

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
A SUB-PETITION OF CELLCO	:	SUB-PETITION NO. 1133
PARTNERSHIP D/B/A VERIZON WIRELESS	:	1338 HIGHLAND AVENUE
FOR THE SHARED USE OF AN EXISTING	:	CHESHIRE, CT
WIRELESS TELECOMMUNICATIONS	:	
FACILITY AT 1338 HIGHLAND AVENUE,	:	
CHESHIRE, CONNECTICUT	:	JUNE 3, 2016

SUB-PETITION FOR DECLARATORY RULING:
ELIGIBLE FACILITIES REQUEST FOR MODIFICATIONS
THAT WILL NOT SUBSTANTIALLY CHANGE THE
PHYSICAL DIMENSIONS OF AN EXISTING BASE STATION

I. Introduction

Pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, codified at 47 U.S.C. § 1455(a) (“Section 6409(a)”) and the October 21, 2014 Report and Order (FCC-14-533) issued by the Federal Communications Commission (“FCC”) (the “FCC Order”), Cellco Partnership d/b/a Verizon Wireless (“Cellco”) hereby petitions the Connecticut Siting Council (the “Council”) for a declaratory ruling (“Sub-Petition”) that the installation of antennas and related telecommunications equipment at the existing wireless telecommunications base station at 1338 Highland Avenue in Cheshire, Connecticut (the “Property”) constitutes an Eligible Facilities Request (“EFR”) under the FCC Order. Cellco has designated this cell site as its “Cheshire North Facility”.

II. Factual Background

The Property is a 3.0-acre parcel located in Cheshire’s I-2 Industrial zone. The Property is the site of Tower Farms, a commercial nursery and is surrounded by commercial, industrial, agricultural and residential uses along Highland Avenue (Route 10). (See Attachment 1 – Site

Vicinity Map and Site Schematic (Aerial Photograph)).

On November 22, 1999, the Cheshire Planning and Zoning Commission (“PZC”) approved an application by Springwiche Cellular Limited Partnership (now AT&T Wireless (“AT&T”)) to establish a wireless telecommunications facility at the Property. AT&T installed antennas inside the upper portion of an existing (abandoned) farm silo in the northwest portion of the Property at a height of 54 feet above ground level (“AGL”). The antennas are located behind RF transparent screening panels. Equipment associated with AT&T’s antennas was located inside a shelter to the east of the silo. A copy of the PZC’s 1999 Notice of Decision is included in Attachment 2.

Since 1999, the Town has authorized the shared use of the silo by Metro PCS and Sprint/Nextel Communications (“Sprint”). Metro PCS antennas are located at a height of 57 feet AGL. Metro PCS equipment is located inside a shelter adjacent to the silo. Sprint has since abandoned this facility. On January 7, 2016, the Council approved Petition for Declaratory Ruling No. 1212 from the Town of Cheshire, and assumed jurisdiction over the existing telecommunication facility at the Property.

III. Cellco’s Proposed Cheshire North Facility

Cellco is licensed to provide wireless telecommunications services in the 850 MHz, 1900 MHz, 700 MHz and 2100 MHz frequency ranges in Cheshire and throughout the State of Connecticut. The proposed Cheshire North Facility described in this Sub-Petition would provide wireless service in all of Cellco’s licensed frequency ranges and is designed to provide coverage and capacity relief to Cellco’s existing wireless network in northern portions of Cheshire.

Cellco intends to install twelve (12) antennas and nine (9) remote radio heads (“RRHs”) inside the upper portion of the existing farm silo at a height of 70 feet AGL. Equipment

associated with Cellco's antennas will be located inside a secure room inside the adjacent equipment shelter.¹ (See Attachment 3 – Project Plans). Cellco will also install a 35 kW natural gas back-up generator on a 5' x 8' concrete pad, to the north of AT&T's equipment shelter and a new air conditioning ("A/C") condensing unit adjacent to the existing equipment shelter. (See Attachment 3 – Plan Sheet C-2). Power and telephone service will extend from existing service on the Property. Specifications for Cellco's antennas, RRHs and back-up generator are included in Attachment 4. A Structural Analysis Report, confirming that the silo can support Cellco's antennas and related equipment, is included in Attachment 5.

IV. Discussion

A. The Proposed Modifications Will Not Cause a Substantial Change to the Physical Dimensions of the Existing Base Station

Section 6409(a) provides, in relevant part, that "a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." Pursuant to the FCC Order, the proposed modification does not substantially change the physical dimensions of the base station if the following criteria are satisfied.

1. *The proposed modified facility will not increase the height of the tower/base station by more than ten (10) percent of the height.* Cellco does not intend to increase the height of the silo. Cellco's antennas will be located at the 70-foot level on the 78-foot silo.
2. *The proposed facility modification will not protrude from the edge of the structure more than six (6) feet.* Cellco's antennas will be located inside the top portion of the silo structure behind RF transparent screening panels and will not protrude from the face of the

¹ Cellco will utilize the equipment room recently abandoned by Sprint.

structure.

3. *The proposed facility does not involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets.* Cellco intends to install its equipment inside an existing shelter on the Property. A small back-up generator on a 5' x 8' concrete pad will be located north of AT&T's equipment shelter.

4. *The proposed facility does not entail any excavation or deployment outside the current site of the base station.* Cellco's proposed modification will remain within the limits of the Property and adjacent to other equipment associated with the existing telecommunications facility. Excavation within the limits of the compound is limited to that which is required to install the back-up generator and A/C condenser.

5. *The proposed facility does not defeat the existing concealment elements of the base station.* Cellco's antennas will be located behind antenna screening material at the top of the silo and its equipment will be located inside an existing shelter, consistent with all concealment elements of the facility.

6. *The proposed facility complies with conditions associated with the prior approval of construction or modification of the base station.* Cellco's shared use of the existing telecommunications silo is consistent with the Town's November 22, 1999 approval. (See Attachment 2).

B. FCC Compliance

Included in Attachment 6 are Far Field Approximation tables for all of Cellco's proposed operating frequencies at the Cheshire North Facility. These tables demonstrate that the Cellco facility will operate well within the FCC safety standards for radio frequency emissions.

C. Notice to the Town, Property Owner and Abutting Landowners

On June 3, 2016, a copy of this Sub-Petition was sent to Cheshire's Town Manager, Michael A. Milone; MUDDDM LLC, owner of the Property; and American Tower Corporation ("ATC"), the telecommunications facility manager. Copies of the letters sent to Mr. Milone, MUDDDM LLC, and ATC are included in Attachment 7. A copy of this Sub-Petition was also sent to the owners of land that abuts the Property. A sample abutter's cover letter and the list of those abutting landowners who were sent notice and a copy of this filing is included in Attachment 8.

V. Conclusion

Based on the information provided above, Cellco respectfully submits that the proposed modification of the existing base station at the Property constitutes an "eligible facilities request" under Section 6409(a) and the FCC Order.

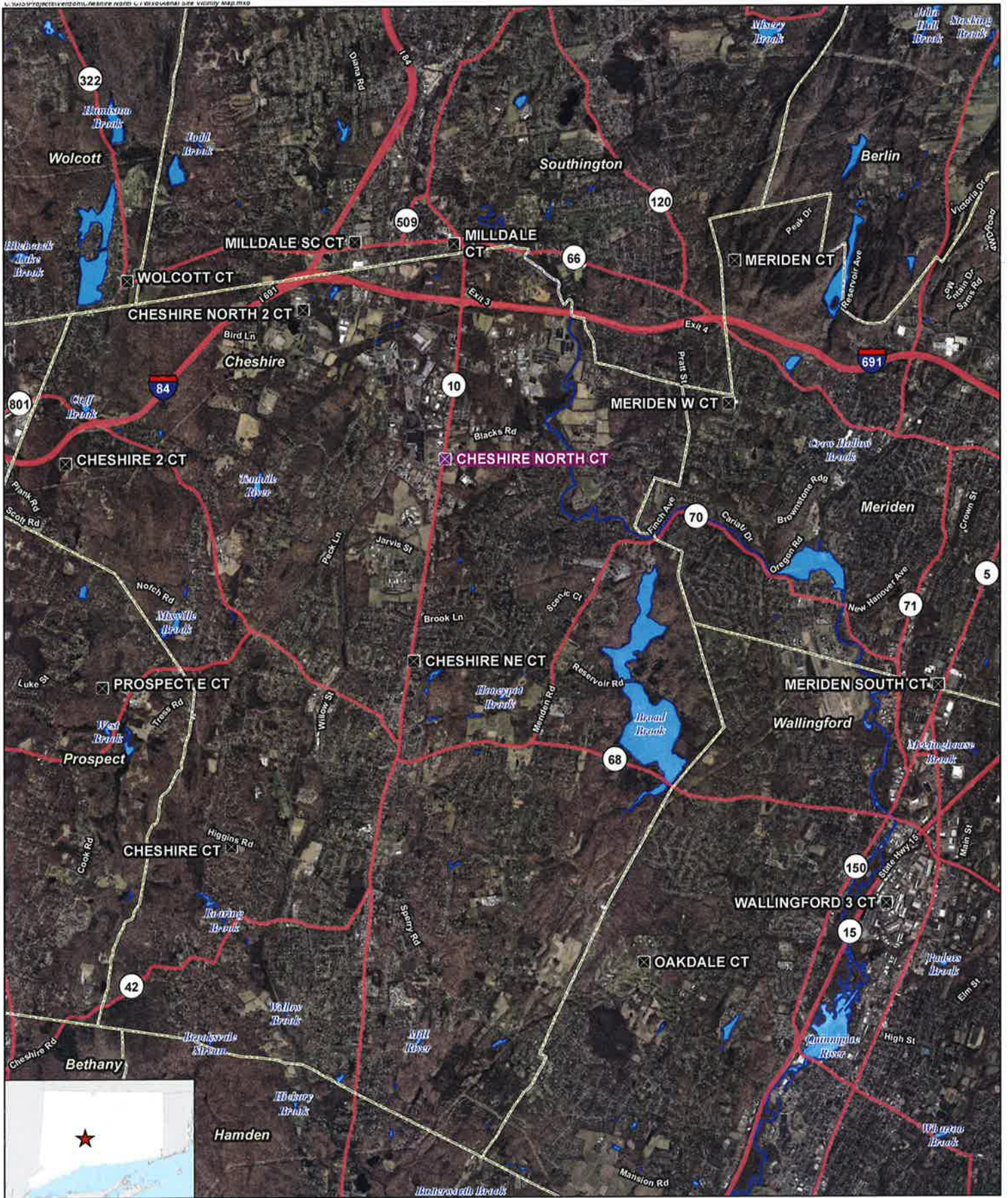
Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON
WIRELESS

