOCATED EQUIPMENT IS SHOWN WITH SOLID LINES. FUTURE EQUIPMENT (NOT IN THIS CONTRACT) IS DEPICTED WITH SHADED LINES. REQUEST CLARIFICATION OF DRAWINGS OR OF SPECIFICATIONS PRIOR TO PRICING OR INSTALLATION.  
5. GENERAL

A. AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, MAKE A MANDATORY SITE VISIT TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO NOTIFY THE OWNER, IN WRITING, OF ANY DISCREPANCIES THAT MAY HAVE BEEN NOTED BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS AND SPECIFICATIONS.  
B. VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR CORRECTNESS OF SAME.  
6. QUALITY, WORKMANSHIP, MATERIALS AND SAFETY  
A. PROVIDE NEW MATERIALS AND EQUIPMENT OF A DOMESTIC MANUFACTURER BY THOSE REGULARLY ENGAGED IN THE PRODUCTION AND MANUFACTURE OF SPECIFIED MATERIALS AND EQUIPMENT. WHERE UL, OR OTHER AGENCY, HAS ESTABLISHED STANDARDS FOR MATERIALS, PROVIDE MATERIALS WHICH ARE LISTED AND LABELED ACCORDINGLY. THE COMMERCIALLY STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES MENTIONED HEREIN ARE INTENDED FOR THE PROPER FUNCTIONING OF THE WORK.  
B. WORK SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE REQUIRED FOR THE WORK. INSTALL MATERIALS AND EQUIPMENT TO PRESENT A NEAT APPEARANCE WHEN COMPLETED AND IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER AND IN ACCORDANCE WITH CONTRACT DOCUMENTS.  
C. PROVIDE LABOR, MATERIALS, APPARATUS AND APPLIANCES ESSENTIAL TO THE FUNCTIONING OF THE SYSTEMS DESCRIBED OR INDICATED HEREIN, OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL WHENEVER MENTIONED IN THE CONTRACT DOCUMENT OR NOT.  
D. MAKE WRITTEN REQUESTS FOR SUPPLEMENTARY INSTRUCTIONS TO ARCHITECT/ENGINEER IN CASE OF DOUBT AS TO WORK INTENDED OR IN EVENT OF NEED FOR EXPLANATION THEREOF.  
E. PERFORMANCE AND MATERIAL REQUIREMENTS SCHEDULED OR SPECIFIED ARE MINIMUM STANDARD ACCEPTABLE. THE RIGHT TO JUDGE THE QUALITY OF EQUIPMENT THAT DEVIATES FROM THE CONTRACT DOCUMENT REMAINS SOLELY WITH ARCHITECT/ENGINEER. CONTRACT DOCUMENT OR NOT.

**GUARANTEE**  
1. GUARANTEE MATERIALS, PARTS AND LABOR FOR WORK FOR ONE YEAR FROM THE DATE OF ISSUANCE OF OCCUPANCY PERMIT. DURING THAT PERIOD, MAKE GOOD FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIALS OR WORKMANSHIP WITH NO ADDITIONAL COMPENSATION AND AS DIRECTED BY ARCHITECT.

**CLEANING**  
1. REMOVE ALL CONSTRUCTION DEBRIS RESULTING FROM THE WORK.  
2. CLEAN EQUIPMENT AND SYSTEMS FOLLOWING THE COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER.  
**COORDINATION AND SUPERVISION**  
1. CAREFULLY LAY OUT ALL WORK IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, PATCH AND REPAIR THE WORK IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER. RENDER FULL COOPERATION TO OTHER TRADES WHERE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES. ASSIST IN WORKING OUT SPACE CONDITIONS. IF WORK IS INSTALLED BEFORE COORDINATION WITH OTHER TRADES, OR CAUSES INTERFERENCE, MAKE CHANGES NECESSARY TO CORRECT CONDITIONS WITHOUT EXTRA CHARGE.

**SUBMITTALS**  
1. AS-BUILT DRAWINGS:  
A. UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER "AS-BUILT" DRAWINGS.  
2. SERVICE MANUALS:  
A. UPON COMPLETION OF THE WORK, FULLY INSTRUCT T-MOBILE AS TO THE OPERATION AND MAINTENANCE OF ALL MATERIAL, EQUIPMENT AND SYSTEMS.  
B. PROVIDE 3 COMPLETE BOUND SETS OF INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT.

