



January 29, 2015

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

Regarding: Notice of Exempt Modification – Addition of 3 radio heads previously approved
Property Address: 751 Higgins Road, Cheshire, CT (the “Property”)
Applicant: AT&T Mobility (“AT&T”)

Dear Ms. Bachman:

AT&T currently maintains a wireless telecommunications facility on an existing 250 foot self-supporting lattice tower (“tower”) location on the Property. AT&T’s facility consists of nine (9) wireless telecommunications antenna at 255 feet. The tower is now controlled by AT&T Towers. The Council approved the previous application on April 5th 2013 reference number EM-AT&T-025-130312. This application (attached) granted AT&T the use of 6 radio heads at this location. The approval expired one year from the issue date. During that time AT&T made the changes to the site per the approval but only installed three (3) of the six (6) radio heads that they received approval. AT&T would now like to install the additional three(3) radio heads that were originally approved under EM-AT&T-025-130312.

Please accept this application as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72 (b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Town Council Chairman and the Town Planner for the Town of Cheshire. A copy of this letter is also being sent to AT&T Towers, the owner of the structure that AT&T is located.

The planned modifications to AT&T’s facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The planned modifications will not result in an increase in the height of the existing structure. AT&T’s additional, previously approved 3 radio heads will be installed at 255 foot level of the 255 foot tower.
2. The proposed modifications will not involve any changes to ground-mounted equipment and, therefore will not require an extension of the site boundary.
3. The proposed modification will not increase the noise level at the facility by six decibel or more, or to levels that exceed state and local criteria.
4. The operation of the modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety



standard. An RF emissions calculation (attached) for AT&T's modified facility was provided in the application which led to the April 5th, 2013 Decision.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The tower and its foundation can support AT&T's proposed modifications. (Please see attached Structural analysis completed by GPD Group dated November 5, 2012).

For the foregoing reasons AT&T respectfully requests that the proposed addition of 3 radio heads previously approved be allowed within the exempt modifications under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

David P. Cooper
Director of Site Acquisition
Empire Telecom

CC: Timothy Slocum, Town Council Chairman, Town of Cheshire
William S. Voelker, AICP, Town Planner, Town of Cheshire
AT&T Towers



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

CT 2036

April 5, 2013

Stephanie Wenderoth
Nexlink Global Services
Suite A, Building 2
800 Marshall Phelps Road
Windsor, CT 06095

RE: **AT&T-025-130312** - AT&T Mobility notice of intent to modify an existing telecommunications facility located at 751 Higgins Road, Cheshire, Connecticut.

Dear Ms. Wenderoth:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated March 5, 2013. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding



800 Marshall Phelps Rd
Building 2A
Windsor, CT 06095

CONNECTICUT
SITING COUNCIL

October 23, 2014

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

RE: **EM-AT&T-025-130312** – New Cingular Wireless PCS, LLC notification of completion of construction at 751 Higgins Rd, Cheshire, Connecticut.

Dear Ms. Bachman:

This letter is submitted on behalf of New Cingular Wireless PCS, LLC ("AT&T"), whose notice of intent to modify an existing telecommunications facility was acknowledged by the Connecticut Siting Council ("Council").

Please accept this letter as notification of completion of construction by AT&T as required as a condition of the Council's acknowledgement. In addition, please refer to the attached documentation from AT&T's Engineer confirming that the installation was completed as designed.

Respectfully Yours,

A handwritten signature in cursive script that reads "Megan Boylan".

Megan Boylan
Project Coordinator

Cc: Kevin Mason, AT&T

April 24, 2013

Mr. Douglas Roberts
Pinnacle Wireless
800 Phelps Road
Windsor, Connecticut 06095

Re: Post Modification Report
Project: AT&T - CT2036 Cheshire
751 Higgins Road
Cheshire, CT
Owner: AT&T Mobility
500 Enterprise Drive, Rocky Hill, CT 06067
Engineer: GPD Group
520 South Main Street Suite 2531, Akron, OH 44311
Contractor: Northeast Towers, Inc.
199 Brickyard Road, Farmington, CT 06032

Centek Project No.: 12033.CO40

Dear Mr. Roberts,

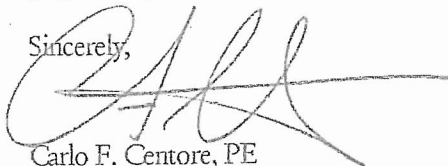
We are providing this "Post Modification Report" with regard to the structural modifications performed at the above referenced project.

The following are the basis for substantiating compliance with the tower modification documents prepared by GPD Group, Job No. 2012856.05, drawings T-1, N-1, S-1, S-2 & MI-1 dated 07/25/2012:

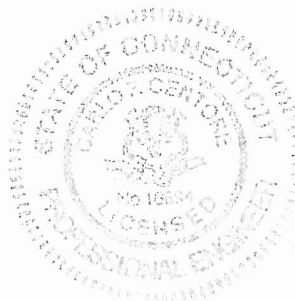
□ Field observations of completed site [refer to FVR dated 04/23/13].

The work under this Contract has been reviewed and found, to the Engineer's best knowledge, information and belief, to be completed in general compliance with the above referenced documents prepared by the this office.

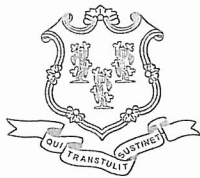
Sincerely,



Carlo F. Centore, PE
Principal - Structural Engineer



Cc: File
Mike Foley - Northeast Towers (via email)



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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E-Mail: siting.council@ct.gov

www.ct.gov/csc

March 13, 2013

The Honorable Timothy Slocum
Council Chairman
Cheshire Town Hall
84 South Main Street
Cheshire, CT 06410

RE: **EM-AT&T-025-130312** - AT&T Mobility notice of intent to modify an existing telecommunications facility located at 751 Higgins Road, Cheshire, Connecticut.

Dear Chairman Slocum:

The Connecticut Siting Council (Council) received a request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72, a copy of which has already been provided to you.

If you have any questions or comments regarding the proposal, please call me or inform the Council by March 27, 2013.

Thank you for your cooperation and consideration.

Very truly yours,

Linda Roberts
Executive Director

LR/CDM/laf

c: Michael A. Milone, Town Manager, Town of Cheshire
William S. Voelker, AICP, Town Planner, Town of Cheshire

March 5, 2013

VIA UPS Delivery

Ms. Linda Roberts, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RECEIVED
MAR 12 2013

RE: AT&T Mobility - Notice of Exempt Modification
751 Higgins Road, Cheshire CT

CONNECTICUT
SITING COUNCIL
ORIGINAL

Dear Ms. Roberts:

This letter and attachments are submitted on behalf of AT&T Mobility ("AT&T"). AT&T is enhancing the capabilities of its wireless system in Connecticut by implementing LTE technology. In order to do so, AT&T will modify antenna and equipment configurations at a number of existing sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to Timothy P. Slocum; Cheshire Mayor.

AT&T plans to modify the existing facility at 751 Higgins Road, Cheshire CT, owned by the Brenda & Ernie Trumpold (coordinates 41° 29' 14.78" N, 72° 55' 45.55" W.). Attached are drawings depicting the planned changes, and documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration. Also included is a power density calculation reflecting the modification to AT&T's operations at the site.

The changes to the facility do not constitute a modification as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C. S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will be unaffected. The existing antennas will remain and AT&T will add three (3) new antennas, six (6) RRU's and one (1) surge arrestor. Additionally, AT&T will install one (1) fiber cable and two (2) DC control cables within the existing monopole.
2. The proposed changes will not extend the site boundaries. AT&T will install additional equipment in the existing equipment shelter. Thus, there will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more. The incremental effect of the proposed change will be negligible.
4. The changes to the facility will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environment as calculated for a mixed frequency site. As indicated in the attached

power density calculations, AT&T's operations at the site will result in a power density of .79%; the combined site operations will result in a total power density of 8.93%

Please feel free to call me with any questions or concerns regarding this matter.
Thank you for your consideration.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'S. Wenderoth', with a stylized flourish at the end.

AT&T Mobility
Stephanie Wenderoth, Consultant
wenderoths@pinnaclewireless.com
401.477.2938

Cc: Timothy P. Slocum, Mayor, Town Hall, 84 South Main Street, Cheshire, Ct 06410

CONNECTICUT SITING COUNCIL
NOTICE OF INTENT TO MODIFY AN EXISTING TOWER FACILITY
EXEMPT MODIFICATION FILING FORM

Public Utility Environmental Standards Act, Connecticut General Statutes §§ 16-50g - 16-50aa
Regulations of Connecticut State Agencies §§ 16-50j-72(b)(2) and 16-50j-73

TO BE COMPLETED BY FILER

Date: 3/5/13

Filer Name and Contact Information

Name: Stephanie Wenderoth

Address: Nexlink Global Services; Suite A Building 2

800 Marshall Phelps Road, Windsor, CT 06095

Phone Number: 401.477.2938

Wireless Carrier: AT&T

Tower Owner: AT&T

Tower Site Address: 751 Higgins Road, Cheshire CT

Municipality and Name of Chief Elected Official Provided A Copy Of This Notice:
Timothy P. Slocum; Cheshire Mayor

Description of Exempt Modification (including antenna and equipment changes):
Add 3 LTE Antennas, new conduit, RRUs and surge arrestor.

Attachments

- ☒ Plans
- ☒ Power density calculations if applicable
- ☒ Tower structural report if applicable
- ☒ \$625.00 Filing Fee

If required:

Municipality w/i 2,500' & Name of Chief Elected Official Provided A Copy Of This Notice:

Underlying Property Owner Provided A Copy Of This Notice:

FOR STAFF USE ONLY

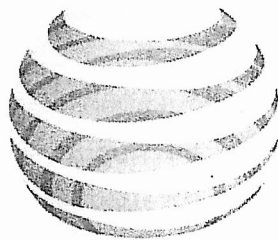
- _____ Modification will not result in an increase in tower height
- _____ Modification is within existing site boundaries
- _____ Modification will not increase noise levels at the site boundary by 6 dbA or more, or to levels that exceed State & local criteria

- _____ Modification will meet FCC and DEEP MPE limits
- _____ Modification will not result in significant adverse change in physical or environmental characteristics of the site
- _____ Modification will not impair the structural integrity of the facility as determined by PE
- _____ If yes to all of the above, approval of acknowledgement letter



C Squared Systems, LLC
65 Dartmouth Drive, Unit A3
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions



at&t

CT2036

(Cheshire SW)

751 Higgins Road, Cheshire, CT 06410

March 4, 2013

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1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modifications to the existing AT&T antenna arrays mounted on the lattice tower located on 751 Higgins Road in Cheshire, CT. The coordinates of the tower are 41° 29' 14.78" N, 72° 55' 45.55" W.

AT&T is proposing the following modifications:

- 1) Remove all existing dual-band (850/1900 MHz) antennas;
- 2) Install seven multi-band (700/850/1900/2100 MHz) antennas for their LTE/GSM/UMTS network.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{1.6^2 \times \text{EIRP}}{4\pi \times R^2} \right) \times \text{Off Beam Loss}$$

Where:

EIRP = Effective Isotropic Radiated Power

$R = \text{Radial Distance} = \sqrt{H^2 + V^2}$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Ground reflection factor of 1.6

Off Beam Loss is determined by the selected antenna pattern

These calculations assume that the antennas are operating at 100 percent capacity and power, and that all channels are transmitting simultaneously. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the finished modifications.

4. Calculation Results

Table 1 below outlines the power density information for the site. Because the proposed AT&T antennas are directional in nature, the majority of the RF power is focused out towards the horizon. As a result, there will be less RF power directed below the antennas relative to the horizon, and consequently lower power density levels around the base of the tower. Please refer to Attachment C for the vertical patterns of the proposed AT&T antennas. The calculated results for AT&T in Table 1 include a nominal 10 dB off-beam pattern loss to account for the lower relative gain below the antennas.

Carrier	Antenna Height (Feet)	Operating Frequency (MHz)	Number of Trans.	ERP Per Transmitter (Watts)	Power Density (mw/cm ²)	Limit	%MPE
Cingular TDMA	259	880	16	100	0.0086	0.5867	1.46%
Cingular GSM	259	880	2	296	0.0032	0.5867	0.54%
Cingular GSM	259	1930	2	427	0.0046	1.0000	0.46%
Cingular TDMA	244	880	16	100	0.0097	0.5867	1.65%
Cingular GSM	244	880	2	296	0.0036	0.5867	0.61%
Cingular GSM	244	1930	2	427	0.0052	1.0000	0.52%
T-Mobile GSM	212	1945	8	107	0.0068	1.0000	0.68%
T-Mobile UMTS	212	2100	2	605	0.0097	1.0000	0.97%
Nextel	215	851	9	100	0.0070	0.5673	1.23%
Verizon Cellular	252	869	9	214	0.0109	0.5793	1.88%
Verizon PCS	252	1970	7	188	0.0075	1.0000	0.75%
Verizon AWS	252	2145	1	455	0.0026	1.0000	0.26%
Verizon LTE	252	698	1	719	0.0041	0.4653	0.87%
Voicestream	217	2400	1	100	0.0008	1.0000	0.08%
Sprint	225	1930	4	500	0.0142	1.0000	1.42%
AT&T UMTS	255	880	2	1077	0.0012	0.5867	0.20%
AT&T UMTS	255	1900	2	1556	0.0017	1.0000	0.17%
AT&T LTE	255	734	1	1375	0.0008	0.4893	0.16%
AT&T GSM	255	880	1	538	0.0003	0.5867	0.05%
AT&T GSM	255	1900	4	934	0.0021	1.0000	0.21%
						Total	8.93%

Table 1: Carrier Information^{1 2 3}

¹ The existing CSC filing for Cingular should be removed and replaced with the updated AT&T technologies and values provided in Table 1. The power density information for carriers other than AT&T was taken directly from the CSC database dated 1/14/2013. Please note that %MPE values listed are rounded to two decimal points. The total %MPE listed is a summation of each unrounded contribution. Therefore, summing each rounded value may not reflect the total value listed in the table.

² In the case where antenna models are not uniform across all 3 sectors for the same frequency band, the antenna model with the highest gain was used for the calculations to present a worse-case scenario.

³ Antenna height listed for AT&T is in reference to the Dewberry Construction Drawings dated February 28, 2013.

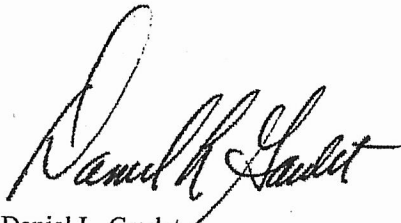
5. Conclusion

The above analysis verifies that emissions from the existing site will be below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Even when using conservative methods, the cumulative power density from the proposed transmit antennas at the existing facility is well below the limits for the general public. The highest expected percent of Maximum Permissible Exposure at ground level is **8.93% of the FCC limit**.

As noted previously, obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the finished modifications.

6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.



Daniel L. Goulet
C Squared Systems, LLC

March 4, 2013

Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

ANSI C95.1-1982, American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz. IEEE-SA Standards Board

IEEE Std C95.3-1991 (Reaff 1997), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave. IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure⁴

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure⁵

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

Table 2: FCC Limits for Maximum Permissible Exposure (MPE)

⁴ Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

⁵ General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

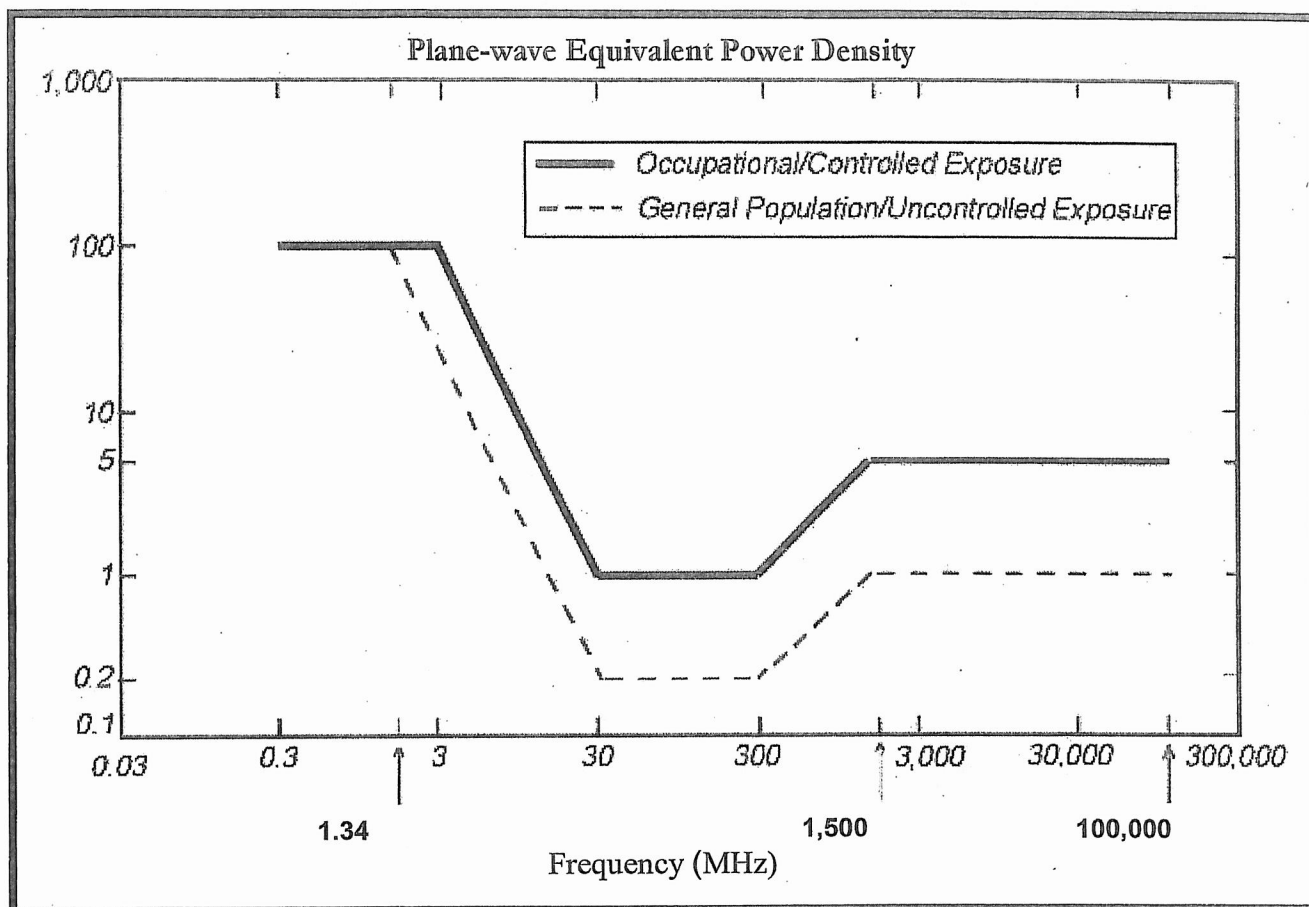
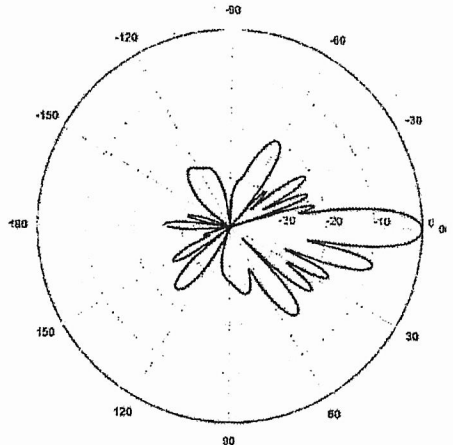
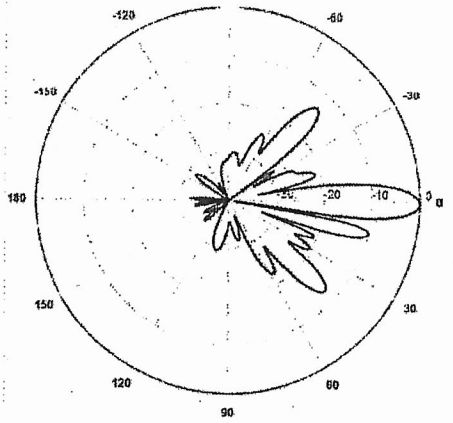
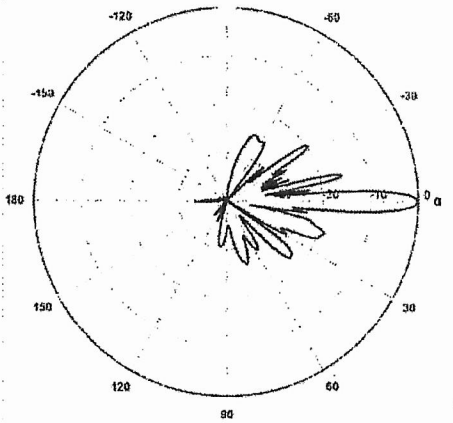


Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: AT&T Antenna Data Sheets and Electrical Patterns

700 MHz Manufacturer: Commscope Model #: SBNH-1D6565C Frequency Band: 698-806 MHz Gain: 13.6 dBd Vertical Beamwidth: 8.6° Horizontal Beamwidth: 71° Polarization: $\pm 45^\circ$ Size L x W x D: 96.4" x 11.9" x 7.1"	
850 MHz Manufacturer: Commscope Model #: SBNH-1D6565C Frequency Band: 806-896 MHz Gain: 14.3 dBd Vertical Beamwidth: 7.8° Horizontal Beamwidth: 67° Polarization: $\pm 45^\circ$ Size L x W x D: 96.4" x 11.9" x 7.1"	
1900 MHz Manufacturer: Commscope Model #: SBNH-1D6565C Frequency Band: 1850-1990 MHz Gain: 15.9 dBd Vertical Beamwidth: 5.1° Horizontal Beamwidth: 57° Polarization: $\pm 45^\circ$ Size L x W x D: 96.4" x 11.9" x 7.1"	



AT&T Towers
5405 Windward Pkwy
Alpharetta, GA 30004
(770) 708-6100



Kevin Clements
1117 Perimeter Ctr W, Suite W303
Atlanta, GA 30338
(678) 781-5061
kclements@gpdgroup.com

GPD# 2012867.11
November 5, 2012

STRUCTURAL ANALYSIS REPORT

AT&T DESIGNATION:	Site USID:	TAG0053
	Site FA:	10136365
	Site Name:	CHESHIRE
	AT&T Project:	Wireline Cingular Modification 6-18-2012
ANALYSIS CRITERIA:	Codes:	TIA/EIA-222-F, 2003 IBC & ASCE 7-05
		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' 14.999" N, Longitude 72° 55' 46.999" W
		Market: MA/RI/VT/NH/ME/CT
		250' Radio Relay Towers Self Support Tower

Ms. Charlotte Malone,

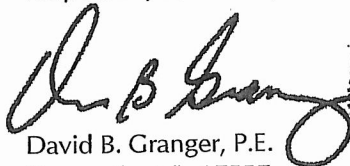
GPD is pleased to submit this Structural Analysis Report to determine the structural integrity of the aforementioned tower. The purpose of the analysis is to determine the suitability of the tower with the existing and proposed loading configuration detailed in the analysis report.

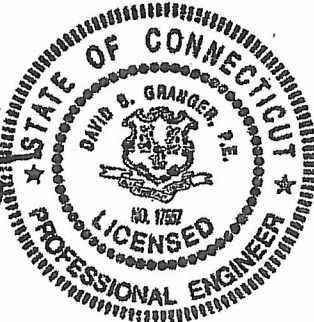
Analysis Results

Tower Stress Level with Proposed Equipment:	82.1%	Pass
Building Pedestal Ratio with Proposed Equipment:	16.3%	Pass

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

Respectfully submitted,


David B. Granger, P.E.
Connecticut #: 17557



SUMMARY & RESULTS

The purpose of this analysis was to verify whether the existing modified structure is capable of carrying the proposed loading configuration as specified by Cingular to AT&T Mobility. This report was commissioned by Ms. Charlotte Malone of AT&T Mobility.

This analysis is limited to the above grade tower structure and supporting building pedestals. 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 considered in this analysis.

TOWER SUMMARY AND RESULTS

Member	Capacity	Results
Legs	82.1%	Pass
Leg Bolts	34.2%	Pass
Diagonals	61.8%	Pass
Horizontals	63.0%	Pass
Redundant Members	81.5%	Pass
Member Bolts	45.5%	Pass
Anchor Rods	35.3%	Pass
Building Pedestals	16.3%	Pass

ANALYSIS METHOD

RISA 3D (Version 9.1.1) and TNX Tower (Version 6.0.4.0), 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 detailed site visit by GPD.

DOCUMENTS PROVIDED

Document	Remarks	Source
Preliminary Tower Summary	Sprint Co-location document, uploaded 8/1/12	Siterra
Site Lease Application	Sprint Application, dated 7/5/12, uploaded 9/4/12	Siterra
Original Building Drawings	American Telephone & Telegraph Co. L-4 Junction Building, Cheshire, CT, dated 12/1/65	Siterra
Foundation Exploration	FDH Project #: 11-12049E-N1, dated 12/20/11	Siterra
Geotechnical Report	Not Provided	N/A
Previous Structural Analysis	GPD Project #: 2012856.72, dated 8/13/12	Siterra
Tower Mapping	Tower Engineering Professionals Project #: 111343, dated 4/8/11	Siterra
Modification Drawings	GPD Project #: 2012856.05, dated 7/25/12	Siterra

ASSUMPTIONS

This rigorous 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 ± 3.3 sf, and coax equal to the number of existing antennas without reserve.
11. All existing loading was obtained from the previous analysis by GPD Project #: 2012856.72, dated 8/13/12, site photos and the provided preliminary tower summary and is assumed to be accurate.
12. This analysis is limited to the above grade tower structure and supporting building pedestals. 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.
13. The future AT&T loading has been assumed based on the loading in the Wireline Verizon Modification 5-10-2012.

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

DISCLAIMER OF WARRANTIES

GPD GROUP has not performed a site visit to the tower to verify the member sizes or antenna/coax loading. 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 GROUP in connection with this Rigorous Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. All tower components have been assumed to only resist dead loads when no other loads are applied. 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.

GPD GROUP 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 GROUP 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 feasibility 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 specified code recommended 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 GROUP, 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.

GPD GROUP 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 GROUP 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 GROUP 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

tnxTower GPD Group 520 South Main St Akron, OH 44311 Phone: (330) 572-2100 FAX: (330) 572-2102	Job	TAG0053 CHESHIRE	Page	1 of 7
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	Client	AT&T Mobility	Designed by	awestrump

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 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, feedline 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
LDF7-50A (1-5/8 FOAM)	B	Yes	Ar (CfAe)	170.00 - 8.00	-4.0000	0.45	12	6	1.0000	1.9800		0.82
RET Cable	B	Yes	Ar (CfAe)	170.00 - 8.00	-4.0000	0.42	6	2	0.4400	0.4400		0.08
LDF7-50A (1-5/8 FOAM)	B	Yes	Ar (CfAe)	212.00 - 37.00	0.0000	0.45	4	4	1.0000	1.9800		0.82
1" Rigid Conduit	C	Yes	Ar (CfAe)	20.00 - 8.00	0.0000	-0.45	11	11	1.0000	1.0000		0.50
1" Rigid Conduit	C	Yes	Ar (CfAe)	30.00 - 20.00	0.0000	-0.45	7	7	1.0000	1.0000		0.50
1" Rigid Conduit	C	Yes	Ar (CfAe)	37.00 - 30.00	0.0000	-0.45	6	6	1.0000	1.0000		0.50
LDF7-50A (1-5/8 FOAM)	C	Yes	Ar (CfAe)	207.00 - 8.00	0.0000	-0.35	1	1	1.0000	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	C	Yes	Ar (CfAe)	212.00 - 37.00	2.0000	-0.45	8	8	1.0000	1.9800		0.82
RET Cable	C	Yes	Ar (CfAe)	212.00 - 37.00	2.0000	-0.42	1	1	0.4400	0.4400		0.08
Power Cable (1/2")	C	Yes	Ar (CfAe)	250.00 - 8.00	0.0000	0.44	1	1	0.6300	0.6300		0.15
1-3/4" Rigid Conduit	C	Yes	Ar (CfAe)	250.00 - 8.00	0.0000	0.46	1	1	1.7500	1.7500		1.00
1/2" cable	D	Yes	Ar (CfAe)	36.50 - 8.00	0.0000	0.04	1	1	0.5000	0.5000		5.00
1/2" cable	D	Yes	Ar (CfAe)	44.50 - 8.00	0.0000	-0.04	1	1	0.5000	0.5000		5.00
LDF5-50A (7/8 FOAM)	D	Yes	Ar (CfAe)	169.00 - 8.00	8.0000	0.04	3	3	1.0000	1.0900		0.33
LDF5-50A (7/8 FOAM)	D	Yes	Ar (CfAe)	188.00 - 169.00	8.0000	0.04	2	2	1.0000	1.0900		0.33
LDF7-50A (1-5/8 FOAM)	D	Yes	Ar (CfAe)	200.00 - 8.00	0.0000	0.45	9	9	1.0000	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	D	Yes	Ar (CfAe)	212.00 - 200.00	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	D	Yes	Ar (CfAe)	225.00 - 8.00	0.0000	-0.05	3	1	1.0000	1.9800		0.82

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	Client	AT&T Mobility	Designed by	awestrum

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
(1-5/8 FOAM)												
LDF7-50A	D	Yes	Ar (CfAe)	240.00 - 8.00	0.0000	0	10	6	1.0000	1.9800		0.82
(1-5/8 FOAM)												
LDF7-50A	D	Yes	Ar (CfAe)	250.00 - 240.00	0.0000	0	2	2	1.0000	1.9800		0.82
(1-5/8 FOAM)												
LDF6-50A	D	Yes	Ar (CfAe)	250.00 - 8.00	0.0000	0.02	5	3	1.0000	1.5500		0.66
(1-1/4 FOAM)												
LDF7-50A	D	Yes	Ar (CfAe)	250.00 - 8.00	6.0000	0	13	6	1.0000	1.9800		0.82
(1-5/8 FOAM)												
1" Line	D	Yes	Ar (CfAe)	250.00 - 8.00	6.0000	0	1	1	1.0000	1.0000		2.00
LDF4.5-50	D	Yes	Ar (CfAe)	85.00 - 8.00	3.0000	0	7	7	0.8700	0.8700		0.15
(5/8 FOAM)												
LDF4-50A	D	Yes	Ar (CfAe)	85.00 - 8.00	0.0000	0.055	1	1	0.6300	0.6300		0.15
(1/2 FOAM)												
Climbing Ladder	C	No	Af (Leg)	250.00 - 8.00	0.0000	0.1	1	1	0.2500	0.0000	0.5000	7.90
Feedline Ladder (Af)	B	Yes	Af (CfAe)	212.00 - 8.00	-4.0000	0.45	1	1	3.0000	3.0000	12.0000	8.40
Feedline Ladder (Af)	C	Yes	Af (CfAe)	212.00 - 8.00	2.0000	-0.42	1	1	3.0000	3.0000	12.0000	8.40
Feedline Ladder (Af)	D	Yes	Af (CfAe)	250.00 - 8.00	0.0000	0	1	1	3.0000	3.0000	12.0000	8.40
Feedline Ladder (Af)	D	Yes	Af (CfAe)	209.00 - 8.00	0.0000	0.43	1	1	3.0000	3.0000	12.0000	8.40

