Robinson+Cole

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October 16, 2023

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification**
1111 East Putnam Avenue, Greenwich, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at the above-referenced address (the "Property"). Cellco's facility consists of pipe-mounted antennas and remote radio heads attached to a roof-top mechanical screening enclosure on the roof of the building. Equipment associated with the antennas is located inside the building. Cellco's existing facility was approved by the Siting Council in February of 1990 (Docket No. 120). A copy of the Council's Docket No. 120, Decision and Order approval is included in Attachment 1.

Cellco's proposed modification involves the installation of two (2) interference mitigation filters ("Filters") on its existing antenna mounting assembly. The specification sheet for the Filter is included in Attachment 2.

Please accept this letter 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 Greenwich's Chief Elected Official and Land Use Officer. A copy of this letter is being sent to the owner of the Property.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. The Filters will be installed on existing antenna mounting assemblies attached to the existing mechanical equipment screening enclosure.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The installation of the Filters will not result in a change to radio frequency (RF) emissions from the facility. Therefore, no new RF emissions information is included in this filing.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. According to the attached Mount Analysis Report ("MA), the existing mechanical screen wall on the roof, the host structure and mounting assemblies can support Cellco's proposed modifications. A copy of the MA is included in Attachment 3.

A copy of the parcel map and Property owner information is included in Attachment 4. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 5.

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Fred Camillo, Greenwich First Selectman
Patrick LaRow, Director of Planning & Zoning
Fountainhead Properties LLC, Property Owner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

ORIGINAL

4145E

DOCKET NO. 120 - An application of Metro Mobile CTS of Fairfield County, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of cellular telephone antennas and associated equipment located in the Town of Greenwich, Connecticut.

CONNECTICUT

SITING

COUNCIL

FEBRUARY 26, 1990

DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council finds that the effects associated with the construction, operation, and maintenance of a cellular telecommunications facility at the proposed site in Greenwich, Connecticut, including effects on the natural environment; ecological balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the proposed Greenwich (East) site in this application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the Connecticut General Statutes (CGS), be issued to Metro Mobile CTS of Fairfield County, Inc., for the construction, operation, and maintenance of a cellular telephone facility at the proposed site on 1111 East Putnam Avenue, Greenwich, Connecticut.

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

1. The facility shall be constructed in accordance with applicable sections of the State of Connecticut Basic Building Code.

2. The Certificate holder shall notify the Council if and when any equipment other than that listed in this application is added to this facility.

3. The Certificate Holder shall prepare a Development and Management Plan (D&M Plan) for this site which shall include detailed plans for the attachment of the antenna structures to the roof top facade showing mounting brackets, modifications to the facade and building structure, cable pathway from antennas to the equipment room, and the location of emergency power generation. The Certificate Holder shall consult with the building's owner in the preparation of the D&M Plan.

4. The antenna bases shall be mounted no higher than 49 feet above ground level, or 144 feet above mean sea level.

5. The Certificate Holder shall provide a final report to the Council upon completion of construction, including the final construction costs and date of commercial operation.

6. If this facility does not initially provide, or permanently ceases to provide, cellular service following the completion of construction, this Decision and Order shall be void, and the antennas and all associated equipment in this application shall be dismantled and removed or reapplication for any new use shall be made to the Council and a Certificate granted before any such new use is made.

7. The Certificate Holder shall comply with any future radio frequency (RF) standard promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility granted in this Decision and Order shall be brought into compliance with such standards.

8. The Certificate Holder or its successor shall provide the Council with a report of recalculated power density if and when additional channels over the proposed 90 channels, higher wattage over the proposed 100 watts per channel, or if other circumstances in operation cause change in power density above the levels originally calculated in the application.

9. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the issuance of this Decision and Order, or within three years of the completion of any appeal taken to this Decision and Order.

Pursuant to Section 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below. A notice of issuance shall be published in the The Advocate and Greenwich Time. By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of State Agencies.

The parties or intervenors to this proceeding are:

(Applicant)	(Its Representatives)
Metro Mobile CTS of Fairfield County, Inc. 50 Rockland Road South Norwalk, CT 06854 Attn: Phillip Mayberry Vice President and General Manager	Robinson & Cole One Commercial Plaza Hartford, CT 0613-3597 Attn: Earl W. Phillips, Esq.

(Party)

Patrick J. Pellegrino
Mary G. Pellegrino
268 Milbank Avenue
Greenwich, CT 06830

(Intervenor)

SNET Cellular, Inc.
227 Church Street
New Haven, CT 06506

Peter H. Tyrrell, Esq.
Senior Attorney
SNET Cellular, Inc.
227 Church Street
New Haven, CT 06506

TEF/cp

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket No. 120 or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 26 day of February, 1990.

Council Members	Vote Cast
Gloria Dibble Pond Chairperson	Yes
Commissioner Peter Boucher Designee: Robert A. Pulito	Yes
Commissioner Leslie Carothers Designee: Brian Emerick	Yes
Harry E. Covey	Yes
Mortimer A. Gelston	Yes
Daniel P. Lynch, Jr.	Yes
Paulann H. Sheets	Abstain
William H. Smith	Yes
Colin C. Tait	Yes

ATTACHMENT 2

BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The BSF0020 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the BSF0020 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the BSF0020 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available

TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	

ELECTRICAL	
Impedance	50Ohms
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm

DC / AISG	
Passband	0 - 13MHz
Insertion loss	0.3dB maximum
Return loss	15dB minimum
Input voltage range	± 33V
DC current rating	2A continuous, 4A peak
Compliance	3GPP TS 25.461

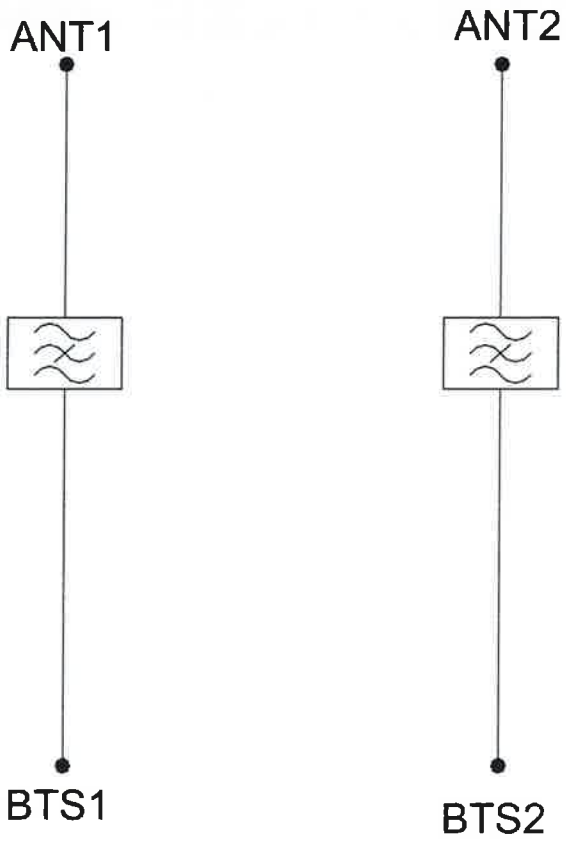
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20°C to +60°C | -4°F to +140°F
Ingress protection	IP67
Altitude	2600m | 8530ft
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE

MECHANICAL	
Dimensions H x D x W	269 x 277 x 80mm | 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	8.0 kg | 17.6 lbs (no bracket)
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.

ORDERING INFORMATION

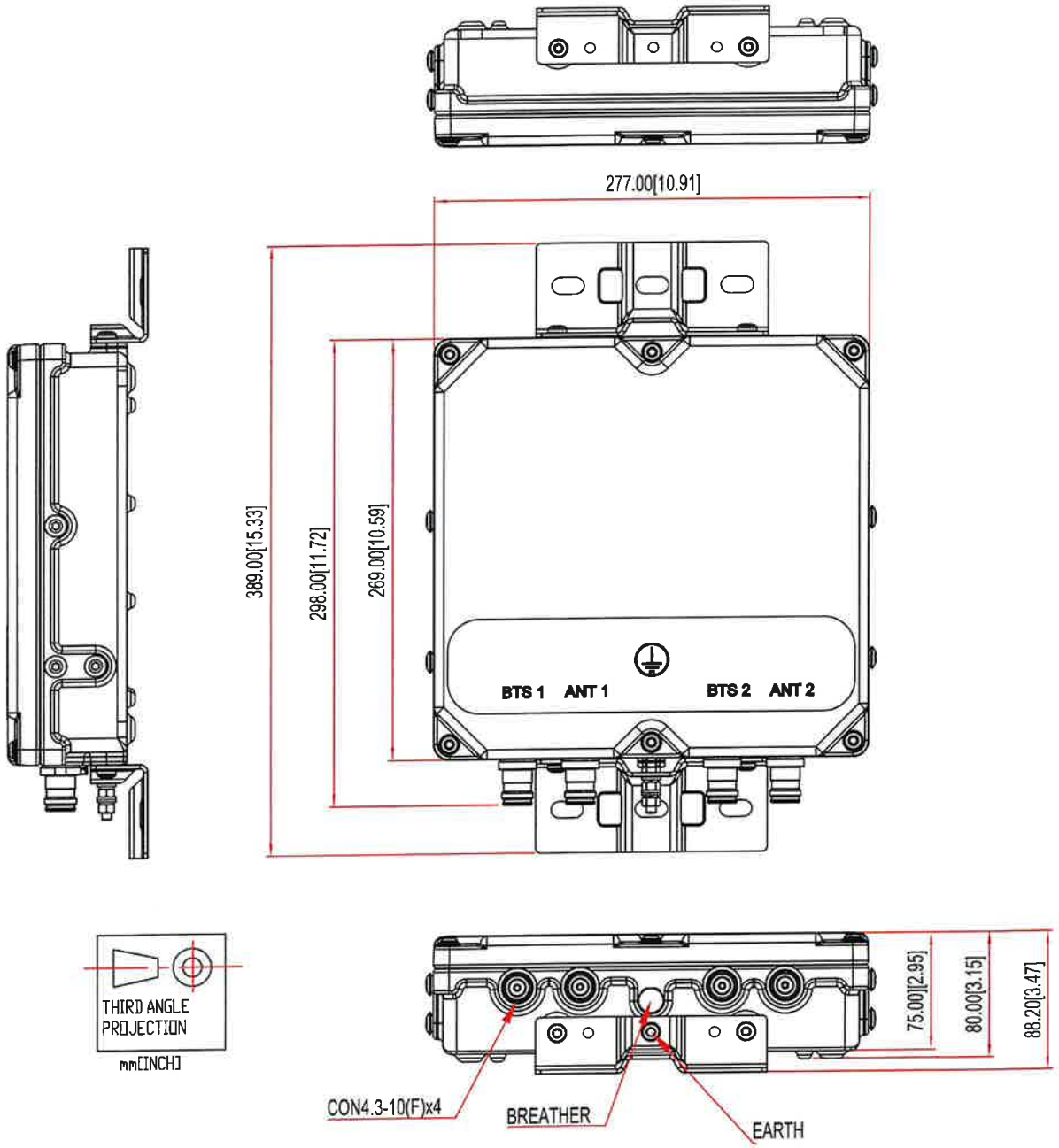
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
BSF0020F3V1	TWIN, 2 in / 2 out	DC/AISG PASS NO BRACKET	4.3-10 (F)
BSF0020F3V1-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)
BSF0020F3V1-2	QUAD, 4 in / 4 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

MECHANICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ATTACHMENT 3

ALL-POINTS
TECHNOLOGY CORPORATION

MOUNT ANALYSIS REPORT
RIVERSIDE, CONNECTICUT

Prepared for
Verizon Wireless

verizon

Verizon Site Ref:
468066; Riverside CT

Site Address: 1111 East Putnam Avenue, Riverside, CT 06878
FUZE ID: 17136870
PSLC Code: 468066
MDG Location ID: 5000104976

APT Filing No. CT141_14200

Rev 0: August 29, 2023

ALL-POINTS TECHNOLOGY CORPORATION, P.C.
567 VAUXHALL STREET EXTENSION · SUITE 311 · WATERFORD, CT 06385 · PHONE 860-663-1697

Mount Analysis Report
Riverside, Connecticut
prepared for
Verizon Wireless

EXECUTIVE SUMMARY:

All-Points Technology Corporation, P.C. (APT) performed a structural analysis of the existing antenna mount assemblies and an evaluation of the existing host structure to support a proposed Verizon Wireless equipment modification.

Details of the existing and proposed equipment configuration are included within the table on the following page. Reference can be made to the Construction Drawings, prepared by APT, marked Rev 0, dated 08/29/2023.

We find that the existing Verizon mount assemblies and the existing host structure meet the requirements of the 2021 International Building Code (IBC), as amended by the 2022 Connecticut State Building Code, and the ANSI/TIA-222-H standard under the proposed equipment loading.

The mount assembly component usage is summarized in the table below:

Mount Assembly Component	Usage (%)
Members (Pipe Mast)	48%
Connection (Bolts)	12%

The existing rooftop screenwall and supporting roof structure component usage is summarized in the table below:

Mount Assembly Component	Usage (%)
Mechanical Screenwall (Braces)	96%
Roof Support Structure (Beam)	94%

INTRODUCTION:

A structural analysis of the existing mount assemblies was performed by APT for the purpose of supporting the proposed Verizon Wireless equipment installation. Further, APT conducted a local evaluation of the existing host structure with the imposed carrier loading. The subject host structure is a 37.8'± office building located at 1111 East Putnam Avenue in Riverside, Connecticut.

The following information was utilized in the preparation of this analysis:

- Rooftop mapping obtained from field measurements and site observations conducted by APT during January and October 2022.
- Mount Analysis and Structural Reinforcement Design Report as prepared by APT (APT Filing No. CT141_13220), dated April 7, 2023
- Mount Analysis Report as prepared by PBA Engineering, P.C. (PBA) (PBA Project No. N-552), dated April 6, 2021.
- Structural Analysis Report as prepared by PBA Engineering, P.C. (PBA) (PBA Project No. N-552), dated April 6, 2021.

- Construction Drawings as prepared by On Air Engineering, LLC (On-Air), marked Rev 2 and dated April 4, 2021.
- Partial set of Building Drawings as prepared by James A. Evans, Architect, and Werner, Jensen, & Korst, Engineers

The analysis was conducted using the following antenna inventory (proposed equipment shown in **bold** text):

Carrier	Antenna and Appurtenance Make/Model	Elevation	Status[1]	Mount Type
Verizon	**(2) Kaelus KA-6030 Filters [3]**	90'±	P	Existing individual steel pipes flush mounted to existing building rooftop mechanical screenwall.
	(3) Samsung MT6407-77A Panel Antennas w/ Integrated RRHs (6) Commscope NHH-65B-R2B panel antennas [2] (3) Samsung B2/B66a (RF4439d-25A) RRHs, (3) Samsung B5/B13 (RF4440d-13A) RRHs, (3) Raycap RxxDC-3315-PF-48 (6OVP)		ETR	

Notes:

1. ETR = Existing to Remain; ERL= Existing to be Relocated; P = Proposed; F = Future; *R*= Reserved.
2. Antennas utilizing dual mount antenna brackets.
3. Gamma Sector only.

STRUCTURAL ANALYSIS:

The structural analysis has been prepared in accordance with the ANSI/TIA-222-H standard entitled "Structural Standard for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures"; American Institute of Steel Construction (AISC) Manual of Steel Construction, and the 2021 International Building Code (IBC), as amended by the 2022 Connecticut State Building Code utilizing the following criteria:

- 120 mph (3-second gust) Basic Design Wind Speed
- Risk Category: II
- Exposure Category: C
- Ground Snow Load, Pg = 30 psf
- Roof Live Load, LLr = 20 psf

ANALYSIS RESULTS:

Antenna Mount Assemblies:

The analysis of the antenna mount assemblies was conducted in accordance with the criteria outlined herein with the aforementioned proposed equipment loading. The following table summarizes the results of the analysis:

Mount Assembly Component	Usage (%)
Members (Pipe Mast)	48%
Connection (Bolts)	12%

Existing Screenwall & Roof Members:

The analysis of the existing rooftop mechanical screenwall and supporting roof structure were conducted in accordance with the criteria outlined herein with the aforementioned proposed equipment loading. The following table summarizes the results of the analysis:

Mount Assembly Component	Usage (%)
Mechanical Screenwall (Braces)	96%
Roof Support Structure (Beam)	94%

CONCLUSIONS AND RECOMMENDATIONS:

In conclusion, we find that the existing mount assemblies and host structure located at 1111 East Putnam Avenue Road in Riverside, Connecticut meets the requirements of the 2021 International Building Code (IBC), as amended by the 2022 Connecticut State Building Code, and the ANSI/TIA-222-H standard under the proposed equipment loading.

Sincerely,
All-Points Technology Corp., P.C.

Michael S. Trodden, P.E.
Sr. Structural Engineer

STATE OF CONNECTICUT
MICHAEL TRODDEN
33313
LICENSED
PROFESSIONAL ENGINEER

Prepared by,
All-Points Technology Corp., P.C.

Domenic Aversa, PE
Sr. Structural Engineer

LIMITATIONS:

This report is based on the following:

1. Tower/structure is properly installed and maintained.
2. With the exception of the anchor bolts, all members are in a non-deteriorated condition.
3. All required members are in place.
4. All bolts are in place and are properly tightened.
5. Tower/structure is in plumb condition.
6. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Replacing or reinforcing bracing members.
2. Reinforcing members in any manner.
3. Installing antenna mounts.
4. Extending tower/structure.

APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware of any information which is contrary to that which is contained herein, or you are aware of any defects arising from the original design, material, fabrication, and erection deficiencies, you should disregard this report and immediately contact APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

Appendix A

Design Criteria

Municipality	Basic Design Wind Speeds, V (mph)				Allowable Stress Design Wind Speeds, V_{asd} (mph)				Ground Snow Load p_g (psf)	MCE Ground Accelerations		Wind-Borne Debris Region[1]		Hurricane-Prone Region
	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV		S_S (g)	S_1 (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	
Cornwall	105	115	125	130	81	89	97	101	40	0.172	0.054			
Coventry	110	120	130	135	85	93	101	105	30	0.188	0.055			Yes
Cromwell	110	120	130	135	85	93	101	105	30	0.207	0.056			Yes
Danbury	110	120	125	130	85	93	97	101	30	0.225	0.056			Yes
Darien	110	120	130	135	85	93	101	105	30	0.250	0.057		Type B	Yes
Deep River	115	125	135	140	89	97	105	108	30	0.210	0.054			Yes
Derby	110	120	130	135	85	93	101	105	30	0.202	0.054			Yes
Durham	110	120	130	135	85	93	101	105	30	0.211	0.055			Yes
East Granby	110	120	125	130	85	93	97	101	35	0.173	0.054			Yes
East Haddam	115	125	135	135	89	97	105	105	30	0.214	0.056			Yes
East Hampton	110	125	130	135	85	97	101	105	30	0.210	0.056			Yes
East Hartford	110	120	130	135	85	93	101	105	30	0.191	0.055			Yes
East Haven	110	125	135	135	85	97	105	105	30	0.200	0.053	Type B	Type B	Yes
East Lyme	120	130	135	140	93	101	105	108	30	0.198	0.053	Type B	Type B	Yes
East Windsor	110	120	130	135	85	93	101	105	30	0.177	0.055			Yes
Eastford	110	120	130	135	85	93	101	105	40	0.180	0.055			Yes
Easton	110	120	130	135	85	93	101	105	30	0.218	0.055			Yes
Ellington	110	120	130	135	85	93	101	105	35	0.178	0.055			Yes
Enfield	110	120	125	130	85	93	97	101	35	0.172	0.055			Yes
Essex	115	125	135	140	89	97	105	108	30	0.207	0.054			Yes
Fairfield	110	120	130	135	85	93	101	105	30	0.219	0.055		Type B	Yes
Farmington	110	120	130	135	85	93	101	105	35	0.188	0.055			Yes
Franklin	115	125	135	140	89	97	105	108	30	0.195	0.054			Yes
Glastonbury	110	120	130	135	85	93	101	105	30	0.200	0.055			Yes
Goshen	110	115	125	130	85	89	97	101	40	0.172	0.054			
Granby	110	120	125	130	85	93	97	101	35	0.171	0.054			Yes
Greenwich	110	120	130	135	85	93	101	105	30	0.274	0.059		Type B	Yes
Griswold	120	125	135	140	93	97	105	108	30	0.189	0.054			Yes
Groton	120	130	140	140	93	101	108	108	30	0.190	0.052	Type B	Type A	Yes
Guilford	115	125	135	140	89	97	105	108	30	0.204	0.054	Type B	Type B	Yes
Haddam	115	125	135	135	89	97	105	105	30	0.214	0.055			Yes
Hamden	110	120	130	135	85	93	101	105	30	0.202	0.054			Yes

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Stiff Soil

Latitude: 41.041092
Longitude: -73.584221
Elevation: 82.77864545731552 ft (NAVD 88)

Wind

Results:

Wind Speed	117 Vmph
10-year MRI	75 Vmph
25-year MRI	85 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Tue Aug 15 2023

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Tue Aug 15 2023

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Appendix B

Mount Analysis

ALL-POINTS TECHNOLOGY CORPORATION

Project ID:	CT141_14200
Site Name:	Riverside CT
Date:	8/15/2023
Prepared By:	D.Aversa
Checked By:	M. Trodden

(Based on ANSI/TIA-222-H-2018)

Site Name:	Riverside CT
Site Address:	1111 East Putnam Ave Riverside, CT 06878
Site County:	Fairfield

Design Criteria

Risk Category =	II		*Sect. 2.2 & Table 2-1*
Exposure Category =	C		*Section 2.6.5*
Ultimate Design Wind Speed, V =	120	mph	*Appendix P 2022 CT Builidng Code*
Design Wind Speed with Ice, V_i =	50	mph	*Fig. B-9*
Design Ice Thickness, t_i =	1.00	in	*Fig. B-9*
Importance Factor, I =	1.00		*Table 2-3*

Building Information:

Antenna Centerline, z =	43.9	ft., +/-	
Building Height, H =	37.8	ft., +/-	
Bulkhead/Parapet Height, H_{ppt} =	0.00	ft., +/-	*(max.)*
Largest Windward Face of Structure, W_s =	48.0	ft., +/-	

Wind Pressure Analysis:

$q_z = 0.00256 K_z K_{zt} K_s K_e K_d V^2$ *Section 2.6.11.6*

K_z : **See Next Sheet**

z_g =	900		*Table 2-4*
α =	9.5		*Table 2-4*
K_{zmin} =	0.85		*Table 2-4*
K_{zt} : K_{zt} =	**1.00**		*Section 2.6.6*
K_s : K_s =	**1.10**		*Section 2.6.7*
K_e : K_e =	**1.00**		*Section 2.6.8*
K_d : K_d =	**0.95**		*Section 16.6*
q_z' =	**38.52**	**psf**	
q_{zi}' =	**6.69**	**psf**	

$F = q_z G_h (EPA)_A = q_z G_h K_a [(EPA)_N \cos^2(\Theta) + (EPA)_T \sin^2(\Theta)]$ *Section 2.6.11.2*

G_h =	1.00		*Section 16.6*
K_a =	0.90		*Section 16.6*

ALL-POINTS TECHNOLOGY CORPORATION

Project ID:	CT141_14200
Site Name:	Riverside CT
Date:	8/15/2023
Prepared By:	D.Aversa
Checked By:	M. Trodden

(Based on ANSI/TIA-222-H-2018)

Design Criteria: *(From Previous Sheet)*

$q_z' =$ **38.52** psf
$q_{zi}' =$ **6.69** psf
$t_i =$ **1.00** in

$G_h =$ 1.00 *Section 16.6*
$K_a =$ 0.90 *Section 16.6*

$z_g =$ 900 *Table 2-4*
$\alpha =$ 9.5 *Table 2-4*
$K_{zmin} =$ 0.85 *Table 2-4*

Description	#/Sector	Elev. z, ft	K_z	q_z, psf	Dimensions: Height, in	Width, in	Depth, in	Wght., lbs	Flat Panel Front Coefficient: Area, ft²	Aspect Ratio	Ca	C_aA_a	Flat Panel Side Coefficient: Area, ft²	Aspect Ratio	Ca	C_aA_a	Front Wind Force, lbs	Side Wind Force, lbs	Weight, lbs
NHH-65B-R2B	2.0	43.9	1.064	41.00	72.0	11.9	8.2	73.7	5.95	6.050	1.36	8.08	4.100	8.780	1.46	5.983	299.0	221.0	73.7
MT6407-77A	**1.0**	**43.9**	1.064	41.00	35.1	16.1	5.5	87.1	3.92	2.180	1.20	4.71	1.343	6.370	1.37	1.843	174.0	68.0	87.1
B2/66a Samsung RRH	1.0	43.9	1.064	41.00	15.0	15.0	10.0	97.5	1.56	1.000	1.20	1.88	1.046	1.494	1.20	1.255	70.0	47.0	97.5
B5/B13 Samsung RRH	1.0	43.9	1.064	41.00	15.0	15.0	8.1	82.0	1.56	1.000	1.20	1.88	0.844	1.852	1.20	1.013	70.0	38.0	82.0
KA-6030 Filter	2.0	43.9	1.064	41.00	10.6	10.9	3.2	17.6	0.80	0.972	1.20	0.96	0.236	3.313	1.24	0.291	72.0	22.0	35.2
OVP	1.0	43.9	1.064	41.00	19.8	15.7	10.3	32.0	2.16	1.259	1.20	2.60	1.409	1.932	1.20	1.691	96.0	63.0	32.0

Description	#/Sector	z, ft	K_z	q_{zi}, psf	Dimensions with Ice: Ice Thick., t_{iz}, in	Height, in	Dc, in	Ice Wght., lbs	Flat Panel Front Coefficient: Area, ft²	Aspect Ratio	Ca	C_aA_a	Flat Panel Side Coefficient: Area, ft²	Aspect Ratio	Ca	C_aA_a	Front Wind Force, lbs	Side Wind Force, lbs	Weight, lbs
NHH-65B-R2B	2.0	43.9	1.064	7.118	1.03	74.06	14.45	120.1	7.18	5.12	0.76	5.444	5.276	5.12	0.76	4.001	35.0	26.0	193.8
MT6407-77A	**1.0**	43.9	1.064	7.118	1.03	37.16	17.02	70.2	4.69	2.18	0.70	3.280	1.953	2.18	0.70	1.367	22.0	9.0	157.3
B2/66a Samsung RRH	1.0	43.9	1.064	7.118	1.03	17.06	18.05	34.1	2.02	0.95	0.70	1.414	1.433	0.95	0.70	1.003	10.0	7.0	131.6
B5/B13 Samsung RRH	1.0	43.9	1.064	7.118	1.03	17.06	17.05	32.3	2.02	1.00	0.70	1.414	1.203	1.00	0.70	0.842	10.0	6.0	114.3
KA-6030 Filter	2.0	43.9	1.064	7.118	1.03	12.66	11.36	16.4	1.14	1.11	0.70	0.797	0.462	1.11	0.70	0.324	12.0	6.0	86.8
OVP	1.0	43.9	1.064	7.118	1.03	21.86	18.77	45.3	2.70	1.16	0.70	1.890	1.868	1.16	0.70	1.308	13.0	9.0	77.3

ALL-POINTS TECHNOLOGY CORPORATION

Project ID:	CT141_14200
Site Name:	Riverside CT
Date:	8/15/2023
Prepared By:	D.Aversa
Checked By:	M. Trodden

(Based on ANSI/TIA-222-H-2018)

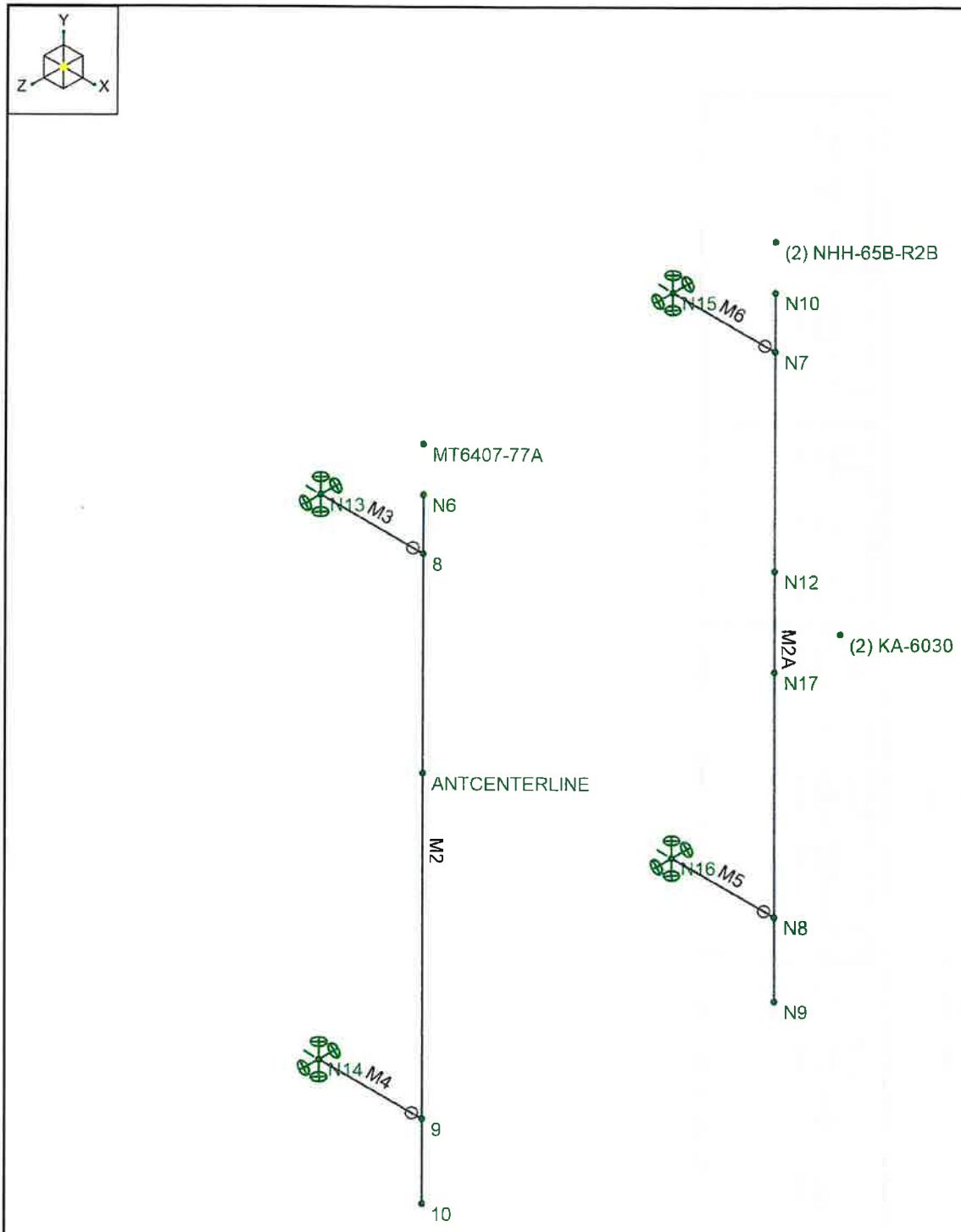
Design Criteria: *(From Previous Sheet)*

$q_z' =$ **38.52** psf $G_h =$ 1.00 *Section 16.6* $z_g =$ 900 *Table 2-4*

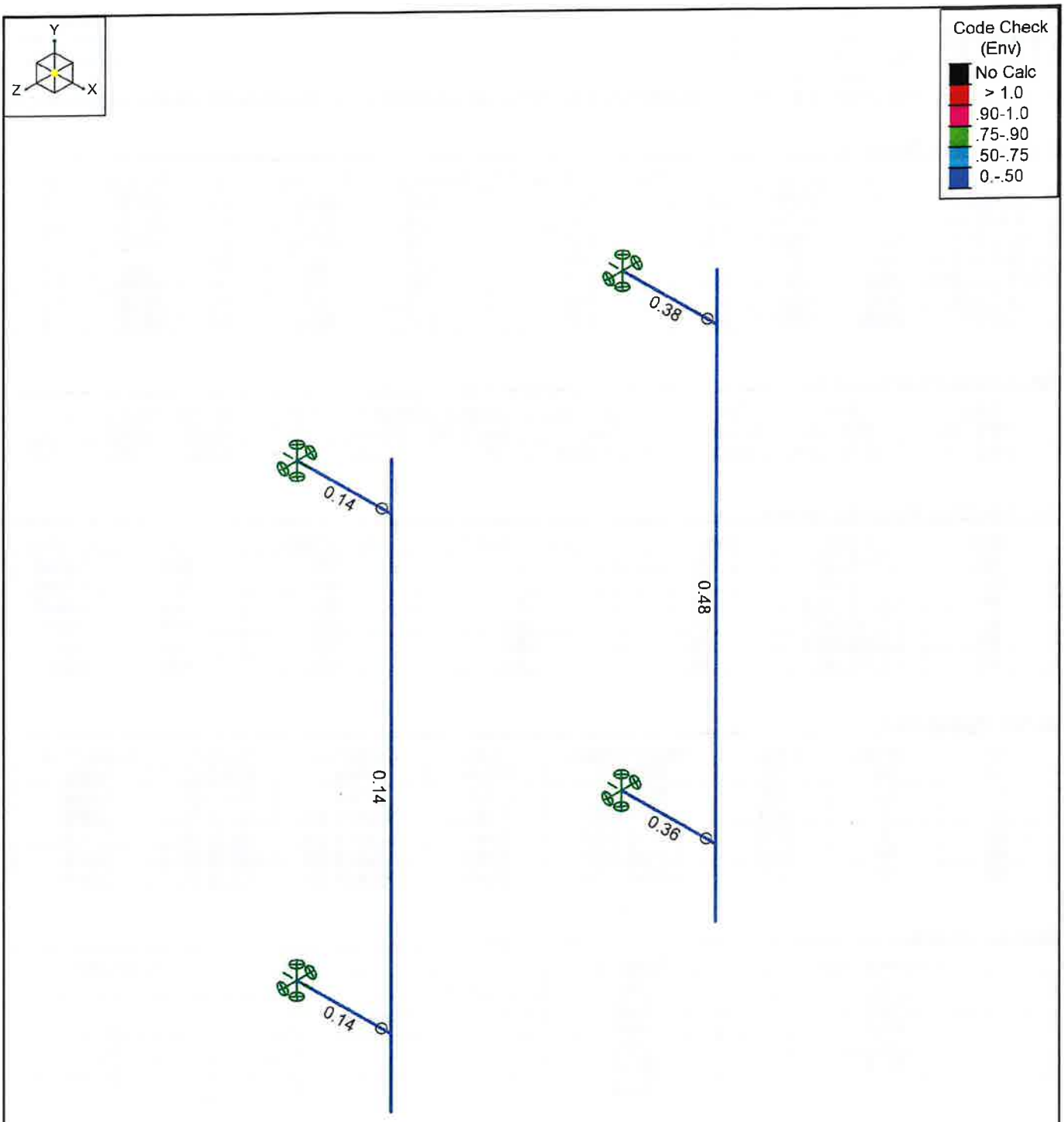
$q_{zi}' =$ **6.69** psf $K_a =$ 0.90 *Section 16.6* $\alpha =$ 9.5 *Table 2-4*

$t_i =$ **1.00** in $K_{zmin} =$ 0.85 *Table 2-4*

						Dimensions					Loading, No Ice			With Ice				
Description	Elev. z, ft	K_z	q_z, psf	Ice Thick., t_{di}, in	q_{zi}, psf	Width or Dia, in	Depth, in	Thickness, in	r_s	Weight, lbs/ft	Flat or Round	Ca	Wind, lbs/ft	Width or Dia, in	Dc_i, in	Weight, lbs/ft	Ca	Wind, lbs/ft
L2.5x2.5x1/4	43.9	1.064	41.00	1.03	7.12	2.500	2.500	0.250	-	4.10	FLAT	2.00	15.37	4.56	3.536	5.74	2.00	4.87
2.0" STD	43.9	1.064	41.00	1.03	7.12	2.375	2.375	0.154	-	3.65	ROUND	1.20	8.76	4.43	2.375	4.28	1.20	2.84



RISA	APT	Existing Mounts	SK-1
	DJA		Aug 15, 2023 at 10:30 AM
	CT141_14200	Nodes & Labels	Riverside CT - TYP MOUNT.r...



Member Code Checks Displayed (Enveloped)

RISA	APT	Existing Mounts	SK-2
	DJA		Aug 15, 2023 at 10:31 AM
	CT141_14200	Bending Stresses	Riverside CT - TYP MOUNT.r...

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e^{5}°F^{-1}]	Density [k/ft^3]	Yield [psi]	Ry	Fu [psi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50000	1.1	65000	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36000	1.5	58000	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50000	1.1	65000	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42000	1.4	58000	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46000	1.4	58000	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35000	1.6	60000	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50000	1.4	65000	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in^2]	Iyy [in^4]	Izz [in^4]	J [in^4]
1	PIPE 2.0	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
2	L2.5x2.5x1/4	L2.5X2.5X4	Beam	Single Angle	A36 Gr.36	Typical	1.19	0.692	0.692	0.026

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
1	M2	PIPE 2.0	84		N/A	N/A	Lateral
2	M2A	PIPE 2.0	84		N/A	N/A	Lateral
3	M3	L2.5x2.5x1/4	14	Lbyy	N/A	N/A	Lateral
4	M4	L2.5x2.5x1/4	14	Lbyy	N/A	N/A	Lateral
5	M5	L2.5x2.5x1/4	14	Lbyy	N/A	N/A	Lateral
6	M6	L2.5x2.5x1/4	14	Lbyy	N/A	N/A	Lateral

Member Primary Data

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
1	M2	N6	10	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical
2	M2A	N10	N9	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical
3	M3	8	N13	L2.5x2.5x1/4	Beam	Single Angle	A36 Gr.36	Typical
4	M4	9	N14	L2.5x2.5x1/4	Beam	Single Angle	A36 Gr.36	Typical
5	M5	N8	N16	L2.5x2.5x1/4	Beam	Single Angle	A36 Gr.36	Typical
6	M6	N7	N15	L2.5x2.5x1/4	Beam	Single Angle	A36 Gr.36	Typical

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Distributed
1	DL	DL	-1.05	3	
2	WLX	WLX		3	2
3	WLZ	WLZ		3	6
4	DLi	OL1		3	6
5	WLXi	WL+X		3	2
6	WLZi	WL+Z		3	6

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4DL	Yes	Y	DL	1.4						
2											
3	1.2DL + WLX	Yes	Y	DL	1.2	WLX	1				
4	1.2DL + 0.75WLX + 0.25WLZ	Yes	Y	DL	1.2	WLX	0.75	WLZ	0.25		
5	1.2DL + 0.25WLX + 0.75WLZ	Yes	Y	DL	1.2	WLX	0.25	WLZ	0.75		
6	1.2DL + WLZ	Yes	Y	DL	1.2	WLZ	1				