By 

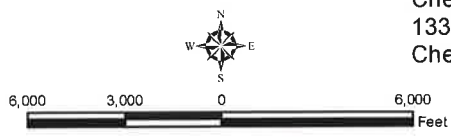
Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
Its Attorneys

ATTACHMENT 1



- Legend**
- ✖ Proposed Verizon Wireless Facility
 - Surrounding Verizon Wireless Facilities
 - ▭ Municipal Boundary
 - 🌊 Waterbody

Base Map Source: 2012 Aerial Photograph (CTECO)
 Map Scale: 1 inch = 6,000 feet
 Map Date: January 2016





Site Vicinity Map

Proposed Wireless Telecommunications Facility
 Cheshire North CT
 1338 Highland Avenue
 Cheshire, Connecticut





Legend

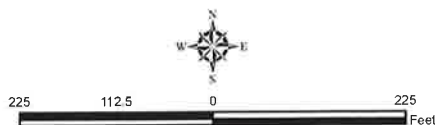
-  Approximate Subject Property
-  Approximate Parcel Boundary (CTDEEP GIS Parcels Last Updated 2010)

Site Schematic

Proposed Wireless
Telecommunications Facility
Cheshire North CT
1338 Highland Avenue
Cheshire, Connecticut



Map Notes:
Base Map Source: ESRI World Imagery, NAIP 2014
Map Scale: 1 inch = 225 feet
Map Date: June 2016



ATTACHMENT 2

TOWN OF CHESHIRE

Planning & Zoning Commission
84 South Main Street
Cheshire, Connecticut 06410
203-271-6670 • Fax 203-271-6664

CERTIFIED MAIL



December 3, 1999

Springwich Cellular Limited Partnership
c/o Keith Coppins
500 Enterprise Drive -Suite 3A
Rocky Hill, CT 06067

RE: Site Plan Application MAD 12/28/99
Springwich Cellular Limited Partnership
1338 Highland Avenue
To Install a cellular antennae and placement of an Equipment cabinet

Dear Mr. Coppins:

At the regular meeting of the Planning and Zoning Commission held on November 22, 1999, the following motion was unanimously approved:

MOTION: That the Zoning Committee recommends that the Planning and Zoning Commission approve the site plan application of Springwich Cellular Limited Partnership for a cellular antennae and equipment cabinet for property located at 1338 Highland Avenue, in an I-2 zone, as shown on the current Assessor's Map No. 28, Lot No. 15, and shown on the following plans entitled:


SNET Mobility Inc., 1338 Highland Avenue
Cheshire, CT., Springwich Cellular Site, Cheshire-
Tower Farms, October 15, 1999 sheets T-1, C-1, and C-2

With the following stipulation:

1. The applicant shall comply with comments in a memo from the Police Department dated November 4, 1999 and attached hereto.

Moved by Mrs. Mouris, seconded by Mr. Gaudio and unanimously approved.

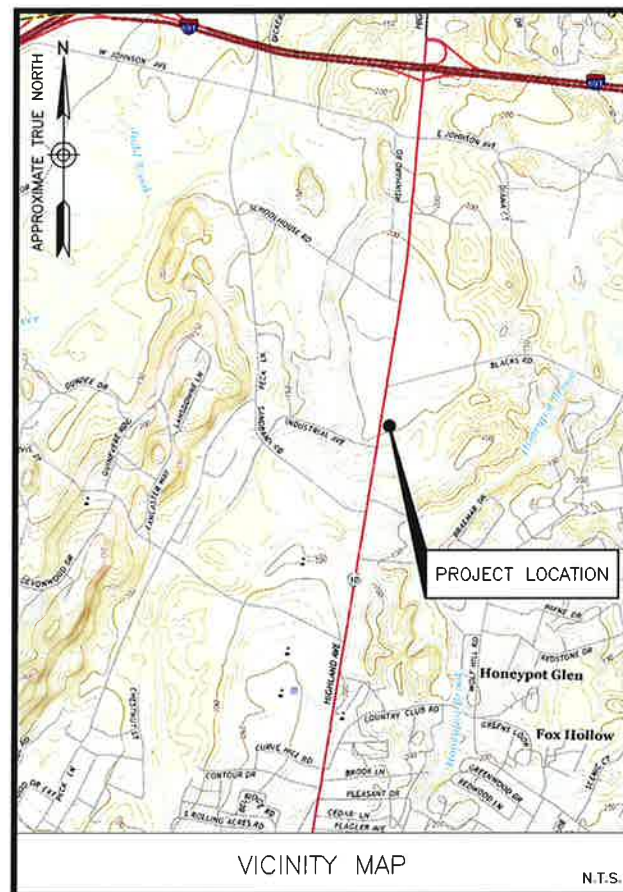
Very truly yours,


William C. Freitag, Secretary
Cheshire Planning and Zoning Commission

ATTACHMENT 3

CELLCO PARTNERSHIP d/b/a **verizon** WIRELESS

PROPOSED WIRELESS FACILITY SITE NAME: CHESHIRE NORTH CT 1338 HIGHLAND AVENUE CHESHIRE, CT 06410



DIRECTIONS FROM 99 EAST RIVER DRIVE, EAST HARTFORD, CT:
FOLLOW I-84 WEST AND TAKE EXIT 29 FOR CT-10 TOWARD MILLEDALE. TURN RIGHT ONTO CT-10 SOUTH. FOLLOW CT-10 SOUTH FOR 2.7 MILES. DESTINATION WILL BE ON THE LEFT.

<p>SITE COORDINATES: LATITUDE: 41° 32' 12.800"N LONGITUDE: 72° 53' 35.869"W (BASED ON 1-A CERTIFICATION)</p> <p>ELEVATION DATA GRADE ELEVATION AT BUILDING = 209.7' A.M.S.L. (BASED ON 1-A CERTIFICATION)</p> <p>ELEVATION (TO TOP OF EXISTING SILO) ELEVATION = 78.0'± A.G.L., 288.7'± A.M.S.L.</p> <p>ELEVATION (TO TOP OF ANTENNA) ELEVATION = 74.0'± A.G.L., 283.7'± A.M.S.L.</p>
PROJECT INFORMATION

<p>THE SCOPE OF WORK SHALL INCLUDE:</p> <ol style="list-style-type: none"> EXISTING EQUIPMENT ROOM TO BE UTILIZED. A TOTAL OF UP TO ONE (12) PROPOSED CELLCO PARTNERSHIP ANTENNAS AND ASSOCIATED APPURTENANCES ARE TO BE MOUNTED INSIDE SILO WITH A TOP ELEVATION OF 74'± A.G.L. POWER AND TELCO UTILITIES SHALL BE ROUTED FROM EXISTING DEMARCS ON SITE TO THE PROPOSED CELLCO PARTNERSHIP EQUIPMENT ROOM AT GRADE. ROUTING SHOWN HEREIN IS SHOWN AS CONCEPTUAL. FINAL UTILITY DEMARC LOCATIONS AND ROUTING WILL BE COORDINATED WITH THE BUILDING OWNER AND LOCAL UTILITY COMPANIES. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2013 CONNECTICUT SUPPLEMENT.
SCOPE OF WORK

<p>SITE NAME: CHESHIRE NORTH CT</p> <p>SITE ADDRESS: 1338 HIGHLAND AVENUE CHESHIRE, CT 06410 NEW HAVEN COUNTY</p> <p>PROPERTY OWNER: MUDDM LLC 1338 HIGHLAND AVENUE CHESHIRE CT 06410</p> <p>APPLICANT: CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108</p> <p>SITE ACQUISITION CONTACT: JAMES SMITH STRUCTURAL CONSULTING SERVICES, P.C. (203) 740-7578</p> <p>LEGAL/REGULATORY CONTACT: KENNETH C. BALDWIN, ESQ. ROBINSON & COLE (860) 275-8345</p>
PROJECT INFORMATION