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight lb
Tower Top Platform	C	None		0.0000	250.00	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
DUO1417-8686 w/Mount Pipe	B	From Face	2.00 0.00 4.00	0.0000	250.00	No Ice	7.25	5.86	45.85
						1/2" Ice	7.96	6.96	103.71
						1" Ice	8.57	7.78	172.26
DUO1417-8686 w/Mount Pipe	D	From Face	2.00 0.00 4.00	0.0000	250.00	No Ice	7.25	5.86	45.85
						1/2" Ice	7.96	6.96	103.71
						1" Ice	8.57	7.78	172.26
1284315 TMA	B	From Face	2.00 0.00 4.00	0.0000	250.00	No Ice	0.23	0.12	1.20
						1/2" Ice	0.30	0.17	3.05
						1" Ice	0.38	0.24	5.87
1284315 TMA	D	From Face	2.00 0.00 4.00	0.0000	250.00	No Ice	0.23	0.12	1.20
						1/2" Ice	0.30	0.17	3.05
						1" Ice	0.38	0.24	5.87
SBNH-1D6565C w/ Mount Pipe	B	From Face	2.00 0.00 4.00	0.0000	250.00	No Ice	11.45	9.12	82.70
						1/2" Ice	12.06	10.21	162.03
						1" Ice	12.69	11.18	254.15
SBNH-1D6565C w/ Mount Pipe	C	From Face	2.00 0.00 4.00	0.0000	250.00	No Ice	11.45	9.12	82.70
						1/2" Ice	12.06	10.21	162.03
						1" Ice	12.69	11.18	254.15
(2) SBNH-1D6565C w/ Mount Pipe	D	From Face	2.00 0.00 4.00	0.0000	250.00	No Ice	11.45	9.12	82.70
						1/2" Ice	12.06	10.21	162.03
						1" Ice	12.69	11.18	254.15
(2) RRUS-11	B	From Face	2.00	0.0000	250.00	No Ice	4.42	1.19	55.00

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			Designed by awestrum

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb	
(2) RRUS-11	C	From Face	0.00	0.0000	250.00	1/2" Ice	4.71	1.35	80.77
			4.00			1" Ice	5.00	1.53	109.98
			2.00			No Ice	4.42	1.19	55.00
			0.00			1/2" Ice	4.71	1.35	80.77
(6) RRUS-11	D	From Face	4.00	0.0000	250.00	1" Ice	5.00	1.53	109.98
			2.00			No Ice	4.42	1.19	55.00
			0.00			1/2" Ice	4.71	1.35	80.77
			4.00			1" Ice	5.00	1.53	109.98
GPS	A	From Face	2.00	0.0000	250.00	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
			2.00			No Ice	4.35	10.82	80.74
LPA-80080-6CF-EDIN-X w/ Mount Pipe	A	From Face	-15.00	0.0000	250.00	1/2" Ice	4.79	11.74	145.80
			2.00			1" Ice	5.24	12.67	220.59
			2.00			No Ice	4.35	10.82	80.74
			15.00			1/2" Ice	4.79	11.74	145.80
LPA-80080-6CF-EDIN-X w/ Mount Pipe	A	From Face	2.00	0.0000	250.00	1" Ice	5.24	12.67	220.59
			2.00			No Ice	14.20	14.28	70.39
			-15.00			1/2" Ice	15.02	15.85	187.69
			2.00			1" Ice	15.85	17.48	320.49
LPA-80063/6CFE-DIN w/ Mount Pipe	B	From Face	2.00	0.0000	250.00	No Ice	14.20	14.28	70.39
			15.00			1/2" Ice	15.02	15.85	187.69
			2.00			1" Ice	15.85	17.48	320.49
			4.00			No Ice	14.20	14.28	70.39
LPA-80063/6CFE-DIN w/ Mount Pipe	C	From Face	0.00	0.0000	250.00	1/2" Ice	15.02	15.85	187.69
			2.00			1" Ice	15.85	17.48	320.49
			2.00			No Ice	3.41	3.41	80.00
			0.00			1/2" Ice	4.47	4.47	104.00
4' Standoff	C	From Face	2.00	0.0000	250.00	1" Ice	5.50	5.50	128.00
			0.00			No Ice	14.20	14.28	70.39
			2.00			1/2" Ice	15.02	15.85	187.69
			2.00			1" Ice	15.85	17.48	320.49
LPA-80063/6CFE-DIN w/ Mount Pipe	D	From Face	2.00	0.0000	250.00	No Ice	3.41	3.41	80.00
			10.00			1/2" Ice	4.47	4.47	104.00
			2.00			1" Ice	5.50	5.50	128.00
			4.00			No Ice	7.73	4.16	17.00
4' Standoff	D	From Face	-5.00	0.0000	250.00	1/2" Ice	8.27	4.60	59.49
			2.00			1" Ice	8.81	5.04	107.83
			2.00			No Ice	5.02	5.28	40.55
			0.00			1/2" Ice	5.57	6.45	83.67
BXA-70063-6CF	A	From Face	2.00	0.0000	250.00	1" Ice	6.09	7.33	138.23
			2.00			No Ice	7.73	4.16	17.00
			-5.00			1/2" Ice	8.27	4.60	59.49
			2.00			1" Ice	8.81	5.04	107.83
BXA-171063/12BF w/ Mount Pipe	A	From Face	2.00	0.0000	250.00	No Ice	5.02	5.28	40.55
			0.00			1/2" Ice	5.57	6.45	83.67
			2.00			1" Ice	6.09	7.33	138.23
			2.00			No Ice	7.73	4.16	17.00
BXA-70063-6CF	B	From Face	-5.00	0.0000	250.00	1/2" Ice	8.27	4.60	59.49
			2.00			1" Ice	8.81	5.04	107.83
			2.00			No Ice	5.02	5.28	40.55
			5.00			1/2" Ice	5.57	6.45	83.67
BXA-171063/12BF w/ Mount Pipe	B	From Face	2.00	0.0000	250.00	1" Ice	6.09	7.33	138.23
			4.00			No Ice	7.73	4.16	17.00
			15.00			1/2" Ice	8.27	4.60	59.49
			2.00			1" Ice	8.81	5.04	107.83
4' Standoff	C	From Face	15.00	0.0000	250.00	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
			4.00			No Ice	5.02	5.28	40.55
BXA-171063/12BF w/ Mount Pipe	D	From Face	-15.00	0.0000	250.00	1/2" Ice	5.57	6.45	83.67
			2.00			1" Ice	6.09	7.33	138.23
			2.00			No Ice	3.41	3.41	80.00
			15.00			1/2" Ice	4.47	4.47	104.00
4' Standoff	D	From Face	2.00	0.0000	250.00	1" Ice	5.50	5.50	128.00
			4.00			No Ice	5.02	5.28	40.55
			-15.00			1/2" Ice	5.57	6.45	83.67
			2.00			1" Ice	6.09	7.33	138.23
4' Standoff	D	From Face	2.00	0.0000	250.00	No Ice	3.41	3.41	80.00

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb
RRH 9442	A	From Face	-15.00	0.0000	250.00	1/2" Ice	4.47	104.00
			2.00			1" Ice	5.50	128.00
			2.00			No Ice	2.97	50.00
			-15.00			1/2" Ice	3.21	74.49
RRH 9442	B	From Face	2.00	0.0000	250.00	1" Ice	3.46	102.29
			2.00			No Ice	2.97	50.00
			-15.00			1/2" Ice	3.21	74.49
			2.00			1" Ice	3.46	102.29
RRH 9442	C	From Face	4.00	0.0000	250.00	No Ice	2.97	50.00
			0.00			1/2" Ice	3.21	74.49
			2.00			1" Ice	3.46	102.29
			5.00			No Ice	6.46	60.55
7770.00 w/ Mount Pipe	B	From Face	10.00	0.0000	240.00	1/2" Ice	7.14	108.85
			1.00			1" Ice	7.73	167.84
			5.00			No Ice	7.33	73.53
			10.00			1/2" Ice	7.98	134.57
AM-X-CD-16-65-00T-RET w/ mountpipe	B	From Face	1.00	0.0000	240.00	1" Ice	8.57	204.89
			2.50			No Ice	2.52	200.00
			10.00			1/2" Ice	3.15	250.00
			0.00			1" Ice	3.78	300.00
7770.00 w/ Mount Pipe	C	From Face	5.00	0.0000	240.00	No Ice	6.46	60.55
			-10.00			1/2" Ice	7.14	108.85
			1.00			1" Ice	7.73	167.84
			5.00			No Ice	7.33	73.53
AM-X-CD-16-65-00T-RET w/ mountpipe	C	From Face	-10.00	0.0000	240.00	1/2" Ice	7.98	134.57
			1.00			1" Ice	8.57	204.89
			2.50			No Ice	2.52	200.00
			-10.00			1/2" Ice	3.15	250.00
5' Side Arm	C	From Face	0.00	0.0000	240.00	1" Ice	3.78	300.00
			5.00			No Ice	6.46	60.55
			10.00			1/2" Ice	7.14	108.85
			1.00			1" Ice	7.73	167.84
7770.00 w/ Mount Pipe	C	From Face	5.00	0.0000	240.00	No Ice	6.46	60.55
			10.00			1/2" Ice	7.14	108.85
			1.00			1" Ice	7.73	167.84
			5.00			No Ice	11.45	82.70
SBNH-1D6565C w/ Mount Pipe	C	From Face	10.00	0.0000	240.00	1/2" Ice	12.06	162.03
			1.00			1" Ice	12.69	254.15
			2.50			No Ice	2.52	200.00
			10.00			1/2" Ice	3.15	250.00
5' Side Arm	C	From Face	0.00	0.0000	240.00	1" Ice	3.78	300.00
			5.00			No Ice	6.46	60.55
			10.00			1/2" Ice	7.14	108.85
			1.00			1" Ice	7.73	167.84
7770.00 w/ Mount Pipe	D	From Face	2.50	0.0000	240.00	No Ice	2.52	200.00
			10.00			1/2" Ice	3.15	250.00
			0.00			1" Ice	3.78	300.00
			5.00			No Ice	6.46	60.55
5' Side Arm	D	From Face	1.00	0.0000	240.00	1/2" Ice	7.14	108.85
			2.50			No Ice	2.52	200.00
			10.00			1/2" Ice	7.98	134.57
			0.00			1" Ice	8.57	204.89
DB980H65E-M w/ 20' Mount Pipe	B	From Face	1.00	0.0000	225.60	No Ice	8.11	124.30
			-15.00			1/2" Ice	10.01	199.77
			0.00			1" Ice	11.94	291.06
			1.00			No Ice	8.11	124.30
DB980H65E-M w/ 20' Mount Pipe	B	From Face	15.00	0.0000	225.60	1/2" Ice	10.01	199.77
			0.00			1" Ice	11.94	291.06
			1.00			No Ice	8.11	124.30
			-15.00			1/2" Ice	10.01	199.77
DB980H65E-M w/ 20' Mount Pipe	C	From Face	0.00	0.0000	225.60	1" Ice	11.94	291.06
			1.00			No Ice	8.11	124.30
			15.00			1/2" Ice	10.01	199.77
			0.00			1" Ice	11.94	291.06
DB980H65E-M w/ 20' Mount Pipe	C	From Face	1.00	0.0000	225.60	No Ice	8.11	124.30
			15.00			1/2" Ice	10.01	199.77
			0.00			1" Ice	11.94	291.06
			1.00			No Ice	5.24	66.40
DB980H65E-M w/ 10' Mount Pipe	D	From Face	1.00	0.0000	225.60	No Ice	5.24	66.40
			1.00			No Ice	5.24	66.40
			1.00			No Ice	5.24	66.40
			1.00			No Ice	5.24	66.40

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	Client	AT&T Mobility	Designed by awestrum

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb
Pipe			10.00			1/2" Ice 6.13	6.46	114.34
			0.00			1" Ice 7.04	7.88	172.79
DB980H65E-M w/ 20' Mount	D	From Face	1.00	0.0000	225.60	No Ice 8.11	7.94	124.30
Pipe			15.00			1/2" Ice 10.01	10.34	199.77
			0.00			1" Ice 11.94	12.76	291.06
10' x 2.5" Pipe	B	From Face	1.00	0.0000	225.60	No Ice 2.50	2.50	50.00
			-10.00			1/2" Ice 3.53	3.53	68.64
			0.00			1" Ice 4.58	4.58	93.79
10' x 2.5" Pipe	D	From Face	1.00	0.0000	225.60	No Ice 2.50	2.50	50.00
			-15.00			1/2" Ice 3.53	3.53	68.64
			0.00			1" Ice 4.58	4.58	93.79
(3) DB844H90E-XY	A	From Leg	1.00	0.0000	209.00	No Ice 3.58	5.40	35.55
w/Mount Pipe			0.00			1/2" Ice 4.20	6.49	76.59
			3.00			1" Ice 4.73	7.30	127.74
(3) DB844H90E-XY	D	From Leg	1.00	0.0000	209.00	No Ice 3.58	5.40	35.55
w/Mount Pipe			0.00			1/2" Ice 4.20	6.49	76.59
			3.00			1" Ice 4.73	7.30	127.74
14' T-Frame	A	From Leg	0.50	0.0000	209.00	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
14' T-Frame	D	From Leg	0.50	0.0000	209.00	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) RR90-17-02DP w/Mount	B	From Leg	1.00	0.0000	209.00	No Ice 4.91	3.64	43.55
Pipe			0.00			1/2" Ice 5.57	4.70	81.64
			3.00			1" Ice 6.14	5.48	130.14
(2) RR90-17-02DP w/Mount	C	From Leg	1.00	0.0000	209.00	No Ice 4.91	3.64	43.55
Pipe			0.00			1/2" Ice 5.57	4.70	81.64
			3.00			1" Ice 6.14	5.48	130.14
APX16DWV-16DWVS-C	B	From Leg	1.00	0.0000	209.00	No Ice 7.78	3.81	66.25
w/Mount Pipe			0.00			1/2" Ice 8.48	4.88	115.45
			3.00			1" Ice 9.09	5.66	175.43
APX16DWV-16DWVS-C	C	From Leg	1.00	0.0000	209.00	No Ice 7.78	3.81	66.25
w/Mount Pipe			0.00			1/2" Ice 8.48	4.88	115.45
			3.00			1" Ice 9.09	5.66	175.43
(2) Dual Duplex 1900 TMA	B	From Leg	1.00	0.0000	209.00	No Ice 0.69	0.41	14.00
			0.00			1/2" Ice 0.81	0.51	19.05
			3.00			1" Ice 0.94	0.63	25.68
(2) Dual Duplex 1900 TMA	C	From Leg	1.00	0.0000	209.00	No Ice 0.69	0.41	14.00
			0.00			1/2" Ice 0.81	0.51	19.05
			3.00			1" Ice 0.94	0.63	25.68
ATMAA1412D-1A20	B	From Leg	1.00	0.0000	209.00	No Ice 1.17	0.47	13.00
			0.00			1/2" Ice 1.31	0.57	20.62
			3.00			1" Ice 1.47	0.69	30.11
ATMAA1412D-1A20	C	From Leg	1.00	0.0000	209.00	No Ice 1.17	0.47	13.00
			0.00			1/2" Ice 1.31	0.57	20.62
			3.00			1" Ice 1.47	0.69	30.11
14' T-Frame	B	From Leg	0.50	0.0000	209.00	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
14' T-Frame	C	From Leg	0.50	0.0000	209.00	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
26"x 26" Flat Panel	C	From Leg	1.00	0.0000	209.00	No Ice 5.60	0.52	15.00
			0.00			1/2" Ice 5.92	0.67	38.43
			-2.00			1" Ice 6.24	0.83	65.30
(3) DB844H90E-XY	C	From Leg	1.00	0.0000	198.00	No Ice 3.58	5.40	35.55

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	Client	AT&T Mobility	Designed by	awestrum

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb
w/Mount Pipe			0.00			1/2" Ice 4.20	6.49	76.59
			2.00			1" Ice 4.73	7.30	127.74
14' T-Frame	C	From Leg	0.50	0.0000	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
PG1N0F-0091-011	A	From Leg	3.50	-45.0000	188.00	No Ice 1.40	1.40	7.50
			-3.50			1/2" Ice 2.23	2.23	18.71
			5.00			1" Ice 3.07	3.07	35.15
5' Standoff	A	From Leg	1.75	-45.0000	188.00	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
PG1N0F-0091-011	B	From Leg	3.50	45.0000	188.00	No Ice 1.40	1.40	7.50
			3.50			1/2" Ice 2.23	2.23	18.71
			5.00			1" Ice 3.07	3.07	35.15
5' Standoff	B	From Leg	1.75	45.0000	188.00	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
PG1N0F-0091-011	B	From Leg	3.50	45.0000	169.00	No Ice 1.40	1.40	7.50
			3.50			1/2" Ice 2.23	2.23	18.71
			5.00			1" Ice 3.07	3.07	35.15
5' Standoff	B	From Leg	1.75	45.0000	169.00	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) HBX-6516DS-VTM w/ mount pipe	B	From Leg	1.00	0.0000	170.00	No Ice 3.53	3.17	28.15
			0.00			1/2" Ice 3.91	3.80	58.62
			0.00			1" Ice 4.33	4.43	97.61
(2) HBX-6516DS-VTM w/ mount pipe	C	From Leg	1.00	0.0000	170.00	No Ice 3.53	3.17	28.15
			0.00			1/2" Ice 3.91	3.80	58.62
			0.00			1" Ice 4.33	4.43	97.61
(2) HBX-6516DS-VTM w/ mount pipe	D	From Leg	1.00	0.0000	170.00	No Ice 3.53	3.17	28.15
			0.00			1/2" Ice 3.91	3.80	58.62
			0.00			1" Ice 4.33	4.43	97.61
(2) ATM200-A20	B	From Leg	1.00	0.0000	170.00	No Ice 0.12	0.12	0.53
			0.00			1/2" Ice 0.19	0.19	2.23
			-2.00			1" Ice 0.27	0.27	4.77
(2) ATM200-A20	C	From Leg	1.00	0.0000	170.00	No Ice 0.12	0.12	0.53
			0.00			1/2" Ice 0.19	0.19	2.23
			-2.00			1" Ice 0.27	0.27	4.77
(2) ATM200-A20	D	From Leg	1.00	0.0000	170.00	No Ice 0.12	0.12	0.53
			0.00			1/2" Ice 0.19	0.19	2.23
			-2.00			1" Ice 0.27	0.27	4.77
4' T-Arm - Round (GPD)	B	From Leg	0.50	0.0000	170.00	No Ice 2.39	1.44	83.50
			0.00			1/2" Ice 2.99	1.87	108.55
			0.00			1" Ice 3.59	2.30	133.60
4' T-Arm - Round (GPD)	C	From Leg	0.50	0.0000	170.00	No Ice 2.39	1.44	83.50
			0.00			1/2" Ice 2.99	1.87	108.55
			0.00			1" Ice 3.59	2.30	133.60
4' T-Arm - Round (GPD)	D	From Leg	0.50	0.0000	170.00	No Ice 2.39	1.44	83.50
			0.00			1/2" Ice 2.99	1.87	108.55
			0.00			1" Ice 3.59	2.30	133.60
407517689 GPS	A	From Leg	1.00	0.0000	100.00	No Ice 0.17	0.17	0.87
			0.00			1/2" Ice 0.24	0.24	3.85
			0.00			1" Ice 0.32	0.32	7.85
GPS-TMG-HR-26NCM	A	From Leg	1.00	0.0000	100.00	No Ice 0.17	0.17	0.87
			0.00			1/2" Ice 0.24	0.24	3.85
			0.00			1" Ice 0.32	0.32	7.85
WL14-69/S	A	From Leg	1.00	0.0000	85.00	No Ice 2.88	2.88	5.00

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _A A Front ft ²	C _A A Side ft ²	Weight lb
			0.00			1/2" Ice	3.74	3.74	6.50
			0.00			1" Ice	4.61	4.61	8.45
WL14-69/S	B	From Leg	1.00	0.0000	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
WL14-69/S	C	From Leg	1.00	0.0000	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
WL14-69/S	D	From Leg	1.00	0.0000	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
WL7-13	C	From Leg	1.00	0.0000	85.00	No Ice	2.88	2.88	25.00
			0.00			1/2" Ice	3.73	3.73	32.50
			0.00			1" Ice	4.59	4.59	40.00
2.25' Yagi	C	From Face	1.00	0.0000	44.50	No Ice	0.41	0.41	10.00
			0.00			1/2" Ice	0.56	0.56	14.05
			0.00			1" Ice	0.73	0.73	19.98
s8000	C	None		0.0000	40.00	No Ice	13.22	32.52	1800.00
						1/2" Ice	13.73	33.28	2009.36
						1" Ice	14.25	34.05	2228.09
RBS 3106	C	None		0.0000	40.00	No Ice	17.85	12.60	1875.00
						1/2" Ice	18.42	13.07	2040.02
						1" Ice	19.00	13.55	2213.20
Purcell RAC35	C	None		0.0000	40.00	No Ice	8.17	6.81	120.00
						1/2" Ice	8.55	7.17	188.06
						1" Ice	8.95	7.54	261.43
(4) RRU 22 20W	C	None		0.0000	40.00	No Ice	1.57	2.58	35.00
						1/2" Ice	1.74	2.80	57.07
						1" Ice	1.92	3.03	82.20
(2) PBC02 MU	C	None		0.0000	40.00	No Ice	1.45	3.76	45.00
						1/2" Ice	1.62	4.02	70.25
						1" Ice	1.80	4.29	98.83
14" Omni	C	None		0.0000	41.00	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
GPS	C	None		0.0000	42.00	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
Camera	B	From Leg	1.50	0.0000	37.00	No Ice	0.13	0.06	2.00
			0.00			1/2" Ice	0.18	0.09	3.30
			0.00			1" Ice	0.25	0.14	5.42
2.5' Box Mount	B	From Leg	1.50	0.0000	37.00	No Ice	1.36	1.36	20.00
			0.00			1/2" Ice	2.45	2.45	40.00
			0.00			1" Ice	3.50	3.50	64.00
GPS	D	From Face	3.00	0.0000	36.50	No Ice	0.17	0.17	0.87
			0.00			1/2" Ice	0.24	0.24	3.85
			0.00			1" Ice	0.32	0.32	7.85
3' Side Arm	D	From Face	1.50	0.0000	36.50	No Ice	0.93	0.93	44.94
			0.00			1/2" Ice	1.13	1.13	54.87
			0.00			1" Ice	1.37	1.37	67.25

Hot Rolled Steel Properties

Label	E [ksi]	G [ksi]	Nu	Therm (ΔE5 F)	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
A36	29000	11200	.295	.65	.49	36	1.5	58	1.2

Concrete Properties

Label	E [ksi]	G [ksi]	Nu	Therm (ΔE5 F)	Density [k/ft³]	f'c [ksi]	Lambda	Flex Steel [ksi]	Shear Steel [ksi]
Conc3000NW	3156	1372	.15	.6	.145	3	1	60	60
Conc3500NW	3409	1482	.15	.6	.145	3.5	1	60	60
Conc4000NW	3644	1584	.15	.6	.145	4	1	60	60
Conc3000LW	2085	907	.15	.6	.11	3	1	60	60
Conc3500LW	2252	979	.15	.6	.11	3.5	1	60	60
Conc4000LW	2408	1047	.15	.6	.11	4	1	60	60

Hot Rolled Steel Section Sets

Label	Type	Shape	Design List	Material	Design Rules	A [in2]	Iy [in4]	Izz [in4]	J [in4]
TWR LEG T1	Column	L6x6x1/2	Single Angle	A36	Typical	5.75	19.9	19.9	.501
TWR HORZ IN T1	Beam	W12X26	Wide Flange	A36	Typical	7.65	17.3	204	.3
TWR DIAG IN T1	Column	LL2.5x2.5x3x3	Single Angle	A36	Typical	1.8	2.464	1.07	.023
TWR RED HORZ IN T1	Column	L2.5X2.5X3	Single Angle	A36	Typical	.9	.535	.535	.011
TWR RED SUB H IN T1	Column	LL2.5x2.5x3x3	Single Angle	A36	Typical	1.8	2.464	1.07	.023
TWR RED SUB D IN T1	Column	L2.5X2.5X3	Single Angle	A36	Typical	.9	.535	.535	.011
TWR HORZ OUT T1	Column	W10X22	Single Angle	A36	Typical	6.49	11.4	118	.239
TWR DIAG OUT T1	Column	LL4x3.5x6x3	Single Angle	A36	Typical	5.35	12.853	8.3	.264
TWR DIAG OUT KICK T1	Column	LL2.5x2.5x3x3	Single Angle	A36	Typical	1.8	2.464	1.07	.023
TWR RED HORZ OUT T1	Beam	L2.5X2.5X3	Double Angle	A36	Typical	.9	.535	.535	.011
TWR RED DIAG T1	Column	L2 1/2x2 1/2x3/16	Single Angle	A36	Typical	.902	.547	.547	.011
TWR RED LEG T2	Column	W6X25	Wide Flange	A36	Typical	7.34	17.1	53.4	.461
TWR DIAG T2	Column	2L2 1/2x3x1/2x3/8	Double Angle	A36	Typical	5	11.217	2.604	.417
TWR RED HORZ T2	Beam	L3X3X3	Double Angle	A36	Typical	1.09	.948	.948	.014
TWR RED HORZ 2 T2	Beam	2L2 1/2x2 1/2x3/16x3/8	Double Angle	A36	Typical	1.8	2.499	1.09	.021
TWR RED DIAG T2	Column	L3X3X3	Double Angle	A36	Typical	1.09	.948	.948	.014
TWR RED HORZ 3 T2	Beam	2L2 1/2x2 1/2x3/16x3/8	Double Angle	A36	Typical	1.8	2.499	1.09	.021
TWR RED DIAG 2 T2	Column	2L2 1/2x2 1/2x3/16x3/8	Double Angle	A36	Typical	1.8	2.499	1.09	.021
TWR RED DIAG 3 T2	Column	2L2 1/2x2 1/2x1/4x3/8	Double Angle	A36	Typical	2.38	3.347	1.41	.049
TWR RED HIP HORZ 1 T2	Column	LL4x4x8x3	Double Angle	A36	Typical	7.49	25.083	11	.644
TWR RED HIP HORZ 2 T2	Column	LL3x3x3x3	Double Angle	A36	Typical	2.18	4.092	1.9	.027
TWR RED HIP DIAG 1 T2	Column	LL3x3x3x3	Double Angle	A36	Typical	2.18	4.092	1.9	.027
TWR RED HIP DIAG 2 T2	Column	LL3x3x6x3	Double Angle	A36	Typical	4.22	8.39	3.5	.202
TWR INNER SUPP T2	Beam	W10X22	Wide Flange	A36	Typical	6.49	11.4	118	.239

Hot Rolled Steel Section Sets (Continued)

Label	Shape	Type	Design List	Material	Design Rules	A [in2]	I _{yy} [in4]	I _{zz} [in4]	J [in4]
25 TWR INNER SQUARE T2	W8X13	HBrace	Wide Flange	A36	Typical	3.84	2.73	39.6	.087
26 TWR INNER CORNER T2	W10X22	Beam	Wide Flange	A36	Typical	6.49	11.4	118	.239
27 TWR LEG T3	W6X25	Column	Wide Flange	A36	Typical	7.34	17.1	53.4	.461
28 TWR RED HORZ T3	2L3x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.99	2.513	1.81	.023
29 TWR RED HORZ T3	2L2 1/2x3/8x3/8	Column	Double Angle	A36	Typical	3.84	8.341	2.08	.18
30 TWR RED HORZ T3	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.948	.014
31 TWR RED HORZ 2 T3	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
32 TWR RED DIAG T3	L3X3X3	Column	Double Angle	A36	Typical	1.09	.948	.948	.014
33 TWR RED HORZ 3 T3	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
34 TWR RED DIAG 2 T3	2L2 1/2x2 1/2x3/16x3/8	Column	Double Angle	A36	Typical	1.8	2.499	1.09	.021
35 TWR RED DIAG 3 T3	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
36 TWR RED HIP HORZ 1 T3	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
37 TWR RED HIP HORZ 2 T3	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
38 TWR RED HIP DIAG 1 T3	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
39 TWR RED HIP DIAG 2 T3	LL3x3x6x3	Column	Double Angle	A36	Typical	4.22	8.39	3.5	.202
40 TWR INNER SUPP T3	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
41 TWR INNER SQUARE T3	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
42 TWR INNER GIRT T3	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
43 TWR INNER TRIANGLE T3	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
44 TWR INNER CORNER T3	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
45 TWR INNER LADDER T3	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
46 TWR LEG T4	W6X25	Column	Wide Flange	A36	Typical	7.34	17.1	53.4	.461
47 TWR RED HORZ T4	2L3x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.99	2.513	1.81	.023
48 TWR DIAG T4	2L2 1/2x3x1/2x3/8	Column	Double Angle	A36	Typical	5	11.217	2.604	.417
49 TWR RED HORZ T4	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.948	.014
50 TWR RED HORZ 2 T4	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
51 TWR RED DIAG T4	L3X3X3	Column	Double Angle	A36	Typical	1.09	.948	.948	.014
52 TWR RED HORZ 3 T4	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
53 TWR RED DIAG 2 T4	2L2 1/2x2 1/2x3/16x3/8	Column	Double Angle	A36	Typical	1.8	2.499	1.09	.021
54 TWR RED DIAG 3 T4	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
55 TWR RED HIP HORZ 1 T4	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
56 TWR RED HIP HORZ 2 T4	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
57 TWR RED HIP DIAG 1 T4	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
58 TWR RED HIP DIAG 2 T4	LL3x3x6x3	Column	Double Angle	A36	Typical	4.22	8.39	3.5	.202
59 TWR INNER SUPP T4	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
60 TWR INNER SQUARE T4	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
61 TWR INNER GIRT T4	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
62 TWR INNER TRIANGLE T4	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
63 TWR INNER CORNER T4	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
64 TWR INNER LADDER T4	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
65 TWR LEG T5	W8X40	Column	Wide Flange	A36	Typical	11.7	49.1	146	1.12

Hot Rolled Steel Section Sets (Continued)

Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Ivy [in4]	Izz [in4]	J [in4]
66 TWR HORZ T5	2L3x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.99	2.513	1.81	.023
67 TWR DIAG T5	2L2 1/2x3x1/2x3/8	Column	Double Angle	A36	Typical	5	11.217	2.604	.417
68 TWR RED HORZ T5	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.948	.014
69 TWR RED HORZ 2 T5	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
70 TWR RED DIAG T5	L3X3X3	Column	Double Angle	A36	Typical	1.09	.948	.948	.014
71 TWR RED HORZ 3 T5	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
72 TWR RED DIAG 2 T5	2L2 1/2x2 1/2x3/16x3/8	Column	Double Angle	A36	Typical	1.8	2.499	1.09	.021
73 TWR RED DIAG 3 T5	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
74 TWR RED HIP HORZ 1 T5	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
75 TWR RED HIP HORZ 2 T5	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
76 TWR RED HIP DIAG 1 T5	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
77 TWR RED HIP DIAG 2 T5	LL3x3x6x3	Column	Double Angle	A36	Typical	4.22	8.39	3.5	.202
78 TWR INNER SUPP T5	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
79 TWR INNER SQUARE T5	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
80 TWR INNER GIRT T5	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
81 TWR INNER TRIANGLE T5	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
82 TWR INNER CORNER T5	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
83 TWR INNER LADDER T5	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
84 TWR LEG T6	W8X40	Column	Wide Flange	A36	Typical	11.7	49.1	146	1.12
85 TWR HORZ T6	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
86 TWR DIAG T6	2L3x4x3/8x3/8	Column	Double Angle	A36	Typical	4.969	18.655	3.84	.233
87 TWR RED HORZ T6	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.948	.014
88 TWR RED HORZ 2 T6	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
89 TWR RED DIAG T6	L3X3X3	Column	Double Angle	A36	Typical	1.09	.948	.948	.014
90 TWR RED HORZ 3 T6	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
91 TWR RED DIAG 2 T6	2L2 1/2x2 1/2x3/16x3/8	Column	Double Angle	A36	Typical	1.8	2.499	1.09	.021
92 TWR RED DIAG 3 T6	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
93 TWR RED HIP HORZ 1 T6	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
94 TWR RED HIP HORZ 2 T6	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
95 TWR RED HIP DIAG 1 T6	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
96 TWR RED HIP DIAG 2 T6	LL3x3x6x3	Column	Double Angle	A36	Typical	4.22	8.39	3.5	.202
97 TWR INNER SUPP T6	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
98 TWR INNER SQUARE T6	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
99 TWR INNER GIRT T6	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
100 TWR INNER TRIANGLE T6	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
101 TWR INNER CORNER T6	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
102 TWR INNER LADDER T6	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
103 TWR LEG T7	W10X54	Column	Wide Flange	A36	Typical	15.8	103	303	1.82
104 TWR HORZ T7	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
105 TWR DIAG T7	2L3x4x3/8x3/8	Column	Double Angle	A36	Typical	4.969	18.655	3.84	.233
106 TWR RED HORZ T7	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.948	.014