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
7	1.2DL + 0.25WL-X + 0.75WLZ	Yes	Y	DL	1.2	WLX	-0.25	WLZ	0.75		
8	1.2DL + 0.75WL-X + 0.25WLZ	Yes	Y	DL	1.2	WLX	-0.75	WLZ	0.25		
9	1.2DL + WL-X	Yes	Y	DL	1.2	WLX	-1				
10	1.2DL + 0.75WL-X + 0.25WL-Z	Yes	Y	DL	1.2	WLX	-0.75	WLZ	-0.25		
11	1.2DL + 0.25WL-X + 0.75WL-Z	Yes	Y	DL	1.2	WLX	-0.25	WLZ	-0.75		
12	1.2DL + WL-Z	Yes	Y	DL	1.2	WLZ	-1				
13	1.2DL + 0.25WLX + 0.75WL-Z	Yes	Y	DL	1.2	WLX	0.25	WLZ	-0.75		
14	1.2DL + 0.75WLX + 0.25WL-Z	Yes	Y	DL	1.2	WLX	0.75	WLZ	-0.25		
15											
16	1.2DL + DLi + WLXi	Yes	Y	DL	1.2	OL1	1	WL+X	1		
17	1.2DL + DLi + 0.75WLXi + 0.25WLZi	Yes	Y	DL	1.2	OL1	1	WL+X	0.75	WL+Z	0.25
18	1.2DL + DLi + 0.25WLXi + 0.75WLZi	Yes	Y	DL	1.2	OL1	1	WL+X	0.25	WL+Z	0.75
19	1.2DL + DLi + WLZi	Yes	Y	DL	1.2	OL1	1	WL+Z	1		
20	1.2DL + DLi + 0.25WL-Xi + 0.75WLZi	Yes	Y	DL	1.2	OL1	1	WL+X	-0.25	WL+Z	0.75
21	1.2DL + DLi + 0.75WL-Xi + 0.25WLZi	Yes	Y	DL	1.2	OL1	1	WL+X	-0.75	WL+Z	0.25
22	1.2DL + DLi + WL-Xi	Yes	Y	DL	1.2	OL1	1	WL+X	-1		
23	1.2DL + DLi + 0.75WL-Xi + 0.25WL-Zi	Yes	Y	DL	1.2	OL1	1	WL+X	-0.75	WL+Z	-0.25
24	1.2DL + DLi + 0.25WL-Xi + 0.75WL-Zi	Yes	Y	DL	1.2	OL1	1	WL+X	-0.25	WL+Z	-0.75
25	1.2DL + DLi + WL-Zi	Yes	Y	DL	1.2	OL1	1	WL+Z	-1		
26	1.2DL + DLi + 0.25WLXi + 0.75WL-Zi	Yes	Y	DL	1.2	OL1	1	WL+X	0.25	WL+Z	-0.75
27	1.2DL + DLi + 0.75WLXi + 0.25WL-Zi	Yes	Y	DL	1.2	OL1	1	WL+X	0.75	WL+Z	-0.25
28											
29	DL	Yes	Y	DL	1						
30											
31	DL + 0.6WLX	Yes	Y	DL	1	WLX	0.6				
32	DL + 0.6(.75WLX + 0.25WLZ)	Yes	Y	DL	1	WLX	0.45	WLZ	0.15		
33	DL + 0.6(0.25WLX + 0.75WLZ)	Yes	Y	DL	1	WLX	0.15	WLZ	0.45		
34	DL + 0.6WLZ	Yes	Y	DL	1	WLZ	0.6				
35	DL + 0.6(0.25WL-X + 0.75WLZ)	Yes	Y	DL	1	WLX	-0.15	WLZ	0.45		
36	DL + 0.6(0.75WL-X + 0.25WLZ)	Yes	Y	DL	1	WLX	-0.45	WLZ	0.15		
37	DL + 0.6WL-X	Yes	Y	DL	1	WLX	-0.6				
38	DL + 0.6(0.75WL-X + 0.25WL-Z)	Yes	Y	DL	1	WLX	-0.45	WLZ	-0.15		
39	DL + 0.6(0.25WL-X + 0.75WL-Z)	Yes	Y	DL	1	WLX	-0.15	WLZ	-0.45		
40	DL + 0.6WL-Z	Yes	Y	DL	1	WLZ	0.6				
41	DL + 0.6(0.25WLX + 0.75WL-Z)	Yes	Y	DL	1	WLX	0.15	WLZ	-0.45		
42	DL + 0.6(0.75WLX + 0.25WL-Z)	Yes	Y	DL	1	WLX	0.45	WLZ	-0.15		
43											
44	DL + 0.7DLi + 0.7WLXi	Yes	Y	DL	1	OL1	0.7	WL+X	0.7		
45	DL + 0.7DLi + 0.7(0.75WLXi + 0.25WLZi)	Yes	Y	DL	1	OL1	0.7	WL+X	0.525	WL+Z	0.175
46	DL + 0.7DLi + 0.7(0.25WLXi + 0.75WLZi)	Yes	Y	DL	1	OL1	0.7	WL+X	0.175	WL+Z	0.525
47	DL + 0.7DLi + 0.7WLZi	Yes	Y	DL	1	OL1	0.7	WL+Z	0.7		
48	DL + 0.7DLi + 0.7(0.25WL-Xi + 0.75WLZi)	Yes	Y	DL	1	OL1	0.7	WL+X	-0.175	WL+Z	0.525
49	DL + 0.7DLi + 0.7(0.75WL-Xi + 0.25WLZi)	Yes	Y	DL	1	OL1	0.7	WL+X	-0.525	WL+Z	0.175
50	DL + 0.7DLi + 0.7WL-Xi	Yes	Y	DL	1	OL1	0.7	WL+X	-0.7		
51	DL + 0.7DLi + 0.7(0.75WL-Xi + 0.25WL-Zi)	Yes	Y	DL	1	OL1	0.7	WL+X	-0.525	WL+Z	-0.175
52	DL + 0.7DLi + 0.7(0.25WL-Xi + 0.75WL-Zi)	Yes	Y	DL	1	OL1	0.7	WL+X	-0.175	WL+Z	-0.525
53	DL + 0.7DLi + 0.7WL-Zi	Yes	Y	DL	1	OL1	0.7	WL+Z	-0.7		
54	DL + 0.7DLi + 0.7(0.25WLXi + 0.75WL-Zi)	Yes	Y	DL	1	OL1	0.7	WL+X	0.175	WL+Z	-0.525
55	DL + 0.7DLi + 0.7(0.75WLXi + 0.25WL-Zi)	Yes	Y	DL	1	OL1	0.7	WL+X	0.525	WL+Z	-0.175

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1	1	N13	0	85.97	0	0	0	96.248
2	1	N14	0	85.574	0	0	0	95.785
3	1	N15	0	152.914	0	0	0	174.348

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
4	1	N16	0	152.33	0	0	0	173.668
5	1	Totals:	0	476.788	0			
6	1	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
7	3	N13	-135.902	73.7	0	0	-0.042	82.439
8	3	N14	-99.418	73.338	0	0	-0.031	82.036
9	3	N15	-427.338	131.137	0	0	-0.241	149.107
10	3	N16	-303.982	130.501	0	0	-0.171	148.485
11	3	Totals:	-966.64	408.675	0			
12	3	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
13	4	N13	-102.005	72.523	-22.224	0	23.267	81.076
14	4	N14	-74.485	74.515	-19.072	0	19.603	82.98
15	4	N15	-320.582	124.075	-81.972	0	92.655	140.876
16	4	N16	-227.908	137.562	-58.324	0	65.198	156.294
17	4	Totals:	-724.98	408.675	-181.592			
18	4	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
19	5	N13	-34.21	70.165	-66.672	0	69.914	78.361
20	5	N14	-24.62	76.872	-57.215	0	58.889	84.886
21	5	N15	-107.07	109.887	-245.917	0	278.814	124.53
22	5	N16	-75.76	151.75	-174.97	0	196.141	172.121
23	5	Totals:	-241.66	408.675	-544.775			
24	5	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
25	6	N13	-0.313	68.984	-88.897	0	93.252	77.009
26	6	N14	0.313	78.053	-76.287	0	78.541	85.847
27	6	N15	-0.314	102.763	-327.89	0	372.077	116.417
28	6	N16	0.314	158.875	-233.293	0	261.716	180.139
29	6	Totals:	0	408.675	-726.367			
30	6	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
31	7	N13	33.741	70.156	-66.672	0	69.964	78.402
32	7	N14	25.089	76.882	-57.215	0	58.923	84.935
33	7	N15	106.599	109.79	-245.917	0	279.302	124.816
34	7	N16	76.231	151.847	-174.97	0	196.433	172.517
35	7	Totals:	241.66	408.675	-544.775			
36	7	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
37	8	N13	101.848	72.502	-22.224	0	23.359	81.176
38	8	N14	74.642	74.536	-19.072	0	19.668	83.096
39	8	N15	320.425	123.909	-81.972	0	93.386	141.497
40	8	N16	228.065	137.728	-58.324	0	65.662	157.064
41	8	Totals:	724.98	408.675	-181.592			
42	8	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
43	9	N13	135.902	73.678	0	0	0.042	82.557
44	9	N14	99.418	73.36	0	0	0.031	82.167
45	9	N15	427.338	131	0	0	0.244	149.778
46	9	N16	303.982	130.638	0	0	0.173	149.233
47	9	Totals:	966.64	408.675	0			
48	9	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
49	10	N13	102.005	74.859	22.224	0	-23.296	83.909
50	10	N14	74.485	72.179	19.072	0	-19.622	81.206
51	10	N15	320.582	138.125	81.972	0	-93.02	157.89
52	10	N16	227.908	123.512	58.324	0	-65.404	141.214
53	10	Totals:	724.98	408.675	181.592			
54	10	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
55	11	N13	34.21	77.217	66.672	0	-69.943	86.624
56	11	N14	24.62	69.821	57.215	0	-58.908	79.301
57	11	N15	107.07	152.312	245.914	0	-279.178	174.233
58	11	N16	75.76	109.326	174.973	0	-196.351	125.388

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
59	11	Totals:	241.66	408.675	544.775			
60	11	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
61	12	N13	0.313	78.393	88.896	0	-93.252	87.987
62	12	N14	-0.313	68.644	76.287	0	-78.541	78.356
63	12	N15	0.314	159.374	327.885	0	-372.073	182.464
64	12	N16	-0.314	102.264	233.298	0	-261.72	117.579
65	12	Totals:	0	408.675	726.367			
66	12	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
67	13	N13	-33.741	77.218	66.672	0	-69.935	86.605
68	13	N14	-25.089	69.82	57.215	0	-58.904	79.284
69	13	N15	-106.599	152.283	245.914	0	-278.933	174.184
70	13	N16	-76.231	109.354	174.973	0	-196.229	125.41
71	13	Totals:	-241.66	408.675	544.775			
72	13	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
73	14	N13	-101.848	74.871	22.224	0	-23.33	83.831
74	14	N14	-74.642	72.167	19.072	0	-19.649	81.124
75	14	N15	-320.425	138.165	81.972	0	-93.018	157.505
76	14	N16	-228.065	123.473	58.324	0	-65.455	140.862
77	14	Totals:	-724.98	408.675	181.592			
78	14	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
79	16	N13	-22.994	130.579	0	0	-0.013	144.942
80	16	N14	-18.886	130.012	0	0	-0.01	144.284
81	16	N15	-57.843	329.019	0	0	-0.082	376.336
82	16	N16	-44.037	327.772	0	0	-0.063	374.914
83	16	Totals:	-143.76	917.382	0			
84	16	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
85	17	N13	-17.27	130.41	-5.176	0	5.2	144.749
86	17	N14	-14.14	130.181	-4.885	0	4.862	144.348
87	17	N15	-43.407	328.18	-12.458	0	13.64	375.391
88	17	N16	-33.003	328.611	-9.853	0	10.617	375.78
89	17	Totals:	-107.82	917.382	-32.372			
90	17	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
91	18	N13	-5.823	130.07	-15.529	0	15.628	144.364
92	18	N14	-4.647	130.521	-14.654	0	14.607	144.477
93	18	N15	-14.536	326.501	-37.372	0	41.091	373.502
94	18	N16	-10.934	330.29	-29.56	0	31.983	377.517
95	18	Totals:	-35.94	917.382	-97.115			
96	18	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
97	19	N13	-0.099	129.901	-20.705	0	20.842	144.172
98	19	N14	0.099	130.69	-19.538	0	19.48	144.541
99	19	N15	-0.1	325.662	-49.83	0	54.82	372.56
100	19	N16	0.1	331.129	-39.413	0	42.668	378.387
101	19	Totals:	0	917.382	-129.487			
102	19	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
103	20	N13	5.674	130.069	-15.529	0	15.635	144.374
104	20	N14	4.796	130.522	-14.654	0	14.613	144.487
105	20	N15	14.386	326.491	-37.372	0	41.14	373.565
106	20	N16	11.084	330.3	-29.56	0	32.019	377.586
107	20	Totals:	35.94	917.382	-97.115			
108	20	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
109	21	N13	17.22	130.406	-5.176	0	5.22	144.778
110	21	N14	14.19	130.185	-4.885	0	4.878	144.379
111	21	N15	43.357	328.151	-12.458	0	13.771	375.572
112	21	N16	33.053	328.64	-9.853	0	10.717	375.979
113	21	Totals:	107.82	917.382	-32.372			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
114	21	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
115	22	N13	22.994	130.575	0	0	0.013	144.98
116	22	N14	18.886	130.016	0	0	0.01	144.325
117	22	N15	57.843	328.982	0	0	0.082	376.575
118	22	N16	44.037	327.809	0	0	0.063	375.173
119	22	Totals:	143.76	917.382	0			
120	22	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
121	23	N13	17.27	130.745	5.176	0	-5.202	145.172
122	23	N14	14.14	129.847	4.885	0	-4.863	144.26
123	23	N15	43.407	329.822	12.457	0	-13.647	377.517
124	23	N16	33.003	326.969	9.853	0	-10.622	374.303
125	23	Totals:	107.82	917.382	32.372			
126	23	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
127	24	N13	5.823	131.084	15.529	0	-15.629	145.558
128	24	N14	4.647	129.507	14.654	0	-14.608	144.131
129	24	N15	14.536	331.501	37.372	0	-41.098	379.405
130	24	N16	10.934	325.29	29.56	0	-31.988	372.567
131	24	Totals:	35.94	917.382	97.115			
132	24	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
133	25	N13	0.099	131.253	20.705	0	-20.842	145.75
134	25	N14	-0.099	129.338	19.538	0	-19.48	144.068
135	25	N15	0.1	332.339	49.83	0	-54.82	380.351
136	25	N16	-0.1	324.452	39.414	0	-42.668	371.7
137	25	Totals:	0	917.382	129.487			
138	25	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
139	26	N13	-5.674	131.085	15.529	0	-15.634	145.549
140	26	N14	-4.796	129.506	14.654	0	-14.612	144.122
141	26	N15	-14.386	331.509	37.372	0	-41.132	379.349
142	26	N16	-11.084	325.282	29.56	0	-32.015	372.506
143	26	Totals:	-35.94	917.382	97.115			
144	26	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
145	27	N13	-17.22	130.748	5.176	0	-5.219	145.145
146	27	N14	-14.19	129.843	4.885	0	-4.877	144.23
147	27	N15	-43.357	329.849	12.457	0	-13.763	377.341
148	27	N16	-33.053	326.942	9.853	0	-10.712	374.113
149	27	Totals:	-107.82	917.382	32.372			
150	27	COG (in):	X: -0.386	Y: -70.29	Z: 13.635			
151	29	N13	0	61.407	0	0	0	68.748
152	29	N14	0	61.124	0	0	0	68.418
153	29	N15	0	109.224	0	0	0	124.535
154	29	N16	0	108.807	0	0	0	124.048
155	29	Totals:	0	340.563	0			
156	29	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
157	31	N13	-81.527	61.413	0	0	-0.021	68.719
158	31	N14	-59.665	61.119	0	0	-0.015	68.385
159	31	N15	-256.308	109.258	0	0	-0.121	124.367
160	31	N16	-182.484	108.774	0	0	-0.086	123.861
161	31	Totals:	-579.984	340.563	0			
162	31	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
163	32	N13	-61.192	60.708	-13.333	0	13.965	67.902
164	32	N14	-44.702	61.824	-11.445	0	11.768	68.951
165	32	N15	-192.278	105.025	-49.166	0	55.635	119.446
166	32	N16	-136.816	113.007	-35.011	0	39.176	128.551
167	32	Totals:	-434.988	340.563	-108.955			
168	32	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
169	33	N13	-20.523	59.295	-39.999	0	41.947	66.272
170	33	N14	-14.775	63.236	-34.334	0	35.342	70.089
171	33	N15	-64.218	96.535	-147.5	0	167.28	109.644
172	33	N16	-45.48	121.496	-105.033	0	117.773	138.007
173	33	Totals:	-144.996	340.563	-326.865			
174	33	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
175	34	N13	-0.188	58.588	-53.331	0	55.944	65.459
176	34	N14	0.188	63.943	-45.779	0	47.132	70.661
177	34	N15	-0.188	92.279	-196.667	0	223.168	104.765
178	34	N16	0.188	125.752	-140.043	0	157.108	142.772
179	34	Totals:	0	340.563	-435.82			
180	34	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
181	35	N13	20.241	59.291	-39.999	0	41.968	66.291
182	35	N14	15.057	63.24	-34.334	0	35.357	70.111
183	35	N15	63.936	96.495	-147.5	0	167.472	109.771
184	35	N16	45.762	121.536	-105.033	0	117.89	138.175
185	35	Totals:	144.996	340.563	-326.865			
186	35	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
187	36	N13	61.099	60.698	-13.333	0	14.007	67.95
188	36	N14	44.795	61.834	-11.445	0	11.798	69.006
189	36	N15	192.184	104.951	-49.166	0	55.949	119.739
190	36	N16	136.91	113.081	-35.011	0	39.379	128.907
191	36	Totals:	434.988	340.563	-108.955			
192	36	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
193	37	N13	81.527	61.402	0	0	0.021	68.778
194	37	N14	59.665	61.13	0	0	0.015	68.451
195	37	N15	256.308	109.19	0	0	0.121	124.702
196	37	N16	182.484	108.841	0	0	0.086	124.235
197	37	Totals:	579.984	340.563	0			
198	37	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
199	38	N13	61.192	62.109	13.333	0	-13.975	69.591
200	38	N14	44.702	60.423	11.445	0	-11.775	67.879
201	38	N15	192.278	113.446	49.166	0	-55.767	129.581
202	38	N16	136.816	104.585	35.011	0	-39.25	119.47
203	38	Totals:	434.988	340.563	108.955			
204	38	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
205	39	N13	20.523	63.521	39.998	0	-41.958	71.22
206	39	N14	14.775	59.011	34.334	0	-35.349	66.741
207	39	N15	64.218	121.935	147.499	0	-167.41	139.382
208	39	N16	45.48	96.096	105.034	0	-117.848	110.015
209	39	Totals:	144.996	340.563	326.865			
210	39	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
211	40	N13	-0.188	58.588	-53.331	0	55.944	65.459
212	40	N14	0.188	63.943	-45.779	0	47.132	70.661
213	40	N15	-0.188	92.279	-196.667	0	223.168	104.765
214	40	N16	0.188	125.752	-140.043	0	157.108	142.772
215	40	Totals:	0	340.563	-435.82			
216	40	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
217	41	N13	-20.241	63.522	39.998	0	-41.958	71.209
218	41	N14	-15.057	59.009	34.334	0	-35.35	66.731
219	41	N15	-63.936	121.93	147.499	0	-167.339	139.341
220	41	N16	-45.762	96.102	105.034	0	-117.816	109.997
221	41	Totals:	-144.996	340.563	326.865			
222	41	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
223	42	N13	-61.099	62.115	13.333	0	-13.997	69.55

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
224	42	N14	-44.795	60.416	11.445	0	-11.791	67.836
225	42	N15	-192.184	113.475	49.166	0	-55.817	129.372
226	42	N16	-136.91	104.557	35.011	0	-39.305	119.265
227	42	Totals:	-434.988	340.563	108.955			
228	42	COG (in):	X: -0.408	Y: -70.026	Z: 17.27			
229	44	N13	-16.09	101.23	0	0	-0.007	112.462
230	44	N14	-13.226	100.789	0	0	-0.006	111.949
231	44	N15	-40.435	247.786	0	0	-0.043	283.381
232	44	N16	-30.881	246.853	0	0	-0.033	282.31
233	44	Totals:	-100.632	696.658	0			
234	44	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
235	45	N13	-12.085	101.112	-3.623	0	3.641	112.327
236	45	N14	-9.902	100.907	-3.42	0	3.406	111.992
237	45	N15	-30.344	247.205	-8.71	0	9.547	282.722
238	45	N16	-23.143	247.433	-6.908	0	7.453	282.904
239	45	Totals:	-75.474	696.658	-22.66			
240	45	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
241	46	N13	-4.075	100.876	-10.868	0	10.937	112.057
242	46	N14	-3.254	101.143	-10.26	0	10.228	112.08
243	46	N15	-10.161	246.044	-26.13	0	28.732	281.403
244	46	N16	-7.668	248.595	-20.723	0	22.427	284.095
245	46	Totals:	-25.158	696.658	-67.981			
246	46	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
247	47	N13	-0.069	100.757	-14.49	0	14.585	111.922
248	47	N14	0.069	101.261	-13.68	0	13.64	112.124
249	47	N15	-0.07	245.462	-34.84	0	38.327	280.745
250	47	N16	0.07	249.176	-27.63	0	29.915	284.691
251	47	Totals:	0	696.658	-90.641			
252	47	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
253	48	N13	3.97	100.875	-10.868	0	10.941	112.063
254	48	N14	3.359	101.144	-10.26	0	10.232	112.086
255	48	N15	10.056	246.038	-26.13	0	28.758	281.436
256	48	N16	7.773	248.601	-20.723	0	22.446	284.131
257	48	Totals:	25.158	696.658	-67.981			
258	48	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
259	49	N13	12.05	101.11	-3.623	0	3.652	112.343
260	49	N14	9.937	100.909	-3.42	0	3.414	112.009
261	49	N15	30.309	247.19	-8.71	0	9.616	282.817
262	49	N16	23.178	247.449	-6.908	0	7.505	283.009
263	49	Totals:	75.474	696.658	-22.66			
264	49	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
265	50	N13	16.09	101.228	0	0	0.007	112.483
266	50	N14	13.226	100.791	0	0	0.006	111.971
267	50	N15	40.435	247.766	0	0	0.043	283.507
268	50	N16	30.881	246.872	0	0	0.033	282.447
269	50	Totals:	100.632	696.658	0			
270	50	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
271	51	N13	12.085	101.346	3.623	0	-3.642	112.618
272	51	N14	9.902	100.673	3.42	0	-3.406	111.927
273	51	N15	30.344	248.348	8.71	0	-9.551	284.166
274	51	N16	23.143	246.291	6.908	0	-7.455	281.85
275	51	Totals:	75.474	696.658	22.66			
276	51	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
277	52	N13	4.075	101.582	10.868	0	-10.938	112.888
278	52	N14	3.254	100.436	10.26	0	-10.229	111.84