SHEET NUMBER	DESCRIPTION
T-1	TITLE SHEET
C-1	ABUTTERS MAP
C-2	SITE PLAN
C-3	SOUTH ELEVATION
SHEET INDEX	

CELLCO PARTNERSHIP
d/b/a **verizon** WIRELESS

CHESHIRE NORTH CT

CSC DRAWINGS		
C	06/01/16	FINAL
B	05/04/16	FOR COMMENT
A	01/19/16	FOR COMMENT

Dewberry
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

JIANG YU, P.E.
CONNECTICUT LICENSE NO. 0023222

DRAWN BY: AL

REVIEWED BY: BH

CHECKED BY: GHN

PROJECT NUMBER: 50067815

JOB NUMBER: 50067821

SITE ADDRESS

1338 HIGHLAND AVE
CHESHIRE, CT 06410

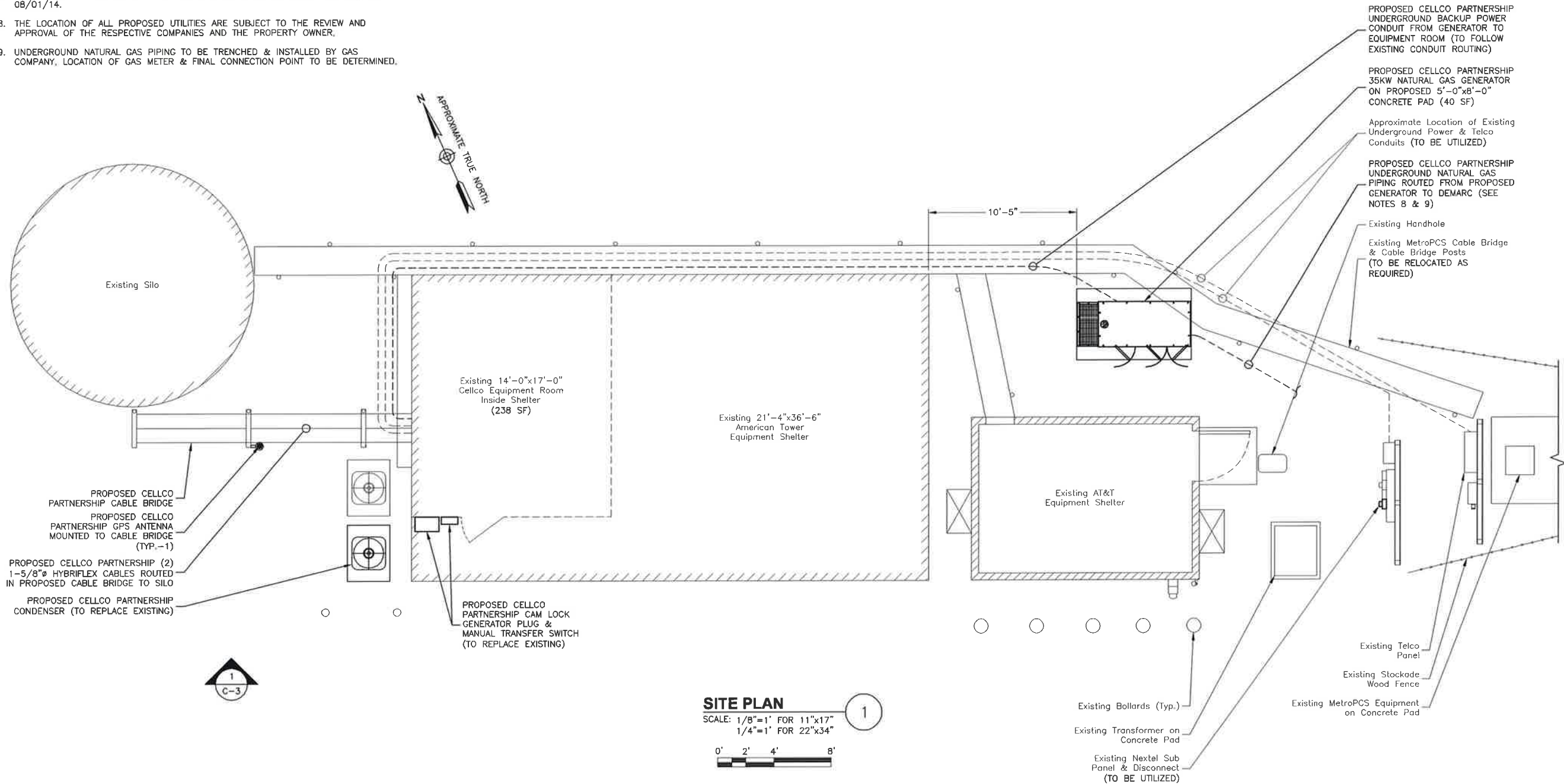
SHEET TITLE

TITLE SHEET

SHEET NUMBER

NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
3. THESE DRAWINGS ARE PROVIDED FOR SITING COUNCIL REVIEW. CONSTRUCTION LEVEL DRAWINGS WILL BE DEVELOPED SUBSEQUENT TO THE APPROVAL OF THESE DRAWINGS.
4. LOCATION & ORIENTATION OF ALL ANTENNAS, COAX & EQUIPMENT BASED ON STRUCTURAL ANALYSIS PREPARED BY URS DATED APRIL 29, 2011.
5. CELLCO PARTNERSHIP TO REUSE EXISTING NEXTEL POWER & FIBER CONDUITS.
6. GROUND WILL BE TO EXISTING GROUND RING.
7. SITE PLAN & ELEVATION BASED ON SITE VISIT BY DEWBERRY ENGINEERS INC. ON 08/01/14.
8. THE LOCATION OF ALL PROPOSED UTILITIES ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE RESPECTIVE COMPANIES AND THE PROPERTY OWNER.
9. UNDERGROUND NATURAL GAS PIPING TO BE TRENCHED & INSTALLED BY GAS COMPANY, LOCATION OF GAS METER & FINAL CONNECTION POINT TO BE DETERMINED.



CHESHIRE NORTH CT

CSC DRAWINGS

REV	DATE	DESCRIPTION
C	06/01/16	FINAL
B	05/04/16	FOR COMMENT
A	01/19/16	FOR COMMENT

Dewberry
Dewberry Engineers Inc.
800 PARSIPPANY ROAD
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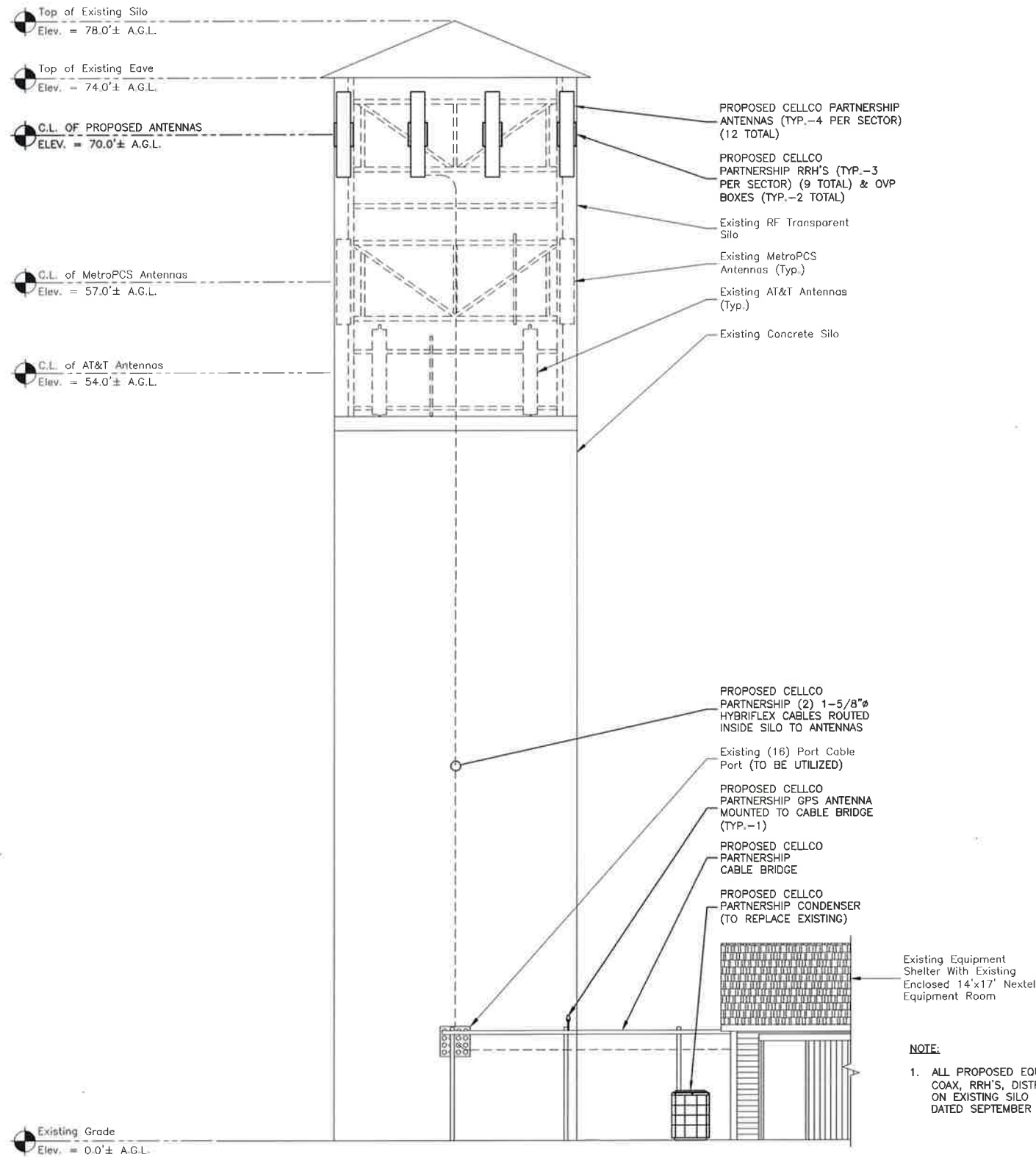
DRAWN BY: AL
REVIEWED BY: BH
CHECKED BY: GHN
PROJECT NUMBER: 50067815
JOB NUMBER: 50067821

SITE ADDRESS
1338 HIGHLAND AVE
CHESHIRE, CT 06410

SHEET TITLE
SITE PLAN
SHEET NUMBER

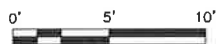
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6. GROUND WILL BE TO EXISTING GROUND RING.
7. SITE PLAN & ELEVATION BASED ON SITE VISIT BY DEWBERRY ENGINEERS INC. ON 08/01/14.