Hot Rolled Steel Section Sets (Continued)

Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
107 TWR RED HORZ 2 T7	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
108 TWR RED DIAG T7	L3X3X3	Column	Double Angle	A36	Typical	1.09	.948	.014	.021
109 TWR RED HORZ 3 T7	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
110 TWR RED DIAG 2 T7	2L2 1/2x2 1/2x3/16x3/8	Column	Double Angle	A36	Typical	1.8	2.499	1.09	.021
111 TWR RED DIAG 3 T7	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
112 TWR RED HIP HORZ 1 T7	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
113 TWR RED HIP HORZ 2 T7	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
114 TWR RED HIP DIAG 1 T7	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
115 TWR RED HIP DIAG 2 T7	LL3x3x6x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
116 TWR INNER SUPP T7	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	4.22	8.39	3.5	.202
117 TWR INNER SQUARE T7	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
118 TWR INNER GIRT T7	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
119 TWR INNER TRIANGLE T7	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
120 TWR INNER CORNER T7	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
121 TWR INNER LADDER T7	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
122 TWR LEG T8	W10X60	Column	Wide Flange	A36	Typical	17.6	116	341	2.48
123 TWR HORZ T8	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
124 TWR DIAG T8	2L3x4x1/2x3/8	Column	Double Angle	A36	Typical	6.5	25.005	4.85	.542
125 TWR RED HORZ T8	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.014	.021
126 TWR RED HORZ 2 T8	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
127 TWR RED DIAG T8	L3X3X3	Column	Double Angle	A36	Typical	1.09	.948	.014	.021
128 TWR RED HORZ 3 T8	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
129 TWR RED DIAG 2 T8	2L2 1/2x2 1/2x3/16x3/8	Column	Double Angle	A36	Typical	1.8	2.499	1.09	.021
130 TWR RED DIAG 3 T8	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
131 TWR RED HIP HORZ 1 T8	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
132 TWR RED HIP HORZ 2 T8	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
133 TWR RED HIP DIAG 1 T8	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
134 TWR RED HIP DIAG 2 T8	LL3x3x6x3	Column	Double Angle	A36	Typical	4.22	8.39	3.5	.202
135 TWR INNER SUPP T8	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
136 TWR INNER SQUARE T8	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
137 TWR INNER GIRT T8	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
138 TWR INNER TRIANGLE T8	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
139 TWR INNER CORNER T8	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
140 TWR INNER LADDER T8	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
141 TWR LEG T9	W10X68	Column	Wide Flange	A36	Typical	20	134	394	3.56
142 TWR HORZ T9	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
143 TWR DIAG T9	2L3x4x1/2x3/8	Column	Double Angle	A36	Typical	6.5	25.005	4.85	.542
144 TWR RED HORZ T9	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.014	.021
145 TWR RED HORZ 2 T9	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
146 TWR RED DIAG T9	L3X3X3	Column	Double Angle	A36	Typical	1.09	.948	.014	.021
147 TWR RED HORZ 3 T9	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021

Company : GPD Group
 Designer : awestrum
 Job Number : 2012867.11

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Nov 5, 2012
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 Checked By:

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iw [in4]	Izz [in4]	J [in4]
148	TWR RED DIAG 2 T9	2L2 1/2x2 1/2x3/16x3/8	Column	Double Angle	A36	Typical	1.8	2.499	1.09	.021
149	TWR RED DIAG 3 T9	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
150	TWR RED HIP HORZ 1 T9	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
151	TWR RED HIP HORZ 2 T9	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
152	TWR RED HIP DIAG 1 T9	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
153	TWR RED HIP DIAG 2 T9	LL3x3x6x3	Column	Double Angle	A36	Typical	4.22	8.39	3.5	.202
154	TWR INNER SUPP T9	2L3x2 1/2x3/8x3/8	Beam	Double Angle	A36	Typical	3.84	5.153	3.31	.18
155	TWR INNER SQUARE T9	LL2.5x2.5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
156	TWR INNER GIRT T9	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
157	TWR INNER TRIANGLE T9	LL2.5x2 5x3x3	Beam	Double Angle	A36	Typical	1.8	2.464	1.07	.023
158	TWR INNER CORNER T9	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
159	TWR INNER LADDER T9	LL3x2.5x6x3	Beam	Double Angle	A36	Typical	3.86	5.105	3.3	.189
160	TWR LEG T10	W12X79	Column	Wide Flange	A36	Typical	23.2	216	662	3.84
161	TWR HORZ T10	2L3x3x1/2x3/8	Beam	Double Angle	A36	Typical	5.5	11.324	4.43	.458
162	TWR DIAG T10	2L4x4x1/2x3/8	Column	Double Angle	A36	Typical	7.5	25.217	11.1	.625
163	TWR RED HORZ T10	L3X3X3	Beam	Double Angle	A36	Typical	1.09	.948	.948	.014
164	TWR RED HORZ 2 T10	2L2 1/2x2 1/2x3/16x3/8	Beam	Double Angle	A36	Typical	1.8	2.499	1.09	.021
165	TWR RED DIAG T10	L3X3X4	Column	Double Angle	A36	Typical	1.44	1.23	1.23	.031
166	TWR RED HORZ 3 T10	2L2 1/2x2 1/2x1/4x3/8	Beam	Double Angle	A36	Typical	2.38	3.347	1.41	.049
167	TWR RED DIAG 2 T10	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
168	TWR RED HORZ 4 T10	2L3x3x1/4x3/8 HRA	Beam	Double Angle	A36	Typical	2.88	5.535	2.49	.06
169	TWR RED DIAG 3 T10	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
170	TWR RED DIAG 4 T10	2L2 1/2x2 1/2x1/4x3/8	Column	Double Angle	A36	Typical	2.38	3.347	1.41	.049
171	TWR RED HORZ 1A T10	L2.5X2 5X3	Column	Double Angle	A36	Typical	.9	.535	.535	.011
172	TWR RED DIAG 1A T10	L2.5X2 5X8	Column	Double Angle	A36	Typical	2.25	1.22	1.22	.188
173	TWR RED HIP HORZ 1 T10	LL4x4x8x3	Column	Double Angle	A36	Typical	7.49	25.083	11	.644
174	TWR RED HIP HORZ 2 T10	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
175	TWR RED HIP DIAG 1 T10	LL3x3x3x3	Column	Double Angle	A36	Typical	2.18	4.092	1.9	.027
176	TWR RED HIP DIAG 2 T10	LL3x3x6x3	Column	Double Angle	A36	Typical	4.22	8.39	3.5	.202
177	TWR INNER PLATFORM T10	C4X7.25	Column	Double Angle	A36	Typical	2.13	.433	4.59	.08
178	TWR INNER LADDER T10	LL3x2.5x6x3	Column	Double Angle	A36	Typical	3.86	5.105	3.3	.189

General Section Sets

	Label	Shape	Type	Material	A [in2]	Iw [in4]	Izz [in4]	J [in4]
1	TWR INNER SUPP T1	2C12x20.7x0.375	Beam	A36 Gen	12.18	17.311	258	.74
2	TWR_HORZ_T2	2C10x20x0.375	Beam	A36 Gen	11.76	13.025	157.8	.74
3	TWR INNER SUPP T2	2C12x20.7x0.375	Beam	A36 Gen	12.18	17.311	258	.74
4	TWR INNER SUPP T10	2C4x7.25x0.375	Beam	A36 Gen	4.26	2.647	9.18	.16

Concrete Column Bending Reinforcement

	Column	Shape	Span	Perim Bars
1	M1252A	CRECT42X42	1	CUSTOM
2	M1253A	CRECT42X42	1	CUSTOM
3	M1254A	CRECT42X42	1	CUSTOM
4	M1255A	CRECT42X42	1	CUSTOM

Concrete Column Shear Reinforcement

	Column	Span	Region 1	Region 2	Region 3	Region 4
1	M1252A	1	CUSTOM	CUSTOM	CUSTOM	CUSTOM
2	M1253A	1	CUSTOM	CUSTOM	CUSTOM	CUSTOM
3	M1254A	1	CUSTOM	CUSTOM	CUSTOM	CUSTOM
4	M1255A	1	CUSTOM	CUSTOM	CUSTOM	CUSTOM

Concrete Column Design Parameters

Label	Shape	Length[ft]	Lu-vy[ft]	Lu-zz[ft]	Cm-vy	Cm-zz	Kv	Kzz	y sway	z sway	lcr Factor	Flexural L	Shear Lay
1	M1252A	6.2										TAG0053	TAG0053
2	M1253A	6.2										TAG0053	TAG0053
3	M1254A	6.2										TAG0053	TAG0053
4	M1255A	6.2										TAG0053	TAG0053

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Member)	Surface(Plate)
1	Dead	None		-1		40	396	40		
2	No Ice Wind 0 deg	None				40	950	120		
3	No Ice Wind 45 deg	None				80	938	160		
4	No Ice Wind 90 deg	None				40	958	120		
5	No Ice Wind 135 deg	None				80	946	160		
6	No Ice Wind 180 deg	None				40	950	120		
7	No Ice Wind 225 deg	None				80	938	160		
8	No Ice Wind 270 deg	None				40	958	120		
9	No Ice Wind 315 deg	None				80	946	160		
10	Ice	None				40	400	761		
11	Temperature Drop	None						1255		
12	Ice Wind 0 deg	None				40	934	120		
13	Ice Wind 45 deg	None				80	894	160		
14	Ice Wind 90 deg	None				40	934	120		

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Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Member)	Surface(Plate/...
15	Ice Wind 135 deg	None				80	912	160		
16	Ice Wind 180 deg	None				40	934	120		
17	Ice Wind 225 deg	None				80	894	160		
18	Ice Wind 270 deg	None				40	934	120		
19	Ice Wind 315 deg	None				80	912	160		
20	Service Wind 0 deg	None				40	934	120		
21	Service Wind 45 deg	None				80	892	160		
22	Service Wind 90 deg	None				40	934	120		
23	Service Wind 135 deg	None				80	904	160		
24	Service Wind 180 deg	None				40	934	120		
25	Service Wind 225 deg	None				80	934	160		
26	Service Wind 270 deg	None				40	934	120		
27	Service Wind 315 deg	None				80	904	160		

Load Combinations

	Description	Solve	PDelta	SRSS	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	Dead Only	Yes			1	1	28	1	29	1	0	0	0	0	0	0
2	Dead+Wind 0 deg - No Ice	Yes			1	1	2	1	28	1	29	1	0	0	0	0
3	Dead+Wind 45 deg - No Ice	Yes			1	1	3	1	28	1	29	1	0	0	0	0
4	Dead+Wind 90 deg - No Ice	Yes			1	1	4	1	28	1	29	1	0	0	0	0
5	Dead+Wind 135 deg - No Ice	Yes			1	1	5	1	28	1	29	1	0	0	0	0
6	Dead+Wind 180 deg - No Ice	Yes			1	1	6	1	28	1	29	1	0	0	0	0
7	Dead+Wind 225 deg - No Ice	Yes			1	1	7	1	28	1	29	1	0	0	0	0
8	Dead+Wind 270 deg - No Ice	Yes			1	1	8	1	28	1	29	1	0	0	0	0
9	Dead+Wind 315 deg - No Ice	Yes			1	1	9	1	28	1	29	1	0	0	0	0
10	Dead+Ice+Temp	Yes			1	1	10	1	11	1	28	1	29	1	0	0
11	Dead+Wind 0 deg+Ice+Temp	Yes			1	1	12	1	10	1	11	1	28	1	29	1
12	Dead+Wind 45 deg+Ice+Temp	Yes			1	1	13	1	10	1	11	1	28	1	29	1
13	Dead+Wind 90 deg+Ice+Temp	Yes			1	1	14	1	10	1	11	1	28	1	29	1
14	Dead+Wind 135 deg+Ice+Temp	Yes			1	1	15	1	10	1	11	1	28	1	29	1
15	Dead+Wind 180 deg+Ice+Temp	Yes			1	1	16	1	10	1	11	1	28	1	29	1
16	Dead+Wind 225 deg+Ice+Temp	Yes			1	1	17	1	10	1	11	1	28	1	29	1
17	Dead+Wind 270 deg+Ice+Temp	Yes			1	1	18	1	10	1	11	1	28	1	29	1
18	Dead+Wind 315 deg+Ice+Temp	Yes			1	1	19	1	10	1	11	1	28	1	29	1
19	Dead+Wind 0 deg - Service	Yes			1	1	20	1	28	1	29	1	0	0	0	0
20	Dead+Wind 45 deg - Service	Yes			1	1	21	1	28	1	29	1	0	0	0	0
21	Dead+Wind 90 deg - Service	Yes			1	1	22	1	28	1	29	1	0	0	0	0
22	Dead+Wind 135 deg - Service	Yes			1	1	23	1	28	1	29	1	0	0	0	0
23	Dead+Wind 180 deg - Service	Yes			1	1	24	1	28	1	29	1	0	0	0	0

Factor	BLC	F
	0	
	0	
	0	

MZ [k-ft]	
218.92	
-241.612	
240.757	
-219.7	
216.151	
-195.487	
200.514	
222.893	

[illegible]

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

	Member	Shape	Code Check	Locfll	LC Shear C...	Locfll	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnw/om [k-ft]	Mnzz/om [k-ft]	Cb	Ean
20	M1227	LL4x3.5x6x3	.050	9.217	6	.002	9.217	Y	4	76.149	115.329	10.019	5.325	1... H1-1b
21	M1228	LL4x3.5x6x3	.049	9.217	8	.002	9.217	Y	2	76.149	115.329	10.019	5.325	1... H1-1b
22	M1229	LL4x3.5x6x3	.038	6.201	4	.001	0	Y	8	84.065	115.329	10.019	8.52	1... H1-1b
23	M1230	LL4x3.5x6x3	.038	9.888	8	.001	8.044	Y	8	84.065	115.329	10.019	8.52	1... H1-1b
24	M1231	LL4x3.5x6x3	.049	9.217	4	.002	9.217	Y	2	76.149	115.329	10.019	5.325	1... H1-1b
25	M1232	LL4x3.5x6x3	.050	9.217	6	.002	9.217	Y	8	76.149	115.329	10.019	5.325	1... H1-1b
26	M1233	LL4x3.5x6x3	.039	6.201	2	.001	8.044	Y	2	84.065	115.329	10.019	8.52	1... H1-1b
27	M1234	LL4x3.5x6x3	.039	9.888	6	.001	0	Y	2	84.065	115.329	10.019	8.52	1... H1-1b
28	M1235	LL4x3.5x6x3	.050	9.217	2	.002	9.217	Y	8	76.149	115.329	10.019	5.325	1... H1-1b
29	M51	2L2 1/2x3x1/2x3/8	.338	15.046	8	.004	22.569	Y	12	47.292	107.784	10.115	2.673	1 H1-1a
30	M59	2L2 1/2x3x1/2x3/8	.339	15.046	4	.004	22.569	Y	17	47.292	107.784	10.115	2.673	1 H1-1a
31	M67	2L2 1/2x3x1/2x3/8	.347	15.046	6	.004	22.569	Y	18	47.292	107.784	10.115	2.673	1 H1-1a
32	M75	2L2 1/2x3x1/2x3/8	.346	15.046	2	.004	22.569	Y	16	47.292	107.784	10.115	2.673	1 H1-1a
33	M83	2L2 1/2x3x1/2x3/8	.311	15.046	4	.004	22.569	Y	16	47.292	107.784	10.115	2.673	1 H1-1a
34	M91	2L2 1/2x3x1/2x3/8	.312	15.046	8	.004	22.569	Y	14	47.292	107.784	10.115	2.673	1 H1-1a
35	M99	2L2 1/2x3x1/2x3/8	.327	15.046	2	.004	22.569	Y	14	47.292	107.784	10.115	2.673	1 H1-1a
36	M107	2L2 1/2x3x1/2x3/8	.327	15.046	6	.004	22.569	Y	11	47.292	107.784	10.115	2.673	1 H1-1a
37	M124	2L2 1/2x3x3/8x3/8	.607	7.523	8	.005	22.569	Y	17	37.49	82.778	7.521	2.083	1 H1-1a
38	M132	2L2 1/2x3x3/8x3/8	.608	7.523	4	.005	22.569	Y	13	37.49	82.778	7.521	2.083	1 H1-1a
39	M141	2L2 1/2x3x3/8x3/8	.612	7.523	6	.005	22.569	Y	15	37.49	82.778	7.521	2.083	1 H1-1a
40	M149	2L2 1/2x3x3/8x3/8	.611	7.523	2	.005	22.569	Y	11	37.49	82.778	7.521	2.083	1 H1-1a
41	M158	2L2 1/2x3x3/8x3/8	.544	7.523	4	.005	22.569	Y	13	37.49	82.778	7.521	2.083	1 H1-1a
42	M166	2L2 1/2x3x3/8x3/8	.545	7.523	8	.005	22.569	Y	17	37.49	82.778	7.521	2.083	1 H1-1a
43	M175	2L2 1/2x3x3/8x3/8	.573	7.523	2	.005	22.569	Y	11	37.49	82.778	7.521	2.083	1 H1-1a
44	M183	2L2 1/2x3x3/8x3/8	.573	7.523	6	.005	22.569	Y	15	37.49	82.778	7.521	2.083	1 H1-1a
45	M205	2L2 1/2x3x1/2x3/8	.640	7.523	8	.004	22.569	Y	8	47.292	107.784	10.115	2.673	1 H1-1a
46	M213	2L2 1/2x3x1/2x3/8	.641	7.523	4	.004	22.569	Y	13	47.292	107.784	10.115	2.673	1 H1-1a
47	M222	2L2 1/2x3x1/2x3/8	.655	7.523	6	.004	22.569	Y	6	47.292	107.784	10.115	2.673	1 H1-1a
48	M230	2L2 1/2x3x1/2x3/8	.654	7.523	2	.004	22.569	Y	2	47.292	107.784	10.115	2.673	1 H1-1a
49	M239	2L2 1/2x3x1/2x3/8	.576	7.523	4	.004	22.569	Y	13	47.292	107.784	10.115	2.673	1 H1-1a
50	M247	2L2 1/2x3x1/2x3/8	.576	7.523	8	.004	22.569	Y	8	47.292	107.784	10.115	2.673	1 H1-1a
51	M256	2L2 1/2x3x1/2x3/8	.606	7.523	2	.004	22.569	Y	2	47.292	107.784	10.115	2.673	1 H1-1a
52	M264	2L2 1/2x3x1/2x3/8	.606	7.523	6	.004	22.569	Y	6	47.292	107.784	10.115	2.673	1 H1-1a
53	M286	2L2 1/2x3x1/2x3/8	.776	22.569	8	.004	22.569	Y	8	47.292	107.784	10.115	2.673	1 H1-1a
54	M294	2L2 1/2x3x1/2x3/8	.777	22.569	4	.004	22.569	Y	4	47.292	107.784	10.115	2.673	1 H1-1a
55	M303	2L2 1/2x3x1/2x3/8	.792	22.569	6	.004	22.569	Y	6	47.292	107.784	10.115	2.673	1 H1-1a
56	M311	2L2 1/2x3x1/2x3/8	.790	22.569	2	.004	22.569	Y	2	47.292	107.784	10.115	2.673	1 H1-1a
57	M320	2L2 1/2x3x1/2x3/8	.703	22.569	4	.004	22.569	Y	4	47.292	107.784	10.115	2.673	1 H1-1a
58	M328	2L2 1/2x3x1/2x3/8	.704	22.569	8	.004	22.569	Y	8	47.292	107.784	10.115	2.673	1 H1-1a
59	M337	2L2 1/2x3x1/2x3/8	.734	22.569	2	.004	22.569	Y	2	47.292	107.784	10.115	2.673	1 H1-1a
60	M345	2L2 1/2x3x1/2x3/8	.733	22.569	6	.004	22.569	Y	6	47.292	107.784	10.115	2.673	1 H1-1a

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

Member	Shape	Code Check	Locfit	LC Shear C...	Locfit	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnw/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
61	M367	2L3x4x3/8x3/8	.709	22.569	8	.005	22.569	Y	7	61.48	107.111	12.805	1 H1-1a
62	M375	2L3x4x3/8x3/8	.710	22.569	4	.005	22.569	Y	5	61.48	107.111	12.805	1 H1-1a
63	M384	2L3x4x3/8x3/8	.722	22.569	6	.005	22.569	Y	5	61.48	107.111	12.805	1 H1-1a
64	M392	2L3x4x3/8x3/8	.721	22.569	2	.005	22.569	Y	3	61.48	107.111	12.805	1 H1-1a
65	M401	2L3x4x3/8x3/8	.646	22.569	4	.005	22.569	Y	3	61.48	107.111	12.805	1 H1-1a
66	M409	2L3x4x3/8x3/8	.646	22.569	8	.005	22.569	Y	9	61.48	107.111	12.805	1 H1-1a
67	M418	2L3x4x3/8x3/8	.669	22.569	2	.005	22.569	Y	9	61.48	107.111	12.805	1 H1-1a
68	M426	2L3x4x3/8x3/8	.669	22.569	6	.005	22.569	Y	7	61.48	107.111	12.805	1 H1-1a
69	M448	2L3x4x3/8x3/8	.811	22.569	8	.005	22.569	Y	7	61.48	107.111	12.805	1 H1-1a
70	M456	2L3x4x3/8x3/8	.812	22.569	4	.005	22.569	Y	4	61.48	107.111	12.805	1 H1-1a
71	M465	2L3x4x3/8x3/8	.824	22.569	6	.005	22.569	Y	6	61.48	107.111	12.805	1 H1-1a
72	M473	2L3x4x3/8x3/8	.823	22.569	2	.005	22.569	Y	3	61.48	107.111	12.805	1 H1-1a
73	M482	2L3x4x3/8x3/8	.740	22.569	4	.005	22.569	Y	9	61.48	107.111	12.805	1 H1-1a
74	M490	2L3x4x3/8x3/8	.740	22.569	8	.005	22.569	Y	9	61.48	107.111	12.805	1 H1-1a
75	M499	2L3x4x3/8x3/8	.763	22.569	2	.005	22.569	Y	9	61.48	107.111	12.805	1 H1-1a
76	M507	2L3x4x3/8x3/8	.763	22.569	6	.005	22.569	Y	6	61.48	107.111	12.805	1 H1-1a
77	M529	2L3x4x1/2x3/8	.730	5.015	8	.005	22.569	Y	7	78.844	140.12	17.163	1 H1-1a
78	M537	2L3x4x1/2x3/8	.732	5.015	4	.005	22.569	Y	5	78.844	140.12	17.163	1 H1-1a
79	M546	2L3x4x1/2x3/8	.741	5.329	6	.005	22.569	Y	6	78.844	140.12	17.163	1 H1-1a
80	M554	2L3x4x1/2x3/8	.739	5.015	2	.005	22.569	Y	3	78.844	140.12	17.163	1 H1-1a
81	M563	2L3x4x1/2x3/8	.669	5.015	4	.005	22.569	Y	3	78.844	140.12	17.163	1 H1-1a
82	M571	2L3x4x1/2x3/8	.668	5.015	8	.005	22.569	Y	9	78.844	140.12	17.163	1 H1-1a
83	M580	2L3x4x1/2x3/8	.688	5.015	2	.005	22.569	Y	9	78.844	140.12	17.163	1 H1-1a
84	M588	2L3x4x1/2x3/8	.689	5.015	6	.005	22.569	Y	7	78.844	140.12	17.163	1 H1-1a
85	M610	2L3x4x1/2x3/8	.807	5.329	8	.005	22.569	Y	7	78.844	140.12	17.163	1 H1-1a
86	M618	2L3x4x1/2x3/8	.809	5.329	4	.005	22.569	Y	14	78.844	140.12	17.163	1 H1-1a
87	M627	2L3x4x1/2x3/8	.821	5.329	6	.005	22.569	Y	14	78.844	140.12	17.163	1 H1-1a
88	M635	2L3x4x1/2x3/8	.819	5.329	2	.005	22.569	Y	3	78.844	140.12	17.163	1 H1-1a
89	M644	2L3x4x1/2x3/8	.740	5.329	4	.005	22.569	Y	3	78.844	140.12	17.163	1 H1-1a
90	M652	2L3x4x1/2x3/8	.739	5.329	8	.005	22.569	Y	9	78.844	140.12	17.163	1 H1-1a
91	M661	2L3x4x1/2x3/8	.762	5.329	2	.005	22.569	Y	9	78.844	140.12	17.163	1 H1-1a
92	M669	2L3x4x1/2x3/8	.764	5.329	6	.005	22.569	Y	7	78.844	140.12	17.163	1 H1-1a
93	M691	2L4x4x1/2x3/8	.747	6.872	7	.002	6.872	Y	3	103.043	161.677	17.309	1 H1-1a
94	M701	2L4x4x1/2x3/8	.713	6.872	5	.002	6.872	Y	9	103.043	161.677	17.309	1 H1-1a
95	M712	2L4x4x1/2x3/8	.769	6.821	6	.002	0	Y	5	103.67	161.677	17.309	1 H1-1a
96	M722	2L4x4x1/2x3/8	.789	6.821	3	.002	13.642	Y	3	103.67	161.677	17.309	1 H1-1a
97	M733	2L4x4x1/2x3/8	.661	6.872	3	.002	6.872	Y	7	103.043	161.677	17.309	1 H1-1a
98	M743	2L4x4x1/2x3/8	.700	6.872	9	.002	6.872	Y	5	103.043	161.677	17.309	1 H1-1a
99	M754	2L4x4x1/2x3/8	.751	6.821	9	.002	0	Y	9	103.67	161.677	17.309	1 H1-1a
100	M764	2L4x4x1/2x3/8	.719	6.821	6	.002	0	Y	7	103.67	161.677	17.309	1 H1-1a
101	M5	W12X26	.068	12.667	16	.009	0	Y	11	96.306	164.91	14.677	1.... H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

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

Member	Shape	Code Check	Locftl	LC Shear C...	Locftl	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eon
102	M6												
103	M6	.068	12.667	13	.009	25.334	y 17	96.306	164.91	14.677	61.782	1...	H1-1b
104	M7	.069	12.667	11	.009	0	y 15	96.306	164.91	14.677	61.843	1...	H1-1b
105	M8	.069	12.667	17	.009	25.334	y 13	96.306	164.91	14.677	61.859	1...	H1-1b
106	M1212	.154	41.334	7	.012	0	y 9	27.859	139.904	10.958	46.707	2...	H1-1b
107	M1213	.152	0	3	.012	41.334	y 9	27.859	139.904	10.958	46.707	2...	H1-1b
108	M1214	.154	0	9	.011	41.334	y 7	27.859	139.904	10.958	46.707	2...	H1-1b
109	M1215	.152	41.334	9	.011	0	y 3	27.859	139.904	10.958	46.707	2...	H1-1b
110	M123	.474	8.375	4	.015	25.125	y 14	22.95	42.898	2.687	1.54	1	H1-1a
111	M140	.434	25.125	6	.015	25.125	y 12	22.95	42.898	2.687	1.54	1	H1-1a
112	M157	.389	8.375	8	.015	25.125	y 18	22.95	42.898	2.687	1.54	1	H1-1a
113	M174	.453	25.125	2	.019	25.125	y 16	22.95	42.898	2.687	1.54	1	H1-1a
114	M204	.684	8.375	4	.015	25.125	y 14	22.95	42.898	2.687	1.54	1	H1-1a
115	M221	.653	25.125	6	.015	25.125	y 12	22.95	42.898	2.687	1.54	1	H1-1a
116	M238	.581	8.375	8	.015	25.125	y 18	22.95	42.898	2.687	1.54	1	H1-1a
117	M255	.653	29.313	2	.019	25.125	y 16	22.95	42.898	2.687	2.464	1	H1-1a
118	M285	.840	4.188	4	.015	25.125	y 14	22.95	42.898	2.687	2.464	1	H1-1a
119	M302	.813	17.099	6	.015	25.125	y 12	22.95	42.898	2.687	1.54	1	H1-1a
120	M319	.722	8.375	8	.015	25.125	y 18	22.95	42.898	2.687	1.54	1	H1-1a
121	M336	.797	29.313	2	.019	25.125	y 16	22.95	42.898	2.687	2.464	1	H1-1a
122	M366	.530	4.188	4	.017	25.125	y 15	44.67	82.778	5.511	4.656	1	H1-1a
123	M383	.508	17.099	6	.016	25.125	y 13	44.67	82.778	5.511	2.91	1	H1-1a
124	M400	.453	16.401	8	.016	25.125	y 18	44.67	82.778	5.511	2.91	1	H1-1a
125	M417	.501	29.313	2	.019	25.125	y 16	44.67	82.778	5.511	4.656	1	H1-1a
126	M447	.604	4.188	4	.017	25.125	y 14	44.67	82.778	5.511	4.656	1	H1-1a
127	M464	.580	17.099	6	.017	25.125	y 12	44.67	82.778	5.511	2.91	1	H1-1a
128	M481	.520	16.401	8	.017	25.125	y 18	44.67	82.778	5.511	2.91	1	H1-1a
129	M498	.568	29.313	2	.019	25.125	y 16	44.67	82.778	5.511	4.656	1	H1-1a
130	M528	.681	4.188	4	.017	25.125	y 15	44.67	82.778	5.511	4.656	1	H1-1a
131	M545	.660	17.099	6	.017	25.125	y 13	44.67	82.778	5.511	2.91	1	H1-1a
132	M562	.593	16.401	8	.017	25.125	y 18	44.67	82.778	5.511	2.91	1	H1-1a
133	M579	.640	29.313	2	.019	25.125	y 16	44.67	82.778	5.511	4.656	1	H1-1a
134	M609	.747	4.188	4	.017	25.125	y 14	44.67	82.778	5.511	4.656	1	H1-1a
135	M626	.725	17.099	6	.017	25.125	y 12	44.67	82.778	5.511	2.91	1	H1-1a
136	M643	.649	16.401	8	.017	25.125	y 18	44.67	82.778	5.511	2.91	1	H1-1a
137	M660	.697	29.313	2	.019	25.125	y 16	44.67	82.778	5.511	4.656	1	H1-1a
138	M690	.562	16.75	7	.005	8.375	y 17	61.27	118.563	10.211	3.848	1	H1-1a
139	M711	.548	16.75	3	.004	25.125	y 12	61.27	118.563	10.211	3.848	1	H1-1a
140	M732	.527	16.75	9	.004	25.125	y 16	61.27	118.563	10.211	3.848	1	H1-1a
141	M753	.517	29.313	9	.005	25.125	y 16	61.27	118.563	10.211	6.157	1	H1-1a
142	M1180	.025	4.188	3	.002	8.375	y 2	44.675	83.21	5.46	4.625	1	H1-1b
143	M1181	.025	4.188	5	.002	8.375	y 4	44.675	83.21	5.46	4.625	1	H1-1b