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
279	52	N15	10.161	249.509	26.13	0	-28.736	285.484
280	52	N16	7.668	245.129	20.723	0	-22.429	280.66
281	52	Totals:	25.158	696.658	67.98			
282	52	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
283	53	N13	0.069	101.701	14.49	0	-14.585	113.023
284	53	N14	-0.069	100.318	13.68	0	-13.64	111.796
285	53	N15	0.07	250.09	34.84	0	-38.327	286.144
286	53	N16	-0.07	244.549	27.63	0	-29.915	280.065
287	53	Totals:	0	696.658	90.641			
288	53	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
289	54	N13	-3.97	101.583	10.868	0	-10.941	112.883
290	54	N14	-3.359	100.436	10.26	0	-10.231	111.835
291	54	N15	-10.056	249.514	26.13	0	-28.754	285.454
292	54	N16	-7.773	245.125	20.723	0	-22.444	280.628
293	54	Totals:	-25.158	696.658	67.98			
294	54	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			
295	55	N13	-12.05	101.348	3.623	0	-3.651	112.603
296	55	N14	-9.937	100.671	3.42	0	-3.414	111.911
297	55	N15	-30.309	248.362	8.71	0	-9.612	284.073
298	55	N16	-23.178	246.277	6.908	0	-7.503	281.75
299	55	Totals:	-75.474	696.658	22.66			
300	55	COG (in):	X: -0.388	Y: -70.269	Z: 13.919			

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N13	max	135.902	9	131.253	25	88.896	12	0	55	93.252	6	145.75	25
2		min	-135.902	3	58.588	34	-88.897	6	0	1	-93.252	12	65.459	34
3	N14	max	99.418	9	130.69	19	76.287	12	0	55	78.541	6	144.541	19
4		min	-99.418	3	59.009	41	-76.287	6	0	1	-78.541	12	66.731	41
5	N15	max	427.338	9	332.339	25	327.885	12	0	55	372.077	6	380.351	25
6		min	-427.338	3	92.279	34	-327.89	6	0	1	-372.073	12	104.765	34
7	N16	max	303.982	9	331.129	19	233.298	12	0	55	261.716	6	378.387	19
8		min	-303.982	3	96.096	39	-233.293	6	0	1	-261.72	12	109.997	41
9	Totals:	max	966.64	9	917.382	19	726.367	12						
10		min	-966.64	3	340.563	41	-726.367	6						

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

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
1	M2	PIPE 2.0	0.14	33.25	9	0.014	7		9	17855.085	32130	1871.625	1871.625	1	H1-1b
2	M2A	PIPE 2.0	0.475	33.25	9	0.044	7		9	17855.085	32130	1871.625	1871.625	1	H1-1b
3	M3	L2.5X2.5X4	0.139	14	19	0.011	14	y	25	36881.065	38556	1113.554	2537.388	1.5	H2-1
4	M4	L2.5X2.5X4	0.139	14	19	0.011	14	y	19	36881.065	38556	1113.554	2537.388	1.5	H2-1
5	M5	L2.5X2.5X4	0.36	14	19	0.027	14	y	19	36881.065	38556	1113.554	2537.388	1.5	H2-1
6	M6	L2.5X2.5X4	0.381	14	6	0.027	14	y	25	36881.065	38556	1113.554	2537.388	1.5	H2-1

ALL-POINTS TECHNOLOGY CORPORATION

Project ID:	CT141_13220
Site Name:	Riverside CT
Date:	8/15/2023
Prepared By:	D.Aversa
Checked By:	M. Trodden

EXISTING CONNECTION CHECK

>> Max Reactions per RISA Output: N15, Envelope **[Max Shear]**

	Fx =	428.3 lbs	Mx =	0.0	lbs-ft
(Uplift)	Fy =	0.0 lbs	My =	372.1	lbs-ft
	Fz =	328.9 lbs	Mz =	0.0	lbs-ft

>> Existing Connection:

	L, in		W, in		
Member Size =	4.5	x	4.5	Existing STD 4.0" Pipe	
	L, in		W, in		t, in
Plate =	10	x	6.5	x	0.5
Bolt Spac. =	3 in			Fy =	36 ksi
Bolt Dia =	0.625 in			Grade =	A325
# of Bolts =	2				

>> Check Existing Bolts: Per Field Notes, 5/8" DIA A325 Bolts

Tall =	20700 lbs	Vall =	12400 lbs
T_{My} =	1488.4 lbs		
T_{Mz} =	0 lbs	$V_{Fx/Fz}$ =	540.0149 lbs
T_{Fa} =	0.00 lbs	V_{Mx} =	0 lbs
Ft =	1488.4 lbs	Fv =	540.0149 lbs

>> Bolt Interaction:

0.071903 + 0.044 = 0.115 **< 1.0, OK**

Appendix C

Existing Screenwall and
Roof Structure Evaluation

ALL-POINTS TECHNOLOGY CORPORATION

Project ID:	CT141_14200
Site Name:	Riverside CT
Date:	8/29/2023

(Based on IBC 2021/2022 CSBC & ASCE 7-16)

DEAD LOADING

For Screenwall Siding =	2.5	psf	
Roofing Membrane =	0.5	psf	
3" Rigid Insulation =	4.50	psf	*Per drawings prepared by Werner Jensen & Korst*
Roof Deck 22 Gauge Type B =	2.20	psf	*Per drawings prepared by Werner Jensen & Korst*
Hung Ceiling =	3.00	psf	*Assumed*
Mechanical Duct Allowance =	4.00	psf	*Assumed*
Misc. =	2.00	psf	
Total =	16.20	psf	
Use =	**17.00**	**psf**	

LIVE LOADING

Per Existing Building Drawings by Werner Jensen & Korst, design live load for roof areas is **30 psf.**
Per IBC 2021 / 2022 CSBC, live load for ordinary roofs is **20 psf.**

SNOW LOADING *(Per ASCE 7-16 & CT Building Code 2022)*

$p_f = 0.7C_eC_tIp_g$ *(ASCE 7-16, Section 7.3)*

p_g =	30	psf	*(CTBC Appendix P)*
C_e =	1.0		*(ASCE 7-16, Table 7.3-1)*
C_t =	1.1		*(ASCE 7-16, Table 7.3-2)*
I =	1.0		*(ASCE 7-16, Table 1.5-2)*

p_{fmin} =	30	psf	***<< Per 1608.1.1 of 2022 CTBC , P_f shall not be less than 30 psf***
Calculated p_f =	23.1	psf	
Use p_f =	**30**	**psf**	

WIND LOADING

> Wind Loads: General Requirements - Chapter 26

Location =	Greenwich, CT		
Risk Category =	II		*Table 1.5-1*
V_{ult} =	120	mph	*Figures 26.5-1A - 26.5-1C*
z =	37.8	ft, +/-	
Exposure =	C		*Section 26.7.3*
α =	9.5		*Table 26.9-1*
z_g =	900		*Table 26.9-1*
k_z =	1.03		*Table 27.3-1*
k_{zt} =	1.00		*Section 26.8*
k_d =	0.85		*Table 26.6-1*
q_z =	**32.31**	**psf**	

> Wind Loads on Other Structures and Building Appurtenances - Chapter 29

$q_z \times GC_r$ =	**61.39**	**psf**

ALL-POINTS TECHNOLOGY CORPORATION

Project ID: CT141_14200
Site Name: Riverside CT
Date: 8/15/2023

(Based on IBC 2015/2018 CSBC & ASCE 7-10)

DEAD LOADING

Equipment	Quant.	Dimensions, in			Weight, lbs	
		Height	Width	Depth	Per.	Total
NHH-65B-R2B	2	72.0	13.8	8.2	73.7	147.4
MT6407-77A	1	35.1	16.1	5.5	87.1	87.1
B5/B13 RRH	1	15.0	15.0	8.1	82.0	82.0
B2/B66 RRH	1	15.0	15.0	10.0	97.5	97.5
6OVP	1	19.8	15.7	10.3	32.0	32.0
KA-6030 Filter	2	10.6	10.9	3.2	17.6	35.2
APXVAALL24_43-U-NA20	*1*	*95.9*	*24.0*	*8.5*	*149.9*	*149.9*
AIR32	*1*	*56.6*	*12.9*	*8.7*	*132.2*	*132.2*
AIR6449	*1*	*33.1*	*20.6*	*8.6*	*104.0*	*104.0*
Ericsson RRU	*1*	*14.9*	*13.2*	*9.3*	*74.0*	*74.0*
Ericsson RRU	*1*	*16.5*	*13.5*	*9.6*	*88.0*	*88.0*

**T-mobile Equipment in italics*

Total (per sector) =	1029.3	lbs/sector
Add 25% for misc. =	1286.63	lbs
Total Carrier Equip Weight =	3859.88	lbs
Distributed Load (Based upon 156' +/- screenwall perimeter) =	24.7	lbs/ft
Use =	**30.0**	**lbs/ft**

WIND LOADING

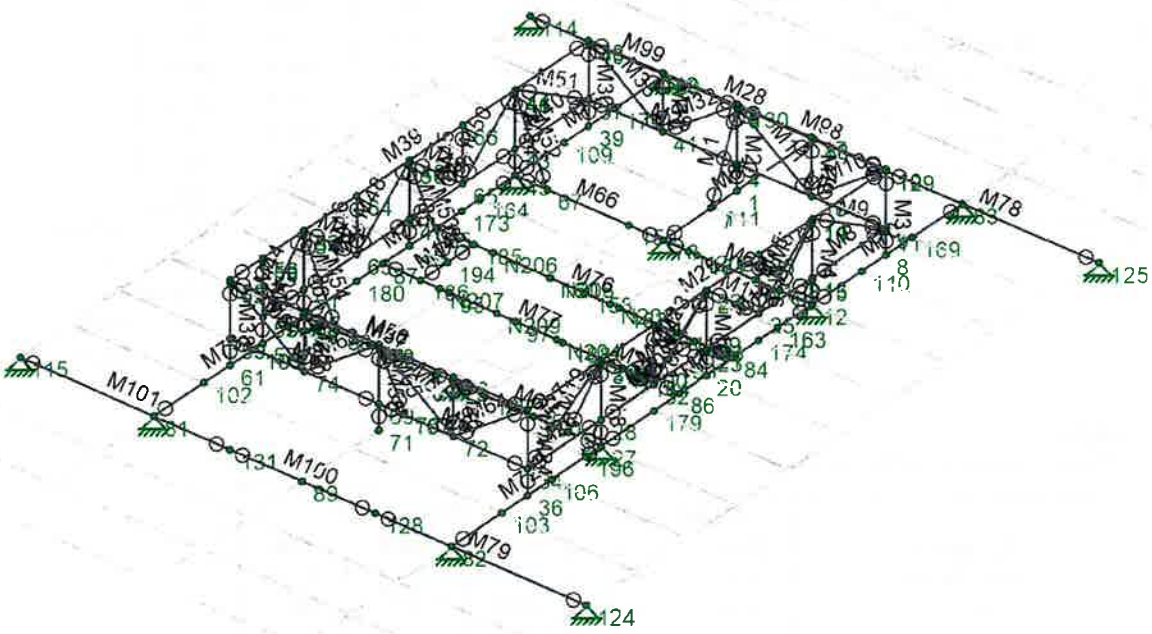
**** See Previous Sheet for Calculation****

q_z = **61.39** **psf**

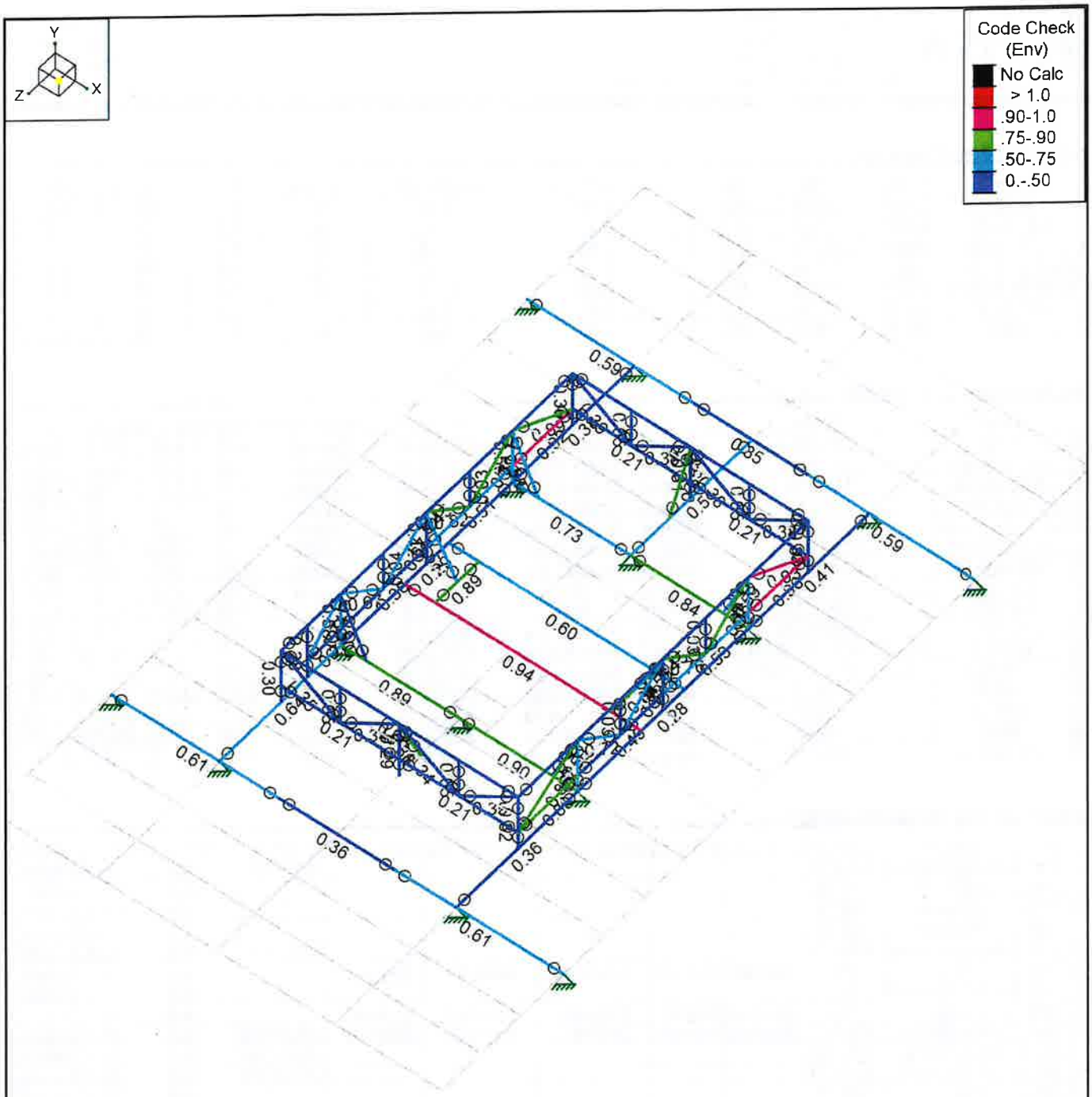
Equipment	Wind Area, ft^2		Wind Load, lbs		
	Norm.	Trans.	Norm.	Trans.	Avg.
NHH-65B-R2B	6.90	4.10	423.6	251.7	366.3
MT6407-77A	3.92	1.34	240.9	82.3	188.1
B5/B13 RRH	1.56	0.85	95.9	52.1	81.3
B2/B66 RRH	1.56	1.05	95.9	64.2	85.4
6OVP	2.16	1.42	132.8	87.0	117.5
KA-6030 Filter	0.80	0.24	49.3	14.5	37.7
APXVAALL24_43-U-NA20	*15.98*	*5.66*	981.3	347.5	770.0
AIR32	*5.07*	*3.42*	311.3	209.9	277.5
AIR6449	*4.74*	*1.98*	290.7	121.4	234.3
Ericsson RRU	*1.37*	*0.96*	83.9	58.8	75.5
Ericsson RRU	*1.55*	*1.10*	95.0	67.5	85.8

**T-mobile Equipment in italics*

Total (per sector) =	2319.4	lbs/sector
Add 25% for misc. =	2899.20	lbs
Total Carrier Equip Wind Load =	8697.61	lbs
Distributed Load (Based upon 156' +/- screenwall perimeter) =	55.75	lbs/ft
Use =	**60.0**	**lbs/ft**



RISA	APT	Existing Screen Wall	SK-1
	DJA		Aug 15, 2023 at 09:49 AM
	CT141_14200	Nodes & Labels	Exist. Roof Framing w Scree...



Member Code Checks Displayed (Enveloped)

RISA	APT	Existing Screen Wall	SK-2
	DJA		Aug 15, 2023 at 09:50 AM
	CT141_14200	Bending Stresses	Exist. Roof Framing w Scree...