**CUTTING AND PATCHING**  
1. PROVIDE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING REQUIRED TO COMPLETE THE WORK.  
2. OBTAIN OWNER APPROVAL PRIOR TO CUTTING THROUGH FLOORS OR WALLS FOR PIPING OR CONDUIT.

**TESTS, INSPECTION AND APPROVAL**  
1. BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.  
2. PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.

**SPECIAL REQUIREMENTS**  
1. DO NOT LEAVE ANY WORK INCOMPLETE NOR ANY HAZARDOUS SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. DO NOT INTERFERE WITH OR CUTOFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S WRITTEN PERMISSION.  
2. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING BUILDING UTILITIES AND SERVICE SYSTEMS, INCLUDING FEEDER OR BRANCH CIRCUITING SUPPLYING EXISTING FACILITIES, CONFER WITH THE OWNER AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON.  
SHUTDOWN NOTE: SCHEDULE AND NOTIFY OWNER 48 HOURS PRIOR TO SHUTDOWN. ALL SHUTDOWN WORK TO BE SCHEDULED AT A TIME CONVENIENT TO OWNER.

**GROUNDING**  
1. ROUTE ALL GROUNDING CONDUCTORS AS SHOWN ON CONDUIT/GROUNDING RISER.  
2. ROUTE 500 KCMIL CU. THHN CONDUCTOR FROM THE MGB LOCATION TO BUILDING STEEL. VERIFY BUILDING STEEL IS EFFECTIVELY GROUNDED PER NEC TO THE MAIN SERVICE GROUNDING ELECTRODE CONDUCTOR (GEC).  
3. MAKE ALL GROUND CONNECTIONS FROM MGB TO ELECTRICAL EQUIPMENT WITH 2 HOLE, CRIMP TYPE, BURNDY COMPRESSION TERMINATIONS, SIZED AS REQUIRED.  
4. USE 1 HOLE, CRIMP TYPE, BURNDY COMPRESSIONS TERMINATIONS, SIZED AS REQUIRED, AT EQUIPMENT GROUND CONNECTIONS.  
5. HIRE AN INDEPENDENT LAB TO PERFORM THE SPECIFIED OHMS TESTING. PROVIDE 4 SETS OF THE CERTIFIED DOCUMENTS TO THE OWNER FOR VERIFICATION PRIOR TO THE PROJECT COMPLETION.

**RACEWAYS**  
1. ALL WIRING TO BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE FOLLOWING:  
A. EXTERIOR FEEDERS AND CONTROL, WHERE UNDERGROUND, TO BE IN SCH 40 PVC.  
B. EXTERIOR, ABOVE GROUND POWER CONDUITS TO BE GALVANIZED RIGID STEEL (RGS).  
C. ALL TELECOMMUNICATION CONDUITS, INTERIOR/EXTERIOR, TO BE EMT.  
D. INSTALL PULL ROPES IN ALL NEW EMPTY CONDUITS INSTALLED ON THIS PROJECT.  
E. ALL TELECOM CONDUITS AND PULL BOXES INSTALLED ON THIS PROJECT TO BE LABELED "T-MOBILE". OWNER WILL PROVIDE LABELS FOR CONTRACTOR TO INSTALL.  
F. INTERIOR FEEDERS TO BE INSTALLED IN E.M.T. WITH STEEL COMPRESSION FITTINGS.  
G. MINIMUM SIZE CONDUIT TO BE 1/2" TRADE SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.  
H. FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT TO BE INSTALLED IN LIQUID-TIGHT FLEXIBLE METAL CONDUIT.  
I. CONDUIT TO BE RUN CONCEALED IN CEILINGS, FINISHED AREAS OR DRYWALL PARTITIONS, UNLESS OTHERWISE NOTED.  
J. THE ROUTING OF CONDUITS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. BEFORE INSTALLING ANY WORK, EXAMINE THE WORKING LAYOUTS AND SHOP DRAWINGS OF THE OTHER TRADES TO DETERMINE THE EXACT LOCATIONS AND CLEARANCES.  
K. ALL EXTERIOR MOUNTING HARDWARE TO BE GALVANIZED STEEL. COORDINATE WITH BUILDING ENGINEER PRIOR TO ATTACHING TO BUILDING STRUCTURE.