SOUTH ELEVATION

SCALE: 1"=10' FOR 11"x17"
1"=5' FOR 22"x34"



CHESHIRE NORTH CT

CSC DRAWINGS

C	06/01/16	FINAL
B	05/04/16	FOR COMMENT
A	01/19/16	FOR COMMENT

Dewberry
Dewberry Engineers Inc.
800 PARSIPPANY ROAD
SUITE 301
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JIANG YU, P.E.
CONNECTICUT LICENSE NO. 0023222

DRAWN BY:	AL
REVIEWED BY:	BH
CHECKED BY:	GHN
PROJECT NUMBER:	50067815
JOB NUMBER:	50067821

SITE ADDRESS

1338 HIGHLAND AVE
CHESHIRE, CT 06410

SHEET TITLE

SOUTH ELEVATION

SHEET NUMBER

ATTACHMENT 4



SBNHH-1D65B

Andrew® Tri-band Antenna, 698–896 and 2x 1695–2360 MHz, 65° horizontal beamwidth, internal RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	14.9	14.7	17.7	18.2	18.6	18.6
Beamwidth, Horizontal, degrees	68	66	69	66	63	58
Beamwidth, Vertical, degrees	12.1	10.7	5.6	5.2	5.0	4.5
Beam Tilt, degrees	0–14	0–14	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	14	13	15	15	15	13
Front-to-Back Ratio at 180°, dB	27	29	28	28	28	27
CPR at Boresight, dB	20	23	20	20	17	21
CPR at Sector, dB	14	10	12	10	9	1
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	30	30	30	30	30	30
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	350	350	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	14.5	14.3	17.4	17.9	18.2	18.3
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.8	±0.4	±0.3	±0.5	±0.3
Gain by Beam Tilt, average, dBi	0° 14.6	0° 14.5	0° 17.4	0° 17.8	0° 18.1	0° 18.2
	7° 14.6	7° 14.4	3° 17.5	3° 17.9	3° 18.3	3° 18.4
	14° 14.2	14° 13.6	7° 17.4	7° 17.9	7° 18.2	7° 18.4
Beamwidth, Horizontal Tolerance, degrees	±2.2	±3.4	±2	±4.6	±5.7	±4.3
Beamwidth, Vertical Tolerance, degrees	±0.8	±1	±0.3	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	16	14	16	16	16	15
Front-to-Back Total Power at 180° ± 30°, dB	25	26	27	26	26	26
CPR at Boresight, dB	22	23	21	20	20	22
CPR at Sector, dB	13	11	16	12	11	4

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

General Specifications

Antenna Brand	Andrew®
Antenna Type	DualPol® multiband with internal RET
Band	Multiband
Brand	DualPol® Teletilt®
Operating Frequency Band	1695 – 2360 MHz 698 – 896 MHz
Performance Note	Outdoor usage

SBNHH-1D65B

POWERED BY



Mechanical Specifications

Color	Light gray
Lightning Protection	dc Ground
Radiator Material	Aluminum Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, total	6
Wind Loading, maximum	617.7 N @ 150 km/h 138.9 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Depth	180.0 mm 7.1 in
Length	1851.0 mm 72.9 in
Width	301.0 mm 11.9 in
Net Weight	18.4 kg 40.6 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Power Consumption, idle state, maximum	2.0 W
Power Consumption, normal conditions, maximum	13.0 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
RET System	Teletilt®

Packed Dimensions

Depth	299.0 mm 11.8 in
Length	1970.0 mm 77.6 in
Width	409.0 mm 16.1 in
Shipping Weight	31.0 kg 68.3 lb

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



Included Products

Product Specifications

COMMSCOPE®

SBNHH-1D65B

POWERED BY



BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

ALCATEL-LUCENT B13 RRH4X30-4R

Alcatel-Lucent B13 Remote Radio Head 4x30-4R is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B13 RRH4x30-4R allows operators to have a compact radio solution to deploy LTE in the 700U band (700 MHz, 3GPP band 13), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.



The Alcatel-Lucent B13 RRH4x30-4R product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity and up to 10MHz instantaneous bandwidth.

The Alcatel-Lucent B13 RRH4x30-4R is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

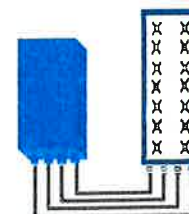
Its compactness and slim design makes the Alcatel-Lucent B13 RRH4x30-4R easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 700 MHz band (700U, 3GPP band 13)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- 10MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in 700U band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through MIMO4
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



4x30W with 4T4R
or
2x60W with 2T4R

Can be switched between modes via SW w/o site visit

TECHNICAL SPECIFICATIONS

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	U700 (C) (3GPP bands 13): DL: 746 - 756 MHz / UL: 777 - 787 MHz
Instantaneous bandwidth - #carriers	10MHz – 1 LTE carrier (in 10MHz occupied bandwidth)
LTE carrier bandwidth	10 MHz
RF output power	2x60W or 4x30W (by SW)
Noise figure – RX Diversity scheme	2 dB typ. (<2.5 dB max) – 2 or 4 way Rx diversity
Sizes (HxWxD) in mm (in.)	550 x 305 x 230 (21.6" x 12.0" x 9") (with solar shield)
Volume in L	38 (with solar shield)
Weight in kg (lb) (w/o mounting HW)	26 (57.2) (with solar shield)
DC voltage range	-40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption
DC power consumption	550W typical @100% RF load (in 2Tx or 4Tx mode)
Environmental conditions	-40°C (-40°F) / +55°C (+131°F)
Wind load (@150km/h or 93mph)	IP65 Frontal: <200N / Lateral : <150N
Antenna ports	4 ports 7/16 DIN female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate7, 9.8 Gbps) SFP single mode dual fiber
AISG interfaces	1 AISG2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) – 4 RF Tx & 4 RF Rx monitor ports - 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27

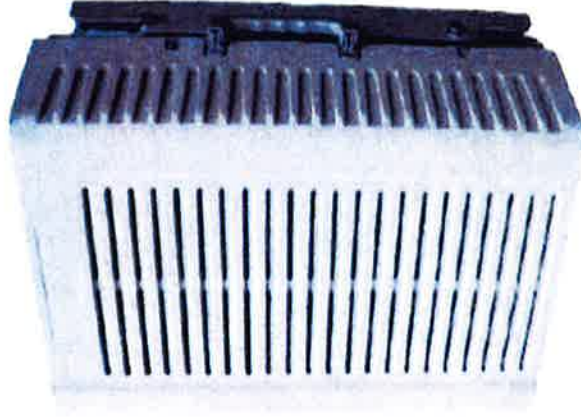
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PCS RF MODULES

RRH1900 2X60 - HW CHARACTERISTICS

LA6.0.1/13.3

RRH2x60	
RF Output Power	2x60W
Instantaneous Bandwidth	20MHz
Transmitter	2 TX
Receiver	2 Branch RX – LA6.0.1 4 Branch RX – LR13.3
Features	AISG 2.0 for RET/TMA Internal Smart Bias-T
Power	-48VDC
CPRI Ports	2 CPRI Rate 3 Ports
External Alarms	4 External User Alarms
Monitor Ports	TX
Environmental	GR487 Compliance
RF Connectors	7/16 DIN (top mounted)



** Not a Verizon Wireless deployed product

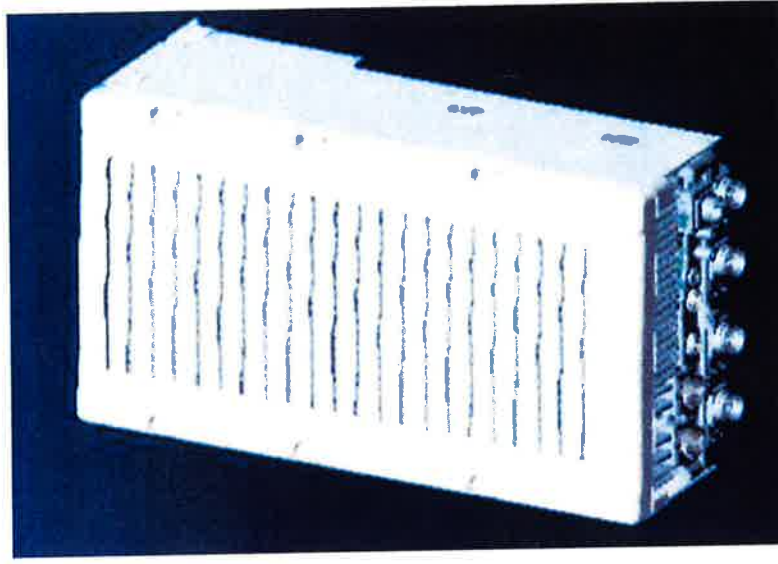
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NEW PCS RF MODULES FOR VZW

RRH2X60 - HW CHARACTERISTICS

LR14.3

RRH2x60	
RF Output Power	2x60W (4x30W HW Ready)
Instantaneous Bandwidth	60MHz
Target Reliability (Annual Return Rate)	<2%
Receiver	4 Branch Rx
Features	AISG 2.0 for RET/TMA
Power	-48VDC Internal Smart Bias-T
CPRI Ports	2 CPRI Rate 5 Ports
External Alarms	4 External User Alarms
Monitor Ports	TX, RX
Environmental	GR487 Compliance
RF Connectors	7/16 DIN (downward facing)
Dimensions	22"(h) x 12"(w) x 9.4" (d)**
Weight	55lb**



**-. Includes solar shield but not mounting brackets (8 lbs.)

ALCATEL-LUCENT WIRELESS PRODUCT DATASHEET RRH2X60-AWS FOR BAND 4 APPLICATIONS

The Alcatel-Lucent RRH2x60-AWS is a high power, small form factor Remote Radio Head operating in the AWS frequency band (3GPP Band 4) for LTE technology. It is designed with an eco-efficient approach, providing operators with the means to achieve high quality and high capacity coverage with minimum site requirements and efficient operation.



A distributed Node B expands the deployment options by using two components, a Base Band Unit (BBU) containing the digital assets and a separate RRH containing the radio-frequency (RF) elements. This modular design optimizes available space and allows the main components of a Node B to be installed separately, within the same site or several kilometers apart.

The Alcatel-Lucent RRH2x60-AWS is linked to the BBU by an optical-fiber connection carrying downlink and uplink digital radio signals

along with operations, administration and maintenance (OA&M) information.

SUPERIOR RF PERFORMANCE

The Alcatel-Lucent RRH2x60-AWS integrates all the latest technologies. This allows to offer best-in-class characteristics.

It delivers an outstanding 120 watts of total RF power thanks to its two transmit RF paths of 60 W each.

It is ideally suited to support multiple-input multiple-output (MIMO) 2x2 operation.

It includes four RF receivers to natively support 4-way uplink reception diversity. This improves the radio uplink coverage and this can be used to extend the cell radius commensurate with 2x2MIMO 2x60 W for the downlink.

It supports multiple discontinuous LTE carriers within an instantaneous bandwidth of 45 MHz corresponding to the entire AWS B4 spectrum.

The latest generation power amplifiers (PA) used in this product achieve high efficiency (>40%), resulting in improved power consumption figures.