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e^{5}°F^{-1}]	Density [k/ft^{3}]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in^{2}]	Iyy [in^{4}]	Izz [in^{4}]	J [in^{4}]
1	C10	C10X15.3	Beam	Channel	A36 Gr.36	Typical	4.48	2.27	67.3	0.209
2	(N) L4x4x3/8	L4X4X6	HBrace	Single Angle	A36 Gr.36	Typical	2.86	4.32	4.32	0.141
3	L3x3x1/4 Dia.	L3X3X4	HBrace	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	0.031
4	L3x3x1/4 Vertical	L3X3X4	VBrace	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	0.031
5	L3x3x1/4 Kicker	L3X3X4	VBrace	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	0.031
6	L2.5x2.5x1/4	L2.5X2.5X4	Beam	Single Angle	A36 Gr.36	Typical	1.19	0.692	0.692	0.026
7	HSS6x6x1/4	HSS6X6X4	Column	SquareTube	A36 Gr.36	Typical	5.24	28.6	28.6	45.6
8	4.0" STD	PIPE 4.0	Beam	Pipe	A53 Gr.B	Typical	2.96	6.82	6.82	13.6
9	2.0" STD	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
10	HSS4x4	HSS4X4X4	Column	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
11	16WF36	16WFX38.7 15 HISTORIC	Beam	Wide Flange	A36 Gr.36	Typical	11.39	22.9	490.8	0.93
12	14WF30	14WFX32.4 1 HISTORIC	Beam	Wide Flange	A36 Gr.36	Typical	9.53	18.1	320.2	0.63
13	10B19	10B19	Beam	Wide Flange	A36 Gr.36	Typical	5.533	4.278	94.619	0.21
14	12B14	12B14	Beam	Wide Flange	A36 Gr.36	Typical	4.071	2.344	85.826	0.061
15	8B10	8B10	Beam	Wide Flange	A36 Gr.36	Typical	2.881	2.083	29.766	0.035
16	(N) W6x15	W6X15	Beam	Wide Flange	A992	Typical	4.43	9.32	29.1	0.101

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	L-Torque [in]	K y-y	K z-z	Channel Conn.	a [in]	Function
1	M1	L3x3x1/4 Kicker	105.079						0.8	0.8	N/A	N/A	Lateral
2	M2	HSS4x4	100.75								N/A	N/A	Lateral
3	M3	HSS4x4	100.75								N/A	N/A	Lateral
4	M4	HSS4x4	100.75								N/A	N/A	Lateral
5	M5	L3x3x1/4 Kicker	105.079						0.8	0.8	N/A	N/A	Lateral
6	M6	C10	188	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
7	M7	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
8	M8	C10	116	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
9	M9	L3x3x1/4 Dia.	135.227	Segment	Segment	Segment	Segment	Segment	0.865	0.865	N/A	N/A	Lateral
10	M10	L3x3x1/4 Dia.	116.903						0.865	0.865	N/A	N/A	Lateral
11	M11	(N) L4x4x3/8	116.903						0.865	0.865	N/A	N/A	Lateral
12	M12	HSS4x4	100.75								N/A	N/A	Lateral
13	M13	L3x3x1/4 Kicker	108.003						0.8	0.8	N/A	N/A	Lateral
14	M14	C10	166	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
15	M15	L3x3x1/4 Dia.	108.255						0.865	0.865	N/A	N/A	Lateral
16	M16	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
17	M17	(N) L4x4x3/8	108.255						0.865	0.865	N/A	N/A	Lateral
18	M18	HSS4x4	100.75								N/A	N/A	Lateral
19	M19	L3x3x1/4 Kicker	105.079						0.8	0.8	N/A	N/A	Lateral
20	M20	C10	166	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
21	M21	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
22	M22	(N) L4x4x3/8	108.255						0.865	0.865	N/A	N/A	Lateral
23	M23	L3x3x1/4 Dia.	108.255						0.865	0.865	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	L-Torque [in]	K y-y	K z-z	Channel Conn.	a [in]	Function
24	M24	HSS4x4	100.75								N/A	N/A	Lateral
25	M25	C10	564	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
26	M26	C10	116			Lbyy					N/A	N/A	Lateral
27	M27	L3x3x1/4 Dia.	135.227						0.865	0.865	N/A	N/A	Lateral
28	M28	C10	376	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
29	M29	C10	188	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
30	M30	HSS4x4	100.75								N/A	N/A	Lateral
31	M31	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
32	M32	(N) L4x4x3/8	116.903						0.865	0.865	N/A	N/A	Lateral
33	M33	L3x3x1/4 Dia.	116.903						0.865	0.865	N/A	N/A	Lateral
34	M34	HSS4x4	100.75								N/A	N/A	Lateral
35	M35	HSS4x4	100.75								N/A	N/A	Lateral
36	M36	HSS4x4	100.75								N/A	N/A	Lateral
37	M37	C10	100.75								N/A	N/A	Lateral
38	M38	HSS4x4	100.75								N/A	N/A	Lateral
39	M39	C10	564	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
40	M40	C10	116			Lbyy					N/A	N/A	Lateral
41	M41	C10	166	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
42	M42	C10	166	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
43	M43	C10	65			Lbyy					N/A	N/A	Lateral
44	M44	L3x3x1/4 Dia.	95.159						0.865	0.865	N/A	N/A	Lateral
45	M45	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
46	M46	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
47	M47	L3x3x1/4 Dia.	108.255	Segment	Segment	Segment	Segment	Segment	0.865	0.865	N/A	N/A	Lateral
48	M48	(N) L4x4x3/8	108.255						0.865	0.865	N/A	N/A	Lateral
49	M49	(N) L4x4x3/8	108.255						0.865	0.865	N/A	N/A	Lateral
50	M50	L3x3x1/4 Dia.	108.255						0.865	0.865	N/A	N/A	Lateral
51	M51	L3x3x1/4 Dia.	135.227						0.865	0.865	N/A	N/A	Lateral
52	M52	L3x3x1/4 Kicker	105.079						0.8	0.8	N/A	N/A	Lateral
53	M53	L3x3x1/4 Kicker	108.003						0.8	0.8	N/A	N/A	Lateral
54	M54	L3x3x1/4 Kicker	105.079						0.8	0.8	N/A	N/A	Lateral
55	M55	HSS4x4	100.75								N/A	N/A	Lateral
56	M56	C10	376	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
57	M57	C10	188	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
58	M58	C10	188	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
59	M59	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
60	M60	L3x3x1/4 Vertical	69.5								N/A	N/A	Lateral
61	M61	L3x3x1/4 Dia.	116.903						0.865	0.865	N/A	N/A	Lateral
62	M62	(N) L4x4x3/8	116.903						0.865	0.865	N/A	N/A	Lateral
63	M63	(N) L4x4x3/8	116.903						0.865	0.865	N/A	N/A	Lateral
64	M64	L3x3x1/4 Dia.	116.903						0.865	0.865	N/A	N/A	Lateral
65	M65	L3x3x1/4 Kicker	105.079						0.8	0.8	N/A	N/A	Lateral
66	M66	12B14	188	48	Segment	48	Segment	48			N/A	N/A	Lateral
67	M67	12B14	188	48		48		48			N/A	N/A	Lateral
68	M68	12B14	188	48	Segment	48	Segment	48			N/A	N/A	Lateral
69	M69	12B14	188	48		48		48			N/A	N/A	Lateral
70	M70	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
71	M71	16WF36	332	Segment	Segment	Segment	Segment				N/A	N/A	Lateral
72	M72	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
73	M73	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
74	M74	16WF36	332	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
75	M75	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
76	M76	16WF36	376	48		48		48			N/A	N/A	Lateral
77	M77	16WF36	376	48		48		48			N/A	N/A	Lateral
78	M78	14WF30	267	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	L-Torque [in]	K y-y	K z-z	Channel Conn.	a [in]	Function
79	M79	14WF30	267	24	Segment	24	Segment				N/A	N/A	Lateral
80	M80	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
81	M81	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
82	M82	8B10	124.04			Lbyy					N/A	N/A	Lateral
83	M83	8B10	124.04	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
84	M84	8B10	124.04			Lbyy					N/A	N/A	Lateral
85	M85	8B10	124.04			Lbyy					N/A	N/A	Lateral
86	M86	12B14	188								N/A	N/A	Lateral
87	M87	12B14	188								N/A	N/A	Lateral
88	M88	MC6X6.5	188								N/A	N/A	Lateral
89	M89	MC6X6.5	188								N/A	N/A	Lateral
90	M90	MC6X6.5	188								N/A	N/A	Lateral
91	M91	MC6X6.5	188								N/A	N/A	Lateral
92	M92	MC6X6.5	188								N/A	N/A	Lateral
93	M93	MC6X6.5	188								N/A	N/A	Lateral
94	M98	14WF30	184	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
95	M99	14WF30	267	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
96	M100	14WF30	184	24	Segment	24	Segment				N/A	N/A	Lateral
97	M101	14WF30	267	24	Segment	24	Segment				N/A	N/A	Lateral
98	M102	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
99	M103	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
100	M104	10B19	236	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
101	M105	10B19	228	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
102	M106	10B19	228	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
103	M107	10B19	228	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
104	M108	MC6X6.5	171								N/A	N/A	Lateral
105	M109	MC6X6.5	188								N/A	N/A	Lateral
106	M110	MC6X6.5	188								N/A	N/A	Lateral
107	M111	MC6X6.5	171								N/A	N/A	Lateral
108	M112	MC6X6.5	171								N/A	N/A	Lateral
109	M113	MC6X6.5	188								N/A	N/A	Lateral
110	M114	MC6X6.5	188								N/A	N/A	Lateral
111	M115	MC6X6.5	171								N/A	N/A	Lateral
112	M116	MC6X6.5	171								N/A	N/A	Lateral
113	M117	MC6X6.5	188								N/A	N/A	Lateral
114	M118	MC6X6.5	188								N/A	N/A	Lateral
115	M119	MC6X6.5	171								N/A	N/A	Lateral
116	M120	MC6X6.5	171								N/A	N/A	Lateral
117	M121	MC6X6.5	188								N/A	N/A	Lateral
118	M122	MC6X6.5	188								N/A	N/A	Lateral
119	M123	MC6X6.5	171								N/A	N/A	Lateral
120	M124	MC6X6.5	171								N/A	N/A	Lateral
121	M125	MC6X6.5	171								N/A	N/A	Lateral
122	M126	MC6X6.5	171								N/A	N/A	Lateral
123	M127	MC6X6.5	171								N/A	N/A	Lateral
124	M128	12B14	171								N/A	N/A	Lateral
125	M129	12B14	171								N/A	N/A	Lateral
126	M130	8B10	123.96	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
127	M131	8B10	123.96	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
128	M132	8B10	144.5								N/A	N/A	Lateral
129	M133	8B10	87								N/A	N/A	Lateral
130	M134	8B10	144.5								N/A	N/A	Lateral
131	M135	MC6X6.5	171								N/A	N/A	Lateral
132	M136	MC6X6.5	171								N/A	N/A	Lateral
133	M137	MC6X6.5	171								N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	L-Torque [in]	K y-y	K z-z	Channel Conn.	a [in]	Function
134	M138	MC6X6.5	171								N/A	N/A	Lateral
135	M139	12B14	171								N/A	N/A	Lateral
136	M140	12B14	171								N/A	N/A	Lateral
137	M141	MC6X6.5	171								N/A	N/A	Lateral
138	M142	MC6X6.5	171								N/A	N/A	Lateral
139	M143	MC6X6.5	171								N/A	N/A	Lateral
140	M144	MC6X6.5	171								N/A	N/A	Lateral
141	M145	MC6X6.5	171								N/A	N/A	Lateral
142	M146	MC6X6.5	171								N/A	N/A	Lateral
143	M147	8B10	84	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
144	M148	8B10	84	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
145	M149	8B10	124.04	Segment	Segment	Segment	Segment	Segment			N/A	N/A	Lateral
146	M150	8B10	60								N/A	N/A	Lateral
147	M151	8B10	60								N/A	N/A	Lateral
148	M152	12B14	188								N/A	N/A	Lateral
149	M153	12B14	188								N/A	N/A	Lateral
150	M154	(N) W6x15	48			Lbyy					N/A	N/A	Lateral
151	M155	(N) W6x15	48			Lbyy					N/A	N/A	Lateral

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	6	7		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
2	M2	3	1		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
3	M3	10	8		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
4	M4	14	12		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
5	M5	19	16		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
6	M6	2	9	90	C10	Beam	Channel	A36 Gr.36	Typical
7	M7	17	18		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
8	M8	9	13	90	C10	Beam	Channel	A36 Gr.36	Typical
9	M9	14	9		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
10	M10	10	18		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
11	M11	18	3		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
12	M12	22	20		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
13	M13	24	193		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
14	M14	13	21	90	C10	Beam	Channel	A36 Gr.36	Typical
15	M15	14	25		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
16	M16	26	25		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
17	M17	25	22		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
18	M18	29	27		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
19	M19	31	30		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
20	M20	21	28	90	C10	Beam	Channel	A36 Gr.36	Typical
21	M21	33	32		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
22	M22	22	32		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
23	M23	32	29		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
24	M24	35	36		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
25	M25	10	35	90	C10	Beam	Channel	A36 Gr.36	Typical
26	M26	28	34	90	C10	Beam	Channel	A36 Gr.36	Typical
27	M27	29	34		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
28	M28	38	10	90	C10	Beam	Channel	A36 Gr.36	Typical
29	M29	37	2	90	C10	Beam	Channel	A36 Gr.36	Typical
30	M30	38	39		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
31	M31	42	41		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
32	M32	3	41		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
33	M33	41	38		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
34	M34	44	45		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
35	M35	48	49		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
36	M36	52	53		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
37	M37	56	57		C10	Beam	Channel	A36 Gr.36	Typical
38	M38	60	61		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
39	M39	38	60	90	C10	Beam	Channel	A36 Gr.36	Typical
40	M40	37	43	90	C10	Beam	Channel	A36 Gr.36	Typical
41	M41	43	47	90	C10	Beam	Channel	A36 Gr.36	Typical
42	M42	47	51	90	C10	Beam	Channel	A36 Gr.36	Typical
43	M43	51	55	90	C10	Beam	Channel	A36 Gr.36	Typical
44	M44	55	52		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
45	M45	65	66		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
46	M46	63	64		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
47	M47	52	63		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
48	M48	63	48		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
49	M49	48	65		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
50	M50	65	44		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
51	M51	44	37		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
52	M52	46	67		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
53	M53	50	194		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
54	M54	54	68		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
55	M55	70	71		HSS4x4	Column	SquareTube	A500 Gr.B Rect	Typical
56	M56	35	60	90	C10	Beam	Channel	A36 Gr.36	Typical
57	M57	34	69	90	C10	Beam	Channel	A36 Gr.36	Typical
58	M58	69	59	90	C10	Beam	Channel	A36 Gr.36	Typical
59	M59	73	72		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
60	M60	75	74		L3x3x1/4 Vertical	VBrace	Single Angle	A36 Gr.36	Typical
61	M61	60	74		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
62	M62	74	70		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
63	M63	70	72		(N) L4x4x3/8	HBrace	Single Angle	A36 Gr.36	Typical
64	M64	72	35		L3x3x1/4 Dia.	HBrace	Single Angle	A36 Gr.36	Typical
65	M65	77	76		L3x3x1/4 Kicker	VBrace	Single Angle	A36 Gr.36	Typical
66	M66	45	78		12B14	Beam	Wide Flange	A36 Gr.36	Typical
67	M67	53	79		12B14	Beam	Wide Flange	A36 Gr.36	Typical
68	M68	78	12		12B14	Beam	Wide Flange	A36 Gr.36	Typical
69	M69	79	27		12B14	Beam	Wide Flange	A36 Gr.36	Typical
70	M70	12	83		10B19	Beam	Wide Flange	A36 Gr.36	Typical
71	M71	27	12		16WF36	Beam	Wide Flange	A36 Gr.36	Typical
72	M72	82	27		10B19	Beam	Wide Flange	A36 Gr.36	Typical
73	M73	81	53		10B19	Beam	Wide Flange	A36 Gr.36	Typical
74	M74	53	45		16WF36	Beam	Wide Flange	A36 Gr.36	Typical
75	M75	45	80		10B19	Beam	Wide Flange	A36 Gr.36	Typical
76	M76	85	84		16WF36	Beam	Wide Flange	A36 Gr.36	Typical
77	M77	87	86		16WF36	Beam	Wide Flange	A36 Gr.36	Typical
78	M78	125	129		14WF30	Beam	Wide Flange	A36 Gr.36	Typical
79	M79	124	128		14WF30	Beam	Wide Flange	A36 Gr.36	Typical
80	M80	89	79		10B19	Beam	Wide Flange	A36 Gr.36	Typical
81	M81	78	88		10B19	Beam	Wide Flange	A36 Gr.36	Typical
82	M82	94	95		8B10	Beam	Wide Flange	A36 Gr.36	Typical
83	M83	96	97		8B10	Beam	Wide Flange	A36 Gr.36	Typical
84	M84	98	99		8B10	Beam	Wide Flange	A36 Gr.36	Typical
85	M85	100	101		8B10	Beam	Wide Flange	A36 Gr.36	Typical
86	M86	109	111		12B14	Beam	Wide Flange	A36 Gr.36	Typical
87	M87	111	110		12B14	Beam	Wide Flange	A36 Gr.36	Typical
88	M88	105	107		MC6X6.5	Beam	Wide Flange	A992	Typical
89	M89	107	106		MC6X6.5	Beam	Wide Flange	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
90	M90	102	104		MC6X6.5	Beam	Wide Flange	A992	Typical
91	M91	104	103		MC6X6.5	Beam	Wide Flange	A992	Typical
92	M92	169	108		MC6X6.5	Beam	Wide Flange	A992	Typical
93	M93	108	170		MC6X6.5	Beam	Wide Flange	A992	Typical
94	M94	117	127		RIGID	None	None	RIGID	Typical
95	M95	119	126		RIGID	None	None	RIGID	Typical
96	M96	117	119		RIGID	None	None	RIGID	Typical
97	M97	127	126		RIGID	None	None	RIGID	Typical
98	M98	129	130		14WF30	Beam	Wide Flange	A36 Gr.36	Typical
99	M99	130	114		14WF30	Beam	Wide Flange	A36 Gr.36	Typical
100	M100	128	131		14WF30	Beam	Wide Flange	A36 Gr.36	Typical
101	M101	131	115		14WF30	Beam	Wide Flange	A36 Gr.36	Typical
102	M102	81	116		10B19	Beam	Wide Flange	A36 Gr.36	Typical
103	M103	82	121		10B19	Beam	Wide Flange	A36 Gr.36	Typical
104	M104	89	132		10B19	Beam	Wide Flange	A36 Gr.36	Typical
105	M105	88	133		10B19	Beam	Wide Flange	A36 Gr.36	Typical
106	M106	80	118		10B19	Beam	Wide Flange	A36 Gr.36	Typical
107	M107	83	120		10B19	Beam	Wide Flange	A36 Gr.36	Typical
108	M108	142	140		MC6X6.5	Beam	Wide Flange	A992	Typical
109	M109	140	143		MC6X6.5	Beam	Wide Flange	A992	Typical
110	M110	143	138		MC6X6.5	Beam	Wide Flange	A992	Typical
111	M111	138	139		MC6X6.5	Beam	Wide Flange	A992	Typical
112	M112	141	135		MC6X6.5	Beam	Wide Flange	A992	Typical
113	M113	135	136		MC6X6.5	Beam	Wide Flange	A992	Typical
114	M114	136	134		MC6X6.5	Beam	Wide Flange	A992	Typical
115	M115	134	137		MC6X6.5	Beam	Wide Flange	A992	Typical
116	M116	152	150		MC6X6.5	Beam	Wide Flange	A992	Typical
117	M117	150	153		MC6X6.5	Beam	Wide Flange	A992	Typical
118	M118	153	148		MC6X6.5	Beam	Wide Flange	A992	Typical
119	M119	148	149		MC6X6.5	Beam	Wide Flange	A992	Typical
120	M120	151	145		MC6X6.5	Beam	Wide Flange	A992	Typical
121	M121	145	146		MC6X6.5	Beam	Wide Flange	A992	Typical
122	M122	146	144		MC6X6.5	Beam	Wide Flange	A992	Typical
123	M123	144	147		MC6X6.5	Beam	Wide Flange	A992	Typical
124	M124	155	103		MC6X6.5	Beam	Wide Flange	A992	Typical
125	M125	102	154		MC6X6.5	Beam	Wide Flange	A992	Typical
126	M126	157	106		MC6X6.5	Beam	Wide Flange	A992	Typical
127	M127	105	156		MC6X6.5	Beam	Wide Flange	A992	Typical
128	M128	123	27		12B14	Beam	Wide Flange	A36 Gr.36	Typical
129	M129	53	113		12B14	Beam	Wide Flange	A36 Gr.36	Typical
130	M130	159	160		8B10	Beam	Wide Flange	A36 Gr.36	Typical
131	M131	161	162		8B10	Beam	Wide Flange	A36 Gr.36	Typical
132	M132	164	165		8B10	Beam	Wide Flange	A36 Gr.36	Typical
133	M133	165	166		8B10	Beam	Wide Flange	A36 Gr.36	Typical
134	M134	166	163		8B10	Beam	Wide Flange	A36 Gr.36	Typical
135	M135	168	169		MC6X6.5	Beam	Wide Flange	A992	Typical
136	M136	170	167		MC6X6.5	Beam	Wide Flange	A992	Typical
137	M137	172	110		MC6X6.5	Beam	Wide Flange	A992	Typical
138	M138	109	171		MC6X6.5	Beam	Wide Flange	A992	Typical
139	M139	112	45		12B14	Beam	Wide Flange	A36 Gr.36	Typical
140	M140	12	122		12B14	Beam	Wide Flange	A36 Gr.36	Typical
141	M141	176	174		MC6X6.5	Beam	Wide Flange	A992	Typical
142	M142	173	175		MC6X6.5	Beam	Wide Flange	A992	Typical
143	M143	178	20		MC6X6.5	Beam	Wide Flange	A992	Typical
144	M144	49	177		MC6X6.5	Beam	Wide Flange	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
145	M145	182	179		MC6X6.5	Beam	Wide Flange	A992	Typical
146	M146	180	181		MC6X6.5	Beam	Wide Flange	A992	Typical
147	M147	184	183		8B10	Beam	Wide Flange	A36 Gr.36	Typical
148	M148	186	185		8B10	Beam	Wide Flange	A36 Gr.36	Typical
149	M149	187	188		8B10	Beam	Wide Flange	A36 Gr.36	Typical
150	M150	189	190		8B10	Beam	Wide Flange	A36 Gr.36	Typical
151	M151	191	192		8B10	Beam	Wide Flange	A36 Gr.36	Typical
152	M152	195	197		12B14	Beam	Wide Flange	A36 Gr.36	Typical
153	M153	197	196		12B14	Beam	Wide Flange	A36 Gr.36	Typical
154	M154	193	20		(N) W6x15	Beam	Wide Flange	A992	Typical
155	M155	49	194		(N) W6x15	Beam	Wide Flange	A992	Typical