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Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
143	M1183	.025	4.188	7	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
144	M1184	.025	4.188	7	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
145	M1186	.025	4.188	9	.002	8.375	Y	6	44.675	83.21	4.625	1	H1-1b
146	M1187	.025	4.188	3	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
147	M1150	.025	4.188	3	.002	0	Y	6	44.675	83.21	4.625	1	H1-1b
148	M1151	.025	4.188	9	.002	8.375	Y	4	44.675	83.21	4.625	1	H1-1b
149	M1153	.025	4.188	7	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
150	M1154	.025	4.188	7	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
151	M1156	.025	4.188	5	.002	0	Y	2	44.675	83.21	4.625	1	H1-1b
152	M1157	.025	4.188	3	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
153	M1120A	.025	4.188	3	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
154	M1121A	.025	4.188	9	.002	8.375	Y	4	44.675	83.21	4.625	1	H1-1b
155	M1123A	.025	4.188	7	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
156	M1124A	.025	4.188	7	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
157	M1126	.025	4.188	7	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
158	M1127	.025	4.188	5	.002	0	Y	2	44.675	83.21	4.625	1	H1-1b
159	M1104A	.025	4.188	3	.002	8.375	Y	8	44.675	83.21	4.625	1	H1-1b
160	M1105	.025	4.188	3	.002	0	Y	6	44.675	83.21	4.625	1	H1-1b
161	M1108	.025	4.188	9	.002	8.375	Y	4	44.675	83.21	4.625	1	H1-1b
162	M1109	.025	4.188	7	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
163	M1112A	.025	4.188	7	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
164	M1113A	.025	4.188	5	.002	0	Y	2	44.675	83.21	4.625	1	H1-1b
165	M1102	.025	4.188	3	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
166	M1103	.025	4.188	3	.002	0	Y	6	44.675	83.21	4.625	1	H1-1b
167	M1106	.025	4.188	9	.002	8.375	Y	4	44.675	83.21	4.625	1	H1-1b
168	M1107A	.025	4.188	7	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
169	M1110A	.025	4.188	7	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
170	M1111A	.025	4.188	5	.002	0	Y	2	44.675	83.21	4.625	1	H1-1b
171	M1046	.025	4.188	3	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
172	M1047	.025	4.188	9	.002	8.375	Y	4	44.675	83.21	4.625	1	H1-1b
173	M1051	.025	4.188	7	.002	8.375	Y	4	44.675	83.21	4.625	1	H1-1b
174	M1052	.025	4.188	7	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
175	M1056	.025	4.188	5	.002	8.375	Y	2	44.675	83.21	4.625	1	H1-1b
176	M1057	.025	4.188	3	.002	0	Y	4	44.675	83.21	4.625	1	H1-1b
177	M1061	.025	4.188	7	.002	8.375	Y	7	44.675	83.21	4.625	1	H1-1b
178	M1062	.025	4.188	7	.002	0	Y	2	44.675	83.21	4.625	1	H1-1b
179	M1176	.025	4.188	3	.002	0	Y	2	44.675	83.21	4.625	1	H1-1b
180	M1177	.032	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1	H1-1b
181	M1178	.013	2.961	7	.001	0	Y	5	60.97	83.21	4.625	1	H1-1b
182	M1146	.032	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1	H1-1b
183	M1147	.014	2.961	7	.001	0	Y	5	60.97	83.21	4.625	1	H1-1b

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	Member	Shape	Code Check	Locfitl	LC Shear C...	Locfitl	Dir	LC	Pnc/om [k]	Mnvw/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
184	M1148	LL3x2.5x6x3	.032	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
185	M1116A	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
186	M1117A	LL3x2.5x6x3	.014	2.961	7	.001	0	Y	5	60.97	83.21	4.625	1 H1-1b
187	M1118A	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
188	M1098	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
189	M1099	LL3x2.5x6x3	.014	2.961	7	.001	0	Y	5	60.97	83.21	4.625	1 H1-1b
190	M1100	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
191	M1068	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
192	M1069	LL3x2.5x6x3	.014	2.961	7	.001	0	Y	9	60.97	83.21	4.625	1 H1-1b
193	M1070	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
194	M1036	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
195	M1037	LL3x2.5x6x3	.014	2.961	7	.001	0	Y	9	60.97	83.21	4.625	1 H1-1b
196	M1038	LL3x2.5x6x3	.033	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
197	M1008	LL3x2.5x6x3	.032	4.682	7	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
198	M1009	LL3x2.5x6x3	.014	2.961	7	.001	0	Y	9	60.97	83.21	4.625	1 H1-1b
199	M1010	LL3x2.5x6x3	.032	4.682	3	.002	0	Y	1	38.241	83.21	4.625	1 H1-1b
200	M971	LL3x2.5x6x3	.032	2.961	3	.001	0	Y	2	60.97	83.21	4.625	1 H1-1b
201	M972	LL3x2.5x6x3	.061	4.682	3	.002	0	Y	12	68.512	83.21	4.625	1 H1-1b
202	M973	LL3x2.5x6x3	.061	4.682	3	.002	0	Y	6	68.512	83.21	4.625	1 H1-1b
203	M974	LL3x2.5x6x3	.003	1.481	3	.001	0	Y	5	75.961	83.21	4.625	1 H1-1b
204	M1205	W8X13	.072	8.375	15	.004	0	Y	4	10.157	82.778	8.855	1 H1-1b
205	M1207	W8X13	.072	8.375	13	.004	0	Y	2	10.157	82.778	8.855	1 H1-1b
206	M1209	W8X13	.072	8.375	11	.004	16.75	Y	4	10.157	82.778	8.855	1 H1-1b
207	M1211	W8X13	.071	8.375	17	.004	0	Y	2	10.157	82.778	8.863	1 H1-1b
208	M1188	LL2.5x2.5x3x3	.224	8.375	15	.006	16.75	Y	8	15.832	38.802	1.696	1 H1-1b
209	M1192	LL2.5x2.5x3x3	.224	8.375	17	.006	0	Y	6	15.832	38.802	1.696	1 H1-1b
210	M1196	LL2.5x2.5x3x3	.225	8.375	3	.006	16.75	Y	7	15.832	38.802	1.696	1 H1-1b
211	M1200	LL2.5x2.5x3x3	.225	8.375	3	.006	0	Y	7	15.832	38.802	1.696	1 H1-1b
212	M1158	LL2.5x2.5x3x3	.224	8.375	7	.006	0	Y	7	15.832	38.802	1.696	1 H1-1b
213	M1162	LL2.5x2.5x3x3	.224	8.375	7	.006	16.75	Y	7	15.832	38.802	1.696	1 H1-1b
214	M1166	LL2.5x2.5x3x3	.227	8.375	3	.006	16.75	Y	7	15.832	38.802	1.696	1 H1-1b
215	M1170	LL2.5x2.5x3x3	.227	8.375	3	.006	0	Y	7	15.832	38.802	1.696	1 H1-1b
216	M1128	LL2.5x2.5x3x3	.225	8.375	7	.006	0	Y	7	15.832	38.802	1.696	1 H1-1b
217	M1132	LL2.5x2.5x3x3	.225	8.375	7	.006	16.75	Y	7	15.832	38.802	1.696	1 H1-1b
218	M1136	LL2.5x2.5x3x3	.228	8.375	3	.006	16.75	Y	7	15.832	38.802	1.696	1 H1-1b
219	M1140	LL2.5x2.5x3x3	.228	8.375	3	.006	0	Y	7	15.832	38.802	1.696	1 H1-1b
220	M1110	LL2.5x2.5x3x3	.220	8.375	15	.006	16.75	Y	9	15.832	38.802	1.696	1 H1-1b
221	M1114	LL2.5x2.5x3x3	.220	8.375	17	.006	0	Y	5	15.832	38.802	1.696	1 H1-1b
222	M1118	LL2.5x2.5x3x3	.223	8.375	3	.006	16.75	Y	7	15.832	38.802	1.696	1 H1-1b
223	M1122	LL2.5x2.5x3x3	.223	8.375	3	.006	0	Y	7	15.832	38.802	1.696	1 H1-1b
224	M1080	LL2.5x2.5x3x3	.220	8.375	15	.006	16.75	Y	9	15.832	38.802	1.696	1 H1-1b

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

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pncz/om [k]	Pnt/om [k]	Mnyz/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
225	M1084	LL2.5x2.5x3x3	.220	8.375	17	.006	0	15.832	38.802	2.635	1.696	1...	H1-1b
226	M1088	LL2.5x2.5x3x3	.223	8.375	3	.006	16.75	15.832	38.802	2.635	1.696	1...	H1-1b
227	M1092	LL2.5x2.5x3x3	.223	8.375	3	.006	0	15.832	38.802	2.635	1.696	1...	H1-1b
228	M1042	LL2.5x2.5x3x3	.224	8.375	3	.006	0	15.832	38.802	2.635	1.696	1...	H1-1b
229	M1043	LL2.5x2.5x3x3	.221	8.375	7	.006	16.75	15.832	38.802	2.635	1.696	1...	H1-1b
230	M1044	LL2.5x2.5x3x3	.221	8.375	7	.006	0	15.832	38.802	2.635	1.696	1...	H1-1b
231	M1045	LL2.5x2.5x3x3	.224	8.375	3	.006	16.75	15.832	38.802	2.635	1.696	1...	H1-1b
232	M1012	LL2.5x2.5x3x3	.220	8.375	4	.006	16.75	15.832	38.802	2.635	1.696	1...	H1-1b
233	M1018	LL2.5x2.5x3x3	.220	8.375	2	.006	0	15.832	38.802	2.635	1.696	1...	H1-1b
234	M1024	LL2.5x2.5x3x3	.220	8.375	2	.006	16.75	15.832	38.802	2.635	1.696	1...	H1-1b
235	M1030	LL2.5x2.5x3x3	.221	8.375	13	.006	0	15.832	38.802	2.635	1.696	1...	H1-1b
236	M191	2L3x2 1/2x3/8x3/8	.157	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
237	M192	2L3x2 1/2x3/8x3/8	.158	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
238	M193	2L3x2 1/2x3/8x3/8	.157	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
239	M194	2L3x2 1/2x3/8x3/8	.162	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
240	M272	2L3x2 1/2x3/8x3/8	.156	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
241	M273	2L3x2 1/2x3/8x3/8	.156	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
242	M274	2L3x2 1/2x3/8x3/8	.156	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	1.9	H1-1b
243	M275	2L3x2 1/2x3/8x3/8	.161	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
244	M353	2L3x2 1/2x3/8x3/8	.158	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
245	M354	2L3x2 1/2x3/8x3/8	.158	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
246	M355	2L3x2 1/2x3/8x3/8	.158	11.844	16	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
247	M356	2L3x2 1/2x3/8x3/8	.169	11.844	7	.008	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
248	M434	2L3x2 1/2x3/8x3/8	.155	11.844	15	.015	11.844	60.809	82.778	5.511	2.91	1...	H1-1b
249	M435	2L3x2 1/2x3/8x3/8	.156	11.844	12	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
250	M436	2L3x2 1/2x3/8x3/8	.155	11.844	16	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
251	M437	2L3x2 1/2x3/8x3/8	.160	11.844	16	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
252	M515	2L3x2 1/2x3/8x3/8	.156	11.844	15	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
253	M516	2L3x2 1/2x3/8x3/8	.158	11.844	12	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
254	M517	2L3x2 1/2x3/8x3/8	.156	11.844	16	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
255	M518	2L3x2 1/2x3/8x3/8	.162	11.844	16	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
256	M596	2L3x2 1/2x3/8x3/8	.157	11.844	16	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
257	M597	2L3x2 1/2x3/8x3/8	.158	11.844	12	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
258	M598	2L3x2 1/2x3/8x3/8	.157	11.844	12	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
259	M599	2L3x2 1/2x3/8x3/8	.163	11.844	7	.015	11.844	60.809	82.778	5.511	2.91	1...	H1-1b
260	M677	2L3x2 1/2x3/8x3/8	.158	11.844	12	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
261	M678	2L3x2 1/2x3/8x3/8	.159	11.844	12	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
262	M679	2L3x2 1/2x3/8x3/8	.158	11.844	12	.015	11.844	60.809	82.778	5.511	2.91	2...	H1-1b
263	M680	2L3x2 1/2x3/8x3/8	.168	11.844	7	.015	11.844	60.809	82.778	5.511	2.91	1...	H1-1b
264	M1189	LL2.5x2.5x3x3	.032	4.188	16	.002	8.375	15.832	38.802	2.635	1.696	1	H1-1b
265	M1190	LL2.5x2.5x3x3	.017	2.961	7	.001	5.922	24.574	38.802	2.635	1.696	1	H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
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Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)

Member		Shape	Code Check		Locfit	LC Shear C...	Locfit	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnv/om [k-ft]	Mnz/om [k-ft]	Cb	Ean
266	M1191	LL2.5x2.5x3x3	.016		2.961	3	.001	0	Y	7	24.574	38.802	2.635	1.696	1 H1-1b
267	M1193	LL2.5x2.5x3x3	.032		4.188	16	.002	8.375	Y	4	15.832	38.802	2.635	1.696	1 H1-1b
268	M1194	LL2.5x2.5x3x3	.016		2.961	3	.001	0	Y	7	24.574	38.802	2.635	1.696	1 H1-1b
269	M1195	LL2.5x2.5x3x3	.017		2.961	7	.001	5.922	Y	5	24.574	38.802	2.635	1.696	1 H1-1b
270	M1197	LL2.5x2.5x3x3	.032		4.188	3	.002	8.375	Y	2	15.832	38.802	2.635	1.696	1 H1-1b
271	M1198	LL2.5x2.5x3x3	.017		2.961	7	.001	5.922	Y	5	24.574	38.802	2.635	1.696	1 H1-1b
272	M1199	LL2.5x2.5x3x3	.016		2.961	3	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
273	M1201	LL2.5x2.5x3x3	.032		4.188	3	.002	8.375	Y	8	15.832	38.802	2.635	1.696	1 H1-1b
274	M1202	LL2.5x2.5x3x3	.016		2.961	3	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
275	M1203	LL2.5x2.5x3x3	.017		2.961	7	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
276	M1159	LL2.5x2.5x3x3	.032		4.188	16	.002	8.375	Y	2	15.832	38.802	2.635	1.696	1 H1-1b
277	M1160	LL2.5x2.5x3x3	.017		2.961	3	.001	5.922	Y	7	24.574	38.802	2.635	1.696	1 H1-1b
278	M1161	LL2.5x2.5x3x3	.017		2.961	7	.001	0	Y	9	24.574	38.802	2.635	1.696	1 H1-1b
279	M1163	LL2.5x2.5x3x3	.032		4.188	16	.002	8.375	Y	8	15.832	38.802	2.635	1.696	1 H1-1b
280	M1164	LL2.5x2.5x3x3	.017		2.961	7	.001	0	Y	5	24.574	38.802	2.635	1.696	1 H1-1b
281	M1165	LL2.5x2.5x3x3	.017		2.961	3	.001	0	Y	3	24.574	38.802	2.635	1.696	1 H1-1b
282	M1167	LL2.5x2.5x3x3	.032		4.188	3	.002	8.375	Y	6	15.832	38.802	2.635	1.696	1 H1-1b
283	M1168	LL2.5x2.5x3x3	.017		2.961	3	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
284	M1169	LL2.5x2.5x3x3	.017		2.961	7	.001	0	Y	5	24.574	38.802	2.635	1.696	1 H1-1b
285	M1171	LL2.5x2.5x3x3	.032		4.188	3	.002	8.375	Y	4	15.832	38.802	2.635	1.696	1 H1-1b
286	M1172	LL2.5x2.5x3x3	.017		2.961	7	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
287	M1173	LL2.5x2.5x3x3	.017		2.961	3	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
288	M1129	LL2.5x2.5x3x3	.032		4.188	16	.002	8.375	Y	6	15.832	38.802	2.635	1.696	1 H1-1b
289	M1130	LL2.5x2.5x3x3	.017		2.961	7	.001	5.922	Y	9	24.574	38.802	2.635	1.696	1 H1-1b
290	M1131	LL2.5x2.5x3x3	.017		2.961	3	.001	0	Y	7	24.574	38.802	2.635	1.696	1 H1-1b
291	M1133	LL2.5x2.5x3x3	.032		4.188	16	.002	8.375	Y	4	15.832	38.802	2.635	1.696	1 H1-1b
292	M1134	LL2.5x2.5x3x3	.017		2.961	3	.001	0	Y	7	24.574	38.802	2.635	1.696	1 H1-1b
293	M1135	LL2.5x2.5x3x3	.017		2.961	7	.001	5.922	Y	5	24.574	38.802	2.635	1.696	1 H1-1b
294	M1137	LL2.5x2.5x3x3	.032		4.188	3	.002	8.375	Y	2	15.832	38.802	2.635	1.696	1 H1-1b
295	M1138	LL2.5x2.5x3x3	.017		2.961	7	.001	5.922	Y	5	24.574	38.802	2.635	1.696	1 H1-1b
296	M1139	LL2.5x2.5x3x3	.017		2.961	3	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
297	M1141	LL2.5x2.5x3x3	.032		4.188	3	.002	8.375	Y	7	15.832	38.802	2.635	1.696	1 H1-1b
298	M1142	LL2.5x2.5x3x3	.017		2.961	3	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
299	M1143	LL2.5x2.5x3x3	.017		2.961	7	.001	0	Y	1	24.574	38.802	2.635	1.696	1 H1-1b
300	M1111	LL2.5x2.5x3x3	.032		4.188	16	.002	8.375	Y	5	15.832	38.802	2.635	1.696	1 H1-1b
301	M1112	LL2.5x2.5x3x3	.016		2.961	7	.001	5.922	Y	9	24.574	38.802	2.635	1.696	1 H1-1b
302	M1113	LL2.5x2.5x3x3	.016		2.961	3	.001	0	Y	7	24.574	38.802	2.635	1.696	1 H1-1b
303	M1115	LL2.5x2.5x3x3	.032		4.188	16	.002	8.375	Y	3	15.832	38.802	2.635	1.696	1 H1-1b
304	M1116	LL2.5x2.5x3x3	.016		2.961	3	.001	0	Y	6	24.574	38.802	2.635	1.696	1 H1-1b
305	M1117	LL2.5x2.5x3x3	.016		2.961	7	.001	5.922	Y	5	24.574	38.802	2.635	1.696	1 H1-1b
306	M1119	LL2.5x2.5x3x3	.032		4.188	3	.002	8.375	Y	2	15.832	38.802	2.635	1.696	1 H1-1b

Company : GPD Group
Designer : awestrump
Job Number : 2012867.11

Nov 5, 2012
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TAG0053 CHESHIRE

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

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mhwy/om [k-ft]	Mhzz/om [k-ft]	Cb	Ean
307*	LL2.5x2.5x3x3	.016	2.961	7 .001	5.922	Y	5	24.574	38.802	2.635	1.696	1	H1-1b
308	LL2.5x2.5x3x3	.016	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
309	LL2.5x2.5x3x3	.032	4.188	3 .002	8.375	Y	7	15.832	38.802	2.635	1.696	1	H1-1b
310	LL2.5x2.5x3x3	.016	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
311	LL2.5x2.5x3x3	.016	2.961	7 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
312	LL2.5x2.5x3x3	.017	2.961	7 .001	5.922	Y	9	24.574	38.802	2.635	1.696	1	H1-1b
313	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	7	24.574	38.802	2.635	1.696	1	H1-1b
314	LL2.5x2.5x3x3	.032	4.188	16 .002	8.375	Y	5	15.832	38.802	2.635	1.696	1	H1-1b
315	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	7	24.574	38.802	2.635	1.696	1	H1-1b
316	LL2.5x2.5x3x3	.017	2.961	7 .001	5.922	Y	5	24.574	38.802	2.635	1.696	1	H1-1b
317	LL2.5x2.5x3x3	.032	4.188	16 .002	8.375	Y	3	15.832	38.802	2.635	1.696	1	H1-1b
318	LL2.5x2.5x3x3	.017	2.961	7 .001	5.922	Y	5	24.574	38.802	2.635	1.696	1	H1-1b
319	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
320	LL2.5x2.5x3x3	.032	4.188	3 .002	8.375	Y	2	15.832	38.802	2.635	1.696	1	H1-1b
321	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
322	LL2.5x2.5x3x3	.017	2.961	7 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
323	LL2.5x2.5x3x3	.032	4.188	3 .002	8.375	Y	7	15.832	38.802	2.635	1.696	1	H1-1b
324	LL2.5x2.5x3x3	.032	4.188	7 .002	8.375	Y	2	15.832	38.802	2.635	1.696	1	H1-1b
325	LL2.5x2.5x3x3	.017	2.961	3 .001	5.922	Y	7	24.574	38.802	2.635	1.696	1	H1-1b
326	LL2.5x2.5x3x3	.017	2.961	7 .001	0	Y	9	24.574	38.802	2.635	1.696	1	H1-1b
327	LL2.5x2.5x3x3	.032	4.188	7 .002	8.375	Y	7	15.832	38.802	2.635	1.696	1	H1-1b
328	LL2.5x2.5x3x3	.017	2.961	7 .001	0	Y	5	24.574	38.802	2.635	1.696	1	H1-1b
329	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	3	24.574	38.802	2.635	1.696	1	H1-1b
330	LL2.5x2.5x3x3	.032	4.188	3 .002	8.375	Y	5	15.832	38.802	2.635	1.696	1	H1-1b
331	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
332	LL2.5x2.5x3x3	.017	2.961	7 .001	0	Y	5	24.574	38.802	2.635	1.696	1	H1-1b
333	LL2.5x2.5x3x3	.032	4.188	3 .002	8.375	Y	3	15.832	38.802	2.635	1.696	1	H1-1b
334	LL2.5x2.5x3x3	.017	2.961	7 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
335	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
336	LL2.5x2.5x3x3	.032	4.188	16 .002	8.375	Y	6	15.832	38.802	2.635	1.696	1	H1-1b
337	LL2.5x2.5x3x3	.017	2.961	7 .001	5.922	Y	2	24.574	38.802	2.635	1.696	1	H1-1b
338	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	7	24.574	38.802	2.635	1.696	1	H1-1b
339	LL2.5x2.5x3x3	.032	4.188	16 .002	8.375	Y	3	15.832	38.802	2.635	1.696	1	H1-1b
340	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	6	24.574	38.802	2.635	1.696	1	H1-1b
341	LL2.5x2.5x3x3	.017	2.961	7 .001	5.922	Y	5	24.574	38.802	2.635	1.696	1	H1-1b
342	LL2.5x2.5x3x3	.032	4.188	3 .002	8.375	Y	1	15.832	38.802	2.635	1.696	1	H1-1b
343	LL2.5x2.5x3x3	.017	2.961	7 .001	5.922	Y	4	24.574	38.802	2.635	1.696	1	H1-1b
344	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
345	LL2.5x2.5x3x3	.032	4.188	12 .002	8.375	Y	1	15.832	38.802	2.635	1.696	1	H1-1b
346	LL2.5x2.5x3x3	.017	2.961	3 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b
347	LL2.5x2.5x3x3	.017	2.961	7 .001	0	Y	1	24.574	38.802	2.635	1.696	1	H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
4:41 PM
Checked By:

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

	Member	Shape	Code Check	Locftl	LC Shear C...	Locftl	Dir	LC	Pnc/om [kl]	Pnt/om [kl]	Mnyv/om [k-ft]	Mnzz/om [k-ft]	Cb	Eon
348	M1	L6x6x1/2	.095	2.546	7	.076	14.377	y 3	93.555	123.952	3.534	20.183	1...	H2-1
349	M2	L6x6x1/2	.090	1.198	6	.076	14.377	z 9	93.555	123.952	3.534	20.193	1...	H2-1
350	M3	L6x6x1/2	.084	1.198	2	.074	14.377	y 7	93.555	123.952	3.534	20.193	1...	H2-1
351	M4	L6x6x1/2	.091	2.546	9	.073	14.377	z 5	93.555	123.952	3.534	20.174	1...	H2-1
352	M47	W6X25	.094	0	5	.018	12.5	y 7	139.341	158.228	15.377	33.952	1	H1-1b
353	M48	W6X25	.096	0	7	.017	12.5	y 5	139.341	158.228	15.377	33.952	1	H1-1b
354	M49	W6X25	.086	0	9	.017	12.5	y 3	139.341	158.228	15.377	33.952	1	H1-1b
355	M50	W6X25	.082	0	3	.017	12.5	y 9	139.341	158.228	15.377	33.952	1	H1-1b
356	M119	W6X25	.270	0	7	.026	18.75	y 7	139.341	158.228	15.377	33.952	1	H1-1a
357	M120	W6X25	.280	0	5	.027	18.75	y 5	139.341	158.228	15.377	33.952	1	H1-1a
358	M121	W6X25	.273	0	3	.025	18.75	y 3	139.341	158.228	15.377	33.952	1	H1-1a
359	M122	W6X25	.261	22.135	9	.026	18.75	y 9	139.341	158.228	15.377	33.952	1	H1-1a
360	M200	W6X25	.534	0	7	.038	6.25	y 7	139.341	158.228	15.377	33.952	1	H1-1a
361	M201	W6X25	.546	0	5	.039	6.25	y 5	139.341	158.228	15.377	33.952	1	H1-1a
362	M202	W6X25	.533	0	3	.037	6.25	y 3	139.341	158.228	15.377	33.952	1	H1-1a
363	M203	W6X25	.515	0	9	.037	6.25	y 9	139.341	158.228	15.377	33.952	1	H1-1a
364	M281	W8X40	.466	25	7	.031	6.25	y 7	235.032	252.216	33.234	71.497	1	H1-1a
365	M282	W8X40	.475	25	5	.032	6.25	y 5	235.032	252.216	33.234	71.497	1	H1-1a
366	M283	W8X40	.466	0	3	.030	6.25	y 3	235.032	252.216	33.234	71.497	1	H1-1a
367	M284	W8X40	.457	25	9	.030	6.25	y 9	235.032	252.216	33.234	71.497	1	H1-1a
368	M362	W8X40	.705	0	7	.054	6.25	y 7	235.032	252.216	33.234	71.497	1	H1-1a
369	M363	W8X40	.714	0	5	.056	6.25	y 5	235.032	252.216	33.234	71.497	1	H1-1a
370	M364	W8X40	.705	0	3	.054	6.25	y 3	235.032	252.216	33.234	71.497	1	H1-1a
371	M365	W8X40	.689	0	9	.053	6.25	y 9	235.032	252.216	33.234	71.497	1	H1-1a
372	M443	W10X54	.673	25	7	.052	6.25	y 7	325.473	340.599	56.228	119.641	1	H1-1a
373	M444	W10X54	.681	25	5	.054	6.25	y 5	325.473	340.599	56.228	119.641	1	H1-1a
374	M445	W10X54	.673	25	3	.052	6.25	y 3	325.473	340.599	56.228	119.641	1	H1-1a
375	M446	W10X54	.662	25	9	.051	6.25	y 9	325.473	340.599	56.228	119.641	1	H1-1a
376	M524	W10X60	.818	0	7	.077	6.25	y 7	362.732	379.401	62.874	134.012	1	H1-1a
377	M525	W10X60	.829	0	5	.079	6.25	y 5	362.732	379.401	62.874	134.012	1	H1-1a
378	M526	W10X60	.820	0	3	.077	6.25	y 3	362.732	379.401	62.874	134.012	1	H1-1a
379	M527	W10X60	.808	0	9	.076	6.25	y 9	362.732	379.401	62.874	134.012	1	H1-1a
380	M605	W10X68	.910	25	7	.072	6.25	y 7	412.497	431.138	72.036	153.234	1	H1-1a
381	M606	W10X68	.920	25	5	.073	6.25	y 5	412.497	431.138	72.036	153.234	1	H1-1a
382	M607	W10X68	.911	25	3	.072	6.25	y 3	412.497	431.138	72.036	153.234	1	H1-1a
383	M608	W10X68	.901	25	9	.071	6.25	y 9	412.497	431.138	72.036	153.234	1	H1-1a
384	M686	W12X79	1.094	0	7	.166	6.148	y 7	484.962	500.12	97.545	213.772	1	H1-1a
385	M687	W12X79	1.086	0	5	.171	6.148	y 5	484.962	500.12	97.545	213.772	1	H1-1a
386	M688	W12X79	1.036	0	3	.169	6.148	y 3	484.962	500.12	97.545	213.772	1	H1-1a
387	M689	W12X79	1.053	0	9	.166	6.148	y 9	484.962	500.12	97.545	213.772	1	H1-1a
388	M739A	L2.5X2.5X8	1.086	3.108	3	.001	0	y 3	14.939	48.503	1.235	2.904	1	H2-1

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
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Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mny/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
389	M740A	.869	3.55	4	.001	6.683	Y	13	48.503	1.235	2.893	1	H2-1
390	M743A	.875	3.133	9	.001	6.683	Y	18	48.503	1.235	2.893	1	H2-1
391	M744A	1.036	3.523	9	.001	6.631	Y	12	48.503	1.235	2.904	1	H2-1
392	M747A	.999	3.108	7	.001	0	Y	16	48.503	1.235	2.904	1	H2-1
393	M748A	.935	3.55	7	.001	6.683	Y	8	48.503	1.235	2.893	1	H2-1
394	M751A	.948	3.133	4	.001	6.683	Y	3	48.503	1.235	2.893	1	H2-1
395	M752A	1.060	3.523	5	.001	6.631	Y	5	48.503	1.235	2.893	1	H2-1
396	M56	.082	5.225	13	.004	0	Y	13	38.802	2.672	2.904	1	H2-1
397	M64	.082	5.225	17	.004	10.45	Y	13	38.802	2.672	1.737	1	H1-1b
398	M72	.082	5.225	11	.004	10.45	Y	18	38.802	2.672	1.737	1	H1-1b
399	M80	.082	5.225	15	.004	10.45	Y	12	38.802	2.672	1.737	1	H1-1b
400	M88	.081	5.225	17	.004	10.45	Y	18	38.802	2.672	1.737	1	H1-1b
401	M96	.081	5.225	13	.004	10.45	Y	13	38.802	2.672	1.737	1	H1-1b
402	M104	.081	5.225	15	.004	10.45	Y	16	38.802	2.672	1.737	1	H1-1b
403	M112	.081	5.225	11	.004	10.45	Y	14	38.802	2.672	1.737	1	H1-1b
404	M129	.080	5.225	13	.004	0	Y	15	38.802	2.672	1.737	1	H1-1b
405	M137	.080	5.225	17	.004	0	Y	18	38.802	2.672	1.737	1	H1-1b
406	M146	.080	5.225	12	.004	10.45	Y	12	38.802	2.672	1.737	1	H1-1b
407	M154	.080	5.225	15	.004	10.45	Y	14	38.802	2.672	1.737	1	H1-1b
408	M163	.080	5.225	18	.004	0	Y	18	38.802	2.672	1.737	1	H1-1b
409	M171	.080	5.225	14	.004	0	Y	12	38.802	2.672	1.737	1	H1-1b
410	M180	.080	5.225	14	.004	0	Y	15	38.802	2.672	1.737	1	H1-1b
411	M188	.080	5.225	18	.004	10.45	Y	12	38.802	2.672	1.737	1	H1-1b
412	M210	.080	5.225	12	.004	10.45	Y	14	38.802	2.672	1.737	1	H1-1b
413	M218	.080	5.225	17	.004	0	Y	16	38.802	2.672	1.737	1	H1-1b
414	M227	.080	5.225	11	.004	0	Y	14	38.802	2.672	1.737	1	H1-1b
415	M235	.081	5.225	15	.004	10.45	Y	10	38.802	2.672	1.737	1	H1-1b
416	M244	.080	5.225	17	.004	10.45	Y	16	38.802	2.672	1.737	1	H1-1b
417	M252	.080	5.225	14	.004	10.45	Y	12	38.802	2.672	1.737	1	H1-1b
418	M261	.080	5.225	15	.004	10.45	Y	15	38.802	2.672	1.737	1	H1-1b
419	M269	.080	5.225	11	.004	10.45	Y	11	38.802	2.672	1.737	1	H1-1b
420	M291	.078	5.225	18	.004	10.45	Y	13	38.802	2.672	1.737	1	H1-1b
421	M299	.078	5.225	14	.004	10.45	Y	15	38.802	2.672	1.737	1	H1-1b
422	M308	.078	5.225	14	.004	0	Y	11	38.802	2.672	1.737	1	H1-1b
423	M316	.078	5.225	18	.004	0	Y	15	38.802	2.672	1.737	1	H1-1b
424	M325	.078	5.225	13	.004	10.45	Y	18	38.802	2.672	1.737	1	H1-1b
425	M333	.079	5.225	16	.004	10.45	Y	14	38.802	2.672	1.737	1	H1-1b
426	M342	.079	5.225	12	.004	10.45	Y	14	38.802	2.672	1.737	1	H1-1b
427	M350	.078	5.225	15	.004	0	Y	12	38.802	2.672	1.737	1	H1-1b
428	M372	.078	5.116	16	.004	0	Y	10	38.802	2.672	1.737	1	H1-1b
429	M380	.079	5.116	14	.004	0	Y	18	38.802	2.672	1.737	1	H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