OPTIMIZED TCO

The Alcatel-Lucent RRH2x60-AWS is designed to make available all the benefits of a distributed Node B, with excellent RF characteristics, with low capital expenditures (CAPEX) and low operating expenditures (OPEX).

The Alcatel-Lucent RRH2x60-AWS is a very cost-effective solution to deploy LTE MIMO.

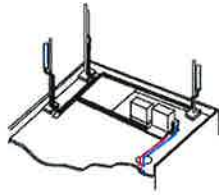
EASY INSTALLATION

The RRH2x60-AWS includes a reversible mounting bracket which allows for ease of installation behind an antenna, or on a rooftop knee wall while providing easy access to the mid body RF connectors.

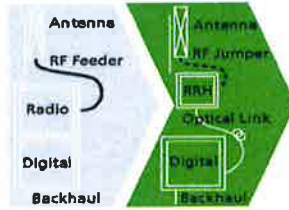
The limited space available in some sites may prevent the installation of traditional single-cabinet BTS equipment. However, many of these sites can host an Alcatel-Lucent RRH2x60-AWS installation, providing more flexible site selection and improved network quality along with greatly reduced installation time and costs.

The Alcatel-Lucent RRH2x60-AWS is a zero-footprint solution and is convection cooled without fans for silent operation, simplifying negotiations with site property owners and minimizing environmental impacts.

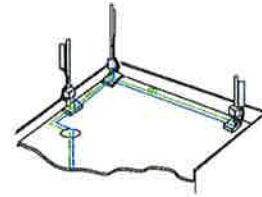
Installation can easily be done by a single person as the Alcatel-Lucent RRH2x60-AWS is compact and weighs about 20 kg, eliminating the need for a crane to hoist the BTS cabinet to the rooftop. A site can be in operation in less than one day.



Macro



RRH for space-constrained cell sites



Distributed

FEATURES

- RRH2x60-AWS integrates two power amplifiers of 60W rating (at each antenna connector)
- Support multiple carriers over the entire 3GPP band 4
- RRH2x60-AWS is optimized for LTE operation
- RRH2x60-AWS is a very compact and lightweight product
- Advanced power management techniques are embedded to provide power savings, such as PA bias control

BENEFITS

- MIMO LTE operation with only one single unit per sector
- Improved uplink coverage with built-in 4-way receive diversity capability
- RRH can be mounted close to the antenna, eliminating nearly all losses in RF cables and thus reducing power consumption by 50% compared to conventional solutions
- Distributed configurations provide easily deployable and cost-effective solutions, near zero footprint and

silent solutions, with minimum impact on the neighborhood, which ease the deployment

- RETA and TMA support without additional hardware thanks to the AISG v2.0 port and the integrated Bias-Tees. Bias-Tees support AISG DC supply and signaling.

TECHNICAL SPECIFICATIONS

Specifications listed are hardware capabilities. Some capabilities depend on support in a specific software release or future release.

Dimensions and weights

- HxWxD : 510x285x186mm (27 l with solar shield)
- Weight : 20 kg (44 lbs)

Electrical Data

- Power Supply : -48V DC (-40.5 to -57V)
- Power Consumption (ETSI average traffic load reference) : 250W @2x60W

RF Characteristics

- Frequency band: 1710-1755, UL / 2110-2155 MHz, DL (3GPP band 4)
- Output power: 2x60W at antenna connectors
- Technology supported: LTE
- Instantaneous bandwidth: 45 MHz
- Rx diversity: 2-way and 4-way uplink reception
- Typical sensitivity without Rx diversity: -105 dBm for LTE

Connectivity

- Two CPRI optical ports for daisy chaining and up to six RRHs per fiber
- Type of optical fiber: Single-Mode (SM) and Multi-Mode (MM) SFPs
- Optical fiber length: up to 500m using MM fiber, up to 20km using SM fiber
- TMA/RETA : AISG 2.0 (RS485 connector and internal Bias-Tee)
- Six external alarms
- Surge protection for all external ports (DC and RF)

Environmental specifications

- Operating temperature: -40°C to 55°C including solar load
- Operating relative humidity: 8% to 100%
- Environmental Conditions : ETS 300 019-1-4 class 4.1E
- Ingress Protection : IEC 60529 IP65
- Acoustic Noise : Noiseless (natural convection cooling)

Safety and Regulatory Data

- EMC : 3GPP 25113, EN 301 489-1, EN 301 489-23, GR 1089, GR 3108, OET-65
- Safety : IEC60950-1, EN 60825-1, UL, ANSI/NFPA 70, CAN/CSA-C22.2
- Regulatory : FCC Part 15 Class B, CE Mark – European Directive : 2002/95/EC (ROHS); 2002/96/EC (WEEE); 1999/5/EC (R&TTE)
- Health : EN 50385

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STANDBY POWER RATING
 25 kW, 31 kVA, 60 Hz

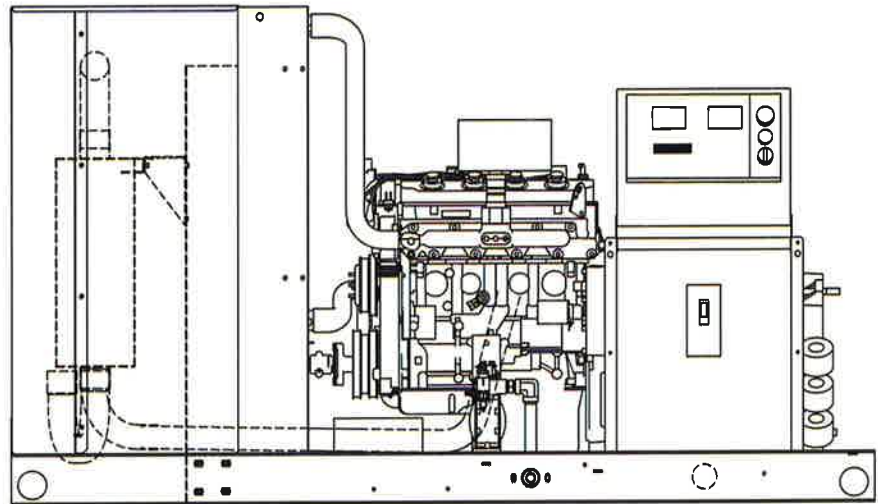
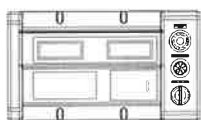
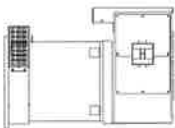
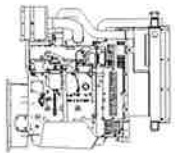
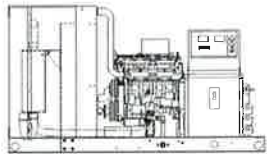


Image used for illustration purposes only



Features

Generator Set

- PROTOTYPE & TORSIONALLY TESTED
- UL2200 TESTED
- RHINOCOAT PAINT SYSTEM

Engine

- EPA COMPLIANT
- INDUSTRIAL TESTED, GENERAC APPROVED
- POWER-MATCHED OUTPUT
- INDUSTRIAL GRADE

Alternator

- TWO-THIRDS PITCH
- LAYER WOUND ROTOR & STATOR
- CLASS H MATERIALS
- DIGITAL 3-PHASE VOLTAGE CONTROL

Controls

- ENCAPSULATED BOARD W/ SEALED HARNESS
- 4-20mA VOLTAGE-TO-CURRENT SENSORS
- SURFACE-MOUNT TECHNOLOGY
- ADVANCED DIAGNOSTICS & COMMUNICATIONS

Benefits

- ▶ PROVIDES A PROVEN UNIT
- ▶ ENSURES A QUALITY PRODUCT
- ▶ IMPROVES RESISTANCE TO ELEMENTS

- ▶ ENVIRONMENTALLY FRIENDLY
- ▶ ENSURES INDUSTRIAL STANDARDS
- ▶ ENGINEERED FOR PERFORMANCE
- ▶ IMPROVES LONGEVITY AND RELIABILITY

- ▶ ELIMINATES HARMFUL 3RD HARMONIC
- ▶ IMPROVES COOLING
- ▶ HEAT TOLERANT DESIGN
- ▶ FAST AND ACCURATE RESPONSE

- ▶ EASY, AFFORDABLE REPLACEMENT
- ▶ NOISE RESISTANT 24/7 MONITORING
- ▶ PROVIDES VIBRATION RESISTANCE
- ▶ HARDENED RELIABILITY

QT025A | 2.4L | 25 kW
INDUSTRIAL SPARK-IGNITED GENERATOR SET
 EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General		Lubrication System	
Make	Generac	Oil Pump Type	Gear
EPA Emissions Compliance	Stationary Emergency	Oil Filter Type	Full-Flow sping-on Cartridge
EPA Emissions Engine Reference	See Emissions Data Sheet	Crankcase Capacity - L (qts)	3.8 (4)
Cylinder #	4	Cooling System	
Type	In-line	Cooling System Type	Pressurized Closed
Displacement - L (cu in)	2.4	Water Pump Flow -gal/min	11
Bore - mm (in)	86.61 (3.41)	Fan Type	Pusher
Stroke - mm (in)	100.08 (3.94)	Fan Speed (rpm)	2150
Compression Ratio	9.5:1	Fan Diameter mm (in)	457 (18)
Intake Air Method	Naturally Aspirated	Coolant Heater Wattage	1500
Number of Main Bearings	5	Coolant Heater Standard Voltage	120 VAC
Connecting Rods	Forged	Fuel System	
Cylinder Head	Aluminum	Fuel Type	Natural Gas, Propane Vapor
Cylinder Liners	No	Carburetor	Down Draft
Ignition	High Energy	Secondary Fuel Regulator	Standard
Piston Type	Aluminum Alloy	Fuel Shut Off Solenoid	Standard
Crankshaft Type	Cast	Operating Fuel Pressure (Standard)	5" - 14" H ₂ O*
Lifter Type	Overhead Cam	Engine Electrical System	
Intake Valve Material	Steel Alloy	System Voltage	12 VDC
Exhaust Valve Material	Hardened Steel	Battery Charging Alternator (Amps)	30
Hardened Valve Seats	yes	Battery Size	See Battery Index 0161970SBY
		Battery Voltage	12 VDC
		Ground Polarity	Negative

*Fuel pressure must remain within specified range and not drop more than 1 in. w.c from static (no-load) to full load.