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Distributed	Area(Member)
1	DL	DL	-1.05	4		10
2	SL	SL				6
3	Roof LL	RLL				6
4	DL new	OL1		8	4	
5	WLX	WLX				2
6	WLZ	WLZ				2
7	WLX new	OL2			4	
8	WLZ new	OL3			4	
9	Exist Design Roof Live Load	LL				
10	BLC 1 Transient Area Loads	None			264	
11	BLC 2 Transient Area Loads	None			225	
12	BLC 3 Transient Area Loads	None			225	
13	BLC 5 Transient Area Loads	None			33	
14	BLC 6 Transient Area Loads	None			6	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	DL	Yes	Y	DL	1								
2	DL + ORIG. DESIGN LL	Yes	Y	DL	1	LL	1						
3													
4	DL New	Yes	Y	OL1	1								
5	DL + DL New	Yes	Y	DL	1	OL1	1						
6	DL + DL New + Roof LL	Yes	Y	DL	1	OL1	1	RLL	1				
7	DL + DL New + SL	Yes	Y	DL	1	OL1	1	SL	1				
8	DL + DL New + 0.6WLX	Yes	Y	DL	1	OL1	1	WLX	0.6	OL2	0.6		
9	DL + DL New + 0.6WLZ	Yes	Y	DL	1	OL1	1	WLZ	0.6	OL3	0.6		
10	DL + DL New + 0.6WL-X	Yes	Y	DL	1	OL1	1	WLX	-0.6	OL2	-0.6		
11	DL + DL New + 0.6WL-Z	Yes	Y	DL	1	OL1	1	WLZ	-0.6	OL3	-0.6		
12	DL + DLnew + 0.75Roof LL + 0.45WLX	Yes	Y	DL	1	OL1	1	RLL	0.75	WLX	0.45	OL2	0.45
13	DL + DLnew + 0.75Roof LL + 0.45WLZ	Yes	Y	DL	1	OL1	1	RLL	0.75	WLZ	0.45	OL3	0.45
14	DL + DLnew + 0.75Roof LL + 0.45WL-X	Yes	Y	DL	1	OL1	1	RLL	0.75	WLX	-0.45	OL2	-0.45
15	DL + DLnew + 0.75Roof LL + 0.45WL-Z	Yes	Y	DL	1	OL1	1	RLL	0.75	WLZ	-0.45	OL3	-0.45
16	DL + DLnew + 0.75SL + 0.45WLX	Yes	Y	DL	1	OL1	1	SL	0.75	WLX	0.45	OL2	0.45
17	DL + DLnew + 0.75SL + 0.45WLZ	Yes	Y	DL	1	OL1	1	SL	0.75	WLZ	0.45	OL3	0.45
18	DL + DLnew + 0.75SL + 0.45WL-X	Yes	Y	DL	1	OL1	1	SL	0.75	WLX	-0.45	OL2	-0.45
19	DL + DLnew + 0.75SL + 0.45WL-Z	Yes	Y	DL	1	OL1	1	SL	0.75	WLZ	-0.45	OL3	-0.45

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	12	max	2254.515	10	40759.163	7	1865.361	11	0	19	0	19	0	19
2		min	-1826.009	8	6358.58	4	-2050.885	9	0	1	0	1	0	1
3	27	max	2019.462	10	41671.195	7	2048.85	11	0	19	0	19	0	19
4		min	-2101.949	8	3082.331	4	-1890.349	9	0	1	0	1	0	1
5	45	max	1513.442	10	39815.26	7	1989.635	11	0	19	0	19	0	19
6		min	-2583.471	8	3214.939	4	-2027.369	9	0	1	0	1	0	1
7	53	max	1919.524	10	39080.696	7	2060.062	11	0	19	0	19	0	19
8		min	-1850.514	8	2160.169	4	-2007.419	9	0	1	0	1	0	1
9	79	max	714.412	10	13264.915	19	3663.578	11	0	19	LOCKED		0	19
10		min	-730.759	8	307.777	4	-3386.627	9	0	1	LOCKED		0	1
11	78	max	623.077	10	10595.626	17	3418.966	11	0	19	LOCKED		0	19
12		min	-800.275	8	2110.091	4	-3612.457	9	0	1	LOCKED		0	1
13	80	max	114.792	8	21242.697	7	478.19	11	0	19	0	19	0	19
14		min	-138.102	10	193.169	4	-549.584	9	0	1	0	1	0	1
15	81	max	112.699	8	23384.304	7	383.971	11	0	19	0	19	0	19
16		min	-121.364	10	224.62	4	-376.817	9	0	1	0	1	0	1
17	82	max	118.949	8	21648.775	7	552.855	11	0	19	0	19	0	19
18		min	-114.075	10	115.682	4	-452.994	9	0	1	0	1	0	1
19	83	max	123.937	8	21224.899	7	444.94	11	0	19	0	19	0	19
20		min	-129.896	10	171.211	4	-566.616	9	0	1	0	1	0	1
21	114	max	6970.613	10	15851.931	7	170.556	9	0	19	0	19	0	19
22		min	-5760.497	8	-27.981	4	-161.652	11	0	1	0	1	0	1
23	115	max	6855.404	10	15843.008	7	157.035	9	0	19	0	19	0	19
24		min	-5931.171	8	-24.706	4	-169.05	11	0	1	0	1	0	1
25	116	max	2027.296	8	9617.026	7	568.77	11	0	19	0	19	0	19
26		min	-2407.474	10	0.018	4	-528.347	9	0	1	0	1	0	1
27	118	max	2058.453	8	9071.235	7	543.913	11	0	19	0	19	0	19
28		min	-2508.942	10	0.027	4	-573.872	9	0	1	0	1	0	1
29	120	max	2340.158	8	9070.603	7	543.913	11	0	19	0	19	0	19
30		min	-2183.89	10	-0.018	4	-573.872	9	0	1	0	1	0	1
31	121	max	2249.42	8	9621.085	7	568.77	11	0	19	0	19	0	19
32		min	-2053.319	10	-0.007	4	-528.347	9	0	1	0	1	0	1
33	124	max	5894.404	10	15846.447	7	157.035	9	0	19	0	19	0	19
34		min	-6398.654	8	-24.679	4	-169.05	11	0	1	0	1	0	1
35	125	max	6189.02	10	15853.127	7	170.555	9	0	19	0	19	0	19
36		min	-6459.213	8	-27.89	4	-161.651	11	0	1	0	1	0	1
37	128	max	NC		NC		NC		NC		LOCKED		LOCKED	
38		min	NC		NC		NC		NC		LOCKED		LOCKED	
39	131	max	NC		NC		NC		NC		LOCKED		LOCKED	
40		min	NC		NC		NC		NC		LOCKED		LOCKED	
41	130	max	NC		NC		NC		NC		LOCKED		LOCKED	
42		min	NC		NC		NC		NC		LOCKED		LOCKED	
43	129	max	NC		NC		NC		NC		LOCKED		LOCKED	
44		min	NC		NC		NC		NC		LOCKED		LOCKED	
45	Totals:	max	25296.81	10	372776.117	7	18470.373	11						
46		min	-25296.81	8	17833.333	4	-18470.373	9						

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1	1	12	384.379	17250.105	-57.137	0	0	0
2	1	27	-172.639	21499.096	52.175	0	0	0
3	1	45	-408.104	18831.127	14.526	0	0	0
4	1	53	155.633	21315.27	-0.178	0	0	0
5	1	79	-12.896	8107.745	128.329	0	LOCKED	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
6	1	78	-10.015	3716.278	-116.389	0	LOCKED	0
7	1	80	-3.71	8766.913	-23.72	0	0	0
8	1	81	-4.908	9705.919	2.384	0	0	0
9	1	82	1.39	8971.915	43.064	0	0	0
10	1	83	2.719	8776.016	-44.832	0	0	0
11	1	114	317.117	5964.664	4.568	0	0	0
12	1	115	311.823	5952.813	-4.944	0	0	0
13	1	116	-122.928	3727.911	16.635	0	0	0
14	1	118	-129.04	3518.61	-15.37	0	0	0
15	1	120	109.976	3518.522	-15.37	0	0	0
16	1	121	106.621	3729.447	16.635	0	0	0
17	1	124	-261.528	5953.97	-4.944	0	0	0
18	1	125	-263.89	5964.795	4.568	0	0	0
19	1	128	NC	NC	NC	NC	LOCKED	LOCKED
20	1	131	NC	NC	NC	NC	LOCKED	LOCKED
21	1	130	NC	NC	NC	NC	LOCKED	LOCKED
22	1	129	NC	NC	NC	NC	LOCKED	LOCKED
23	1	Totals:	0	165271.117	0			
24	1	COG (in):	X: -2.41	Y: 4.264	Z: 297.842			
25	2	12	384.379	17250.105	-57.137	0	0	0
26	2	27	-172.639	21499.096	52.175	0	0	0
27	2	45	-408.104	18831.127	14.526	0	0	0
28	2	53	155.633	21315.27	-0.178	0	0	0
29	2	79	-12.896	8107.745	128.329	0	LOCKED	0
30	2	78	-10.015	3716.278	-116.389	0	LOCKED	0
31	2	80	-3.71	8766.913	-23.72	0	0	0
32	2	81	-4.908	9705.919	2.384	0	0	0
33	2	82	1.39	8971.915	43.064	0	0	0
34	2	83	2.719	8776.016	-44.832	0	0	0
35	2	114	317.117	5964.664	4.568	0	0	0
36	2	115	311.823	5952.813	-4.944	0	0	0
37	2	116	-122.928	3727.911	16.635	0	0	0
38	2	118	-129.04	3518.61	-15.37	0	0	0
39	2	120	109.976	3518.522	-15.37	0	0	0
40	2	121	106.621	3729.447	16.635	0	0	0
41	2	124	-261.528	5953.97	-4.944	0	0	0
42	2	125	-263.89	5964.795	4.568	0	0	0
43	2	128	NC	NC	NC	NC	LOCKED	LOCKED
44	2	131	NC	NC	NC	NC	LOCKED	LOCKED
45	2	130	NC	NC	NC	NC	LOCKED	LOCKED
46	2	129	NC	NC	NC	NC	LOCKED	LOCKED
47	2	Totals:	0	165271.117	0			
48	2	COG (in):	X: -2.41	Y: 4.264	Z: 297.842			
49	4	12	-136.002	6358.58	-16.673	0	0	0
50	4	27	147.357	3082.331	8.385	0	0	0
51	4	45	-135.446	3214.939	-15.092	0	0	0
52	4	53	-131.842	2160.169	8.102	0	0	0
53	4	79	5.219	307.777	17.943	0	LOCKED	0
54	4	78	-78.861	2110.091	11.32	0	LOCKED	0
55	4	80	-7.632	193.169	-11.125	0	0	0
56	4	81	0.543	224.62	0.775	0	0	0
57	4	82	1.465	115.682	5.672	0	0	0
58	4	83	-5.199	171.211	-14.739	0	0	0
59	4	114	291.188	-27.981	-0.45	0	0	0
60	4	115	162.367	-24.706	-0.699	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
61	4	116	-71.615	0.018	2.351	0	0	0
62	4	118	-98.981	0.027	1.514	0	0	0
63	4	120	-18.471	-0.018	1.514	0	0	0
64	4	121	3.507	-0.007	2.351	0	0	0
65	4	124	-21.407	-24.679	-0.699	0	0	0
66	4	125	93.809	-27.89	-0.45	0	0	0
67	4	128	NC	NC	NC	NC	LOCKED	LOCKED
68	4	131	NC	NC	NC	NC	LOCKED	LOCKED
69	4	130	NC	NC	NC	NC	LOCKED	LOCKED
70	4	129	NC	NC	NC	NC	LOCKED	LOCKED
71	4	Totals:	0	17833.333	0			
72	4	COG (in):	X: 41.495	Y: 44.255	Z: 224.512			
73	5	12	199.786	23607.304	-73.786	0	0	0
74	5	27	-56.46	24580.48	60.314	0	0	0
75	5	45	-520.061	22046.495	-1.207	0	0	0
76	5	53	48.899	23474.622	8.022	0	0	0
77	5	79	-8.407	8416.537	144.493	0	LOCKED	0
78	5	78	-88.698	5826.169	-102.802	0	LOCKED	0
79	5	80	-11.737	8960.938	-34.968	0	0	0
80	5	81	-4.705	9931.295	3.501	0	0	0
81	5	82	2.556	9088.249	48.918	0	0	0
82	5	83	-2.886	8948.05	-59.843	0	0	0
83	5	114	601.201	5936.112	4.046	0	0	0
84	5	115	459.847	5927.663	-5.602	0	0	0
85	5	116	-188.615	3728.066	18.848	0	0	0
86	5	118	-223.487	3518.806	-13.613	0	0	0
87	5	120	76.306	3518.434	-13.613	0	0	0
88	5	121	96.454	3729.414	18.848	0	0	0
89	5	124	-248.833	5929.049	-5.602	0	0	0
90	5	125	-131.161	5936.768	4.046	0	0	0
91	5	128	NC	NC	NC	NC	LOCKED	LOCKED
92	5	131	NC	NC	NC	NC	LOCKED	LOCKED
93	5	130	NC	NC	NC	NC	LOCKED	LOCKED
94	5	129	NC	NC	NC	NC	LOCKED	LOCKED
95	5	Totals:	0	183104.45	0			
96	5	COG (in):	X: 1.866	Y: 8.159	Z: 290.7			
97	6	12	128.819	35041.067	-177.408	0	0	0
98	6	27	-97.625	35973.893	160.175	0	0	0
99	6	45	-455.846	33891.744	-52.641	0	0	0
100	6	53	106.685	33878.081	85.542	0	0	0
101	6	79	-10.273	11429.332	237.993	0	LOCKED	0
102	6	78	-88.544	8771.815	-187.566	0	LOCKED	0
103	6	80	-14.522	17148.313	-76.238	0	0	0
104	6	81	-8.925	18899.491	13.501	0	0	0
105	6	82	3.087	17461.474	105.111	0	0	0
106	6	83	-0.735	17132.151	-117.185	0	0	0
107	6	114	665.283	12546.78	7.276	0	0	0
108	6	115	508.875	12538.022	-9.119	0	0	0
109	6	116	-205.842	7654.03	30.683	0	0	0
110	6	118	-245.649	7220.417	-24.481	0	0	0
111	6	120	101.35	7219.87	-24.481	0	0	0
112	6	121	121.047	7657.183	30.683	0	0	0
113	6	124	-311.297	12540.772	-9.119	0	0	0
114	6	125	-195.888	12547.795	7.276	0	0	0
115	6	128	NC	NC	NC	NC	LOCKED	LOCKED