Nov 5, 2012
4:41 PM
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TAG0053 CHESHIRE

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

Member	Shape	Code Check	Locftl	LC Shear C...	Locftl	Dir	LC	Pnc/om [kl]	Pnt/om [kl]	Mnyv/om [k-ft]	Mnzz/om [k-ft]	Cb	Ean
430	M389	2L2 1/2x2 1/2x3/16x3/8	.079	5.116 14	.004	0	Y 11	11.332	38.802	2.672	1.737	1	H1-1b
431	M397	2L2 1/2x2 1/2x3/16x3/8	.078	5.225 16	.004	10.45	Y 15	11.332	38.802	2.672	1.737	1	H1-1b
432	M406	2L2 1/2x2 1/2x3/16x3/8	.078	5.225 16	.004	10.45	Y 13	11.332	38.802	2.672	1.737	1	H1-1b
433	M414	2L2 1/2x2 1/2x3/16x3/8	.078	5.225 14	.004	10.45	Y 13	11.332	38.802	2.672	1.737	1	H1-1b
434	M423	2L2 1/2x2 1/2x3/16x3/8	.078	5.225 14	.004	10.45	Y 15	11.332	38.802	2.672	1.737	1	H1-1b
435	M431	2L2 1/2x2 1/2x3/16x3/8	.078	5.225 12	.004	10.45	Y 17	11.332	38.802	2.672	1.737	1	H1-1b
436	M453	2L2 1/2x2 1/2x3/16x3/8	.087	5.116 15	.004	0	Y 13	11.538	38.802	2.672	1.737	1	H1-1b
437	M461	2L2 1/2x2 1/2x3/16x3/8	.088	5.116 15	.004	0	Y 17	11.538	38.802	2.672	1.737	1	H1-1b
438	M470	2L2 1/2x2 1/2x3/16x3/8	.088	5.116 13	.004	0	Y 15	11.538	38.802	2.672	1.737	1	H1-1b
439	M478	2L2 1/2x2 1/2x3/16x3/8	.086	5.116 13	.004	10.45	Y 16	11.538	38.802	2.672	1.737	1	H1-1b
440	M487	2L2 1/2x2 1/2x3/16x3/8	.086	5.116 11	.004	0	Y 18	11.538	38.802	2.672	1.737	1	H1-1b
441	M495	2L2 1/2x2 1/2x3/16x3/8	.084	5.116 11	.004	10.45	Y 14	11.538	38.802	2.672	1.737	1	H1-1b
442	M504	2L2 1/2x2 1/2x3/16x3/8	.084	5.116 17	.004	0	Y 17	11.538	38.802	2.672	1.737	1	H1-1b
443	M512	2L2 1/2x2 1/2x3/16x3/8	.086	5.116 17	.004	0	Y 16	11.538	38.802	2.672	1.737	1	H1-1b
444	M534	2L2 1/2x2 1/2x3/16x3/8	.095	5.116 16	.004	0	Y 10	11.562	38.802	2.672	1.737	1	H1-1b
445	M542	2L2 1/2x2 1/2x3/16x3/8	.097	5.116 14	.004	0	Y 18	11.562	38.802	2.672	1.737	1	H1-1b
446	M551	2L2 1/2x2 1/2x3/16x3/8	.097	5.116 14	.004	10.45	Y 11	11.562	38.802	2.672	1.737	1	H1-1b
447	M559	2L2 1/2x2 1/2x3/16x3/8	.095	5.116 12	.004	10.45	Y 13	11.562	38.802	2.672	1.737	1	H1-1b
448	M568	2L2 1/2x2 1/2x3/16x3/8	.093	5.116 12	.004	10.45	Y 18	11.562	38.802	2.672	1.737	1	H1-1b
449	M576	2L2 1/2x2 1/2x3/16x3/8	.092	5.116 18	.004	0	Y 12	11.562	38.802	2.672	1.737	1	H1-1b
450	M585	2L2 1/2x2 1/2x3/16x3/8	.092	5.116 18	.004	0	Y 16	11.562	38.802	2.672	1.737	1	H1-1b
451	M593	2L2 1/2x2 1/2x3/16x3/8	.094	5.116 16	.004	0	Y 18	11.562	38.802	2.672	1.737	1	H1-1b
452	M615	2L2 1/2x2 1/2x3/16x3/8	.095	5.116 15	.004	10.45	Y 13	11.585	38.802	2.672	1.737	1	H1-1b
453	M623	2L2 1/2x2 1/2x3/16x3/8	.096	5.116 15	.004	0	Y 15	11.585	38.802	2.672	1.737	1	H1-1b
454	M632	2L2 1/2x2 1/2x3/16x3/8	.090	5.116 14	.004	0	Y 14	11.585	38.802	2.672	1.737	1	H1-1b
455	M640	2L2 1/2x2 1/2x3/16x3/8	.089	5.116 12	.004	0	Y 15	11.585	38.802	2.672	1.737	1	H1-1b
456	M649	2L2 1/2x2 1/2x3/16x3/8	.094	5.116 11	.004	10.45	Y 16	11.585	38.802	2.672	1.737	1	H1-1b
457	M657	2L2 1/2x2 1/2x3/16x3/8	.091	5.116 11	.004	0	Y 12	11.585	38.802	2.672	1.737	1	H1-1b
458	M666	2L2 1/2x2 1/2x3/16x3/8	.086	5.116 18	.004	10.45	Y 16	11.585	38.802	2.672	1.737	1	H1-1b
459	M674	2L2 1/2x2 1/2x3/16x3/8	.089	5.116 16	.004	10.45	Y 12	11.585	38.802	2.672	1.737	1	H1-1b
460	M696	2L2 1/2x2 1/2x1/4x3/8	.122	5.076 7	.004	10.152	Y 12	16.828	51.305	3.58	2.271	1	H1-1b
461	M706	2L2 1/2x2 1/2x1/4x3/8	.128	5.076 5	.004	0	Y 10	16.828	51.305	3.58	2.271	1	H1-1b
462	M717	2L2 1/2x2 1/2x1/4x3/8	.107	5.127 14	.004	10.254	Y 14	16.467	51.305	3.58	2.271	1	H1-1b
463	M727	2L2 1/2x2 1/2x1/4x3/8	.103	5.127 12	.004	10.254	Y 15	16.467	51.305	3.58	2.271	1	H1-1b
464	M738	2L2 1/2x2 1/2x1/4x3/8	.128	5.076 3	.004	10.152	Y 12	16.828	51.305	3.58	2.271	1	H1-1b
465	M748	2L2 1/2x2 1/2x1/4x3/8	.124	5.076 9	.004	0	Y 13	16.828	51.305	3.58	2.271	1	H1-1b
466	M759	2L2 1/2x2 1/2x1/4x3/8	.103	5.127 9	.004	10.254	Y 16	16.467	51.305	3.58	2.271	1	H1-1b
467	M769	2L2 1/2x2 1/2x1/4x3/8	.105	5.127 7	.004	10.254	Y 18	16.467	51.305	3.58	2.271	1	H1-1b
468	M57	2L2 1/2x2 1/2x1/4x3/8	.111	5.116 14	.004	0	Y 16	14.371	51.305	3.58	2.271	1	H1-1b
469	M58	2L2 1/2x2 1/2x1/4x3/8	.034	3.683 17	.002	0	Y 12	26.463	51.305	3.58	2.271	1	H1-1b
470	M65	2L2 1/2x2 1/2x1/4x3/8	.111	5.116 16	.004	0	Y 16	14.371	51.305	3.58	2.271	1	H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
4:41 PM
Checked By:

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

Member	Shape	Code Check	Locfit	LC Shear C...	Locfit	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mny/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
471	M66	2L2 1/2x2 1/2x1/4x3/8	.034	3.683 13	.002	7.523	Y 14	26.463	51.305	3.58	2.271	1	H1-1b
472	M73	2L2 1/2x2 1/2x1/4x3/8	.110	5.116 12	.004	0	Y 16	14.371	51.305	3.58	2.271	1	H1-1b
473	M74	2L2 1/2x2 1/2x1/4x3/8	.034	3.683 15	.002	7.523	Y 11	26.463	51.305	3.58	2.271	1	H1-1b
474	M81	2L2 1/2x2 1/2x1/4x3/8	.109	5.116 14	.004	10.45	Y 12	14.371	51.305	3.58	2.271	1	H1-1b
475	M82	2L2 1/2x2 1/2x1/4x3/8	.034	3.683 12	.002	7.523	Y 16	26.463	51.305	3.58	2.271	1	H1-1b
476	M89	2L2 1/2x2 1/2x1/4x3/8	.109	5.116 18	.004	10.45	Y 12	14.371	51.305	3.58	2.271	1	H1-1b
477	M90	2L2 1/2x2 1/2x1/4x3/8	.033	3.683 13	.002	0	Y 18	26.463	51.305	3.58	2.271	1	H1-1b
478	M97	2L2 1/2x2 1/2x1/4x3/8	.110	5.116 12	.004	10.45	Y 18	14.371	51.305	3.58	2.271	1	H1-1b
479	M98	2L2 1/2x2 1/2x1/4x3/8	.033	3.683 17	.002	7.523	Y 13	26.463	51.305	3.58	2.271	1	H1-1b
480	M105	2L2 1/2x2 1/2x1/4x3/8	.110	5.116 16	.004	10.45	Y 15	14.371	51.305	3.58	2.271	1	H1-1b
481	M106	2L2 1/2x2 1/2x1/4x3/8	.033	3.683 18	.002	0	Y 15	26.463	51.305	3.58	2.271	1	H1-1b
482	M113	2L2 1/2x2 1/2x1/4x3/8	.111	5.116 18	.004	0	Y 14	14.371	51.305	3.58	2.271	1	H1-1b
483	M114	2L2 1/2x2 1/2x1/4x3/8	.033	3.683 15	.002	0	Y 15	26.463	51.305	3.58	2.271	1	H1-1b
484	M130	2L2 1/2x2 1/2x1/4x3/8	.089	5.116 13	.004	0	Y 16	14.371	51.305	3.58	2.271	1	H1-1b
485	M131	2L2 1/2x2 1/2x1/4x3/8	.028	3.683 17	.002	0	Y 14	26.463	51.305	3.58	2.271	1	H1-1b
486	M138	2L2 1/2x2 1/2x1/4x3/8	.088	5.116 17	.004	0	Y 13	14.371	51.305	3.58	2.271	1	H1-1b
487	M139	2L2 1/2x2 1/2x1/4x3/8	.028	3.683 13	.002	7.523	Y 11	26.463	51.305	3.58	2.271	1	H1-1b
488	M147	2L2 1/2x2 1/2x1/4x3/8	.088	5.116 11	.004	10.45	Y 14	14.371	51.305	3.58	2.271	1	H1-1b
489	M148	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 15	.002	7.523	Y 12	26.463	51.305	3.58	2.271	1	H1-1b
490	M155	2L2 1/2x2 1/2x1/4x3/8	.088	5.116 15	.004	10.45	Y 15	14.371	51.305	3.58	2.271	1	H1-1b
491	M156	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 11	.002	7.523	Y 11	26.463	51.305	3.58	2.271	1	H1-1b
492	M164	2L2 1/2x2 1/2x1/4x3/8	.087	5.116 17	.004	0	Y 12	14.371	51.305	3.58	2.271	1	H1-1b
493	M165	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 13	.002	0	Y 17	26.463	51.305	3.58	2.271	1	H1-1b
494	M172	2L2 1/2x2 1/2x1/4x3/8	.088	5.116 13	.004	10.45	Y 18	14.371	51.305	3.58	2.271	1	H1-1b
495	M173	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 17	.002	7.523	Y 16	26.463	51.305	3.58	2.271	1	H1-1b
496	M181	2L2 1/2x2 1/2x1/4x3/8	.088	5.116 15	.004	10.45	Y 15	14.371	51.305	3.58	2.271	1	H1-1b
497	M182	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 11	.002	7.523	Y 15	26.463	51.305	3.58	2.271	1	H1-1b
498	M189	2L2 1/2x2 1/2x1/4x3/8	.088	5.116 11	.004	0	Y 16	14.371	51.305	3.58	2.271	1	H1-1b
499	M190	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 15	.002	0	Y 11	26.463	51.305	3.58	2.271	1	H1-1b
500	M211	2L2 1/2x2 1/2x1/4x3/8	.085	5.116 12	.004	10.45	Y 17	14.371	51.305	3.58	2.271	1	H1-1b
501	M212	2L2 1/2x2 1/2x1/4x3/8	.028	3.683 16	.002	7.523	Y 12	26.463	51.305	3.58	2.271	1	H1-1b
502	M219	2L2 1/2x2 1/2x1/4x3/8	.084	5.116 17	.004	0	Y 13	14.371	51.305	3.58	2.271	1	H1-1b
503	M220	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 13	.002	7.523	Y 17	26.463	51.305	3.58	2.271	1	H1-1b
504	M228	2L2 1/2x2 1/2x1/4x3/8	.084	5.116 11	.004	10.45	Y 16	14.371	51.305	3.58	2.271	1	H1-1b
505	M229	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 15	.002	0	Y 11	26.463	51.305	3.58	2.271	1	H1-1b
506	M236	2L2 1/2x2 1/2x1/4x3/8	.085	5.116 16	.004	0	Y 12	14.371	51.305	3.58	2.271	1	H1-1b
507	M237	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 12	.002	0	Y 14	26.463	51.305	3.58	2.271	1	H1-1b
508	M245	2L2 1/2x2 1/2x1/4x3/8	.084	5.116 17	.004	0	Y 13	14.371	51.305	3.58	2.271	1	H1-1b
509	M246	2L2 1/2x2 1/2x1/4x3/8	.026	3.683 13	.002	0	Y 10	26.463	51.305	3.58	2.271	1	H1-1b
510	M253	2L2 1/2x2 1/2x1/4x3/8	.085	5.116 14	.004	10.45	Y 18	14.371	51.305	3.58	2.271	1	H1-1b
511	M254	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 18	.002	7.523	Y 10	26.463	51.305	3.58	2.271	1	H1-1b

Company : GPD Group
Designer : awesrum
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
4:41 PM
Checked By:

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

Member	Shape	Code Check	Locftl	LC Shear C...	Locftl	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnv/om [k-ft]	Mhzz/om [k-ft]	Cb	Eqn
512	M262	2L2 1/2x2 1/2x1/4x3/8	.085	5.116 14	.004	0	Y 11	14.371	51.305	3.58	2.271	1	H1-1b
513	M263	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 18	.002	0	Y 10	26.463	51.305	3.58	2.271	1	H1-1b
514	M270	2L2 1/2x2 1/2x1/4x3/8	.084	5.116 11	.004	10.45	Y 15	14.371	51.305	3.58	2.271	1	H1-1b
515	M271	2L2 1/2x2 1/2x1/4x3/8	.027	3.683 15	.002	7.523	Y 12	26.463	51.305	3.58	2.271	1	H1-1b
516	M292	2L2 1/2x2 1/2x1/4x3/8	.083	5.116 12	.004	0	Y 16	14.659	51.305	3.58	2.271	1	H1-1b
517	M293	2L2 1/2x2 1/2x1/4x3/8	.030	3.683 16	.002	0	Y 11	26.951	51.305	3.58	2.271	1	H1-1b
518	M300	2L2 1/2x2 1/2x1/4x3/8	.081	5.116 18	.004	0	Y 14	14.659	51.305	3.58	2.271	1	H1-1b
519	M301	2L2 1/2x2 1/2x1/4x3/8	.029	3.683 14	.002	7.523	Y 16	26.951	51.305	3.58	2.271	1	H1-1b
520	M309	2L2 1/2x2 1/2x1/4x3/8	.081	5.116 18	.004	10.45	Y 16	14.659	51.305	3.58	2.271	1	H1-1b
521	M310	2L2 1/2x2 1/2x1/4x3/8	.029	3.683 14	.002	0	Y 11	26.951	51.305	3.58	2.271	1	H1-1b
522	M317	2L2 1/2x2 1/2x1/4x3/8	.083	5.116 16	.004	0	Y 12	14.659	51.305	3.58	2.271	1	H1-1b
523	M318	2L2 1/2x2 1/2x1/4x3/8	.029	3.683 12	.002	7.523	Y 13	26.951	51.305	3.58	2.271	1	H1-1b
524	M326	2L2 1/2x2 1/2x1/4x3/8	.082	5.116 16	.004	0	Y 12	14.659	51.305	3.58	2.271	1	H1-1b
525	M327	2L2 1/2x2 1/2x1/4x3/8	.029	3.683 12	.002	0	Y 11	26.951	51.305	3.58	2.271	1	H1-1b
526	M334	2L2 1/2x2 1/2x1/4x3/8	.084	5.116 14	.004	0	Y 13	14.659	51.305	3.58	2.271	1	H1-1b
527	M335	2L2 1/2x2 1/2x1/4x3/8	.029	3.683 18	.002	0	Y 12	26.951	51.305	3.58	2.271	1	H1-1b
528	M343	2L2 1/2x2 1/2x1/4x3/8	.084	5.116 14	.004	10.45	Y 11	14.659	51.305	3.58	2.271	1	H1-1b
529	M344	2L2 1/2x2 1/2x1/4x3/8	.029	3.683 18	.002	7.523	Y 15	26.951	51.305	3.58	2.271	1	H1-1b
530	M351	2L2 1/2x2 1/2x1/4x3/8	.082	5.116 12	.004	10.45	Y 13	14.659	51.305	3.58	2.271	1	H1-1b
531	M352	2L2 1/2x2 1/2x1/4x3/8	.029	3.683 16	.002	0	Y 18	26.951	51.305	3.58	2.271	1	H1-1b
532	M373	2L2 1/2x2 1/2x1/4x3/8	.081	5.116 12	.004	10.45	Y 18	14.659	51.305	3.58	2.271	1	H1-1b
533	M374	2L2 1/2x2 1/2x1/4x3/8	.031	3.683 16	.002	0	Y 13	26.951	51.305	3.58	2.271	1	H1-1b
534	M381	2L2 1/2x2 1/2x1/4x3/8	.079	5.116 18	.004	0	Y 13	14.659	51.305	3.58	2.271	1	H1-1b
535	M382	2L2 1/2x2 1/2x1/4x3/8	.031	3.683 14	.002	0	Y 15	26.951	51.305	3.58	2.271	1	H1-1b
536	M390	2L2 1/2x2 1/2x1/4x3/8	.079	5.116 18	.004	0	Y 15	14.659	51.305	3.58	2.271	1	H1-1b
537	M391	2L2 1/2x2 1/2x1/4x3/8	.031	3.683 14	.002	7.523	Y 11	26.951	51.305	3.58	2.271	1	H1-1b
538	M398	2L2 1/2x2 1/2x1/4x3/8	.081	5.116 16	.004	0	Y 11	14.659	51.305	3.58	2.271	1	H1-1b
539	M399	2L2 1/2x2 1/2x1/4x3/8	.031	3.683 12	.002	0	Y 13	26.951	51.305	3.58	2.271	1	H1-1b
540	M407	2L2 1/2x2 1/2x1/4x3/8	.080	5.116 15	.004	10.45	Y 10	14.659	51.305	3.58	2.271	1	H1-1b
541	M408	2L2 1/2x2 1/2x1/4x3/8	.030	3.683 11	.002	0	Y 14	26.951	51.305	3.58	2.271	1	H1-1b
542	M415	2L2 1/2x2 1/2x1/4x3/8	.082	5.116 15	.004	10.45	Y 17	14.659	51.305	3.58	2.271	1	H1-1b
543	M416	2L2 1/2x2 1/2x1/4x3/8	.030	3.683 11	.002	7.523	Y 10	26.951	51.305	3.58	2.271	1	H1-1b
544	M424	2L2 1/2x2 1/2x1/4x3/8	.082	5.116 13	.004	0	Y 12	14.659	51.305	3.58	2.271	1	H1-1b
545	M425	2L2 1/2x2 1/2x1/4x3/8	.030	3.683 18	.002	0	Y 16	26.951	51.305	3.58	2.271	1	H1-1b
546	M432	2L2 1/2x2 1/2x1/4x3/8	.080	5.116 13	.004	0	Y 16	14.659	51.305	3.58	2.271	1	H1-1b
547	M433	2L2 1/2x2 1/2x1/4x3/8	.031	3.683 17	.002	0	Y 17	26.951	51.305	3.58	2.271	1	H1-1b
548	M454	2L2 1/2x2 1/2x1/4x3/8	.079	5.116 11	.004	0	Y 18	14.926	51.305	3.58	2.271	1	H1-1b
549	M455	2L2 1/2x2 1/2x1/4x3/8	.033	3.683 16	.002	7.523	Y 16	27.392	51.305	3.58	2.271	1	H1-1b
550	M462	2L2 1/2x2 1/2x1/4x3/8	.077	5.116 11	.004	0	Y 14	14.926	51.305	3.58	2.271	1	H1-1b
551	M463	2L2 1/2x2 1/2x1/4x3/8	.034	3.683 14	.002	7.523	Y 18	27.392	51.305	3.58	2.271	1	H1-1b
552	M471	2L2 1/2x2 1/2x1/4x3/8	.076	5.116 17	.004	0	Y 11	14.926	51.305	3.58	2.271	1	H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
4:41 PM
Checked By:

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

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
553	M472	2L2 1/2x2 1/2x1/4x3/8	.034	3.683	14	.002	7.523	Y 18	27.392	51.305	3.58	2.271	1 H1-1b
554	M479	2L2 1/2x2 1/2x1/4x3/8	.078	5.116	17	.004	10.45	Y 18	14.926	51.305	3.58	2.271	1 H1-1b
555	M480	2L2 1/2x2 1/2x1/4x3/8	.033	3.683	12	.002	7.523	Y 15	27.392	51.305	3.58	2.271	1 H1-1b
556	M488	2L2 1/2x2 1/2x1/4x3/8	.079	5.116	15	.004	10.45	Y 18	14.926	51.305	3.58	2.271	1 H1-1b
557	M489	2L2 1/2x2 1/2x1/4x3/8	.033	3.683	11	.002	7.523	Y 10	27.392	51.305	3.58	2.271	1 H1-1b
558	M496	2L2 1/2x2 1/2x1/4x3/8	.080	5.116	15	.004	10.45	Y 17	14.926	51.305	3.58	2.271	1 H1-1b
559	M497	2L2 1/2x2 1/2x1/4x3/8	.032	3.683	18	.002	7.523	Y 12	27.392	51.305	3.58	2.271	1 H1-1b
560	M505	2L2 1/2x2 1/2x1/4x3/8	.080	5.116	13	.004	10.45	Y 16	14.926	51.305	3.58	2.271	1 H1-1b
561	M506	2L2 1/2x2 1/2x1/4x3/8	.032	3.683	18	.002	0	Y 15	27.392	51.305	3.58	2.271	1 H1-1b
562	M513	2L2 1/2x2 1/2x1/4x3/8	.079	5.116	13	.004	0	Y 14	14.926	51.305	3.58	2.271	1 H1-1b
563	M514	2L2 1/2x2 1/2x1/4x3/8	.033	3.683	17	.002	0	Y 12	27.392	51.305	3.58	2.271	1 H1-1b
564	M535	2L2 1/2x2 1/2x1/4x3/8	.080	5.116	11	.004	0	Y 12	14.956	51.305	3.58	2.271	1 H1-1b
565	M536	2L2 1/2x2 1/2x1/4x3/8	.036	3.683	15	.002	0	Y 13	27.441	51.305	3.58	2.271	1 H1-1b
566	M543	2L2 1/2x2 1/2x1/4x3/8	.077	5.116	11	.004	10.45	Y 13	14.956	51.305	3.58	2.271	1 H1-1b
567	M544	2L2 1/2x2 1/2x1/4x3/8	.036	3.683	15	.002	0	Y 14	27.441	51.305	3.58	2.271	1 H1-1b
568	M552	2L2 1/2x2 1/2x1/4x3/8	.076	5.116	17	.004	0	Y 15	14.956	51.305	3.58	2.271	1 H1-1b
569	M553	2L2 1/2x2 1/2x1/4x3/8	.036	3.683	13	.002	0	Y 12	27.441	51.305	3.58	2.271	1 H1-1b
570	M560	2L2 1/2x2 1/2x1/4x3/8	.079	5.116	17	.004	0	Y 11	14.956	51.305	3.58	2.271	1 H1-1b
571	M561	2L2 1/2x2 1/2x1/4x3/8	.035	3.683	13	.002	7.523	Y 14	27.441	51.305	3.58	2.271	1 H1-1b
572	M569	2L2 1/2x2 1/2x1/4x3/8	.080	5.116	15	.004	0	Y 13	14.956	51.305	3.58	2.271	1 H1-1b
573	M570	2L2 1/2x2 1/2x1/4x3/8	.035	3.683	11	.002	7.523	Y 18	27.441	51.305	3.58	2.271	1 H1-1b
574	M577	2L2 1/2x2 1/2x1/4x3/8	.081	5.116	15	.004	0	Y 13	14.956	51.305	3.58	2.271	1 H1-1b
575	M578	2L2 1/2x2 1/2x1/4x3/8	.034	3.683	11	.002	7.523	Y 14	27.441	51.305	3.58	2.271	1 H1-1b
576	M586	2L2 1/2x2 1/2x1/4x3/8	.081	5.116	13	.004	0	Y 11	14.956	51.305	3.58	2.271	1 H1-1b
577	M587	2L2 1/2x2 1/2x1/4x3/8	.034	3.683	17	.002	0	Y 15	27.441	51.305	3.58	2.271	1 H1-1b
578	M594	2L2 1/2x2 1/2x1/4x3/8	.081	5.116	13	.004	0	Y 16	14.956	51.305	3.58	2.271	1 H1-1b
579	M595	2L2 1/2x2 1/2x1/4x3/8	.036	3.683	17	.002	7.523	Y 18	27.441	51.305	3.58	2.271	1 H1-1b
580	M616	2L2 1/2x2 1/2x1/4x3/8	.089	5.116	3	.004	0	Y 10	14.986	51.305	3.58	2.271	1 H1-1b
581	M617	2L2 1/2x2 1/2x1/4x3/8	.040	3.683	7	.002	7.523	Y 11	27.49	51.305	3.58	2.271	1 H1-1b
582	M624	2L2 1/2x2 1/2x1/4x3/8	.086	5.116	9	.004	0	Y 14	14.986	51.305	3.58	2.271	1 H1-1b
583	M625	2L2 1/2x2 1/2x1/4x3/8	.040	3.683	5	.002	7.523	Y 17	27.49	51.305	3.58	2.271	1 H1-1b
584	M633	2L2 1/2x2 1/2x1/4x3/8	.085	5.116	9	.004	10.45	Y 16	14.986	51.305	3.58	2.271	1 H1-1b
585	M634	2L2 1/2x2 1/2x1/4x3/8	.038	3.683	5	.002	0	Y 15	27.49	51.305	3.58	2.271	1 H1-1b
586	M641	2L2 1/2x2 1/2x1/4x3/8	.086	5.116	7	.004	10.45	Y 13	14.986	51.305	3.58	2.271	1 H1-1b
587	M642	2L2 1/2x2 1/2x1/4x3/8	.038	3.683	3	.002	7.523	Y 15	27.49	51.305	3.58	2.271	1 H1-1b
588	M650	2L2 1/2x2 1/2x1/4x3/8	.086	5.116	7	.004	0	Y 13	14.986	51.305	3.58	2.271	1 H1-1b
589	M651	2L2 1/2x2 1/2x1/4x3/8	.039	3.683	3	.002	7.523	Y 13	27.49	51.305	3.58	2.271	1 H1-1b
590	M658	2L2 1/2x2 1/2x1/4x3/8	.088	5.116	5	.004	0	Y 16	14.986	51.305	3.58	2.271	1 H1-1b
591	M659	2L2 1/2x2 1/2x1/4x3/8	.039	3.683	9	.002	7.523	Y 14	27.49	51.305	3.58	2.271	1 H1-1b
592	M667	2L2 1/2x2 1/2x1/4x3/8	.087	5.116	5	.004	0	Y 12	14.986	51.305	3.58	2.271	1 H1-1b
593	M668	2L2 1/2x2 1/2x1/4x3/8	.037	3.683	9	.002	7.523	Y 14	27.49	51.305	3.58	2.271	1 H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
4:41 PM
Checked By:

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

Member	Shape	Code Check	Locfitl	LC Shear C...	Locfitl	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyv/om [k-ft]	Mnzz/om [k-ft]	Cb	Egn
594	M675	2L2 1/2x2 1/2x1/4x3/8	.087	5.116 3	.004	10.45	Y 16	14.986	51.305	3.58	2.271	1	H1-1b
595	M676	2L2 1/2x2 1/2x1/4x3/8	.038	3.683 7	.002	7.523	Y 17	27.49	51.305	3.58	2.271	1	H1-1b
596	M698	2L2 1/2x2 1/2x1/4x3/8	.253	4.813 7	.005	12.489	Y 11	10.5	51.305	3.58	2.271	1	H1-1a
597	M708	2L2 1/2x2 1/2x1/4x3/8	.272	6.114 5	.005	12.489	Y 17	10.5	51.305	3.58	2.271	1	H1-1a
598	M719	2L2 1/2x2 1/2x1/4x3/8	.144	6.3 14	.005	0	Y 12	10.306	51.305	3.58	2.271	1	H1-1b
599	M729	2L2 1/2x2 1/2x1/4x3/8	.140	6.3 12	.005	0	Y 10	10.306	51.305	3.58	2.271	1	H1-1b
600	M740	2L2 1/2x2 1/2x1/4x3/8	.271	6.114 3	.005	12.489	Y 16	10.5	51.305	3.58	2.271	1	H1-1a
601	M750	2L2 1/2x2 1/2x1/4x3/8	.260	6.114 9	.005	12.489	Y 12	10.5	51.305	3.58	2.271	1	H1-1a
602	M761	2L2 1/2x2 1/2x1/4x3/8	.138	6.3 18	.005	12.6	Y 15	10.306	51.305	3.58	2.271	1	H1-1b
603	M771	2L2 1/2x2 1/2x1/4x3/8	.142	6.3 16	.005	12.6	Y 11	10.306	51.305	3.58	2.271	1	H1-1b
604	M699	2L2 1/2x2 1/2x1/4x3/8	.109	5.2 3	.004	0	Y 11	12.726	51.305	3.58	2.271	1	H1-1b
605	M700	2L2 1/2x2 1/2x1/4x3/8	.059	3.969 7	.002	0	Y 14	22.334	51.305	3.58	2.271	1	H1-1b
606	M709	2L2 1/2x2 1/2x1/4x3/8	.108	5.2 2	.004	0	Y 13	12.726	51.305	3.58	2.271	1	H1-1b
607	M710	2L2 1/2x2 1/2x1/4x3/8	.059	3.969 6	.002	0	Y 11	22.334	51.305	3.58	2.271	1	H1-1b
608	M720	2L2 1/2x2 1/2x1/4x3/8	.094	5.152 9	.004	10.523	Y 12	12.726	51.305	3.58	2.271	1	H1-1b
609	M721	2L2 1/2x2 1/2x1/4x3/8	.053	4.011 14	.002	0	Y 18	22.334	51.305	3.58	2.271	1	H1-1b
610	M730	2L2 1/2x2 1/2x1/4x3/8	.097	5.152 7	.004	10.523	Y 11	12.726	51.305	3.58	2.271	1	H1-1b
611	M731	2L2 1/2x2 1/2x1/4x3/8	.052	4.011 12	.002	0	Y 15	22.334	51.305	3.58	2.271	1	H1-1b
612	M741	2L2 1/2x2 1/2x1/4x3/8	.109	5.2 6	.004	0	Y 12	12.726	51.305	3.58	2.271	1	H1-1b
613	M742	2L2 1/2x2 1/2x1/4x3/8	.058	3.969 2	.002	0	Y 12	22.334	51.305	3.58	2.271	1	H1-1b
614	M751	2L2 1/2x2 1/2x1/4x3/8	.107	5.2 5	.004	10.622	Y 18	12.726	51.305	3.58	2.271	1	H1-1b
615	M752	2L2 1/2x2 1/2x1/4x3/8	.057	3.969 9	.002	0	Y 14	22.334	51.305	3.58	2.271	1	H1-1b
616	M762	2L2 1/2x2 1/2x1/4x3/8	.099	5.152 5	.004	10.523	Y 14	12.726	51.305	3.58	2.271	1	H1-1b
617	M763	2L2 1/2x2 1/2x1/4x3/8	.051	4.011 18	.002	0	Y 11	22.334	51.305	3.58	2.271	1	H1-1b
618	M772	2L2 1/2x2 1/2x1/4x3/8	.098	5.152 3	.004	10.523	Y 13	12.726	51.305	3.58	2.271	1	H1-1b
619	M773	2L2 1/2x2 1/2x1/4x3/8	.052	4.011 16	.002	0	Y 17	22.334	51.305	3.58	2.271	1	H1-1b
620	M54	L3X3X3	.053	3.605 16	.003	7.523	Y 14	7.861	23.497	.878	1.389	1	H2-1
621	M62	L3X3X3	.055	3.605 14	.003	0	Y 18	7.861	23.497	.878	1.389	1	H2-1
622	M70	L3X3X3	.054	3.605 16	.003	0	Y 11	7.861	23.497	.878	1.389	1	H2-1
623	M78	L3X3X3	.052	3.605 13	.003	7.523	Y 16	7.861	23.497	.878	1.389	1	H2-1
624	M86	L3X3X3	.052	3.84 13	.003	7.523	Y 16	7.861	23.497	.878	1.389	1	H2-1
625	M94	L3X3X3	.052	3.84 17	.003	7.523	Y 13	7.861	23.497	.878	1.389	1	H2-1
626	M102	L3X3X3	.053	3.84 13	.003	0	Y 14	7.861	23.497	.878	1.389	1	H2-1
627	M110	L3X3X3	.051	3.605 12	.003	0	Y 11	7.861	23.497	.878	1.389	1	H2-1
628	M127	L3X3X3	.087	3.605 16	.003	0	Y 14	7.861	23.497	.878	1.389	1	H2-1
629	M135	L3X3X3	.090	3.605 14	.003	7.523	Y 17	7.861	23.497	.878	1.389	1	H2-1
630	M144	L3X3X3	.091	3.605 14	.003	0	Y 18	7.861	23.497	.878	1.389	1	H2-1
631	M152	L3X3X3	.085	3.605 12	.003	7.523	Y 16	7.861	23.497	.878	1.389	1	H2-1
632	M161	L3X3X3	.079	3.605 12	.003	0	Y 17	7.861	23.497	.878	1.389	1	H2-1
633	M169	L3X3X3	.077	3.605 18	.003	0	Y 11	7.861	23.497	.878	1.389	1	H2-1
634	M178	L3X3X3	.078	3.605 18	.003	7.523	Y 14	7.861	23.497	.878	1.389	1	H2-1

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

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Egn
635	M186												
636	M208												
637	M216												
638	M225												
639	M233												
640	M242												
641	M250												
642	M259												
643	M267												
644	M289												
645	M297												
646	M306												
647	M314												
648	M323												
649	M331												
650	M340												
651	M348												
652	M370												
653	M378												
654	M387												
655	M395												
656	M404												
657	M412												
658	M421												
659	M429												
660	M451												
661	M459												
662	M468												
663	M476												
664	M485												
665	M493												
666	M502												
667	M510												
668	M532												
669	M540												
670	M549												
671	M557												
672	M566												
673	M574												
674	M583												
675	M591												

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

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

Member	Shape	Code Check	Locfitl	LC Shear C...	Locfitl	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyv/om [k-ft]	Mnzz/om [k-ft]	Cb	Egn
676	M613												
677	M621												
678	M630												
679	M638												
680	M647												
681	M655												
682	M664												
683	M672												
684	M694												
685	M704												
686	M715												
687	M725												
688	M736												
689	M746												
690	M757												
691	M767												
692	M947												
693	M948												
694	M953												
695	M954												
696	M959												
697	M960												
698	M965												
699	M966												
700	M923												
701	M924												
702	M929												
703	M930												
704	M935												
705	M936												
706	M941												
707	M942												
708	M899												
709	M900												
710	M905												
711	M906												
712	M911												
713	M912												
714	M917												
715	M918												
716	M875												

Company : GPD Group
Designer : awestrump
Job Number : 2012867.11

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

Member	Shape	Code Check	Locfll	LC Shear C...	Locfll	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
717	M876	LL3x3x3x3	.024	5.12	3	.001	10.031	Y	7	19.291	46.994	2.496	1 H1-1b
718	M881	LL3x3x3x3	.024	4.911	5	.001	0	Y	3	19.291	46.994	2.496	1 H1-1b
719	M882	LL3x3x3x3	.024	5.12	9	.001	10.031	Y	3	19.291	46.994	2.496	1 H1-1b
720	M887	LL3x3x3x3	.024	4.911	3	.001	0	Y	11	19.291	46.994	2.496	1 H1-1b
721	M888	LL3x3x3x3	.024	5.12	7	.001	0	Y	4	19.291	46.994	2.496	1 H1-1b
722	M893	LL3x3x3x3	.024	4.911	9	.001	10.031	Y	8	19.291	46.994	2.496	1 H1-1b
723	M894	LL3x3x3x3	.024	5.12	5	.001	10.031	Y	6	19.291	46.994	2.496	1 H1-1b
724	M851	LL3x3x3x3	.025	4.911	7	.001	0	Y	15	19.291	46.994	2.496	1 H1-1b
725	M852	LL3x3x3x3	.025	5.12	3	.001	10.031	Y	5	19.291	46.994	2.496	1 H1-1b
726	M857	LL3x3x3x3	.025	4.911	5	.001	10.031	Y	5	19.291	46.994	2.496	1 H1-1b
727	M858	LL3x3x3x3	.025	5.12	9	.001	0	Y	2	19.291	46.994	2.496	1 H1-1b
728	M863	LL3x3x3x3	.024	4.911	3	.001	10.031	Y	6	19.291	46.994	2.496	1 H1-1b
729	M864	LL3x3x3x3	.024	5.12	7	.001	0	Y	5	19.291	46.994	2.496	1 H1-1b
730	M869	LL3x3x3x3	.025	4.911	9	.001	0	Y	18	19.291	46.994	2.496	1 H1-1b
731	M870	LL3x3x3x3	.025	5.12	5	.001	0	Y	5	19.291	46.994	2.496	1 H1-1b
732	M827	LL3x3x3x3	.025	4.911	7	.001	10.031	Y	2	19.291	46.994	2.496	1 H1-1b
733	M828	LL3x3x3x3	.025	5.12	3	.001	0	Y	5	19.291	46.994	2.496	1 H1-1b
734	M833	LL3x3x3x3	.025	4.911	5	.001	10.031	Y	4	19.291	46.994	2.496	1 H1-1b
735	M834	LL3x3x3x3	.025	5.12	9	.001	0	Y	2	19.291	46.994	2.496	1 H1-1b
736	M839	LL3x3x3x3	.025	4.911	3	.001	0	Y	18	19.291	46.994	2.496	1 H1-1b
737	M840	LL3x3x3x3	.025	5.12	7	.001	0	Y	8	19.291	46.994	2.496	1 H1-1b
738	M845	LL3x3x3x3	.025	4.911	9	.001	10.031	Y	7	19.291	46.994	2.496	1 H1-1b
739	M846	LL3x3x3x3	.025	5.12	5	.001	10.031	Y	9	19.291	46.994	2.496	1 H1-1b
740	M803	LL3x3x3x3	.026	4.911	7	.001	0	Y	5	19.291	46.994	2.496	1 H1-1b
741	M804	LL3x3x3x3	.026	5.12	3	.001	0	Y	4	19.291	46.994	2.496	1 H1-1b
742	M809	LL3x3x3x3	.026	4.911	5	.001	0	Y	11	19.291	46.994	2.496	1 H1-1b
743	M810	LL3x3x3x3	.026	5.12	9	.001	0	Y	11	19.291	46.994	2.496	1 H1-1b
744	M815	LL3x3x3x3	.025	4.911	3	.001	0	Y	18	19.291	46.994	2.496	1 H1-1b
745	M816	LL3x3x3x3	.025	5.12	7	.001	10.031	Y	8	19.291	46.994	2.496	1 H1-1b
746	M821	LL3x3x3x3	.026	4.911	9	.001	0	Y	8	19.291	46.994	2.496	1 H1-1b
747	M822	LL3x3x3x3	.026	5.12	5	.001	0	Y	9	19.291	46.994	2.496	1 H1-1b
748	M779	LL3x3x3x3	.042	4.911	16	.003	10.031	Y	16	19.291	46.994	2.496	1 H1-1b
749	M780	LL3x3x3x3	.042	5.12	12	.003	0	Y	12	19.291	46.994	2.496	1 H1-1b
750	M785	LL3x3x3x3	.026	4.911	5	.001	10.031	Y	12	19.291	46.994	2.496	1 H1-1b
751	M786	LL3x3x3x3	.026	5.12	9	.001	10.031	Y	5	19.291	46.994	2.496	1 H1-1b
752	M791	LL3x3x3x3	.026	4.911	3	.001	0	Y	12	19.291	46.994	2.496	1 H1-1b
753	M792	LL3x3x3x3	.026	5.12	7	.001	10.031	Y	5	19.291	46.994	2.496	1 H1-1b
754	M797	LL3x3x3x3	.026	4.911	9	.001	10.031	Y	11	19.291	46.994	2.496	1 H1-1b
755	M798	LL3x3x3x3	.026	5.12	5	.001	10.031	Y	5	19.291	46.994	2.496	1 H1-1b
756	M755A	LL3x3x3x3	.040	6.585	5	.002	0	Y	11	10.499	46.994	2.496	1 H1-1b
757	M756A	LL3x3x3x3	.038	7.105	9	.002	13.642	Y	12	10.657	46.994	2.496	1 H1-1b

Company : GPD Group
Designer : awestrum
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Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)

Member	Shape	Code Check	Locftl	LC Shear C...	Locftl	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnvw/om [k-ft]	Mnzz/om [k-ft]	Cb	Ean
758	M761A	.037	6.537	3	.002	0	Y 10	10.657	46.994	3.69	2.496	1	H1-1b
759	M762A	.040	7.158	7	.002	13.744	Y 15	10.499	46.994	3.69	2.496	1	H1-1b
760	M767A	.041	6.585	9	.002	0	Y 15	10.499	46.994	3.69	2.496	1	H1-1b
761	M768A	.038	7.105	5	.002	0	Y 9	10.657	46.994	3.69	2.496	1	H1-1b
762	M773A	.038	6.537	7	.002	0	Y 11	10.657	46.994	3.69	2.496	1	H1-1b
763	M774A	.041	7.158	3	.002	13.744	Y 13	10.499	46.994	3.69	2.496	1	H1-1b
764	M949	.058	5.944	14	.002	12.14	Y 7	24.789	90.97	7.565	4.754	1	H1-1b
765	M950	.058	6.196	14	.002	12.14	Y 8	24.789	90.97	7.565	4.754	1	H1-1b
766	M955	.058	5.944	12	.002	12.14	Y 4	24.789	90.97	7.565	4.754	1	H1-1b
767	M956	.058	6.196	12	.002	0	Y 2	24.789	90.97	7.565	4.754	1	H1-1b
768	M961	.058	5.944	18	.002	0	Y 6	24.789	90.97	7.565	4.754	1	H1-1b
769	M962	.058	6.196	18	.002	12.14	Y 8	24.789	90.97	7.565	4.754	1	H1-1b
770	M967	.058	5.944	16	.002	0	Y 8	24.789	90.97	7.565	4.754	1	H1-1b
771	M968	.058	6.196	16	.002	12.14	Y 2	24.789	90.97	7.565	4.754	1	H1-1b
772	M925	.052	5.944	13	.002	0	Y 5	24.789	90.97	7.565	4.754	1	H1-1b
773	M926	.052	6.196	14	.002	0	Y 7	24.789	90.97	7.565	4.754	1	H1-1b
774	M931	.052	5.944	18	.002	0	Y 8	24.789	90.97	7.565	4.754	1	H1-1b
775	M932	.052	6.196	14	.002	12.14	Y 5	24.789	90.97	7.565	4.754	1	H1-1b
776	M937	.052	5.944	18	.002	12.14	Y 6	24.789	90.97	7.565	4.754	1	H1-1b
777	M938	.052	6.196	11	.002	12.14	Y 4	24.789	90.97	7.565	4.754	1	H1-1b
778	M943	.052	5.944	16	.002	0	Y 9	24.789	90.97	7.565	4.754	1	H1-1b
779	M944	.052	6.196	16	.002	12.14	Y 9	24.789	90.97	7.565	4.754	1	H1-1b
780	M901	.052	5.944	12	.002	12.14	Y 6	24.789	90.97	7.565	4.754	1	H1-1b
781	M902	.052	6.196	15	.002	0	Y 3	24.789	90.97	7.565	4.754	1	H1-1b
782	M907	.052	5.944	18	.002	0	Y 8	24.789	90.97	7.565	4.754	1	H1-1b
783	M908	.052	6.196	14	.002	12.14	Y 6	24.789	90.97	7.565	4.754	1	H1-1b
784	M913	.052	5.944	17	.002	12.14	Y 3	24.789	90.97	7.565	4.754	1	H1-1b
785	M914	.052	6.196	12	.002	0	Y 3	24.789	90.97	7.565	4.754	1	H1-1b
786	M919	.052	5.944	15	.002	0	Y 5	24.789	90.97	7.565	4.754	1	H1-1b
787	M920	.052	6.196	17	.002	0	Y 9	24.789	90.97	7.565	4.754	1	H1-1b
788	M877	.052	5.944	12	.002	0	Y 3	24.789	90.97	7.565	4.754	1	H1-1b
789	M878	.052	6.196	15	.002	12.14	Y 8	24.789	90.97	7.565	4.754	1	H1-1b
790	M883	.052	5.944	18	.002	12.14	Y 9	24.789	90.97	7.565	4.754	1	H1-1b
791	M884	.052	6.196	14	.002	12.14	Y 5	24.789	90.97	7.565	4.754	1	H1-1b
792	M889	.052	5.944	17	.002	12.14	Y 20	24.789	90.97	7.565	4.754	1	H1-1b
793	M890	.052	6.196	12	.002	12.14	Y 4	24.789	90.97	7.565	4.754	1	H1-1b
794	M895	.052	5.944	15	.002	0	Y 4	24.789	90.97	7.565	4.754	1	H1-1b
795	M896	.052	6.196	17	.002	12.14	Y 7	24.789	90.97	7.565	4.754	1	H1-1b
796	M853	.052	5.944	13	.002	0	Y 9	24.789	90.97	7.565	4.754	1	H1-1b
797	M854	.052	6.196	14	.002	12.14	Y 3	24.789	90.97	7.565	4.754	1	H1-1b
798	M859	.052	5.944	12	.002	12.14	Y 7	24.789	90.97	7.565	4.754	1	H1-1b

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

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyz/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
799	M860												
800	M865	.052	6.196	12	.002	0	Y	5	24.789	90.97	7.565	4.754	1 H1-1b
801	M866	.052	5.944	18	.002	12.14	Y	7	24.789	90.97	7.565	4.754	1 H1-1b
802	M871	.052	6.196	11	.002	0	Y	4	24.789	90.97	7.565	4.754	1 H1-1b
803	M872	.052	5.944	16	.002	12.14	Y	9	24.789	90.97	7.565	4.754	1 H1-1b
804	M829	.052	6.196	16	.002	0	Y	9	24.789	90.97	7.565	4.754	1 H1-1b
805	M830	.052	5.944	13	.002	0	Y	6	24.789	90.97	7.565	4.754	1 H1-1b
806	M835	.052	6.196	14	.002	0	Y	3	24.789	90.97	7.565	4.754	1 H1-1b
807	M836	.052	5.944	11	.002	0	Y	8	24.789	90.97	7.565	4.754	1 H1-1b
808	M841	.052	6.196	13	.002	12.14	Y	12	24.789	90.97	7.565	4.754	1 H1-1b
809	M842	.052	5.944	18	.002	0	Y	2	24.789	90.97	7.565	4.754	1 H1-1b
810	M847	.052	6.196	11	.002	12.14	Y	4	24.789	90.97	7.565	4.754	1 H1-1b
811	M848	.052	5.944	16	.002	12.14	Y	5	24.789	90.97	7.565	4.754	1 H1-1b
812	M805	.052	6.196	16	.002	0	Y	6	24.789	90.97	7.565	4.754	1 H1-1b
813	M806	.052	5.944	12	.002	12.14	Y	3	24.789	90.97	7.565	4.754	1 H1-1b
814	M811	.052	6.196	16	.002	0	Y	8	24.789	90.97	7.565	4.754	1 H1-1b
815	M812	.052	5.944	18	.002	12.14	Y	9	24.789	90.97	7.565	4.754	1 H1-1b
816	M817	.052	6.196	14	.002	0	Y	2	24.789	90.97	7.565	4.754	1 H1-1b
817	M818	.052	5.944	17	.002	0	Y	6	24.789	90.97	7.565	4.754	1 H1-1b
818	M823	.054	6.196	12	.002	12.14	Y	7	24.789	90.97	7.565	4.754	1 H1-1b
819	M824	.054	5.944	15	.002	0	Y	4	24.789	90.97	7.565	4.754	1 H1-1b
820	M781	.068	6.196	17	.002	0	Y	2	24.789	90.97	7.565	4.754	1 H1-1b
821	M782	.068	5.944	12	.003	12.14	Y	13	24.789	90.97	7.565	4.754	1 H1-1b
822	M787	.050	6.196	15	.003	0	Y	14	24.789	90.97	7.565	4.754	1 H1-1b
823	M788	.050	5.944	18	.002	12.14	Y	4	24.789	90.97	7.565	4.754	1 H1-1b
824	M793	.050	6.196	14	.002	0	Y	5	24.789	90.97	7.565	4.754	1 H1-1b
825	M794	.050	5.944	17	.002	12.14	Y	9	24.789	90.97	7.565	4.754	1 H1-1b
826	M799	.050	6.196	12	.002	0	Y	4	24.789	90.97	7.565	4.754	1 H1-1b
827	M800	.052	5.944	15	.002	0	Y	4	24.789	90.97	7.565	4.754	1 H1-1b
828	M757A	.080	6.196	17	.002	12.14	Y	5	24.789	90.97	7.565	4.754	1 H1-1b
829	M758A	.074	7.537	12	.002	15.396	Y	4	15.413	90.97	7.565	4.754	1 H1-1b
830	M763A	.074	7.765	12	.002	15.213	Y	3	15.785	90.97	7.565	4.754	1 H1-1b
831	M764A	.080	7.448	18	.002	15.213	Y	14	15.785	90.97	7.565	4.754	1 H1-1b
832	M769A	.078	7.858	18	.002	15.396	Y	3	15.413	90.97	7.565	4.754	1 H1-1b
833	M770A	.073	7.537	16	.002	0	Y	5	15.413	90.97	7.565	4.754	1 H1-1b
834	M775A	.074	7.765	16	.002	0	Y	15	15.785	90.97	7.565	4.754	1 H1-1b
835	M776A	.080	7.448	14	.002	0	Y	23	15.785	90.97	7.565	4.754	1 H1-1b
836	M945	.018	7.858	14	.002	15.396	Y	13	15.413	90.97	7.565	4.754	1 H1-1b
837	M951	.018	3.948	9	.002	7.896	Y	7	117.031	161.461	17.217	11.212	1 H1-1b
838	M957	.018	3.948	7	.002	7.896	Y	5	117.031	161.461	17.217	11.212	1 H1-1b
839	M963	.018	3.948	5	.002	7.896	Y	3	117.031	161.461	17.217	11.212	1 H1-1b
839	M963	.018	3.948	3	.002	7.896	Y	9	117.031	161.461	17.217	11.212	1 H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

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Nov 5, 2012
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Envelope AISI 13th(360-05): ASD Steel Code Checks (Continued)

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnxx/om [k-ft]	Mnzz/om [k-ft]	Cb	Eon
840	M921	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.031	161.461	11.212	1
841	M927	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.031	161.461	11.212	1
842	M933	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.031	161.461	11.212	1
843	M939	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.031	161.461	11.212	1
844	M897	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.031	161.461	11.212	1
845	M903	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.031	161.461	11.212	1
846	M909	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.031	161.461	11.212	1
847	M915	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.031	161.461	11.212	1
848	M873	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.031	161.461	11.212	1
849	M879	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.031	161.461	11.212	1
850	M885	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.031	161.461	11.212	1
851	M891	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.031	161.461	11.212	1
852	M849	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.031	161.461	11.212	1
853	M855	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.031	161.461	11.212	1
854	M861	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.031	161.461	11.212	1
855	M867	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.031	161.461	11.212	1
856	M825	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.031	161.461	11.212	1
857	M831	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.031	161.461	11.212	1
858	M837	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.031	161.461	11.212	1
859	M843	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.031	161.461	11.212	1
860	M801	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.031	161.461	11.212	1
861	M807	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.031	161.461	11.212	1
862	M813	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.031	161.461	11.212	1
863	M819	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.031	161.461	11.212	1
864	M777A	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.031	161.461	11.212	1
865	M783	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.031	161.461	11.212	1
866	M789	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.031	161.461	11.212	1
867	M795	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.031	161.461	11.212	1
868	M753A	LL4x4x8x3	.018	3.948	5	.002	7.896	Y	7	117.029	161.461	11.212	1
869	M759A	LL4x4x8x3	.018	3.948	3	.002	7.896	Y	5	117.029	161.461	11.212	1
870	M765A	LL4x4x8x3	.018	3.948	9	.002	7.896	Y	3	117.029	161.461	11.212	1
871	M771A	LL4x4x8x3	.018	3.948	7	.002	7.896	Y	9	117.029	161.461	11.212	1
872	M946	LL3x3x3x3	.090	7.896	5	.002	0	Z	5	26.13	46.994	1.56	1...
873	M952	LL3x3x3x3	.090	7.896	3	.002	0	Z	3	26.13	46.994	1.56	1...
874	M958	LL3x3x3x3	.090	7.896	9	.002	0	Z	9	26.13	46.994	1.56	1...
875	M964	LL3x3x3x3	.090	7.896	7	.002	0	Z	7	26.13	46.994	1.56	1...
876	M922	LL3x3x3x3	.096	7.896	5	.002	7.896	Z	5	26.13	46.994	1.56	1...
877	M928	LL3x3x3x3	.095	7.896	3	.002	0	Z	3	26.13	46.994	1.56	1...
878	M934	LL3x3x3x3	.096	7.896	9	.002	0	Z	9	26.13	46.994	1.56	1...
879	M940	LL3x3x3x3	.096	7.896	7	.002	0	Z	7	26.13	46.994	1.56	1...
880	M898	LL3x3x3x3	.096	7.896	5	.002	0	Z	5	26.13	46.994	1.56	1...

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

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Nov 5, 2012
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Envelope AISC 13th(360-05): ASD Steel Code Checks (Continued)

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
881	M904											
882	M910	.096	7.896	3	.002	0	26.13	46.994	3.69	1.56	1...	H1-1b
883	M916	.096	7.896	9	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
884	M874	.096	7.896	7	.002	0	26.13	46.994	3.69	1.56	1...	H1-1b
885	M880	.102	7.896	5	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
886	M886	.102	7.896	3	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
887	M892	.102	7.896	9	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
888	M850	.102	7.896	7	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
889	M856	.107	7.896	5	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
890	M862	.107	7.896	3	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
891	M868	.107	7.896	9	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
892	M826	.107	7.896	7	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
893	M832	.113	7.896	5	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
894	M838	.113	7.896	3	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
895	M844	.113	7.896	9	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
896	M802	.113	7.896	7	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
897	M808	.108	7.896	5	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
898	M814	.107	7.896	3	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
899	M820	.108	7.896	9	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
900	M778	.109	7.896	7	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
901	M784	.143	7.896	14	.004	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
902	M790	.110	7.896	3	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
903	M796	.110	7.896	9	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
904	M754A	.111	7.896	7	.002	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
905	M760A	.126	7.896	3	.003	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
906	M766A	.126	7.896	9	.003	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
907	M772A	.126	7.896	5	.003	7.896	26.13	46.994	3.69	1.56	1...	H1-1b
908	M737A	.701	1.396	3	.001	0	16.161	19.401	.58	1.266	1	H2-1
909	M738A	.529	1.396	4	.001	2.792	16.161	19.401	.58	1.266	1	H2-1
910	M741A	.531	1.396	9	.001	0	16.161	19.401	.58	1.266	1	H2-1
911	M742A	.668	1.396	9	.001	2.792	16.161	19.401	.58	1.266	1	H2-1
912	M745A	.644	1.396	7	.001	0	16.161	19.401	.58	1.266	1	H2-1
913	M746A	.569	1.396	8	.001	2.792	16.161	19.401	.58	1.266	1	H2-1
914	M749A	.577	1.396	4	.001	0	16.161	19.401	.58	1.266	1	H2-1
915	M750A	.683	1.396	5	.001	2.792	16.161	19.401	.58	1.266	1	H2-1
916	M53	.068	4.188	13	.004	8.375	16.978	38.802	2.672	1.737	1	H1-1b
917	M61	.068	4.188	17	.004	8.375	16.978	38.802	2.672	1.737	1	H1-1b
918	M69	.068	4.188	11	.004	8.375	16.978	38.802	2.672	1.737	1	H1-1b
919	M77	.068	4.188	15	.004	8.375	16.978	38.802	2.672	1.737	1	H1-1b
920	M85	.067	4.188	17	.004	8.375	16.978	38.802	2.672	1.737	1	H1-1b
921	M93	.067	4.188	13	.004	8.375	16.978	38.802	2.672	1.737	1	H1-1b

Company : GPD Group
Designer : awestrum
Job Number : 2012867.11

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Nov 5, 2012
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Envelope AISI 13th(360-05): ASD Steel Code Checks (Continued)

Member	Shape	Code Check	Locftl	LC Shear C...	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyv/om [k-ft]	Mnzz/om [k-ft]	Cb	Ean
922	M101	2L2 1/2x2 1/2x3/16x3/8	.067	4.188 15	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
923	M109	2L2 1/2x2 1/2x3/16x3/8	.067	4.188 11	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
924	M126	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 13	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
925	M134	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 17	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
926	M143	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 12	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
927	M151	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 15	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
928	M160	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 18	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
929	M168	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 14	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
930	M177	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 14	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
931	M185	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 18	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
932	M207	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 12	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
933	M215	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 17	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
934	M224	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 11	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
935	M232	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 15	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
936	M241	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 17	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
937	M249	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 14	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
938	M258	2L2 1/2x2 1/2x3/16x3/8	.064	4.188 14	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
939	M266	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 11	.004	8.375	y 10	16.978	38.802	2.672	1.737	1 H1-1b
940	M288	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 14	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
941	M296	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 18	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
942	M305	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 11	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
943	M313	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 14	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
944	M322	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 17	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
945	M330	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 12	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
946	M339	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 16	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
947	M347	2L2 1/2x2 1/2x3/16x3/8	.063	4.188 11	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
948	M369	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 16	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
949	M377	2L2 1/2x2 1/2x3/16x3/8	.066	4.188 14	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
950	M386	2L2 1/2x2 1/2x3/16x3/8	.066	4.188 14	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
951	M394	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 12	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
952	M403	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 12	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
953	M411	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 18	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
954	M420	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 18	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
955	M428	2L2 1/2x2 1/2x3/16x3/8	.065	4.188 16	.004	8.375	y 10	17.25	38.802	2.672	1.737	1 H1-1b
956	M450	2L2 1/2x2 1/2x3/16x3/8	.069	4.188 15	.004	8.375	y 10	17.524	38.802	2.672	1.737	1 H1-1b
957	M458	2L2 1/2x2 1/2x3/16x3/8	.069	4.188 15	.004	8.375	y 10	17.524	38.802	2.672	1.737	1 H1-1b
958	M467	2L2 1/2x2 1/2x3/16x3/8	.069	4.188 13	.004	8.375	y 10	17.524	38.802	2.672	1.737	1 H1-1b
959	M475	2L2 1/2x2 1/2x3/16x3/8	.068	4.188 13	.004	8.375	y 10	17.524	38.802	2.672	1.737	1 H1-1b
960	M484	2L2 1/2x2 1/2x3/16x3/8	.068	4.188 11	.004	8.375	y 10	17.524	38.802	2.672	1.737	1 H1-1b
961	M492	2L2 1/2x2 1/2x3/16x3/8	.068	4.188 11	.004	8.375	y 10	17.524	38.802	2.672	1.737	1 H1-1b
962	M501	2L2 1/2x2 1/2x3/16x3/8	.068	4.188 17	.004	8.375	y 10	17.524	38.802	2.672	1.737	1 H1-1b

Company : GPD Group
Designer : awestrump
Job Number : 2012867.11

TAG0053 CHESHIRE

Nov 5, 2012
4:41 PM
Checked By:

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

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
963	M509	2L2 1/2x2 1/2x3/16x3/8	.068	4.188 17	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
964	M531	2L2 1/2x2 1/2x3/16x3/8	.072	4.188 16	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
965	M539	2L2 1/2x2 1/2x3/16x3/8	.072	4.188 14	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
966	M548	2L2 1/2x2 1/2x3/16x3/8	.072	4.188 14	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
967	M556	2L2 1/2x2 1/2x3/16x3/8	.072	4.188 12	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
968	M565	2L2 1/2x2 1/2x3/16x3/8	.071	4.188 12	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
969	M573	2L2 1/2x2 1/2x3/16x3/8	.071	4.188 18	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
970	M582	2L2 1/2x2 1/2x3/16x3/8	.071	4.188 18	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
971	M590	2L2 1/2x2 1/2x3/16x3/8	.071	4.188 16	.004	8.375	Y 10	17.524	38.802	2.672	1.737	1 H1-1b
972	M612	2L2 1/2x2 1/2x3/16x3/8	.072	4.188 15	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
973	M620	2L2 1/2x2 1/2x3/16x3/8	.073	4.188 15	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
974	M629	2L2 1/2x2 1/2x3/16x3/8	.070	4.188 14	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
975	M637	2L2 1/2x2 1/2x3/16x3/8	.070	4.188 12	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
976	M646	2L2 1/2x2 1/2x3/16x3/8	.071	4.188 11	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
977	M654	2L2 1/2x2 1/2x3/16x3/8	.070	4.188 11	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
978	M663	2L2 1/2x2 1/2x3/16x3/8	.069	4.188 18	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
979	M671	2L2 1/2x2 1/2x3/16x3/8	.070	4.188 16	.004	8.375	Y 10	17.558	38.802	2.672	1.737	1 H1-1b
980	M693	2L2 1/2x2 1/2x3/16x3/8	.090	4.188 3	.004	8.375	Y 10	17.851	38.802	2.672	1.737	1 H1-1b
981	M703	2L2 1/2x2 1/2x3/16x3/8	.093	4.188 9	.004	8.375	Y 10	17.851	38.802	2.672	1.737	1 H1-1b
982	M714	2L2 1/2x2 1/2x3/16x3/8	.083	4.188 14	.004	0	Y 10	17.851	38.802	2.672	1.737	1 H1-1b
983	M724	2L2 1/2x2 1/2x3/16x3/8	.081	4.188 12	.004	0	Y 14	17.851	38.802	2.672	1.737	1 H1-1b
984	M735	2L2 1/2x2 1/2x3/16x3/8	.097	4.188 7	.004	8.375	Y 10	17.851	38.802	2.672	1.737	1 H1-1b
985	M745	2L2 1/2x2 1/2x3/16x3/8	.095	4.188 5	.004	8.375	Y 10	17.851	38.802	2.672	1.737	1 H1-1b
986	M756	2L2 1/2x2 1/2x3/16x3/8	.080	4.188 18	.004	0	Y 10	17.851	38.802	2.672	1.737	1 H1-1b
987	M766	2L2 1/2x2 1/2x3/16x3/8	.082	4.188 16	.004	0	Y 11	17.851	38.802	2.672	1.737	1 H1-1b
988	M55	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 17	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
989	M63	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 13	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
990	M71	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 15	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
991	M79	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 12	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
992	M87	2L2 1/2x2 1/2x3/16x3/8	.148	6.281 13	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
993	M95	2L2 1/2x2 1/2x3/16x3/8	.148	6.281 17	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
994	M103	2L2 1/2x2 1/2x3/16x3/8	.148	6.281 18	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
995	M111	2L2 1/2x2 1/2x3/16x3/8	.148	6.281 15	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
996	M128	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 17	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
997	M136	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 13	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
998	M145	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 15	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
999	M153	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 11	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
1000	M162	2L2 1/2x2 1/2x3/16x3/8	.143	6.281 13	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
1001	M170	2L2 1/2x2 1/2x3/16x3/8	.143	6.281 17	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
1002	M179	2L2 1/2x2 1/2x3/16x3/8	.143	6.281 11	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b
1003	M187	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 15	.006	0	Y 10	7.52	38.802	2.672	1.737	1 H1-1b

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Designer : awestrum
Job Number : 2012867.11

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Member	Shape	Code Check	Locfitl	LC Shear C...	Locfitl	Dir	LC	Pnc/om [kl]	Pnt/om [kl]	Mnw/om [k-ft]	Mnzz/om [k-ft]	Cb	Egn
1004	M209	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 16 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1005	M217	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 13 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1006	M226	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 15 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1007	M234	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 12 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1008	M243	2L2 1/2x2 1/2x3/16x3/8	.143	6.281 13 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1009	M251	2L2 1/2x2 1/2x3/16x3/8	.143	6.281 18 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1010	M260	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 18 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1011	M268	2L2 1/2x2 1/2x3/16x3/8	.144	6.281 15 .006	0	Y	10	7.52	38.802	2.672	1.737	1	H1-1b
1012	M290	2L2 1/2x2 1/2x3/16x3/8	.146	6.281 16 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1013	M298	2L2 1/2x2 1/2x3/16x3/8	.146	6.281 14 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1014	M307	2L2 1/2x2 1/2x3/16x3/8	.146	6.281 14 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1015	M315	2L2 1/2x2 1/2x3/16x3/8	.146	6.281 12 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1016	M324	2L2 1/2x2 1/2x3/16x3/8	.145	6.281 12 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1017	M332	2L2 1/2x2 1/2x3/16x3/8	.145	6.281 18 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1018	M341	2L2 1/2x2 1/2x3/16x3/8	.145	6.281 18 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1019	M349	2L2 1/2x2 1/2x3/16x3/8	.145	6.281 16 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1020	M371	2L2 1/2x2 1/2x3/16x3/8	.147	6.281 16 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1021	M379	2L2 1/2x2 1/2x3/16x3/8	.147	6.281 14 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1022	M388	2L2 1/2x2 1/2x3/16x3/8	.147	6.281 14 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1023	M396	2L2 1/2x2 1/2x3/16x3/8	.147	6.281 12 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1024	M405	2L2 1/2x2 1/2x3/16x3/8	.146	6.281 12 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1025	M413	2L2 1/2x2 1/2x3/16x3/8	.146	6.281 18 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1026	M422	2L2 1/2x2 1/2x3/16x3/8	.146	6.281 18 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1027	M430	2L2 1/2x2 1/2x3/16x3/8	.147	6.281 16 .006	0	Y	10	7.619	38.802	2.672	1.737	1	H1-1b
1028	M452	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 16 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1029	M460	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 14 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1030	M469	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 14 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1031	M477	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 12 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1032	M486	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 12 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1033	M494	2L2 1/2x2 1/2x3/16x3/8	.148	6.281 18 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1034	M503	2L2 1/2x2 1/2x3/16x3/8	.148	6.281 18 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1035	M511	2L2 1/2x2 1/2x3/16x3/8	.149	6.281 16 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1036	M533	2L2 1/2x2 1/2x3/16x3/8	.152	6.281 16 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1037	M541	2L2 1/2x2 1/2x3/16x3/8	.152	6.281 14 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1038	M550	2L2 1/2x2 1/2x3/16x3/8	.152	6.281 14 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1039	M558	2L2 1/2x2 1/2x3/16x3/8	.151	6.281 12 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1040	M567	2L2 1/2x2 1/2x3/16x3/8	.151	6.281 12 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1041	M575	2L2 1/2x2 1/2x3/16x3/8	.150	6.281 18 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1042	M584	2L2 1/2x2 1/2x3/16x3/8	.150	6.281 18 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1043	M592	2L2 1/2x2 1/2x3/16x3/8	.151	6.281 16 .006	0	Y	10	7.72	38.802	2.672	1.737	1	H1-1b
1044	M614	2L2 1/2x2 1/2x3/16x3/8	.154	6.281 16 .006	0	Y	10	7.733	38.802	2.672	1.737	1	H1-1b

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Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnzz/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
1045	M622	2L2 1/2x2 1/2x3/16x3/8	.154	6.281 14	.006	0	Y	10	7.733	38.802	2.672	1	H1-1b
1046	M631	2L2 1/2x2 1/2x3/16x3/8	.153	6.281 14	.006	0	Y	10	7.733	38.802	2.672	1	H1-1b
1047	M639	2L2 1/2x2 1/2x3/16x3/8	.152	6.281 12	.006	0	Y	10	7.733	38.802	2.672	1	H1-1b
1048	M648	2L2 1/2x2 1/2x3/16x3/8	.153	6.281 12	.006	0	Y	10	7.733	38.802	2.672	1	H1-1b
1049	M656	2L2 1/2x2 1/2x3/16x3/8	.152	6.281 18	.006	0	Y	10	7.733	38.802	2.672	1	H1-1b
1050	M665	2L2 1/2x2 1/2x3/16x3/8	.151	6.281 18	.006	0	Y	10	7.733	38.802	2.672	1	H1-1b
1051	M673	2L2 1/2x2 1/2x3/16x3/8	.153	6.281 16	.006	0	Y	10	7.733	38.802	2.672	1	H1-1b
1052	M695	2L2 1/2x2 1/2x1/4x3/8	.125	5.583 3	.005	11.167	Y	10	12.983	51.305	3.58	1	H1-1b
1053	M705	2L2 1/2x2 1/2x1/4x3/8	.131	5.583 9	.005	11.167	Y	10	12.983	51.305	3.58	1	H1-1b
1054	M716	2L2 1/2x2 1/2x1/4x3/8	.110	5.583 14	.005	0	Y	10	12.983	51.305	3.58	1	H1-1b
1055	M726	2L2 1/2x2 1/2x1/4x3/8	.109	5.583 12	.005	0	Y	10	12.983	51.305	3.58	1	H1-1b
1056	M737	2L2 1/2x2 1/2x1/4x3/8	.133	5.583 7	.005	11.167	Y	10	12.983	51.305	3.58	1	H1-1b
1057	M747	2L2 1/2x2 1/2x1/4x3/8	.132	5.583 5	.005	11.167	Y	10	12.983	51.305	3.58	1	H1-1b
1058	M758	2L2 1/2x2 1/2x1/4x3/8	.112	5.583 5	.005	0	Y	10	12.983	51.305	3.58	1	H1-1b
1059	M768	2L2 1/2x2 1/2x1/4x3/8	.110	5.583 16	.005	0	Y	10	12.983	51.305	3.58	1	H1-1b
1060	M697	2L3x3x1/4x3/8 HRA	.137	6.979 16	.006	13.958	Y	10	14.393	62.084	4.991	1	H1-1b
1061	M707	2L3x3x1/4x3/8 HRA	.137	6.979 14	.006	13.958	Y	10	14.393	62.084	4.991	1	H1-1b
1062	M718	2L3x3x1/4x3/8 HRA	.135	6.979 14	.006	0	Y	10	14.393	62.084	4.991	1	H1-1b
1063	M728	2L3x3x1/4x3/8 HRA	.135	6.979 12	.006	0	Y	10	14.393	62.084	4.991	1	H1-1b
1064	M739	2L3x3x1/4x3/8 HRA	.137	6.979 12	.006	13.958	Y	10	14.393	62.084	4.991	1	H1-1b
1065	M749	2L3x3x1/4x3/8 HRA	.136	6.979 18	.006	13.958	Y	10	14.393	62.084	4.991	1	H1-1b
1066	M760	2L3x3x1/4x3/8 HRA	.134	6.979 18	.006	0	Y	10	14.393	62.084	4.991	1	H1-1b
1067	M770	2L3x3x1/4x3/8 HRA	.135	6.979 16	.006	0	Y	10	14.393	62.084	4.991	1	H1-1b
1068	M1192A	L2.5X2.5X3	.356	4.188 2	.002	0	Y	1	3.112	19.401	.58	1...	H2-1
1069	M1193A	L2.5X2.5X3	.344	4.188 6	.002	8.375	Y	1	3.112	19.401	.58	1...	H2-1
1070	M1197A	L2.5X2.5X3	.425	4.188 9	.002	0	Y	4	3.112	19.401	.58	1...	H2-1
1071	M1198A	L2.5X2.5X3	.345	4.188 3	.002	8.375	Y	8	3.112	19.401	.58	1...	H2-1
1072	M1202A	L2.5X2.5X3	.256	4.188 6	.002	0	Y	2	3.112	19.401	.58	1...	H2-1
1073	M1203A	L2.5X2.5X3	.272	4.188 9	.002	8.375	Y	6	3.112	19.401	.58	1...	H2-1
1074	M1207A	L2.5X2.5X3	.397	4.188 5	.002	0	Y	1	3.112	19.401	.58	1...	H2-1
1075	M1208A	L2.5X2.5X3	.478	4.188 7	.002	8.375	Y	1	3.112	19.401	.58	1...	H2-1
1076	M1236	L2.5X2.5X3	.013	2.094 6	.001	4.188	Y	4	10.867	19.401	.58	1...	H2-1
1077	M1237	L2.5X2.5X3	.096	5.167 6	.003	0	Y	1	2.044	19.401	.58	1...	H2-1
1078	M1238	L2.5X2.5X3	.058	4.188 6	.002	0	Y	1	3.112	19.401	.58	1...	H2-1
1079	M1239	L2.5X2.5X3	.096	5.167 6	.003	0	Y	8	2.044	19.401	.58	1...	H2-1
1080	M1240	L2.5X2.5X3	.013	2.094 6	.001	0	Y	8	10.867	19.401	.58	1...	H2-1
1081	M1241	L2.5X2.5X3	.013	2.094 4	.001	4.188	Y	2	10.867	19.401	.58	1...	H2-1
1082	M1242	L2.5X2.5X3	.096	5.167 4	.003	0	Y	1	2.044	19.401	.58	1...	H2-1
1083	M1243	L2.5X2.5X3	.058	4.188 4	.002	0	Y	1	3.112	19.401	.58	1...	H2-1
1084	M1244	L2.5X2.5X3	.096	5.167 4	.003	0	Y	5	2.044	19.401	.58	1...	H2-1
1085	M1245	L2.5X2.5X3	.013	2.094 4	.001	0	Y	6	10.867	19.401	.58	1...	H2-1

Company : GPD Group
Designer : awestrუმ
Job Number : 2012867.11

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

Member		Shape	Code Check			Locfit	LC Shear C...	Locfit	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnv/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
1086	M1246	L2.5X2.5X3	.013	2.094	2	.001	4.188	Y	8	10.867	19.401		.58	1.153	1...	H2-1
1087	M1247	L2.5X2.5X3	.096	5.167	2	.003	0	Y	1	2.044	19.401		.58	.853	1...	H2-1
1088	M1248	L2.5X2.5X3	.058	4.188	2	.002	0	Y	1	3.112	19.401		.58	.935	1...	H2-1
1089	M1249	L2.5X2.5X3	.096	5.167	2	.003	0	Y	3	2.044	19.401		.58	.853	1...	H2-1
1090	M1250	L2.5X2.5X3	.013	2.094	2	.001	0	Y	4	10.867	19.401		.58	1.153	1...	H2-1
1091	M1251	L2.5X2.5X3	.013	2.094	8	.001	4.188	Y	6	10.867	19.401		.58	1.153	1...	H2-1
1092	M1252	L2.5X2.5X3	.096	5.167	8	.003	0	Y	1	2.044	19.401		.58	.853	1...	H2-1
1093	M1253	L2.5X2.5X3	.058	4.188	8	.002	0	Y	1	3.112	19.401		.58	.935	1...	H2-1
1094	M1254	L2.5X2.5X3	.096	5.167	8	.003	0	Y	2	2.044	19.401		.58	.853	1...	H2-1
1095	M1255	L2.5X2.5X3	.013	2.094	8	.001	0	Y	2	10.867	19.401		.58	1.153	1...	H2-1
1096	M52	L3X3X3	.037	2.094	16	.003	0	Y	13	15.722	23.497		.878	1.665	1	H2-1
1097	M60	L3X3X3	.038	2.094	14	.003	4.188	Y	17	15.722	23.497		.878	1.665	1	H2-1
1098	M68	L3X3X3	.037	2.094	16	.003	0	Y	11	15.722	23.497		.878	1.665	1	H2-1
1099	M76	L3X3X3	.037	2.094	13	.003	4.188	Y	15	15.722	23.497		.878	1.665	1	H2-1
1100	M84	L3X3X3	.036	2.094	17	.003	4.188	Y	13	15.722	23.497		.878	1.665	1	H2-1
1101	M92	L3X3X3	.035	2.094	12	.003	4.188	Y	13	15.722	23.497		.878	1.665	1	H2-1
1102	M100	L3X3X3	.036	2.094	17	.003	0	Y	15	15.722	23.497		.878	1.665	1	H2-1
1103	M108	L3X3X3	.036	2.094	14	.003	4.188	Y	11	15.722	23.497		.878	1.665	1	H2-1
1104	M125	L3X3X3	.048	2.094	16	.003	0	Y	12	15.722	23.497		.878	1.665	1	H2-1
1105	M133	L3X3X3	.049	2.094	14	.003	4.188	Y	17	15.722	23.497		.878	1.665	1	H2-1
1106	M142	L3X3X3	.049	2.094	14	.003	0	Y	11	15.722	23.497		.878	1.665	1	H2-1
1107	M150	L3X3X3	.047	2.094	12	.003	0	Y	12	15.722	23.497		.878	1.665	1	H2-1
1108	M159	L3X3X3	.045	2.094	12	.003	0	Y	17	15.722	23.497		.878	1.665	1	H2-1
1109	M167	L3X3X3	.044	2.094	18	.003	4.188	Y	13	15.722	23.497		.878	1.665	1	H2-1
1110	M176	L3X3X3	.045	2.094	18	.003	0	Y	15	15.722	23.497		.878	1.665	1	H2-1
1111	M184	L3X3X3	.047	2.094	15	.003	0	Y	15	15.722	23.497		.878	1.665	1	H2-1
1112	M206	L3X3X3	.067	2.094	7	.003	0	Y	12	15.722	23.497		.878	1.665	1	H2-1
1113	M214	L3X3X3	.066	2.094	14	.003	4.188	Y	17	15.722	23.497		.878	1.665	1	H2-1
1114	M223	L3X3X3	.068	2.094	14	.003	0	Y	11	15.722	23.497		.878	1.665	1	H2-1
1115	M231	L3X3X3	.069	2.094	3	.003	4.188	Y	16	15.722	23.497		.878	1.665	1	H2-1
1116	M240	L3X3X3	.061	2.094	12	.003	0	Y	17	15.722	23.497		.878	1.665	1	H2-1
1117	M248	L3X3X3	.062	2.094	9	.003	4.188	Y	14	15.722	23.497		.878	1.665	1	H2-1
1118	M257	L3X3X3	.060	2.094	9	.003	0	Y	15	15.722	23.497		.878	1.665	1	H2-1
1119	M265	L3X3X3	.063	2.094	16	.003	0	Y	16	15.722	23.497		.878	1.665	1	H2-1
1120	M287	L3X3X3	.075	2.094	15	.003	0	Y	13	15.919	23.497		.878	1.673	1	H2-1
1121	M295	L3X3X3	.078	2.094	15	.003	4.188	Y	18	15.919	23.497		.878	1.673	1	H2-1
1122	M304	L3X3X3	.078	2.094	13	.003	0	Y	11	15.919	23.497		.878	1.673	1	H2-1
1123	M312	L3X3X3	.073	2.094	13	.003	0	Y	12	15.919	23.497		.878	1.673	1	H2-1
1124	M321	L3X3X3	.072	2.094	11	.003	0	Y	17	15.919	23.497		.878	1.673	1	H2-1
1125	M329	L3X3X3	.071	2.094	2	.003	4.188	Y	14	15.919	23.497		.878	1.673	1	H2-1
1126	M338	L3X3X3	.069	2.094	8	.003	0	Y	15	15.919	23.497		.878	1.673	1	H2-1

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Designer : awestrump
Job Number : 2012867.11

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

Member	Shape	Code Check	Loc[ft]	LC Shear C...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
1127	M346												
1128	L3X3X3	.074	2.094	17	.003	0	Y	16	23.497	.878	1.673	1	H2-1
1129	L3X3X3	.109	2.094	6	.003	0	Y	13	23.497	.878	1.673	1	H2-1
1130	L3X3X3	.112	2.094	6	.003	4.188	Y	11	23.497	.878	1.673	1	H2-1
1131	L3X3X3	.112	2.094	5	.003	0	Y	11	23.497	.878	1.673	1	H2-1
1132	L3X3X3	.107	2.094	3	.003	0	Y	12	23.497	.878	1.673	1	H2-1
1133	L3X3X3	.110	2.094	3	.003	0	Y	17	23.497	.878	1.673	1	H2-1
1134	L3X3X3	.108	2.094	9	.003	4.188	Y	14	23.497	.878	1.673	1	H2-1
1135	L3X3X3	.106	2.094	9	.003	0	Y	15	23.497	.878	1.673	1	H2-1
1136	L3X3X3	.109	2.094	7	.003	0	Y	16	23.497	.878	1.673	1	H2-1
1137	L3X3X3	.142	2.094	6	.003	0	Y	12	23.497	.878	1.681	1	H2-1
1138	L3X3X3	.149	2.094	6	.003	4.188	Y	11	23.497	.878	1.681	1	H2-1
1139	L3X3X3	.146	2.094	4	.003	0	Y	11	23.497	.878	1.681	1	H2-1
1140	L3X3X3	.138	2.094	4	.003	0	Y	12	23.497	.878	1.681	1	H2-1
1141	L3X3X3	.145	2.094	2	.003	0	Y	17	23.497	.878	1.681	1	H2-1
1142	L3X3X3	.139	2.094	2	.003	4.188	Y	14	23.497	.878	1.681	1	H2-1
1143	L3X3X3	.135	2.094	8	.003	0	Y	15	23.497	.878	1.681	1	H2-1
1144	L3X3X3	.143	2.094	8	.003	0	Y	16	23.497	.878	1.681	1	H2-1
1145	L3X3X3	.198	2.094	7	.003	0	Y	13	23.497	.878	1.681	1	H2-1
1146	L3X3X3	.204	2.094	5	.003	4.188	Y	12	23.497	.878	1.682	1	H2-1
1147	L3X3X3	.202	2.094	5	.003	0	Y	11	23.497	.878	1.682	1	H2-1
1148	L3X3X3	.195	2.094	3	.003	0	Y	12	23.497	.878	1.682	1	H2-1
1149	L3X3X3	.202	2.094	3	.003	0	Y	16	23.497	.878	1.682	1	H2-1
1150	L3X3X3	.198	2.094	9	.003	4.188	Y	15	23.497	.878	1.682	1	H2-1
1151	L3X3X3	.196	2.094	9	.003	0	Y	15	23.497	.878	1.682	1	H2-1
1152	L3X3X3	.200	2.094	7	.003	0	Y	16	23.497	.878	1.682	1	H2-1
1153	L3X3X3	.230	2.094	7	.003	0	Y	12	23.497	.878	1.682	1	H2-1
1154	L3X3X3	.236	2.094	5	.003	4.188	Y	12	23.497	.878	1.683	1	H2-1
1155	L3X3X3	.207	2.094	5	.003	0	Y	11	23.497	.878	1.683	1	H2-1
1156	L3X3X3	.202	2.094	3	.003	0	Y	13	23.497	.878	1.683	1	H2-1
1157	L3X3X3	.234	2.094	3	.003	0	Y	16	23.497	.878	1.683	1	H2-1
1158	L3X3X3	.229	2.094	9	.003	4.188	Y	16	23.497	.878	1.683	1	H2-1
1159	L3X3X3	.201	2.094	9	.003	0	Y	15	23.497	.878	1.683	1	H2-1
1160	L3X3X3	.206	2.094	7	.003	0	Y	17	23.497	.878	1.683	1	H2-1
1161	L3X3X3	.224	2.792	3	.004	0	Y	10	23.497	.878	1.555	1	H2-1
1162	L3X3X3	.236	2.792	9	.004	0	Y	10	23.497	.878	1.555	1	H2-1
1163	L3X3X3	.173	2.792	4	.004	0	Y	11	23.497	.878	1.555	1	H2-1
1164	L3X3X3	.166	2.792	8	.004	0	Y	11	23.497	.878	1.555	1	H2-1
1165	L3X3X3	.258	2.792	7	.004	0	Y	17	23.497	.878	1.555	1	H2-1
1166	L3X3X3	.250	2.792	5	.004	0	Y	10	23.497	.878	1.555	1	H2-1
1167	L3X3X3	.171	2.792	4	.004	0	Y	15	23.497	.878	1.555	1	H2-1
1168	L3X3X3	.176	2.792	4	.004	0	Y	15	23.497	.878	1.555	1	H2-1

Company : GPD Group
 Designer : awestrum
 Job Number : 2012867.11

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

Member	Shape	Code Check	Locfll	LC Shear C...	Locfll	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mny/om [k-ft]	Mnzz/om [k-ft]	Ob	Egn
1168	M1195A	.343	4.485	2	.002	0	Y	2.491	19.401	.58	.893	1...	H2-1
1169	M1196A	.332	4.875	6	.002	0	V	2.491	19.401	.58	.893	1...	H2-1
1170	M1200A	.356	4.485	8	.002	9.361	Y	2.491	19.401	.58	.893	1...	H2-1
1171	M1201A	.338	4.875	4	.002	0	V	2.491	19.401	.58	.893	1...	H2-1
1172	M1205A	.270	4.485	6	.002	9.361	Y	2.491	19.401	.58	.893	1...	H2-1
1173	M1206A	.281	4.875	2	.002	9.361	V	2.491	19.401	.58	.893	1...	H2-1
1174	M1210A	.385	4.485	4	.002	0	V	2.491	19.401	.58	.893	1...	H2-1
1175	M1211A	.404	4.875	8	.002	9.361	Y	2.491	19.401	.58	.893	1...	H2-1
1176	M1194A	.076	6.333	8	.003	0	Y	6.961	38.802	2.635	1.696	1	H1-1b
1177	M1199A	.093	6.333	2	.003	0	V	6.961	38.802	2.635	1.696	1	H1-1b
1178	M1204A	.077	6.333	4	.003	0	Y	6.961	38.802	2.635	1.696	1	H1-1b
1179	M1209A	.095	6.333	6	.003	0	Y	6.961	38.802	2.635	1.696	1	H1-1b

Concrete Column Design Results

Column	Shape	UC Max	Locfll	UC LC	Shear UC	Locfll	Dir	Phi used	Pn[k]	Mny[k-ft]	Mnz[k-ft]	Vny[k]	Vnz[k]
1	M1252A	CRECT42X42	.163	6.2	7	.179	Y	.65	4905.848	4420.142	4734.626	338.243	338.243
2	M1253A	CRECT42X42	.163	6.2	5	.172	Y	.65	4935.506	4427.952	4745.339	338.243	338.243
3	M1254A	CRECT42X42	.162	6.2	3	.16	Y	.65	4912.842	4422.313	4737.606	338.243	338.243
4	M1255A	CRECT42X42	.162	6.2	9	.169	Y	.65	4894.147	4421.644	4736.687	338.243	338.243

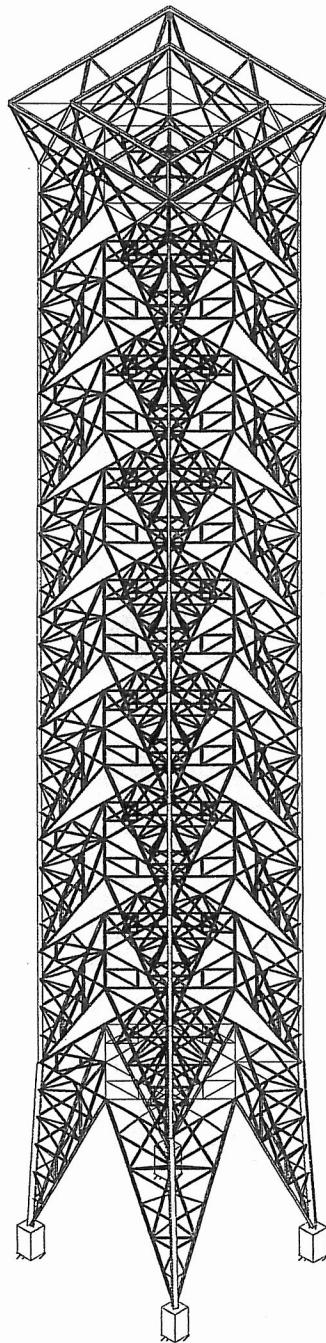
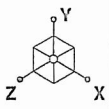
Bolt Checks

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
T2	236.833	Leg	A490N	0.75	28	13.1	0.936	16.70	0.056	1.333	4.2%
		Diagonal	A490N	0.75	4	14.9	3.725	24.74	0.151	1.333	11.3%
		Horizontal	A490N	0.75	4	4.1	1.025	24.74	0.041	1.333	3.1%
T3	211.833	Leg	A490N	0.75	28	34.5	2.464	16.70	0.148	1.333	11.1%
		Diagonal	A490N	0.75	4	21.6	5.400	19.44	0.278	1.333	20.8%
		Horizontal	A490N	0.75	3	12.0	4.000	10.42	0.384	1.333	28.8%
T4	186.833	Leg	A490N	0.875 & 0.75	46	62.8	2.730	17.85	0.153	1.333	11.5%
		Diagonal	A490N	0.75	5	29.7	5.940	24.74	0.240	1.333	18.0%
		Horizontal	A490N	0.75	3	15.1	5.033	10.42	0.483	1.333	36.2%
T5	161.833	Leg	A490N	1	32	101.0	6.313	25.06	0.252	1.333	18.9%
		Diagonal	A490N	0.75	5	35.9	7.180	24.74	0.290	1.333	21.8%
		Horizontal	A490N	0.75	3	18.8	6.267	10.42	0.601	1.333	45.1%
T6	136.833	Leg	A490N	1	40	147.5	7.375	25.06	0.294	1.333	22.1%
		Diagonal	A490N	0.75	4	42.9	10.725	20.12	0.533	1.333	40.0%
		Horizontal	A490N	0.75	3	22.4	7.467	20.84	0.358	1.333	26.9%
T7	111.833	Leg	A490N	1	40	203.1	10.155	25.75	0.394	1.333	29.6%
		Diagonal	A490N	0.75	4	48.8	12.200	20.12	0.606	1.333	45.5%
		Horizontal	A490N	0.75	4	25.7	6.425	20.12	0.319	1.333	24.0%

T8	86.8333	Leg	A490N	1	40	266.8	13.340	29.23	0.456	1.333	34.2%
		Diagonal	A490N	0.75	5	56.6	11.320	24.74	0.458	1.333	34.3%
		Horizontal	A490N	0.75	4	29.1	7.275	20.12	0.362	1.333	27.1%
T9	61.8333	Leg	A490N	1	60	339.4	11.313	32.71	0.346	1.333	25.9%
		Diagonal	A490N	0.75	5	62.8	12.560	24.74	0.508	1.333	38.1%
		Horizontal	A490N	0.75	4	32.2	8.050	20.12	0.400	1.333	30.0%
T10	36.8333	Leg	A490N	1	68	420.4	12.365	32.71	0.378	1.333	28.3%
		Diagonal	A490N	0.75	8	76.9	9.613	24.74	0.389	1.333	29.1%
		Horizontal	A490N	0.75	4	32.1	8.025	24.74	0.324	1.333	24.3%
		Anchor Rod	C1015	2.25	12	420.4	35.033	76.10	0.460	1.333	34.5%
										Maximum % Capacity	45.5%