ALTERNATOR SPECIFICATIONS

Standard Model	390mm	Standard Excitation	Brush Type
Poles	4	Bearings	Sealed Ball
Field Type	Revolving	Coupling	Flexible Disc
Insulation Class - Rotor	H	Load Capacity - Standby	100%
Insulation Class - Stator	H	Prototype Short Circuit Test	Yes
Total Harmonic Distortion	<5%	Voltage Regulator Type	Full Digital
Telephone Interference Factor (TIF)	<50	Number of Sensed Phases	3
		Regulation Accuracy (Steady State)	±0.25%

CODES AND STANDARDS COMPLIANCE (WHERE APPLICABLE)

NFPA 99	BS5514
NFPA 110	SAE J1349
ISO 8528-5	DIN6271
ISO 1708A.5	IEEE C62.41 TESTING
ISO 3046	NEMA ICS 1
	UL2200

Rating Definitions:
 Standby – Applicable for a varying emergency load for the duration of a utility power outage with no overload capability. (Max. load factor = 70%)

QT025A | 2.4L | 25 kW
INDUSTRIAL SPARK-IGNITED GENERATOR SET
 EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

		Natural Gas	Propane Vapor
Single-Phase 120/240 VAC @1.0pf	25 kW	Amps: 104	Amps: 104
Three-Phase 120/208 VAC @0.8pf	25 kW	Amps: 87	Amps: 87
Three-Phase 120/240 VAC @0.8pf	25 kW	Amps: 75	Amps: 75
Three-Phase 277/480 VAC @0.8pf	25 kW	Amps: 38	Amps: 38

STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip											
		480 VAC						208/240 VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	25	16	25	33	41	49	57	12	19	25	31	37	43

FUEL CONSUMPTION RATES*

Natural Gas				Propane Vapor			
Percent Load		ft ³ /hr	m ³ /hr	Percent Load		ft ³ /hr	m ³ /hr
25%		140	3.9	25%		56	1.6
50%		220	6.2	50%		87	2.5
75%		300	8.5	75%		119	3.4
100%		380	10.8	100%		151	4.3

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Air Flow (inlet air combustion and radiator)	ft ³ /min(m ³ /min)	1500 (42.48)
System Coolant Capacity	gal (Liters)	2.5 (9.46)
Heat Rejection to Coolant	BTU/hr	95,000
Max. Operating Ambient Temperature	°F (°C)	122 (50)
Max. Ambient Temperature	°F (°C)	104 (40)
Maximum Radiator Backpressure	in H ₂ O	0.5

COMBUSTION AIR REQUIREMENT

	Standby
Flow at Rated Power cfm (m ³ /min)	70

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	40
Piston Speed	ft/min	1182
BMEP	psi	120

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m ³ /min)	220 (6.2)
Max. Backpressure (Post Turbo)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output - post silencer)	°F (°C)	975 (524)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

STANDARD FEATURES AND OPTIONS

GENERATOR SET

- Genset Vibration Isolation Std
- Extended warranty Opt
- Gen-Link™ Communications Software Opt
- Steel Enclosure Opt
- Aluminum Enclosure Opt

ENGINE SYSTEM

General

- Oil Drain Extension Std
- Critical Exhaust Silencer Std
- Air cleaner Std
- Fan guard Std
- Radiator duct adapter Std

Fuel System

- Fuel lockoff solenoid Std
- Secondary Fuel Regulator Std
- Flexible fuel lines Std

Cooling System

- 120VAC Coolant Heater Std
- Closed Coolant Recovery System Std
- UV/Ozone resistant hoses Std
- Factory-Installed Radiator Std
- Radiator Drain Extension Std

Engine Electrical System

- Battery charging alternator Std
- Battery cables Std
- Battery tray Std
- Solenoid activated starter motor Std
- 10A UL float/equalize battery charger Std
- Rubber-booted engine electrical connections Std

ALTERNATOR SYSTEM

- UL2200 GENprotect™ Std
- Main Line Circuit Breaker Std

CONTROL SYSTEM

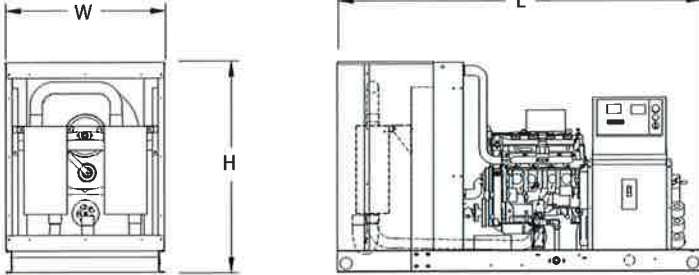
Control Panel

- Digital H Control Panel - Dual 4x20 Display Std
- Programmable Crank Limiter Std
- 21-Light Remote Annunciator Opt
- Remote Relay Panel (8 or 16) Opt
- 7-Day Programmable Exerciser Std
- Special Applications Programmable PLC Std
- RS-232 Communications Std
- RS-485 Communications Std
- All-Phase Sensing DVR Std
- Full System Status Std
- Utility Monitoring (Req. H-Transfer Switch) Std
- 2-Wire Start Compatible Std
- Power Output (kW) Std
- Power Factor Std
- Reactive Power Std
- All phase AC Voltage Std
- All phase Currents Std
- Oil Pressure Std
- Coolant Temperature Std
- Coolant Level Std
- Fuel Pressure Std
- Engine Speed Std
- Battery Voltage Std
- Frequency Std
- Isochronous Governor Control Std
- -40deg C - 70deg C Operation Std
- Waterproof Plug-In Connectors Std
- Audible Alarms and Shutdowns Std
- Not in Auto (Flashing Light) Std
- Auto/Off/Manual Switch Std
- E-Stop (Red Mushroom-Type) Std
- NFPA 110 Level I and II (Programmable) Std
- Remote Communication - RS232 Std

Alarms (Programmable Tolerances, Pre-Alarms and Shutdowns)

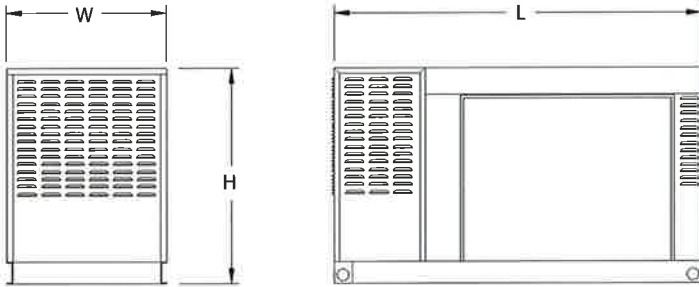
- Low Fuel Pressure Std
- Oil Pressure (Pre-programmed Low Pressure Shutdown) Std
- Coolant Temperature (Pre-programmed High Temp Shutdown) Std
- Coolant Level (Pre-programmed Low Level Shutdown) Std
- Engine Speed (Pre-programmed Overspeed Shutdown) Std
- Voltage (Pre-programmed Overvoltage Shutdown) Std
- Battery Voltage Std

DIMENSIONS AND WEIGHTS*



OPEN SET (Includes Exhaust Flex)

L x W x H in (mm)	77 (1956) x 34 (864) x 43 (1092)
Weight (lbs)	1163
dBA*	83



LEVEL 1 ACOUSTIC ENCLOSURE

L x W x H in (mm)	77 (1956) x 34 (864) x 46 (1168)
Weight (lbs)	1414
dBA*	60

*All measurements are approximate and for estimation purposes only. Sound levels measured at 23ft (7m) under normal operation and do not account for ambient site conditions.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

ATTACHMENT 5



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 78 ft Stealth Silo
ATC Site Name : Mankes Silo, CT
ATC Site Number : 370624
Engineering Number : 66728021
Proposed Carrier : Verizon
Carrier Site Name : Mankes Silo
Carrier Site Number : CTNH504A
Site Location : 1338 Highland Ave
Cheshire, CONNECTICUT 06410-0000
41.536944,-72.893333
County : New Haven
Date : May 25, 2016
Max Usage : 19%
Result : Pass

Reviewed by:
Scott Wirgau, PE
Structural Team Leader

Prepared By:
Brian Davies, E.I.
Structural Engineer II



May 27 2016 10:53 AM



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion.....	1
Existing and Reserved Equipment.....	2
Equipment to be Removed.....	2
Proposed Equipment	2
Structure Usages	3
Foundations	3
Deflection, Twist, and Sway.....	3
Standard Conditions	4
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 78 ft stealth silo to reflect the change in loading by Verizon.

Supporting Documents

Tower Drawings	Structural Components Mapping Job #140862, dated October 17, 2014
-----------------------	---

Analysis

The tower was analyzed using Risa 3D tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ASCE 7-05.

Basic Wind Speed:	85 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	69 mph (3-Second Gust) w/ ½ " radial ice concurrent
Code:	ASCE 7-05
Structure Class:	II
Exposure Category:	C
Topographic Category:	1

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



Existing and Reserved Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
70.0	70.0	3	Alcatel-Lucent RRH2X60-AWS	Silo Mount	(2) 1 5/8" Hybriflex	Verizon
		3	Alcatel-Lucent RRH2X60-1900			
		3	Alcatel-Lucent RRH2x60 700			
		2	RFS DB-T1-6Z-8AB-0Z			
		12	Commscope SBNHH-1D65B			
57.0	57.0	3	Ericsson AIR 21, 1.3M, B4A B2P	Silo Mount	(6) 1 5/8" Hybriflex (2) 1" Hybrid (1) 1 1/4" Hybriflex	Metro PCS
		3	Ericsson AIR 21, 1.3M, B2A B4P			
54.0	54.0	6	Powerwave LGP21901	Silo Mount	(12) 1 5/8" Coax (6) 1/2" Coax (2) 3" conduit (4) 0.78" 8 AWG 6 (2) 0.39" Fiber Trunk (1) 3/8" (0.38") RET Control Cable	AT&T Mobility
		9	Powerwave LGP21401			
		1	Raycap DC6-48-60-18-8F			
		6	Ericsson RRUS 11 (Band 12)			
		6	Powerwave 7770.00			
		2	KMW AM-X-CD-16-65-00T-RET			
		1	Powerwave P65-17-XLH-RR			

Equipment to be Removed

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
No loading considered as to be removed						

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
No loading considered as proposed						

¹Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Coax is installed inside the silo shaft.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	5%	Pass
Diagonals	19%	Pass
Horizontals	17%	Pass
Concrete	15%	Pass

Foundations

Reaction Component	Analysis Reactions
Uplift (Kips)	48.3
Axial (Kips)	48.1
Shear (Kips)	11.4

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.



Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.



Verizon

B. Davies

370624 - 66728021

Mankes Silo, CT
Structure

SK - 1

May 25, 2016 at 8:05 AM

370624 - 66728021.r3d



Verizon

B. Davies

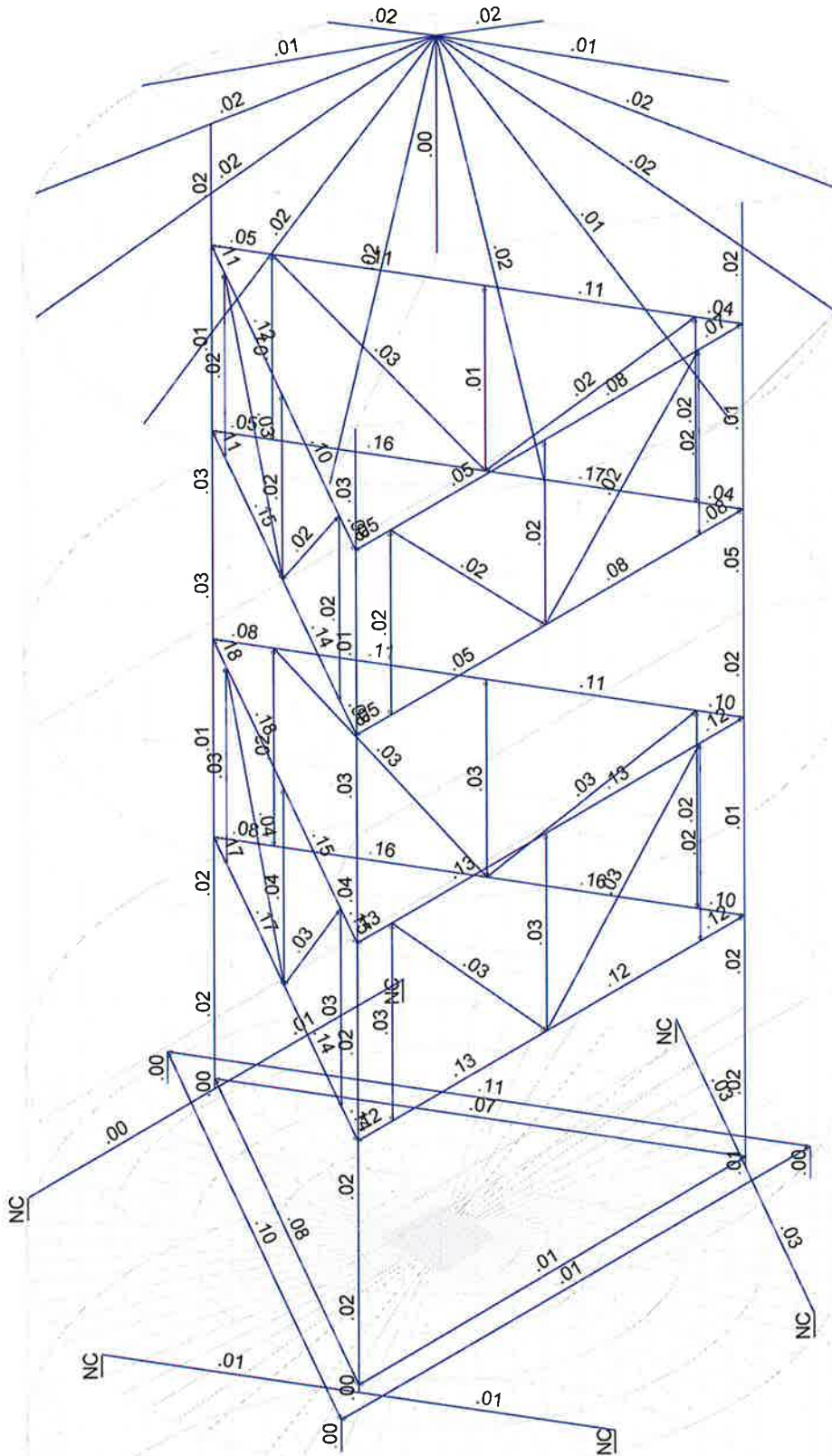
370624 - 66728021

Mankes Silo, CT
Internal Structure

SK - 2

May 25, 2016 at 8:19 AM

370624 - 66728021.r3d



Member Code Checks Displayed
Results for LC 1, 1.4D

Verizon
B. Davies
370624 - 66728021

Mankes Silo, CT
Internal Usages

SK - 3
May 25, 2016 at 8:21 AM
370624 - 66728021.r3d



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in ²]	I _{yy} [in ⁴]	I _{zz} [in ⁴]	J [in ⁴]
1	H1	W8x18	Beam	Wide Flange	A992	Typical	5.26	7.97	61.9	.172
2	H2	L3x3x4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
3	H3	L4x3x4	Beam	Single Angle	A36 Gr.36	Typical	1.69	1.33	2.75	.039
4	H4	LL4x4x4x3	Beam	Double Angle (3/...	A36 Gr.36	Typical	3.86	12.2	6	.088
5	H5	L4x4x4	Beam	Single Angle	A36 Gr.36	Typical	1.93	3	3	.044
6	H6	L6x6x5	Beam	Single Angle	A36 Gr.36	Typical	3.67	13	13	.129
7	Column1	HSS5x0.500	Beam	HSS Pipe	A36 Gr.36	Typical	6.62	17.2	17.2	34.4
8	Column2	HSS5.563x0...	Beam	HSS Pipe	A36 Gr.36	Typical	5.72	19.5	19.5	39
9	V1	L3x3x4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1	N1	8.5	0	17	0	
2	N2	9.240824	0	16.967655	0	
3	N3	9.97601	0	16.870866	0	
4	N4	10.699962	0	16.71037	0	
5	N5	11.407171	0	16.487387	0	
6	N6	12.092255	0	16.203616	0	
7	N7	12.75	0	15.861216	0	
8	N8	13.3754	0	15.462792	0	
9	N9	13.963695	0	15.011378	0	
10	N10	14.510408	0	14.510408	0	
11	N11	15.011378	0	13.963695	0	
12	N12	15.462792	0	13.3754	0	
13	N13	15.861216	0	12.75	0	
14	N14	16.203616	0	12.092255	0	
15	N15	16.487387	0	11.407171	0	
16	N16	16.71037	0	10.699962	0	
17	N17	16.870866	0	9.97601	0	
18	N18	16.967655	0	9.240824	0	
19	N19	17	0	8.5	0	
20	N20	16.967655	0	7.759176	0	
21	N21	16.870866	0	7.02399	0	
22	N22	16.71037	0	6.300038	0	
23	N23	16.487387	0	5.592829	0	
24	N24	16.203616	0	4.907745	0	
25	N25	15.861216	0	4.25	0	
26	N26	15.462792	0	3.6246	0	
27	N27	15.011378	0	3.036305	0	
28	N28	14.510408	0	2.489592	0	
29	N29	13.963695	0	1.988622	0	
30	N30	13.3754	0	1.537208	0	
31	N31	12.75	0	1.138784	0	
32	N32	12.092255	0	0.796384	0	
33	N33	11.407171	0	0.512613	0	
34	N34	10.699962	0	0.28963	0	
35	N35	9.97601	0	0.129134	0	
36	N36	9.240824	0	0.032345	0	
37	N37	8.5	0	0	0	
38	N38	7.759176	0	0.032345	0	
39	N39	7.02399	0	0.129134	0	
40	N40	6.300038	0	0.28963	0	
41	N41	5.592829	0	0.512613	0	
42	N42	4.907745	0	0.796384	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
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 Checked By: A. Tan

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
43	N43	4.25	0	1.138784	0	
44	N44	3.6246	0	1.537208	0	
45	N45	3.036305	0	1.988622	0	
46	N46	2.489592	0	2.489592	0	
47	N47	1.988622	0	3.036305	0	
48	N48	1.537208	0	3.6246	0	
49	N49	1.138784	0	4.25	0	
50	N50	0.796384	0	4.907745	0	
51	N51	0.512613	0	5.592829	0	
52	N52	0.28963	0	6.300038	0	
53	N53	0.129134	0	7.02399	0	
54	N54	0.032345	0	7.759176	0	
55	N55	0	0	8.5	0	
56	N56	0.032345	0	9.240824	0	
57	N57	0.129134	0	9.97601	0	
58	N58	0.28963	0	10.699962	0	
59	N59	0.512613	0	11.407171	0	
60	N60	0.796384	0	12.092255	0	
61	N61	1.138784	0	12.75	0	
62	N62	1.537208	0	13.3754	0	
63	N63	1.988622	0	13.963695	0	
64	N64	2.489592	0	14.510408	0	
65	N65	3.036305	0	15.011378	0	
66	N66	3.6246	0	15.462792	0	
67	N67	4.25	0	15.861216	0	
68	N68	4.907745	0	16.203616	0	
69	N69	5.592829	0	16.487387	0	
70	N70	6.300038	0	16.71037	0	
71	N71	7.02399	0	16.870866	0	
72	N72	7.759176	0	16.967655	0	
73	N73	8.5	4.767	17	0	
74	N74	9.240824	4.767	16.967655	0	
75	N75	9.97601	4.767	16.870866	0	
76	N76	10.699962	4.767	16.71037	0	
77	N77	11.407171	4.767	16.487387	0	
78	N78	12.092255	4.767	16.203616	0	
79	N79	12.75	4.767	15.861216	0	
80	N80	13.3754	4.767	15.462792	0	
81	N81	13.963695	4.767	15.011378	0	
82	N82	14.510408	4.767	14.510408	0	
83	N83	15.011378	4.767	13.963695	0	
84	N84	15.462792	4.767	13.3754	0	
85	N85	15.861216	4.767	12.75	0	
86	N86	16.203616	4.767	12.092255	0	
87	N87	16.487387	4.767	11.407171	0	
88	N88	16.71037	4.767	10.699962	0	
89	N89	16.870866	4.767	9.97601	0	
90	N90	16.967655	4.767	9.240824	0	
91	N91	17	4.767	8.5	0	
92	N92	16.967655	4.767	7.759176	0	
93	N93	16.870866	4.767	7.02399	0	
94	N94	16.71037	4.767	6.300038	0	
95	N95	16.487387	4.767	5.592829	0	
96	N96	16.203616	4.767	4.907745	0	
97	N97	15.861216	4.767	4.25	0	
98	N98	15.462792	4.767	3.6246	0	
99	N99	15.011378	4.767	3.036305	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
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 Checked By: A. Tan