**RACEWAYS CONT'D**  
L. PENETRATIONS OF WALLS, FLOORS AND ROOFS, FOR THE PASSAGE OF ELECTRICAL RACEWAYS, TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS SO AS TO MAINTAIN THE STRUCTURAL OR WATERPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS OR SMOKE TIGHT CORRIDOR PARTITIONS TO MAINTAIN PROPER RATING OF WALL OR CEILING.  
M. PROVIDE ALL CONDUIT ENDS WITH INSULATED METALLIC GROUNDING BUSHINGS.  
N. CONDUIT TO BE SUPPORTED AT MAXIMUM DISTANCE OF 8'-0", OR AS REQUIRED BY NEC, IN HORIZONTAL AND VERTICAL DIRECTIONS.  
O. PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR ALL JUNCTION BOXES AND/OR OUTLET BOXES NOT USED IN EXPOSED AREAS. PROVIDE ALL OTHER UNUSED BOXES WITH STANDARD STEEL COVER PLATES.  
P. WHERE APPLICABLE, PROVIDE ROOFTOP CONDUIT SUPPORT SYSTEM, CONFORMING TO ROOFTOP WARRANTY REQUIREMENTS, PER BUILDING.

**WIRES AND CABLES**  
1. CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.  
2. ALL EQUIPMENT/DEVICES TO BE PROVIDED WITH INSULATED GROUND CONDUCTOR.  
3. ALL WIRE AND CABLE TO BE 600VOLT, COPPER, WITH THHN/ THHN INSULATION, EXCEPT AS NOTED.  
4. WIRE FOR POWER AND LIGHTING WILL NOT BE LESS THAN NO. 12AWG. ALL WIRE NO. 8 AND LARGER TO BE STRANDED.  
5. CONTROL WIRING IS NOT TO BE LESS THAN NO. 14AWG, FLEXIBLE IN SINGLE CONDUCTORS OR MULTI-CONDUCTOR CABLES. CONTROL WIRING WILL CONSIST OF MULTI-CONDUCTOR CABLES WHEREVER POSSIBLE. CABLES TO BE PROVIDED WITH AN OVERALL FLAME-RETARDANT, EXTRUDED JACKET AND RATED FOR PLENUM USE. ALL CONTROL WIRE TO BE 60VOLT RATED.  
6. WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.  
7. HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V CIRCUITS:

LENGTH (FT.)	HOME RUN WIRE SIZE
0 TO 50	NO. 12
51 TO 100	NO. 10
101 TO 150	NO. 8

8. VOLTAGE DROP IS NOT TO EXCEED 3%.  
9. MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.  
**WIRING DEVICES**  
1. ALL RECEPTACLES INSTALLED IN THIS PROJECT TO BE GROUNDING TYPE, WITH GROUNDING PIN SLOT CONNECTED TO DEVICE GROUND SCREW FOR GROUND WIRE CONNECTION.  
**DISCONNECT SWITCHES AND FUSES**  
1. DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.  
2. PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.  
3. PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.  
4. DISCONNECT SWITCHES TO BE MANUFACTURED BY:  
A. GENERAL ELECTRIC COMPANY  
B. SQUARE-D  
5. PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.

**INSTALLATION**  
1. INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.  
2. INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.  
3. FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.  
4. FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:  
A. THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.  
B. TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING. IN NO CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

**CONFLICTS**  
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATIONS OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.  
2. THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.  
3. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

**CONTRACTS AND WARRANTIES**  
1. CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.  
2. SEE MASTER CONTRACTOR SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

**STORAGE**  
1. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

**CLEANUP**  
1. THE CONTRACTORS SHALL, AT ALL TIMES, KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK. THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY TO USE.  
2. EXTERIOR  
A. VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.  
B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.  
C. IF NECESSARY, TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.  
3. INTERIOR  
A. VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.  
B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.  
C. REMOVE PAINT DRIPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

**CHANGE ORDER PROCEDURE**  
1. REFER TO SECTION 17 OF SIGNED MCSA: SEE PROFESSIONAL SERVICE AGREEMENT FOR MCSA.

**RELATED DOCUMENTS AND COORDINATION**  
1. GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.  
**SHOP DRAWINGS**  
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.  
2. ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

**PRODUCTS AND SUBSTITUTIONS**  
1. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST, IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.  
2. SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

**QUALITY ASSURANCE**  
1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE, BUT NOT BE LIMITED TO THE APPLICABLE CODES SET FORTH BY THE LOCAL GOVERNING BODY. SEE "CODE COMPLIANCE" T-1.