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
116	6	131	NC	NC	NC	NC	LOCKED	LOCKED
117	6	130	NC	NC	NC	NC	LOCKED	LOCKED
118	6	129	NC	NC	NC	NC	LOCKED	LOCKED
119	6	Totals:	0	309552.228	0			
120	6	COG (in):	X: 1.095	Y: 4.826	Z: 288.768			
121	7	12	78.706	40759.163	-228.449	0	0	0
122	7	27	-132.74	41671.195	209.355	0	0	0
123	7	45	-408.322	39815.26	-78.699	0	0	0
124	7	53	150.696	39080.696	124.145	0	0	0
125	7	79	-11.767	12933.203	281.369	0	LOCKED	0
126	7	78	-88.464	10241.463	-226.565	0	LOCKED	0
127	7	80	-15.928	21242.697	-97.29	0	0	0
128	7	81	-11.302	23384.304	19.398	0	0	0
129	7	82	3.083	21648.775	133.78	0	0	0
130	7	83	0.339	21224.899	-146.466	0	0	0
131	7	114	688.907	15851.931	8.719	0	0	0
132	7	115	523.742	15843.008	-10.713	0	0	0
133	7	116	-210.491	9617.026	36.043	0	0	0
134	7	118	-253.056	9071.235	-29.339	0	0	0
135	7	120	110.705	9070.603	-29.339	0	0	0
136	7	121	130.038	9621.085	36.043	0	0	0
137	7	124	-333.302	15846.447	-10.713	0	0	0
138	7	125	-220.843	15853.127	8.719	0	0	0
139	7	128	NC	NC	NC	NC	LOCKED	LOCKED
140	7	131	NC	NC	NC	NC	LOCKED	LOCKED
141	7	130	NC	NC	NC	NC	LOCKED	LOCKED
142	7	129	NC	NC	NC	NC	LOCKED	LOCKED
143	7	Totals:	0	372776.117	0			
144	7	COG (in):	X: 0.906	Y: 4.008	Z: 288.293			
145	8	12	-1826.009	26017.531	-76.08	0	0	0
146	8	27	-2101.949	27009.932	63.21	0	0	0
147	8	45	-2583.471	19566.077	-2.396	0	0	0
148	8	53	-1850.514	21229.573	9.626	0	0	0
149	8	79	-730.759	8401.883	142.188	0	LOCKED	0
150	8	78	-800.275	5828.808	-103.092	0	LOCKED	0
151	8	80	114.792	8890.731	-32.796	0	0	0
152	8	81	112.699	9762.611	3.005	0	0	0
153	8	82	118.949	9152.872	52.898	0	0	0
154	8	83	123.937	9017.176	-63.498	0	0	0
155	8	114	-5760.497	5943.882	4.056	0	0	0
156	8	115	-5931.171	5937.716	-5.523	0	0	0
157	8	116	2027.296	3723.025	18.582	0	0	0
158	8	118	2058.453	3513.588	-13.648	0	0	0
159	8	120	2340.158	3524.104	-13.648	0	0	0
160	8	121	2249.42	3734.825	18.582	0	0	0
161	8	124	-6398.654	5922.61	-5.523	0	0	0
162	8	125	-6459.213	5927.507	4.057	0	0	0
163	8	128	NC	NC	NC	NC	LOCKED	LOCKED
164	8	131	NC	NC	NC	NC	LOCKED	LOCKED
165	8	130	NC	NC	NC	NC	LOCKED	LOCKED
166	8	129	NC	NC	NC	NC	LOCKED	LOCKED
167	8	Totals:	-25296.81	183104.45	0			
168	8	COG (in):	X: 1.866	Y: 8.159	Z: 290.7			
169	9	12	206.734	21667.161	-2050.885	0	0	0
170	9	27	-66.895	26522.767	-1890.349	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
171	9	45	-524.262	20141.165	-2027.369	0	0	0
172	9	53	59.766	25336.698	-2007.419	0	0	0
173	9	79	-8.813	6463.468	-3386.627	0	LOCKED	0
174	9	78	-88.667	7778.399	-3612.457	0	LOCKED	0
175	9	80	-10.895	8284.454	-549.584	0	0	0
176	9	81	-5.515	10651.146	-376.817	0	0	0
177	9	82	3.371	9761.66	-452.994	0	0	0
178	9	83	-3.754	8272.523	-566.616	0	0	0
179	9	114	594.063	6138.292	170.556	0	0	0
180	9	115	465.815	5726.145	157.035	0	0	0
181	9	116	-189.53	3726.796	-528.347	0	0	0
182	9	118	-221.944	3519.782	-573.872	0	0	0
183	9	120	75.695	3519.435	-573.872	0	0	0
184	9	121	98.097	3728.155	-528.347	0	0	0
185	9	124	-256.788	5727.517	157.035	0	0	0
186	9	125	-126.479	6138.886	170.555	0	0	0
187	9	128	NC	NC	NC	NC	LOCKED	LOCKED
188	9	131	NC	NC	NC	NC	LOCKED	LOCKED
189	9	130	NC	NC	NC	NC	LOCKED	LOCKED
190	9	129	NC	NC	NC	NC	LOCKED	LOCKED
191	9	Totals:	0	183104.45	-18470.373			
192	9	COG (in):	X: 1.866	Y: 8.159	Z: 290.7			
193	10	12	2254.515	21201.314	-71.595	0	0	0
194	10	27	2019.462	22154.716	57.492	0	0	0
195	10	45	1513.442	24531.13	-0.366	0	0	0
196	10	53	1919.524	25722.692	6.586	0	0	0
197	10	79	714.412	8426.624	146.902	0	LOCKED	0
198	10	78	623.077	5817.142	-102.468	0	LOCKED	0
199	10	80	-138.102	9031.277	-37.117	0	0	0
200	10	81	-121.364	10100.207	4.014	0	0	0
201	10	82	-114.075	9023.695	44.943	0	0	0
202	10	83	-129.896	8879.033	-56.185	0	0	0
203	10	114	6970.613	5926.665	4.034	0	0	0
204	10	115	6855.404	5915.77	-5.683	0	0	0
205	10	116	-2407.474	3733.651	19.119	0	0	0
206	10	118	-2508.942	3524.543	-13.574	0	0	0
207	10	120	-2183.89	3513.228	-13.574	0	0	0
208	10	121	-2053.319	3724.448	19.119	0	0	0
209	10	124	5894.404	5933.894	-5.682	0	0	0
210	10	125	6189.02	5944.421	4.034	0	0	0
211	10	128	NC	NC	NC	NC	LOCKED	LOCKED
212	10	131	NC	NC	NC	NC	LOCKED	LOCKED
213	10	130	NC	NC	NC	NC	LOCKED	LOCKED
214	10	129	NC	NC	NC	NC	LOCKED	LOCKED
215	10	Totals:	25296.81	183104.45	0			
216	10	COG (in):	X: 1.866	Y: 8.159	Z: 290.7			
217	11	12	193.038	25547.674	1865.361	0	0	0
218	11	27	-45.791	22638.795	2048.85	0	0	0
219	11	45	-516.031	23952.23	1989.635	0	0	0
220	11	53	37.83	21612.841	2060.062	0	0	0
221	11	79	-8	10373.672	3663.578	0	LOCKED	0
222	11	78	-88.711	3878.358	3418.966	0	LOCKED	0
223	11	80	-12.573	9634.414	478.19	0	0	0
224	11	81	-3.89	9208.426	383.971	0	0	0
225	11	82	1.743	8411.723	552.855	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
226	11	83	-2.015	9620.52	444.94	0	0	0
227	11	114	608.357	5734.779	-161.652	0	0	0
228	11	115	453.896	6130.052	-169.05	0	0	0
229	11	116	-187.719	3729.032	568.77	0	0	0
230	11	118	-225.049	3517.507	543.913	0	0	0
231	11	120	76.947	3517.11	543.913	0	0	0
232	11	121	94.84	3730.368	568.77	0	0	0
233	11	124	-240.952	6131.452	-169.05	0	0	0
234	11	125	-135.92	5735.496	-161.651	0	0	0
235	11	128	NC	NC	NC	NC	LOCKED	LOCKED
236	11	131	NC	NC	NC	NC	LOCKED	LOCKED
237	11	130	NC	NC	NC	NC	LOCKED	LOCKED
238	11	129	NC	NC	NC	NC	LOCKED	LOCKED
239	11	Totals:	0	183104.45	18470.373			
240	11	COG (in):	X: 1.866	Y: 8.159	Z: 290.7			
241	12	12	-1347.88	33992.436	-152.638	0	0	0
242	12	27	-1599.353	34950.626	136.818	0	0	0
243	12	45	-1994.73	29066.62	-40.591	0	0	0
244	12	53	-1308.506	29591.577	68.056	0	0	0
245	12	79	-552.015	10663.858	213.417	0	LOCKED	0
246	12	78	-620.75	8038.87	-167.483	0	LOCKED	0
247	12	80	82.035	15048.422	-64.213	0	0	0
248	12	81	79.896	16530.473	10.152	0	0	0
249	12	82	91.421	15416.709	93.936	0	0	0
250	12	83	94.853	15137.975	-105.482	0	0	0
251	12	114	-4159.094	10902.548	6.52	0	0	0
252	12	115	-4327.421	10895.663	-8.218	0	0	0
253	12	116	1471.593	6667.312	27.651	0	0	0
254	12	118	1483.826	6289.628	-21.939	0	0	0
255	12	120	1807.225	6300.116	-21.939	0	0	0
256	12	121	1743.743	6680.616	27.651	0	0	0
257	12	124	-4950.476	10880.892	-8.219	0	0	0
258	12	125	-4966.973	10885.942	6.521	0	0	0
259	12	128	NC	NC	NC	NC	LOCKED	LOCKED
260	12	131	NC	NC	NC	NC	LOCKED	LOCKED
261	12	130	NC	NC	NC	NC	LOCKED	LOCKED
262	12	129	NC	NC	NC	NC	LOCKED	LOCKED
263	12	Totals:	-18972.608	277940.284	0			
264	12	COG (in):	X: 1.222	Y: 5.375	Z: 289.086			
265	13	12	158.682	30730.26	-1618.567	0	0	0
266	13	27	-94.611	34578.808	-1319.88	0	0	0
267	13	45	-482.116	29503.889	-1540.063	0	0	0
268	13	53	99.878	32671.199	-1443.245	0	0	0
269	13	79	-10.075	9217.023	-2437.359	0	LOCKED	0
270	13	78	-88.573	9494.902	-2806.609	0	LOCKED	0
271	13	80	-13.196	14594.168	-459.568	0	0	0
272	13	81	-8.384	17196.845	-280.639	0	0	0
273	13	82	3.649	15873.434	-293.827	0	0	0
274	13	83	-1.924	14579.494	-490.723	0	0	0
275	13	114	646.052	11045.852	131.671	0	0	0
276	13	115	503.275	10734.129	114.098	0	0	0
277	13	116	-203.177	6671.031	-383.882	0	0	0
278	13	118	-239.874	6296.37	-443.036	0	0	0
279	13	120	95.41	6295.888	-443.036	0	0	0
280	13	121	116.934	6673.742	-383.882	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
281	13	124	-303.935	10736.524	114.097	0	0	0
282	13	125	-178.016	11046.727	131.67	0	0	0
283	13	128	NC	NC	NC	NC	LOCKED	LOCKED
284	13	131	NC	NC	NC	NC	LOCKED	LOCKED
285	13	130	NC	NC	NC	NC	LOCKED	LOCKED
286	13	129	NC	NC	NC	NC	LOCKED	LOCKED
287	13	Totals:	0	277940.284	-13852.78			
288	13	COG (in):	X: 1.222	Y: 5.375	Z: 289.086			
289	14	12	1664.008	30374.735	-150.811	0	0	0
290	14	27	1448.517	31302.348	134.02	0	0	0
291	14	45	1026.934	32796.339	-39.016	0	0	0
292	14	53	1469.841	32964.217	64.445	0	0	0
293	14	79	532.869	10686.864	217.552	0	LOCKED	0
294	14	78	443.702	8029.632	-166.916	0	LOCKED	0
295	14	80	-109.591	15154.251	-67.399	0	0	0
296	14	81	-95.1	16784.188	11.413	0	0	0
297	14	82	-85.528	15319.328	87.906	0	0	0
298	14	83	-97.503	15033.996	-99.911	0	0	0
299	14	114	5465.93	10884.818	6.501	0	0	0
300	14	115	5327.685	10874.256	-8.345	0	0	0
301	14	116	-1878.164	6678.066	28.077	0	0	0
302	14	118	-1967.745	6300.687	-21.874	0	0	0
303	14	120	-1613.529	6289.161	-21.874	0	0	0
304	14	121	-1510.628	6670.11	28.077	0	0	0
305	14	124	4351.189	10893.977	-8.345	0	0	0
306	14	125	4599.722	10903.312	6.5	0	0	0
307	14	128	NC	NC	NC	NC	LOCKED	LOCKED
308	14	131	NC	NC	NC	NC	LOCKED	LOCKED
309	14	130	NC	NC	NC	NC	LOCKED	LOCKED
310	14	129	NC	NC	NC	NC	LOCKED	LOCKED
311	14	Totals:	18972.608	277940.284	0			
312	14	COG (in):	X: 1.222	Y: 5.375	Z: 289.086			
313	15	12	141.877	33634.487	1293.783	0	0	0
314	15	27	-72.669	31672.289	1612.024	0	0	0
315	15	45	-469.494	32356.732	1440.762	0	0	0
316	15	53	76.932	29882.934	1596.272	0	0	0
317	15	79	-9.256	12138.877	2861.737	0	LOCKED	0
318	15	78	-88.582	6580.065	2478.756	0	LOCKED	0
319	15	80	-14.447	15606.701	327.13	0	0	0
320	15	81	-7.221	16115.955	302.265	0	0	0
321	15	82	2.393	14860.776	476.804	0	0	0
322	15	83	-0.619	15590.66	284.212	0	0	0
323	15	114	656.695	10742.953	-118.183	0	0	0
324	15	115	494.79	11037.332	-131.126	0	0	0
325	15	116	-201.886	6673.87	441.173	0	0	0
326	15	118	-242.192	6293.469	397.653	0	0	0
327	15	120	96.373	6292.945	397.653	0	0	0
328	15	121	114.533	6676.561	441.173	0	0	0
329	15	124	-292.076	11039.751	-131.125	0	0	0
330	15	125	-185.152	10743.926	-118.183	0	0	0
331	15	128	NC	NC	NC	NC	LOCKED	LOCKED
332	15	131	NC	NC	NC	NC	LOCKED	LOCKED
333	15	130	NC	NC	NC	NC	LOCKED	LOCKED
334	15	129	NC	NC	NC	NC	LOCKED	LOCKED
335	15	Totals:	0	277940.284	13852.78			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
336	15	COG (in):	X: 1.222	Y: 5.375	Z: 289.086			
337	16	12	-1369.151	38282.075	-190.774	0	0	0
338	16	27	-1610.683	39225.179	173.564	0	0	0
339	16	45	-1951.225	33507.508	-60.048	0	0	0
340	16	53	-1268.093	33492.568	97.392	0	0	0
341	16	79	-553.246	11791.396	246.865	0	LOCKED	0
342	16	78	-619.967	9142.153	-197.824	0	LOCKED	0
343	16	80	81.463	18118.883	-79.882	0	0	0
344	16	81	78.052	19893.726	14.17	0	0	0
345	16	82	92.037	18557.093	115.275	0	0	0
346	16	83	96.142	18207.412	-127.275	0	0	0
347	16	114	-4157.579	13382.684	7.657	0	0	0
348	16	115	-4329.199	13375.709	-9.463	0	0	0
349	16	116	1472.68	8138.853	31.841	0	0	0
350	16	118	1483.522	7677.021	-25.766	0	0	0
351	16	120	1822.004	7688.871	-25.766	0	0	0
352	16	121	1758.197	8154.227	31.841	0	0	0
353	16	124	-4989.882	13359.033	-9.464	0	0	0
354	16	125	-5007.68	13363.809	7.658	0	0	0
355	16	128	NC	NC	NC	NC	LOCKED	LOCKED
356	16	131	NC	NC	NC	NC	LOCKED	LOCKED
357	16	130	NC	NC	NC	NC	LOCKED	LOCKED
358	16	129	NC	NC	NC	NC	LOCKED	LOCKED
359	16	Totals:	-18972.608	325358.2	0			
360	16	COG (in):	X: 1.041	Y: 4.592	Z: 288.632			
361	17	12	127.284	35019.975	-1650.842	0	0	0
362	17	27	-117.909	38849.99	-1277.086	0	0	0
363	17	45	-452.89	33947.597	-1551.477	0	0	0
364	17	53	129.777	36571.725	-1411.437	0	0	0
365	17	79	-11.077	10348.425	-2406.604	0	LOCKED	0
366	17	78	-88.521	10595.626	-2839.964	0	LOCKED	0
367	17	80	-14.248	17664.709	-479.207	0	0	0
368	17	81	-10.068	20559.937	-279.594	0	0	0
369	17	82	3.742	19013.739	-276.589	0	0	0
370	17	83	-1.119	17648.782	-516.584	0	0	0
371	17	114	666.421	13524.843	132.986	0	0	0
372	17	115	517.327	13212.861	113.015	0	0	0
373	17	116	-207.887	8142.983	-380.238	0	0	0
374	17	118	-246.58	7684.781	-447.46	0	0	0
375	17	120	103.408	7684.235	-447.46	0	0	0
376	17	121	124.701	8146.373	-380.238	0	0	0
377	17	124	-323.331	13215.769	113.014	0	0	0
378	17	125	-199.03	13525.852	132.985	0	0	0
379	17	128	NC	NC	NC	NC	LOCKED	LOCKED
380	17	131	NC	NC	NC	NC	LOCKED	LOCKED
381	17	130	NC	NC	NC	NC	LOCKED	LOCKED
382	17	129	NC	NC	NC	NC	LOCKED	LOCKED
383	17	Totals:	0	325358.2	-13852.78			
384	17	COG (in):	X: 1.041	Y: 4.592	Z: 288.632			
385	18	12	1618.922	34661.558	-189.72	0	0	0
386	18	27	1415.97	35573.438	171.514	0	0	0
387	18	45	1045.404	37240.254	-58.444	0	0	0
388	18	53	1486.343	36866.654	93.115	0	0	0
389	18	79	532.169	11816.597	251.3	0	LOCKED	0
390	18	78	443.04	9132.661	-197.208	0	LOCKED	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
391	18	80	-111.12	18224.927	-83.042	0	0	0
392	18	81	-96.663	20147.703	15.681	0	0	0
393	18	82	-85.989	18459.461	109.213	0	0	0
394	18	83	-97.181	18103.241	-121.659	0	0	0
395	18	114	5504.96	13362.517	7.637	0	0	0
396	18	115	5357.591	13351.806	-9.594	0	0	0
397	18	116	-1888.621	8151.013	32.279	0	0	0
398	18	118	-1980.78	7689.516	-25.696	0	0	0
399	18	120	-1612.358	7676.5	-25.696	0	0	0
400	18	121	-1509.593	8142.343	32.279	0	0	0
401	18	124	4352.002	13374.46	-9.593	0	0	0
402	18	125	4598.51	13383.551	7.636	0	0	0
403	18	128	NC	NC	NC	NC	LOCKED	LOCKED
404	18	131	NC	NC	NC	NC	LOCKED	LOCKED
405	18	130	NC	NC	NC	NC	LOCKED	LOCKED
406	18	129	NC	NC	NC	NC	LOCKED	LOCKED
407	18	Totals:	18972.608	325358.2	0			
408	18	COG (in):	X: 1.041	Y: 4.592	Z: 288.632			
409	19	12	107.24	37921.146	1248.99	0	0	0
410	19	27	-92.941	35946.674	1643.494	0	0	0
411	19	45	-437.067	36797.725	1413.279	0	0	0
412	19	53	103.594	33785.769	1622.486	0	0	0
413	19	79	-10.143	13264.915	2898.292	0	LOCKED	0
414	19	78	-88.517	7685.855	2451.36	0	LOCKED	0
415	19	80	-15.495	18677.279	315.461	0	0	0
416	19	81	-8.935	19479.612	309.499	0	0	0
417	19	82	2.465	18000.97	502.212	0	0	0
418	19	83	0.188	18660.037	266.533	0	0	0
419	19	114	677.024	13221.806	-117.22	0	0	0
420	19	115	509.075	13516.205	-132.541	0	0	0
421	19	116	-206.629	8146.406	445.936	0	0	0
422	19	118	-248.893	7681.28	394.412	0	0	0
423	19	120	104.386	7680.69	394.412	0	0	0
424	19	121	122.323	8149.774	445.936	0	0	0
425	19	124	-311.474	13519.14	-132.541	0	0	0
426	19	125	-206.201	13222.917	-117.22	0	0	0
427	19	128	NC	NC	NC	NC	LOCKED	LOCKED
428	19	131	NC	NC	NC	NC	LOCKED	LOCKED
429	19	130	NC	NC	NC	NC	LOCKED	LOCKED
430	19	129	NC	NC	NC	NC	LOCKED	LOCKED
431	19	Totals:	0	325358.2	13852.78			
432	19	COG (in):	X: 1.041	Y: 4.592	Z: 288.632			

Envelope AISC 14TH (360-10): ASD Member Steel Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [lb-ft]	Mnzz/om [lb-ft]	Cb	Eqn
1	M1	L3X3X4	0.846	54.729	9	0.002	105.079	y	10	10482.01	31041.916	1123.179	1948.352	1.136	H2-1
2	M2	HSS4X4X4	0.314	69.266	10	0.108	3.148	z	9	69111.623	92826.347	10765.469	10765.469	1.402	H1-1b
3	M3	HSS4X4X4	0.338	69.266	8	0.045	72.414	y	10	69111.623	92826.347	10765.469	10765.469	1.4	H1-1b
4	M4	HSS4X4X4	0.604	69.266	16	0.071	3.148	y	10	69111.623	92826.347	10765.469	10765.469	1.468	H1-1a
5	M5	L3X3X4	0.588	54.729	10	0.008	105.079	y	17	10482.01	31041.916	1123.179	1948.352	1.136	H2-1
6	M6	C10X15.3	0.212	94	11	0.03	188	y	11	38562.529	96574.85	3318.693	27738.704	1.29	H1-1b
7	M7	L3X3X4	0.048	69.5	7	0.002	69.5	y	19	14765.621	31041.916	1123.179	2114.686	1	H2-1
8	M8	C10X15.3	0.957	58	7	0.032	116	y	18	25356.584	96574.85	3318.693	18855.841	1	H1-1a
9	M9	L3X3X4	0.927	67.613	7	0.006	135.227	y	7	5413.75	31041.916	1123.179	1780.307	1.136	H2-1
10	M10	L3X3X4	0.384	58.451	7	0.003	116.903	y	7	7243.918	31041.916	1123.179	1879.89	1.136	H2-1