APPENDIX C

Tower Elevation Drawing



Solution: Envelope

GPD Group

awestrum

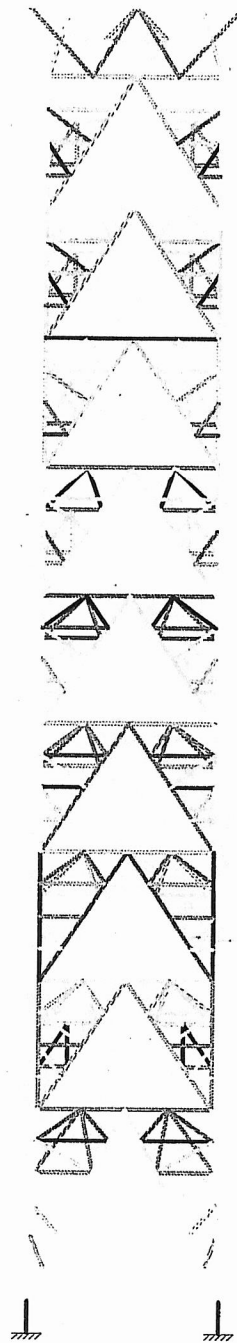
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Section Sets

☒	na
☒	TWR_LEG_T1
☒	TWR_HORZ_IN_T1
☒	TWR_DIAG_IN_T1
☒	TWR_RED_HORZ_IN_T1
☒	TWR_RED_SUB_H_IN_T1
☒	TWR_RED_SUB_D_IN_T1
☒	TWR_HORZ_OUT_T1
☒	TWR_DIAG_OUT_T1
☒	TWR_DIAG_OUT_KICK_T1
☒	TWR_RED_HORZ_OUT_T1
☒	TWR_LEG_T2
☒	TWR_DIAG_T2
☒	TWR_RED_HORZ_T2
☒	TWR_RED_HORZ_2_T2
☒	TWR_RED_DIAG_T2
☒	TWR_RED_HORZ_3_T2
☒	TWR_RED_DIAG_2_T2
☒	TWR_RED_DIAG_3_T2
☒	TWR_RED_HIP_HORZ_1_T2
☒	TWR_RED_HIP_HORZ_2_T2
☒	TWR_RED_HIP_DIAG_1_T2
☒	TWR_RED_HIP_DIAG_2_T2
☒	TWR_INNER_SQUARE_T2
☒	TWR_INNER_CORNER_T2
☒	TWR_LEG_T3
☒	TWR_HORZ_T3
☒	TWR_DIAG_T3
☒	TWR_RED_HORZ_T3
☒	TWR_RED_HORZ_2_T3
☒	TWR_RED_DIAG_T3
☒	TWR_RED_HORZ_3_T3
☒	TWR_RED_DIAG_2_T3
☒	TWR_RED_DIAG_3_T3
☒	TWR_RED_HIP_HORZ_1_T3
☒	TWR_RED_HIP_HORZ_2_T3
☒	TWR_RED_HIP_DIAG_1_T3
☒	TWR_RED_HIP_DIAG_2_T3
☒	TWR_INNER_SUPP_T3
☒	TWR_INNER_SQUARE_T3
☒	TWR_INNER_GIRT_T3
☒	TWR_INNER_TRIANGLE_T3
☒	TWR_INNER_CORNER_T3
☒	TWR_INNER_LADDER_T3
☒	TWR_LEG_T4
☒	TWR_HORZ_T4
☒	TWR_DIAG_T4
☒	TWR_RED_HORZ_T4
☒	TWR_RED_HORZ_2_T4
☒	TWR_RED_DIAG_T4
☒	TWR_RED_HORZ_3_T4
☒	TWR_RED_DIAG_2_T4
☒	TWR_RED_DIAG_3_T4
☒	TWR_RED_HIP_HORZ_1_T4
☒	TWR_RED_HIP_HORZ_2_T4
☒	TWR_RED_HIP_DIAG_1_T4
☒	TWR_RED_HIP_DIAG_2_T4
☒	TWR_INNER_SUPP_T4
☒	TWR_INNER_SQUARE_T4
☒	TWR_INNER_GIRT_T4
☒	TWR_INNER_TRIANGLE_T4
☒	TWR_INNER_CORNER_T4
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☒	TWR_RED_HORZ_T5
☒	TWR_RED_HORZ_2_T5
☒	TWR_RED_DIAG_T5
☒	TWR_RED_HORZ_3_T5
☒	TWR_RED_DIAG_2_T5
☒	TWR_RED_DIAG_3_T5
☒	TWR_RED_HIP_HORZ_1_T5
☒	TWR_RED_HIP_HORZ_2_T5
☒	TWR_RED_HIP_DIAG_1_T5
☒	TWR_RED_HIP_DIAG_2_T5
☒	TWR_INNER_SUPP_T5
☒	TWR_INNER_SQUARE_T5
☒	TWR_INNER_GIRT_T5
☒	TWR_INNER_TRIANGLE_T5
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☒	TWR_HORZ_T6
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☒	TWR_RED_DIAG_2_T6
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☒	TWR_RED_HIP_HORZ_2_T6
☒	TWR_RED_HIP_DIAG_1_T6
☒	TWR_RED_HIP_DIAG_2_T6
☒	TWR_INNER_SUPP_T6
☒	TWR_INNER_SQUARE_T6
☒	TWR_INNER_GIRT_T6
☒	TWR_INNER_TRIANGLE_T6
☒	More...

Solution: Envelope

GPD Group

awestrum

2012867.11

TAG0053 CHESHIRE

SK - 2

Nov 5, 2012 at 4:43 PM

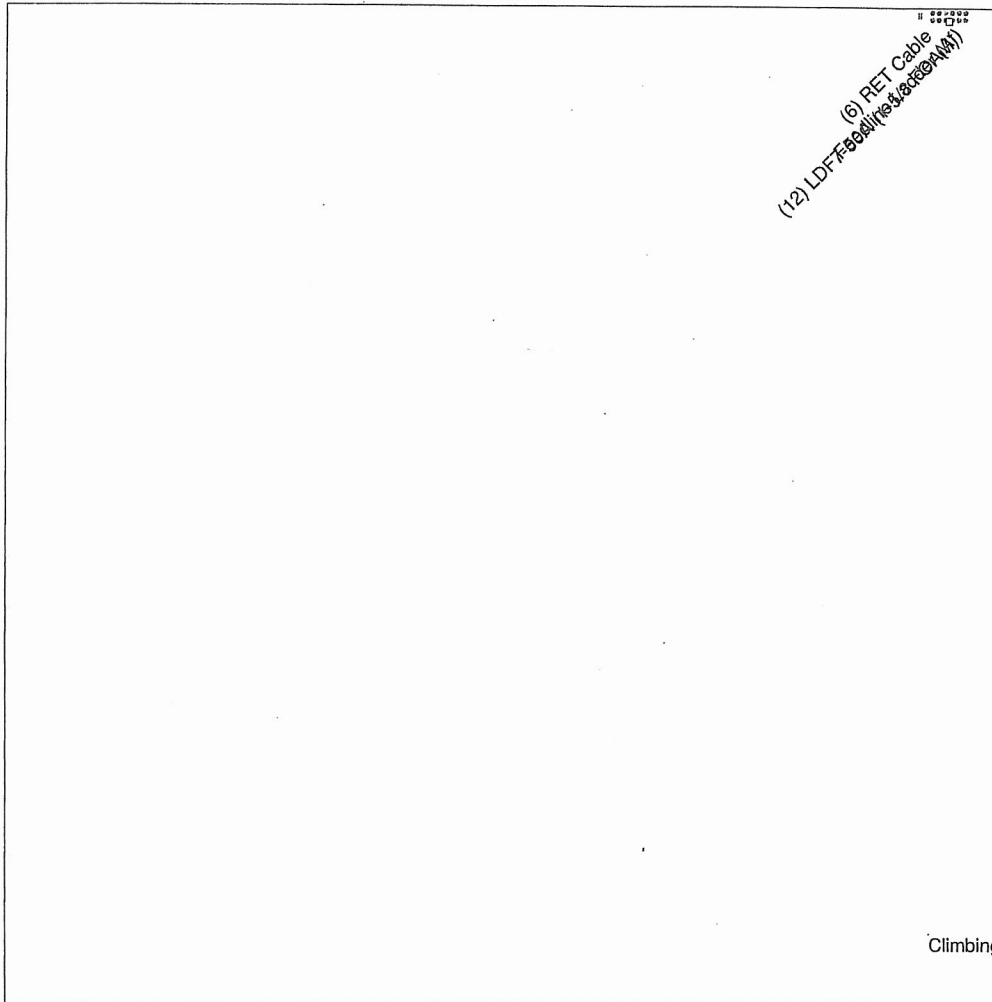
TAG0053.r3d

Round

Flat

App In Face

App Out Face



(11) 1" Rigid Conduit
Feedline Ladder (Af)

LDF7-50A (1-5/8 FOAM)

Climbing Ladder
Power Cable (1/2")
1-3/4" Rigid Conduit

(9) LDF7-50A (1-5/8 FOAM)
Feedline Ladder (Af)

(3) LDF7-50A (1-5/8 FOAM)
(6) RET Cable
(10) LDF7-50A (1-5/8 FOAM)
(13) LDF7-50A (1-5/8 FOAM)



GPD Group

520 South Main St
Akron, OH 44311

Consulting Engineers

Phone: (330) 572-2100
FAX: (330) 572-2102

Job: **TAG0053 CHESHIRE**

Project: **2012867.11**

Client: **AT&T Mobility**

Code: **TIA/EIA-222-F**

Path:

Drawn by: **awestrums**

Date: **11/05/12**

App'd:

Scale:

Dwg No

C:\Users\awestrums\Desktop\AW-Work\TDX Project Towers\2012\2012867\11\TDX FINAL\TAG0053.dwg

36'9-31/32"

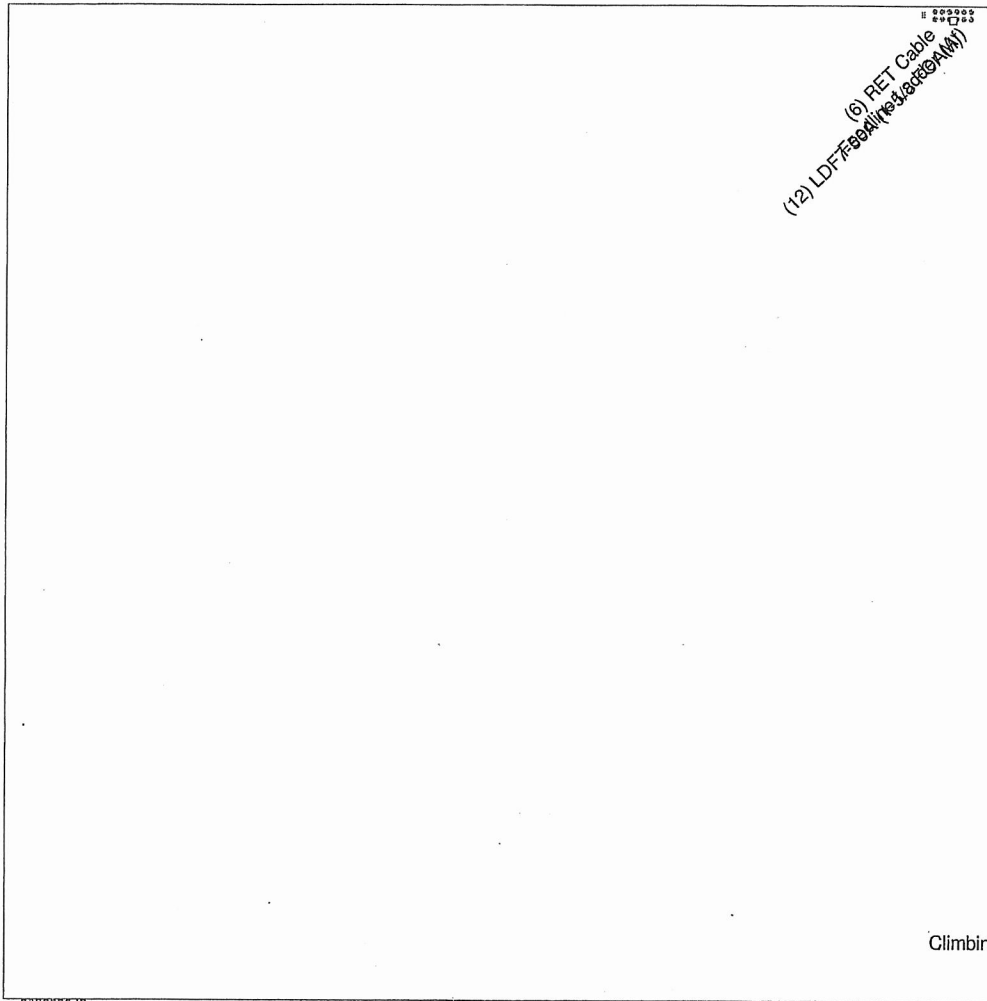
Round

Flat

App In Face

App Out Face

Section @ 36'9-31/32"



(6) RET Cable
(12) LDF-50A (1-5/8 FOAM)

(6) 1" Rigid Conduit
Feedline Ladder (Af)
LDF-50A (1-5/8 FOAM)

Climbing Ladder
Power Cable (1/2")
1-3/4" Rigid Conduit

(9) LDF-50A (1-5/8 FOAM)
Feedline Ladder (Af)

(3) LDF-50A (1-5/8 FOAM)
(3) LDF-50A (1-5/8 FOAM)
(13) LDF-50A (1-5/8 FOAM)
(13) LDF-50A (1-5/8 FOAM)



Consulting Engineers

GPD Group
520 South Main St
Akron, OH 44311
Phone: (330) 572-2100

Job: **TAG0053 CHESHIRE**

Project: **2012867.11**

Client: **AT&T Mobility**

Code: **TIA/EIA-222-F**

Drawn by: **awestrump**

Date: **11/05/12**

App'd:

Scale: **N**

61'9-31/32"

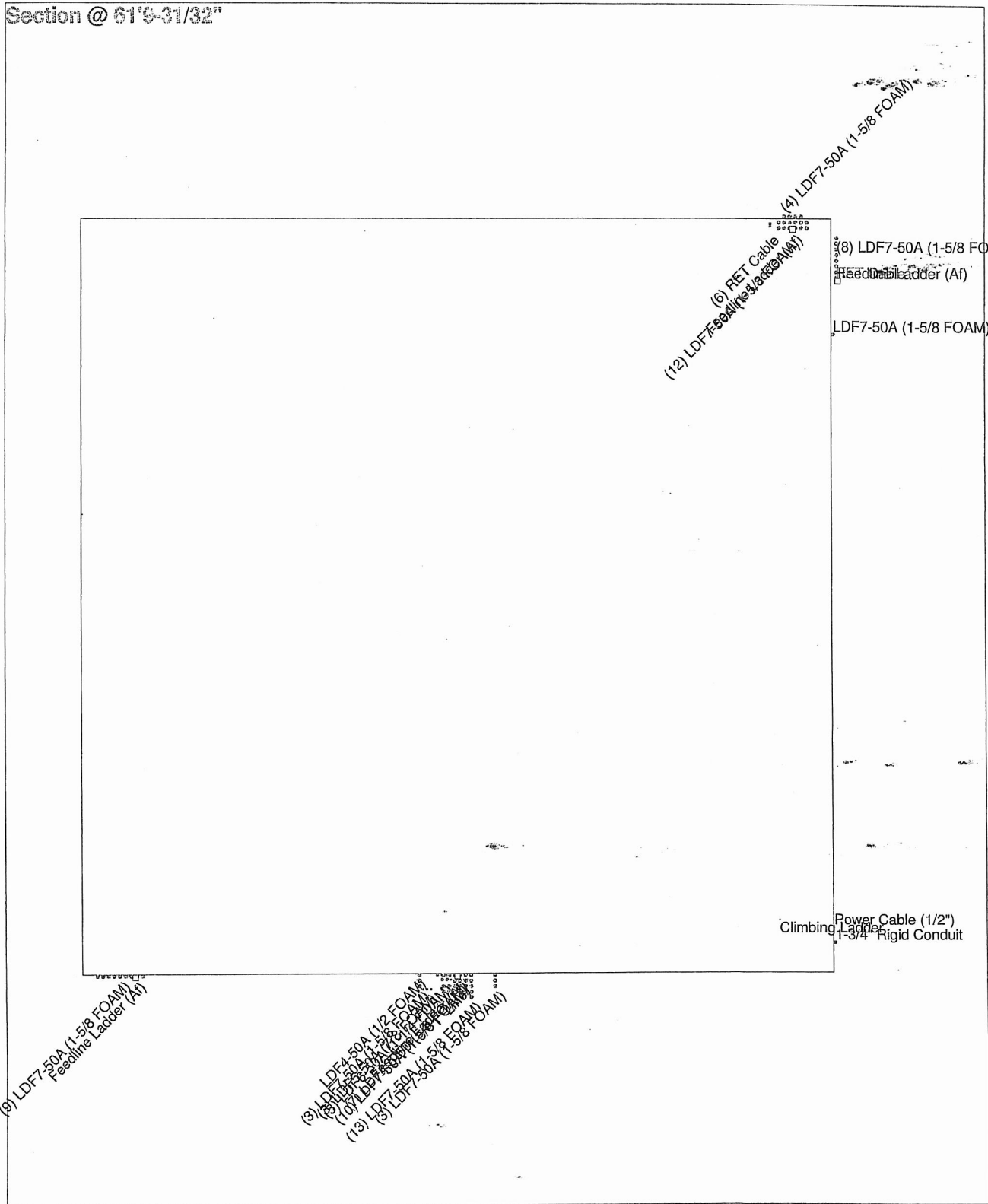
Round

Flat

App In Face

App Out Face

Section @ 61'9-31/32"





SITE NAME: CHESHIRE SW
SITE NUMBER: CT2036

PROJECT INFORMATION

SCOPE OF WORK: RELOCATE (4) EXISTING ANTENNAS TO NEW MOUNT & ADD (3) ANTENNAS ON AN EXISTING LATTICE TOWER. INSTALL FIBER AND POWER CONDUITS AND ANTENNA SUPPORT EQUIPMENT, AND INSTALL ADDITIONAL EQUIPMENT INSIDE AN EXISTING SHELTER.

SITE ADDRESS: 751 HIGGINS ROAD
CHESHIRE, CT 06410

LATITUDE: 41° 29' 14.78" (NAD 83)*

* PER AT&T EXISTING PLANS

JURISDICTION-
CONNECTICUT SITING COUNCIL

TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY

NAME OF APPLICANT:

NAME OF APPLICANT: AT&T MOBILITY
500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

TOWER OWNER: AMERICAN TOWER

DRAWING INDEX

T01	TITLE SHEET	2
G01	GENERAL NOTES	2
A01	SITE PLAN & SHELTER LAYOUT	2
A02	ELEVATION & CONSTRUCTION DETAILS	2
A03	CONSTRUCTION DETAILS-1	2
A04	CONSTRUCTION DETAILS-2	2
F01	GROUNDING DETAILS	2

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

STRUCTURAL NOTE:

- AS REQUIRED BY THE IIA 222F STANDARD, NEWLY GLOBAL SERVICES SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE EXISTING TOWER ANTENNA MOUNTS AND ANY REQUIRED IMPROVEMENTS TO THE EXISTING TOWER ANTENNA MOUNTS AND ANY REQUIRED IMPROVEMENTS. REINFORCEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, CABLES, SUPPORTS AND APPURTENANCES AND COMPLIES WITH THE CURRENT CONNECTICUT STATE BUILDING CODE AND EN/TA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY IMPROVEMENTS AND REINFORCEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION HAVE PROPERLY BEEN INSTALLED PRIOR TO THE ADDITIONAL WORK BEING VOTED IN THE STRUCTURAL ANALYSIS APPURTENANCES.

CONTACT INFORMATION

CONTACT	COMPANY	PHONE NO.
ENGINEERING:	DEWBERRY	(973) 576-9653
C:	NEXLINK	(508) 802-5570
INST.	MARK ROBERTS	(860) 420-8562



Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.0710



300 MARSHALL PHELPS ROAD, #2A
WINDSOR CT 06095

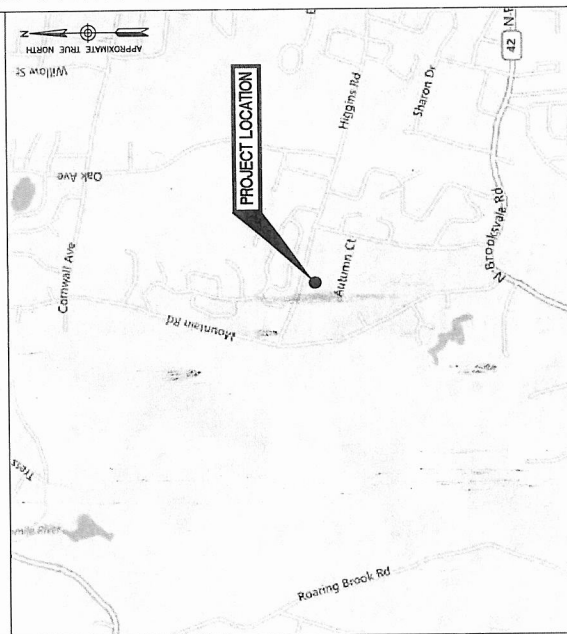
**CHESHIRE SW
SITE NO. CT2036**
751 HIGGINS ROAD
CHESHIRE, CT 06410



500 ENTERPRISE DRIVE,
SUITE 3A
ROCKY HILL, CT 06067

VICINITY MAP

DIRECTIONS: (FROM ROCKY HILL, CT) HEAD NORTHEAST ON ENTERPRISE DRIVE TOWARD CAPITAL BOULEVARD. TURN LEFT ONTO CAPITAL BOULEVARD. TURN LEFT ONTO WEST STREET. TURN LEFT ONTO MERGENTON RD. TAKE EXIT 15 FOR CT-68 TOWARD DURHAM/MALESVILLE. TURN RIGHT ONTO CT-68/W/5 MERIDEN RD. CONTINUE TO FOLLOW CT-68 W. TURN LEFT ONTO CT-68 W/CT-70 W/5 MERIDEN RD. CONTINUE TO FOLLOW CT-68 W/CT-70 W. TURN LEFT ONTO S MAIN ST. TURN RIGHT ONTO HIGGINS RD. STOP AT THE LIGHT.



APPLICABLE BUILDING CODES AND STANDARDS

CONTRACTOR'S WORK SHALL COMPLY WITH PROJECT STANDARD NOTES, SYMBOLS AND DETAILS (SEE DRAWING INDEX FOR STANDARD NOTES AND DETAILS INCLUDED WITH DRAWING PACKAGE). CONTRACTOR WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL CODES, AS ADOPTED BY THE LOCAL JURISDICTION (AJU) FOR THE LOCATION. THE EDITION OF THE ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:

BUILDING CODE:
CONNECTICUT STATE BUILDING CODE (2005) & ALL SUBSEQUENT AMENDMENTS

ELECTRICAL CODE:

ELECTRICAL CODE:
NATIONAL ELECTRICAL CODE (NEC 2005)

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), *MANUAL OF STEEL CONSTRUCTION*, ASD, NINTH
EDITION
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA
SUPPORTING STRUCTURES

**TOWER AND ANTENNA SUPPORTING STRUCTURES:
TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS**

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81. GUIDE FOR MEASURING EARTH

RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
IEEE 1100 (1988) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C62.41 RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR

LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

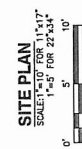
ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING WATER, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

[illegible]

TITLE SHEET

DEWBERRY NO.	DRAWING NUMBER	REV
50048347/50048350	T01	2



1. NORTH SHOWN AS APPROXIMATE.
2. MOUNT ALL ANTENNAS, COAX, SURGE ARRESTORS, RRU's, ETC. IN ACCORDANCE WITH STRUCTURAL ANALYSIS BY OTHERS.

NO.	DATE	REVISIONS	BY	CHK APP'D	
1		ISSUED FOR CONSTRUCTION	JWE	GMH	
2	02/26/13	ISSUED FOR CONSTRUCTION	DHD	GMH	
1	12/11/12	ISSUED FOR CONSTRUCTION	DHD	GMH	
0	03/09/12	PRELIMINARY SUBMISSION	RESA	GMH	
NO.	DATE	REVISIONS	BY	CHK APP'D	
1		DESIGNED BY:	GMH		
2		AS SHOWN	DESIGNED BY:	RESA	



ROBERT J. FALTY, P.E.
 CT LICENSE NO. PDN 002056

50048347/50048350

DEMERRY NO.

DRAWING NUMBER

A01

REVISED

2

SITE PLAN & SHELTER LAYOUT



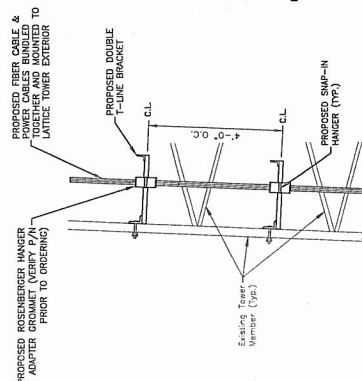
NO.	DATE	BY	REVISIONS	DESIGNED BY:	DRAWN BY:	SCALE
2	03/09/12	PRELIMINARY SUBMISSION	BY CHW (APP'D)			
1	12/11/12	ISSUED FOR CONSTRUCTION	DHD (DAN CHN)			
2	02/28/13	ISSUED FOR CONSTRUCTION	JAE (DAN CHN)			



ROBERT A. FALC, P.E.
 CIVIL ENGINEER

50048347/50048350
A02
 2

ELEVATION & CONSTRUCTION DETAILS

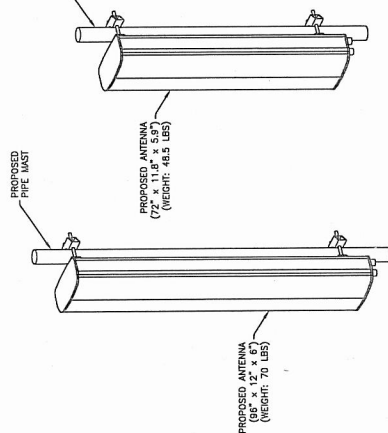


NOTES:

1. MODIFY OR IMPROVE EXISTING CABLE LADDER AS NEEDED.
2. INSTALL CONDUIT PER STRUCTURAL ANALYSIS.

VERTICAL CONDUIT DETAIL

SCALE: N.T.S.

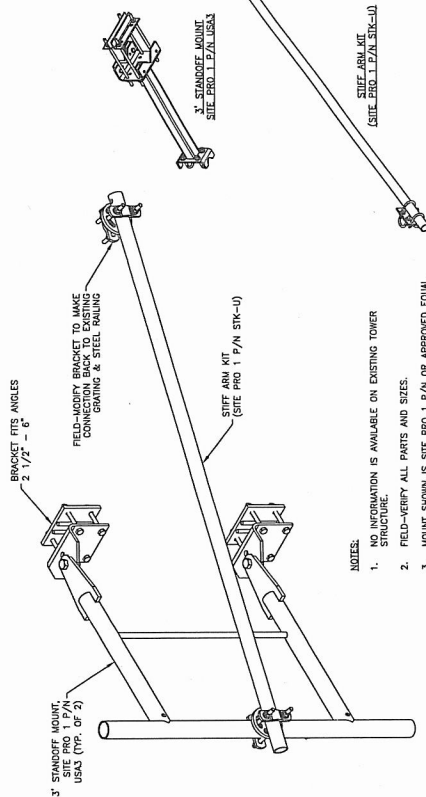


NOTE:

11. PLEASE SEE RFDS FOR SPECIFIC ANTENNA MODEL.

ISOMETRIC ANTENNA DETAILS

SCALE: N.T.S.

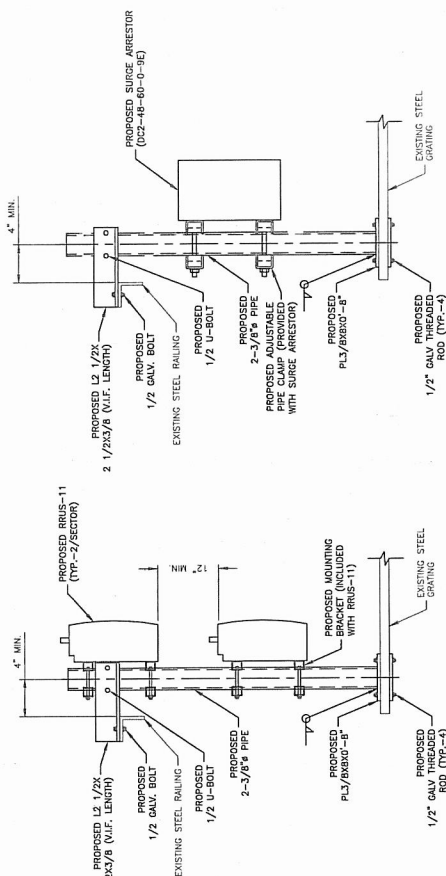


NOTES:

1. NO INFORMATION IS AVAILABLE ON EXISTING TOWER STRUCTURE.
2. FIELD-VERIFY ALL PARTS AND SIZES.
3. MOUNT SHOWN IS SITE PRO 1 P/N OR APPROVED EQUAL.
4. FIELD CUT STANDOFF TO MINIMIZE TRIP HAZARD.

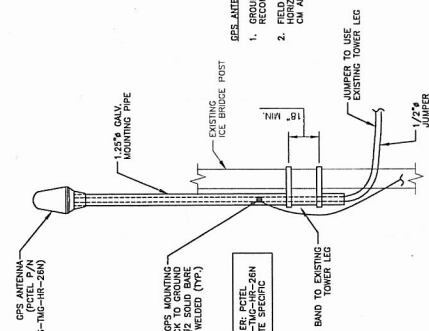
3' STANDOFF MOUNT

SCALE: N.T.S.



RRUS-11 & SURGE

ARREST
SCALE: N.T.S.



GPS ANTENNA NOTES:

1. GROUND ANTENNAS AND MOUNTS PER MANUFACTURERS RECOMMENDATIONS AND AT&T STANDARDS.
2. FIELD LOCATE GPS ANTENNA A MINIMUM OF 10 FEET HORIZONTALLY FROM EXISTING GPS ANTENNA WITH AT&T CM APPROVAL

GPS ANTENNA MOUNT

SCALE: N.T.S.

 Dewberry® Dewberry Engineers, Inc. SUITE 301 600 PARKWAY ROAD ROCKY HILL, CT 06067 PHONE: 860.311.0084 FAX: 860.311.0085 FAX: 878.728.8910	 NEXLINK DIGITAL SERVICE™ 600 MARSHALL PHELPS ROAD, #2A WINDSOR, CT 06095	CHESHIRE SW SITE NO. CT2036 751 HIGGINS ROAD CHESHIRE, CT 06410	 at&t 500 ENTERPRISE DRIVE, ROCKY HILL, CT 06067
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NO.	DATE	REVISIONS	DESIGNED BY:	DRAWN BY:	REVISIONS	DATE	NO.
2	02/28/13	ISSUED FOR CONSTRUCTION	JME	QIN	QIN		
1	12/11/12	ISSUED FOR CONSTRUCTION	DWD	QIN	QIN		
0	03/09/12	PRELIMINARY SUBMISSION	RSA	QIN	QIN		
			BY	CHK	APPD		



CONSTRUCTION DETAILS-1

REV	DRAWING NUMBER	DENVERBY NO.
2	A03	50048377/50048350

SCALE: AS SHOWN

FORBES, J. COOK, P.E.
C LICENSE NO. 75N.0021054

NO.	DATE	REVISIONS	BY	CHK	APP'D	DRAWING NO.	DRAWING NUMBER
0	02/07/12					50048347/50048350	A04
PRELIMINARY - FOR DISCUSSION		DESIGNED BY: GHM		DRAWN BY: RSA		ROBERT J. POLY, P.E. CT LICENSE NO. POL0026554	
SCALE: AS SHOWN							