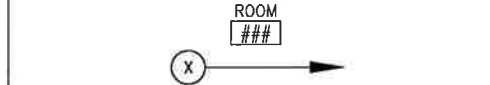
**ADMINISTRATION**  
1. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.  
2. SUBMIT A BAR YOTE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.  
3. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).  
4. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER, NOR WILL WIRELESS SERVICE BE ARRANGED.  
5. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL WPCS SAFETY REQUIREMENTS IN THEIR AGREEMENT.  
6. PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.  
7. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.  
8. NOTIFY THE OWNER/PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS.

**INSURANCE AND BONDS**  
1. CONTRACTOR, AT THEIR OWN EXPENSE, SHALL CARRY AND MAINTAIN, FOR THE DURATION OF THE PROJECT, ALL INSURANCE, AS REQUIRED AND LISTED, AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER. REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS.  
2. THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.  
3. CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

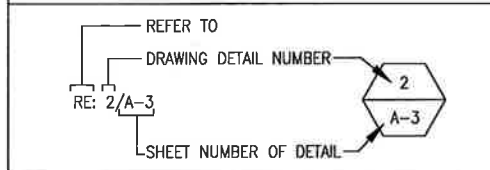
**ABBREVIATIONS**  
ADJ ADJUSTABLE  
AGL ABOVE GROUND LINE  
& AND  
APPROX APPROXIMATE  
@ AT  
BTS BASE TRANSMISSION STATION  
CAB CABINET  
CLG CEILING  
CONC CONCRETE  
CONT CONTINUOUS  
DIA OR Ø DIAMETER  
DWG DRAWING  
EA EACH  
ELEC ELECTRICAL  
ELEV ELEVATION  
EQ EQUAL  
EQUIP EQUIPMENT  
EGB EQUIPMENT GROUND BAR  
(E) EXISTING  
EXT EXTERIOR  
FF FINISHED FLOOR  
GA GAUGE  
GALV GALVANIZED  
GC GENERAL CONTRACTOR  
GRND GROUND  
LG LONG  
MAX MAXIMUM  
MECH MECHANICAL  
MW MICROWAVE DISH  
MFR MANUFACTURER  
MGB MASTER GROUND BAR  
MIN MINIMUM  
MTL METAL  
(N) NEW  
NIC NOT IN CONTRACT  
NTS NOT TO SCALE  
OC ON CENTER  
OPP OPPOSITE  
(P) PROPOSED  
PCS PERSONAL COMMUNICATION SYSTEM  
PCC POWER PROTECTION CABINET  
SF SQUARE FOOT  
SHT SHEET  
SIM SIMILAR  
SS STAINLESS STEEL  
STL STEEL  
TOC TOP OF CONCRETE  
TYP TOP OF MASONRY  
VF VERIFY IN FIELD  
UON UNLESS OTHERWISE NOTED  
WWF WELDED WIRE FABRIC  
W/ WITH

**GENERAL NOTES:**  
**INTENT**  
1. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.  
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.  
3. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.  
4. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.  
5. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

**ARCHITECTURAL SYMBOLS**



**DETAIL REFERENCE KEY**



DATE	DESCRIPTION	REVISION
6/2/16	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 428-000  
DRAWN BY: JLM  
CHECKED BY: ASW



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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

**SITE NUMBER:**  
CT11220A  
  
**SITE NAME:**  
CHESHIRE/ RT-10  
  
751 HIGGINS ROAD  
CHESHIRE, CT 06410

**SHEET TITLE**  
**GENERAL AND ELECTRICAL NOTES**

**SHEET NUMBER**  
**N-1**  
SHEET 13 OF 13 SHEETS