Envelope AISC 14TH (360-10): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [lb-ft]	Mnzz/om [lb-ft]	Cb	Eqn
11	M11	L4X4X6	0.378	57.234	7	0.002	116.903	y	7	25392.26	61652.695	2926.466	5603.756	1.136	H2-1
12	M12	HSS4X4X4	0.408	69.266	19	0.128	3.148	y	8	69111.623	92826.347	10765.469	10765.469	2.322	H1-1a
13	M13	L3X3X4	0.562	56.251	10	0.006	108.003	y	9	9922.17	31041.916	1123.179	1931.079	1.136	H2-1
14	M14	C10X15.3	0.529	83	16	0.037	166	y	8	47208.278	96574.85	3318.693	28562.874	1.353	H1-1a
15	M15	L3X3X4	0.755	54.128	7	0.003	108.255	y	18	8447.4	31041.916	1123.179	1929.596	1.136	H2-1
16	M16	L3X3X4	0.029	69.5	9	0.007	69.5	y	16	14765.621	31041.916	1123.179	2114.686	1	H2-1
17	M17	L4X4X6	0.761	53	7	0.004	108.255	y	18	28812.913	61652.695	2926.466	5709.898	1.136	H2-1
18	M18	HSS4X4X4	0.577	69.266	16	0.057	3.148	y	10	69111.623	92826.347	10765.469	10765.469	1.501	H1-1a
19	M19	L3X3X4	0.5	54.729	10	0.008	105.079	y	19	10482.01	31041.916	1123.179	1948.352	1.136	H2-1
20	M20	C10X15.3	0.49	83	16	0.034	0	y	8	47208.278	96574.85	3318.693	28562.874	1.344	H1-1a
21	M21	L3X3X4	0.029	69.5	11	0.006	69.5	y	7	14765.621	31041.916	1123.179	2114.686	1	H2-1
22	M22	L4X4X6	0.721	55.255	7	0.004	108.255	y	18	28812.913	61652.695	2926.466	5709.898	1.136	H2-1
23	M23	L3X3X4	0.718	54.128	7	0.003	108.255	y	18	8447.4	31041.916	1123.179	1929.596	1.136	H2-1
24	M24	HSS4X4X4	0.321	69.266	8	0.043	100.75	z	11	69111.623	92826.347	10765.469	10765.469	1.4	H1-1b
25	M25	C10X15.3	0.447	282	16	0.054	282	y	8	47208.278	96574.85	3318.693	28562.874	1.568	H1-1b
26	M26	C10X15.3	0.887	58	7	0.036	116	y	10	25356.584	96574.85	3318.693	18855.841	1	H1-1a
27	M27	L3X3X4	0.859	67.613	7	0.006	135.227	y	18	5413.75	31041.916	1123.179	1780.307	1.136	H2-1
28	M28	C10X15.3	0.428	94	19	0.044	188	y	9	38562.529	96574.85	3318.693	27648.306	1.285	H1-1a
29	M29	C10X15.3	0.213	94	11	0.029	188	y	11	38562.529	96574.85	3318.693	27734.478	1.289	H1-1b
30	M30	HSS4X4X4	0.358	69.266	10	0.05	100.75	y	10	69111.623	92826.347	10765.469	10765.469	1.399	H1-1b
31	M31	L3X3X4	0.048	69.5	7	0.002	69.5	y	19	14765.621	31041.916	1123.179	2114.686	1	H2-1
32	M32	L4X4X6	0.384	59.669	7	0.002	116.903	y	17	25392.26	61652.695	2926.466	5603.756	1.136	H2-1
33	M33	L3X3X4	0.389	58.451	7	0.003	116.903	y	7	7243.918	31041.916	1123.179	1879.89	1.136	H2-1
34	M34	HSS4X4X4	0.591	69.266	18	0.087	3.148	y	8	69111.623	92826.347	10765.469	10765.469	1.437	H1-1a
35	M35	HSS4X4X4	0.419	69.266	19	0.141	3.148	y	10	69111.623	92826.347	10765.469	10765.469	2.387	H1-1a
36	M36	HSS4X4X4	0.581	69.266	18	0.061	3.148	y	8	69111.623	92826.347	10765.469	10765.469	1.518	H1-1a
37	M37	C10X15.3	0.276	70.315	11	0.033	100.75	y	16	33613.723	96574.85	3318.693	28562.874	1.446	H1-1b
38	M38	HSS4X4X4	0.295	69.266	10	0.043	100.75	y	10	69111.623	92826.347	10765.469	10765.469	1.4	H1-1b
39	M39	C10X15.3	0.454	282	18	0.06	282	y	10	47208.278	96574.85	3318.693	28562.874	1.624	H1-1b
40	M40	C10X15.3	0.924	58	7	0.03	116	y	16	25356.584	96574.85	3318.693	18855.841	1	H1-1a
41	M41	C10X15.3	0.513	83	18	0.039	166	y	10	47208.278	96574.85	3318.693	28562.874	1.361	H1-1a
42	M42	C10X15.3	0.378	84.729	18	0.033	0	y	10	47208.278	96574.85	3318.693	28562.874	1.339	H1-1a
43	M43	C10X15.3	0.266	32.5	7	0.034	65	y	16	62262.038	96574.85	3318.693	25010.054	1	H1-1a
44	M44	L3X3X4	0.743	47.58	7	0.002	95.159	y	10	10932.574	31041.916	1123.179	2008.824	1.136	H2-1
45	M45	L3X3X4	0.029	0	9	0.008	69.5	y	18	14765.621	31041.916	1123.179	2114.686	1	H2-1
46	M46	L3X3X4	0.036	0	11	0.006	69.5	y	18	14765.621	31041.916	1123.179	2114.686	1	H2-1
47	M47	L3X3X4	0.672	54.128	7	0.004	108.255	y	16	8447.4	31041.916	1123.179	1929.596	1.136	H2-1
48	M48	L4X4X6	0.667	53	7	0.003	108.255	y	7	28812.913	61652.695	2926.466	5709.898	1.136	H2-1
49	M49	L4X4X6	0.817	55.255	7	0.004	108.255	y	16	28812.913	61652.695	2926.466	5709.898	1.136	H2-1
50	M50	L3X3X4	0.807	54.128	7	0.004	108.255	y	16	8447.4	31041.916	1123.179	1929.596	1.136	H2-1
51	M51	L3X3X4	0.889	67.613	7	0.007	135.227	y	7	5413.75	31041.916	1123.179	1780.307	1.136	H2-1
52	M52	L3X3X4	0.684	54.729	8	0.008	105.079	y	17	10482.01	31041.916	1123.179	1948.352	1.136	H2-1
53	M53	L3X3X4	0.506	56.251	8	0.006	108.003	y	9	9922.17	31041.916	1123.179	1931.079	1.136	H2-1
54	M54	L3X3X4	0.503	54.729	8	0.009	105.079	y	19	10482.01	31041.916	1123.179	1948.352	1.136	H2-1
55	M55	HSS4X4X4	0.29	69.266	11	0.11	3.148	z	11	69111.623	92826.347	10765.469	10765.469	1.398	H1-1b
56	M56	C10X15.3	0.377	282	7	0.045	188	y	11	38562.529	96574.85	3318.693	26208.187	1.218	H1-1a
57	M57	C10X15.3	0.206	94	9	0.03	188	y	9	38562.529	96574.85	3318.693	27753.462	1.29	H1-1b
58	M58	C10X15.3	0.206	94	9	0.032	188	y	9	38562.529	96574.85	3318.693	27773.275	1.291	H1-1b
59	M59	L3X3X4	0.048	69.5	7	0.003	69.5	y	17	14765.621	31041.916	1123.179	2114.686	1	H2-1
60	M60	L3X3X4	0.048	69.5	7	0.003	69.5	y	7	14765.621	31041.916	1123.179	2114.686	1	H2-1
61	M61	L3X3X4	0.354	58.451	7	0.003	116.903	y	17	7243.918	31041.916	1123.179	1879.89	1.136	H2-1
62	M62	L4X4X6	0.341	57.234	7	0.003	116.903	y	9	25392.26	61652.695	2926.466	5603.756	1.136	H2-1
63	M63	L4X4X6	0.342	59.669	7	0.003	116.903	y	19	25392.26	61652.695	2926.466	5603.756	1.136	H2-1
64	M64	L3X3X4	0.354	58.451	7	0.003	116.903	y	17	7243.918	31041.916	1123.179	1879.89	1.136	H2-1
65	M65	L3X3X4	0.859	54.729	11	0.002	105.079	y	10	10482.01	31041.916	1123.179	1948.352	1.136	H2-1

Envelope AISC 14TH (360-10): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [lb-ft]	Mnzz/om [lb-ft]	Cb	Eqn
66	M66	12B14	0.726	48.958	16	0.189	0	y	16	66540.151	87757.222	3376.96	28798.935	1	H1-1b
67	M67	12B14	0.892	76.375	16	0.228	0	y	16	66540.151	87757.222	3376.96	28798.935	1	H1-1b
68	M68	12B14	0.844	115.542	18	0.196	188	y	18	66540.151	87757.222	3376.96	28798.935	1	H1-1b
69	M69	12B14	0.903	111.625	18	0.229	188	y	18	66540.151	87757.222	3376.96	28798.935	1	H1-1b
70	M70	10B19	0.41	78.667	16	0.099	115.542	y	7	108110.76	119279.856	5984.628	38095.171	1.381	H1-1b
71	M71	16WFX38.7_15_HISTORIC	0.278	121.042	7	0.19	166	y	18	138038.742	245532.934	18827.334	123952.096	1.06	H1-1b
72	M72	10B19	0.355	78.667	16	0.083	120.458	y	7	77987.427	119279.856	5984.628	38095.171	1.648	H1-1b
73	M73	10B19	0.644	118	18	0.32	169.625	y	7	106380.242	119279.856	5984.628	38095.171	1.049	H1-1b
74	M74	16WFX38.7_15_HISTORIC	0.286	121.042	7	0.187	166	y	16	225813.65	245532.934	18827.334	123952.096	1.062	H1-1b
75	M75	10B19	0.383	157.333	18	0.081	115.542	y	7	77987.427	119279.856	5984.628	38095.171	1.649	H1-1b
76	M76	16WFX38.7_15_HISTORIC	0.602	191.917	7	0.127	376	y	18	202568.318	245532.934	18827.334	123952.096	1	H1-1b
77	M77	16WFX38.7_15_HISTORIC	0.936	188	7	0.212	376	y	18	202568.318	245532.934	18827.334	123952.096	1	H1-1b
78	M78	14WFX32.4_1_HISTORIC	0.591	169.656	7	0.149	172.438	y	7	91343.657	205437.126	15453.424	91976.048	2.053	H1-1b
79	M79	14WFX32.4_1_HISTORIC	0.609	169.656	7	0.154	172.438	y	7	123391.435	205437.126	15453.424	91976.048	2.06	H1-1b
80	M80	10B19	0.433	162.25	11	0.229	120.458	y	19	99921.086	119279.856	5984.628	38095.171	1.291	H1-1b
81	M81	10B19	0.509	73.75	9	0.256	115.542	y	17	81327.857	119279.856	5984.628	38095.171	1.679	H1-1b
82	M98	14WFX32.4_1_HISTORIC	0.352	92	7	0.102	184	y	7	161827.153	205437.126	15453.424	91976.048	1.527	H1-1b
83	M99	14WFX32.4_1_HISTORIC	0.591	97.344	7	0.149	94.563	y	7	91343.657	205437.126	15453.424	91976.048	1.999	H1-1b
84	M100	14WFX32.4_1_HISTORIC	0.36	92	7	0.105	0	y	7	139466.073	205437.126	15453.424	91976.048	1	H1-1b
85	M101	14WFX32.4_1_HISTORIC	0.609	97.344	7	0.154	94.563	y	7	123391.435	205437.126	15453.424	91976.048	2.006	H1-1b
86	M147	8B10	0.843	42	8	0.198	41.125	y	8	54607.478	62108.838	2941.683	15397.482	1.669	H1-1b
87	M148	8B10	0.889	42	10	0.208	41.125	y	10	54607.478	62108.838	2941.683	15397.482	1.669	H1-1b
88	M154	W6X15	0.03	48	8	0.023	48	y	7	122428.256	132634.731	10833.88	25364.156	1.136	H1-1b*
89	M155	W6X15	0.031	48	10	0.023	48	y	7	122428.256	132634.731	10833.88	25364.156	1.136	H1-1b*

ALL-POINTS TECHNOLOGY CORPORATION

Project ID:	CT141_14200
Site Name:	Riverside CT
Date:	8/15/2023
Prepared By:	D.Aversa
Checked By:	M. Trodden

BLOCK SHEAR CONNECTION CHECK

>> Max Reactions per RISA Output: M49, LC7 **[Max Member Axial]**

Max Axial = 22.7 kips

>> Proposed Connection:

	L, in		W, in					
Member Size =	4	x	4	Proposed L4x4x3/8				
	L_1, in		W, in		L_2, in			t, in
Gusset Plate =	7.5	x	17	x	3	x		0.375
Bolt Shear Spac. =	3 in			Fy =	36	ksi		
Bolt Tension Spac. =	1.5 in			Fu =	58	ksi		
Bolt Dia =	0.625 in			Grade =	A325			
# of Bolts =	2							

>> Check Proposed Bolts: 5/8" DIA A325 Bolts

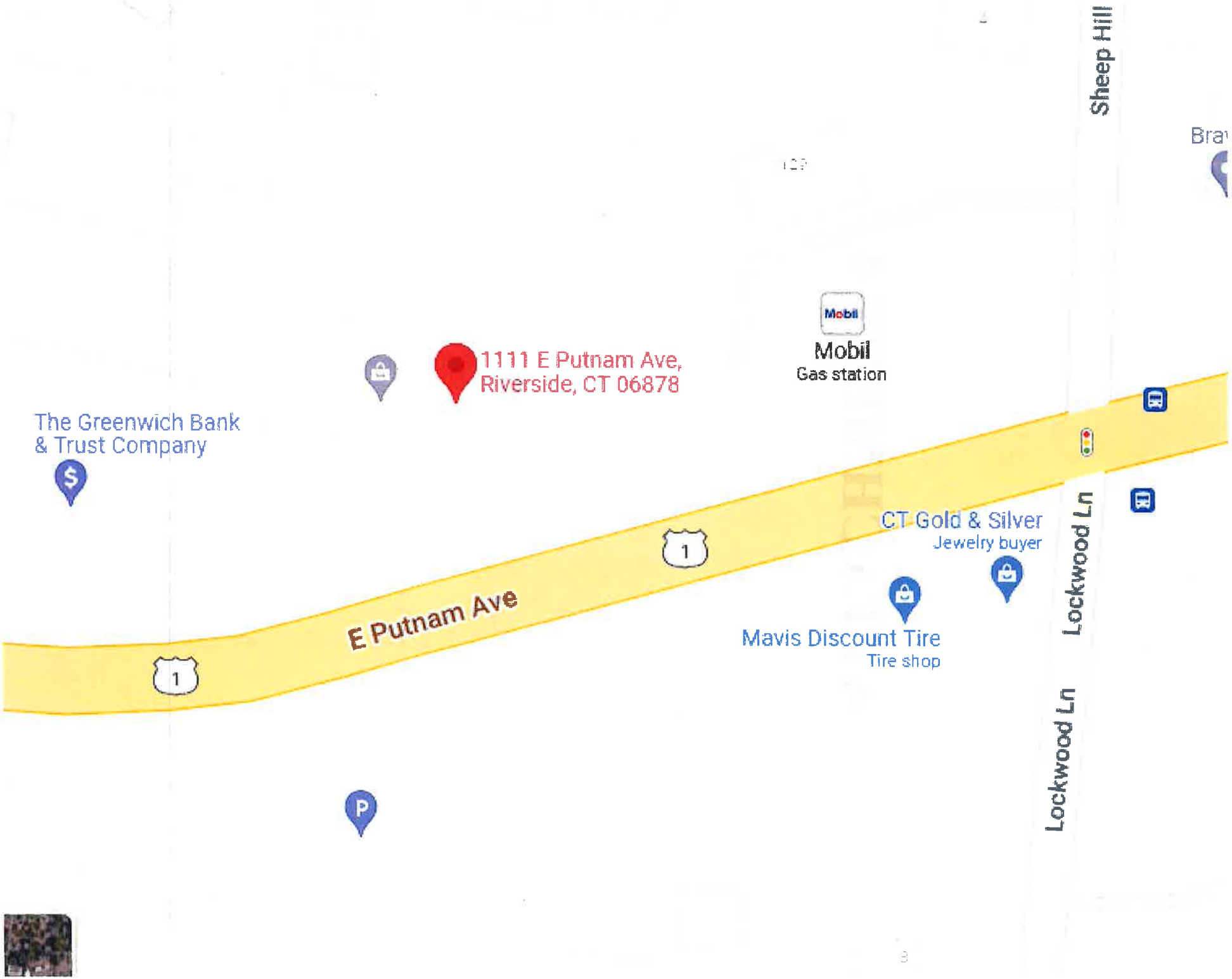
A_{nv} = 1.266 in^2 A_{gv} = 1.688 in^2 A_{nt} = 0.422 in^2

R_N = 30.46 kips *Per Eq. J4-5 of AISC Steel Manual 16th Ed.*

>> Block Shear Interaction:

0.746 **< 1.0, OK**

ATTACHMENT 4


Sheep Hill
1111 E Putnam Ave,
Riverside, CT 06878
Mobil
Gas station
The Greenwich Bank
& Trust Company
CT Gold & Silver
Jewelry buyer
E Putnam Ave
1
Mavis Discount Tire
Tire shop
Lockwood Ln
Lockwood Ln
P

Tax ID 407/054 Printed 05/29/2018 Card No. 1 of 1

ADMINISTRATIVE INFORMATION

PARCEL NUMBER
12-1010/S

Parent Parcel Number

Property Address
EAST PUTNAM AVENUE 1111

Neighborhood
2300 EAST PUTNAM

Property Class
212 General Office

TAXING DISTRICT INFORMATION

Jurisdiction	57	Greenwich, CT
Area	001	
Corporation	057	
District	12	
Section & Plat	352	
Routing Number	2365N0104	

Site Description

Topography:

Public Utilities:
Sewer, Electric

Street or Road:

Neighborhood:

Zoning:
LB Local Business

Legal Acres:
0.4993

OWNERSHIP

FOUNTAINHEAD PROPERTIES LLC
% ALLIED PROP MGMT-ATT T TORELLI
116 MASON ST
GREENWICH, CT 06830

LOT NO 10 11 12 & 392-1 E PUTNAM AVE N 104

TRANSFER OF OWNERSHIP

Date		
12/22/1999	FOUNTAINHEAD PROPERTIES L	Bk/Pg: 3369, 199 $3000000
01/11/1967	NA	Bk/Pg: 750, 310 $0

COMMERCIAL

VALUATION RECORD

Assessment Year		10/31/2005	10/01/2010	10/01/2015	10/01/2015	10/01/2015	10/01/2016	10/01/2017
Reason for Change		2005 Revised	2010 Reval	2015 Prelim	2015 Final	2015 BAA	2016 List	2017 List
VALUATION	L	2967500	2323700	2383600	2383600	2383600	2383600	2383600
Market	B	3192300	2894700	4115900	4115900	3615900	3615900	3216400
	T	6159800	5218400	6499500	6499500	5999500	5999500	5600000
VALUATION	L	2077250	1626590	1668520	1668520	1668520	1668520	1668520
70% Assessed	B	2234610	2026290	2881130	2881130	2531130	2531130	2251480
	T	4311860	3652880	4549650	4549650	4199650	4199650	3920000

LAND DATA AND CALCULATIONS

Land Type	Rating Soil ID -or- Actual Frontage	Measured Acreage -or- Effective Frontage	Table Effective Depth	Prod. Factor -or- Depth Factor -or- Square Feet	Base Rate	Adjusted Rate	Extended Value	Influence Factor	Value
1 Primary Commercial				21749.50	109.59	109.59	2383600		2383600

BA15: Decrease Total Value by $500,000
BP14: 14-2192: Lessee - Version Wireless, Antennas $21,000, nvc
DBA: Wind Office Bldg
GEN: Ext Wall material: Brk, Stl, Gla
Antenaes Income $192,548 2015 income
STIP: 2015 GL & 2016 GL

Permit Number / Type	FilingDate	Est. Cost / Est. SqFt	Field Visit

Supplemental Cards

TRUE TAX VALUE 2383600

Supplemental Cards
TOTAL LAND VALUE 2383600

IMPROVEMENT DATA

PHYSICAL CHARACTERISTICS

ROOFING

Built-up

WALLS

	B	1	2	U
Frame		Yes	Yes	Yes
Brick				
Metal				
Guard				

FRAMING

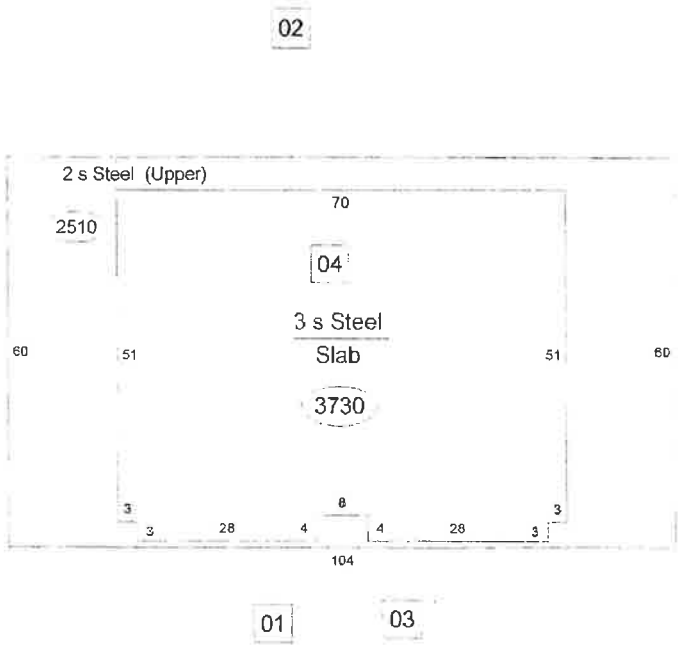
	B	1	2	U
S Prf	0	3730	6240	6240

FINISH

	UF	SF	FO	FD
1	0	0	0	3730
2	0	0	0	6240
U	0	0	0	6240
Total	0	0	0	16210

HEATING AND AIR CONDITIONING

	B	1	2	U
Heat	0	3730	6240	6240
Sprink	0	3730	6240	6240



(LCM: 150.00)

SPECIAL FEATURES

Description	Value

SUMMARY OF IMPROVEMENTS

ID	Use	Stry Hgt	Const Type	Grade	Year Const	Eff Year	Cond	Base Rate	Feat-ures	Adj Rate	Size or Area	Computed Value	Phys Depr	Obsol Depr	Market Adj	% Comp	Value
C	GENOFF	3.00		Avg-	1969	1985	AV	0.00	N	0.00	6240	0	0	0	150	100	3699600
01	PAVING	0.00	85	Good	1969	1985	AV	6.50	N	10.35	16000	165600	13	0	100	100	144100
02	RTWCONC	10.00	6D	Good	1969	1985	AV	26.00	N	58.50	10x 56	3280	13	0	100	100	2900
03	RTWCONC	5.00	6D	Good	1969	1985	AV	26.00	N	58.50	5x 90	5270	13	0	100	100	4600
04	ELEVCOM	3.00	26	Avg+	1969	1985	AV	169000	N	304200	10 0	304200	13	0	100	100	264700

Data Collector/Date	Appraiser/Date	Neighborhood	Supplemental Cards TOTAL IMPROVEMENT VALUE	4115900
JLT 12/08/1999	TOG 10/01/2015	Neigh 2300 AV		

ATTACHMENT 5

Verizon/Riverside

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	neopost 10/16/2023 US POSTAGE $003.19⁰ ZIP 06103 041L12203937 OLD STATE HOUSE STATION 06103 OCT 16 2023
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Fred Camillo, First Selectman Town of Greenwich 101 Field Point Road Greenwich, CT 06830				
2.	Patrick LaRow, Director of Planning and Zoning Town of Greenwich 101 Field Point Road Greenwich, CT 06830				
3.	Fountainhead Properties LLC 116 Mason Street Greenwich, CT 06830				
4.					
5.					
6.					

See Reverse for Instructions