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
100	N100	14.510408	4.767	2.489592	0	
101	N101	13.963695	4.767	1.988622	0	
102	N102	13.3754	4.767	1.537208	0	
103	N103	12.75	4.767	1.138784	0	
104	N104	12.092255	4.767	0.796384	0	
105	N105	11.407171	4.767	0.512613	0	
106	N106	10.699962	4.767	0.28963	0	
107	N107	9.97601	4.767	0.129134	0	
108	N108	9.240824	4.767	0.032345	0	
109	N109	8.5	4.767	0	0	
110	N110	7.759176	4.767	0.032345	0	
111	N111	7.02399	4.767	0.129134	0	
112	N112	6.300038	4.767	0.28963	0	
113	N113	5.592829	4.767	0.512613	0	
114	N114	4.907745	4.767	0.796384	0	
115	N115	4.25	4.767	1.138784	0	
116	N116	3.6246	4.767	1.537208	0	
117	N117	3.036305	4.767	1.988622	0	
118	N118	2.489592	4.767	2.489592	0	
119	N119	1.988622	4.767	3.036305	0	
120	N120	1.537208	4.767	3.6246	0	
121	N121	1.138784	4.767	4.25	0	
122	N122	0.796384	4.767	4.907745	0	
123	N123	0.512613	4.767	5.592829	0	
124	N124	0.28963	4.767	6.300038	0	
125	N125	0.129134	4.767	7.02399	0	
126	N126	0.032345	4.767	7.759176	0	
127	N127	0	4.767	8.5	0	
128	N128	0.032345	4.767	9.240824	0	
129	N129	0.129134	4.767	9.97601	0	
130	N130	0.28963	4.767	10.699962	0	
131	N131	0.512613	4.767	11.407171	0	
132	N132	0.796384	4.767	12.092255	0	
133	N133	1.138784	4.767	12.75	0	
134	N134	1.537208	4.767	13.3754	0	
135	N135	1.988622	4.767	13.963695	0	
136	N136	2.489592	4.767	14.510408	0	
137	N137	3.036305	4.767	15.011378	0	
138	N138	3.6246	4.767	15.462792	0	
139	N139	4.25	4.767	15.861216	0	
140	N140	4.907745	4.767	16.203616	0	
141	N141	5.592829	4.767	16.487387	0	
142	N142	6.300038	4.767	16.71037	0	
143	N143	7.02399	4.767	16.870866	0	
144	N144	7.759176	4.767	16.967655	0	
145	N145	8.5	9.534	17	0	
146	N146	9.240824	9.534	16.967655	0	
147	N147	9.97601	9.534	16.870866	0	
148	N148	10.699962	9.534	16.71037	0	
149	N149	11.407171	9.534	16.487387	0	
150	N150	12.092255	9.534	16.203616	0	
151	N151	12.75	9.534	15.861216	0	
152	N152	13.3754	9.534	15.462792	0	
153	N153	13.963695	9.534	15.011378	0	
154	N154	14.510408	9.534	14.510408	0	
155	N155	15.011378	9.534	13.963695	0	
156	N156	15.462792	9.534	13.3754	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
157	N157	15.861216	9.534	12.75	0	
158	N158	16.203616	9.534	12.092255	0	
159	N159	16.487387	9.534	11.407171	0	
160	N160	16.71037	9.534	10.699962	0	
161	N161	16.870866	9.534	9.97601	0	
162	N162	16.967655	9.534	9.240824	0	
163	N163	17	9.534	8.5	0	
164	N164	16.967655	9.534	7.759176	0	
165	N165	16.870866	9.534	7.02399	0	
166	N166	16.71037	9.534	6.300038	0	
167	N167	16.487387	9.534	5.592829	0	
168	N168	16.203616	9.534	4.907745	0	
169	N169	15.861216	9.534	4.25	0	
170	N170	15.462792	9.534	3.6246	0	
171	N171	15.011378	9.534	3.036305	0	
172	N172	14.510408	9.534	2.489592	0	
173	N173	13.963695	9.534	1.988622	0	
174	N174	13.3754	9.534	1.537208	0	
175	N175	12.75	9.534	1.138784	0	
176	N176	12.092255	9.534	0.796384	0	
177	N177	11.407171	9.534	0.512613	0	
178	N178	10.699962	9.534	0.28963	0	
179	N179	9.97601	9.534	0.129134	0	
180	N180	9.240824	9.534	0.032345	0	
181	N181	8.5	9.534	0	0	
182	N182	7.759176	9.534	0.032345	0	
183	N183	7.02399	9.534	0.129134	0	
184	N184	6.300038	9.534	0.28963	0	
185	N185	5.592829	9.534	0.512613	0	
186	N186	4.907745	9.534	0.796384	0	
187	N187	4.25	9.534	1.138784	0	
188	N188	3.6246	9.534	1.537208	0	
189	N189	3.036305	9.534	1.988622	0	
190	N190	2.489592	9.534	2.489592	0	
191	N191	1.988622	9.534	3.036305	0	
192	N192	1.537208	9.534	3.6246	0	
193	N193	1.138784	9.534	4.25	0	
194	N194	0.796384	9.534	4.907745	0	
195	N195	0.512613	9.534	5.592829	0	
196	N196	0.28963	9.534	6.300038	0	
197	N197	0.129134	9.534	7.02399	0	
198	N198	0.032345	9.534	7.759176	0	
199	N199	0	9.534	8.5	0	
200	N200	0.032345	9.534	9.240824	0	
201	N201	0.129134	9.534	9.97601	0	
202	N202	0.28963	9.534	10.699962	0	
203	N203	0.512613	9.534	11.407171	0	
204	N204	0.796384	9.534	12.092255	0	
205	N205	1.138784	9.534	12.75	0	
206	N206	1.537208	9.534	13.3754	0	
207	N207	1.988622	9.534	13.963695	0	
208	N208	2.489592	9.534	14.510408	0	
209	N209	3.036305	9.534	15.011378	0	
210	N210	3.6246	9.534	15.462792	0	
211	N211	4.25	9.534	15.861216	0	
212	N212	4.907745	9.534	16.203616	0	
213	N213	5.592829	9.534	16.487387	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
214	N214	6.300038	9.534	16.71037	0	
215	N215	7.02399	9.534	16.870866	0	
216	N216	7.759176	9.534	16.967655	0	
217	N217	8.5	14.301	17	0	
218	N218	9.240824	14.301	16.967655	0	
219	N219	9.97601	14.301	16.870866	0	
220	N220	10.699962	14.301	16.71037	0	
221	N221	11.407171	14.301	16.487387	0	
222	N222	12.092255	14.301	16.203616	0	
223	N223	12.75	14.301	15.861216	0	
224	N224	13.3754	14.301	15.462792	0	
225	N225	13.963695	14.301	15.011378	0	
226	N226	14.510408	14.301	14.510408	0	
227	N227	15.011378	14.301	13.963695	0	
228	N228	15.462792	14.301	13.3754	0	
229	N229	15.861216	14.301	12.75	0	
230	N230	16.203616	14.301	12.092255	0	
231	N231	16.487387	14.301	11.407171	0	
232	N232	16.71037	14.301	10.699962	0	
233	N233	16.870866	14.301	9.97601	0	
234	N234	16.967655	14.301	9.240824	0	
235	N235	17	14.301	8.5	0	
236	N236	16.967655	14.301	7.759176	0	
237	N237	16.870866	14.301	7.02399	0	
238	N238	16.71037	14.301	6.300038	0	
239	N239	16.487387	14.301	5.592829	0	
240	N240	16.203616	14.301	4.907745	0	
241	N241	15.861216	14.301	4.25	0	
242	N242	15.462792	14.301	3.6246	0	
243	N243	15.011378	14.301	3.036305	0	
244	N244	14.510408	14.301	2.489592	0	
245	N245	13.963695	14.301	1.988622	0	
246	N246	13.3754	14.301	1.537208	0	
247	N247	12.75	14.301	1.138784	0	
248	N248	12.092255	14.301	0.796384	0	
249	N249	11.407171	14.301	0.512613	0	
250	N250	10.699962	14.301	0.28963	0	
251	N251	9.97601	14.301	0.129134	0	
252	N252	9.240824	14.301	0.032345	0	
253	N253	8.5	14.301	0	0	
254	N254	7.759176	14.301	0.032345	0	
255	N255	7.02399	14.301	0.129134	0	
256	N256	6.300038	14.301	0.28963	0	
257	N257	5.592829	14.301	0.512613	0	
258	N258	4.907745	14.301	0.796384	0	
259	N259	4.25	14.301	1.138784	0	
260	N260	3.6246	14.301	1.537208	0	
261	N261	3.036305	14.301	1.988622	0	
262	N262	2.489592	14.301	2.489592	0	
263	N263	1.988622	14.301	3.036305	0	
264	N264	1.537208	14.301	3.6246	0	
265	N265	1.138784	14.301	4.25	0	
266	N266	0.796384	14.301	4.907745	0	
267	N267	0.512613	14.301	5.592829	0	
268	N268	0.28963	14.301	6.300038	0	
269	N269	0.129134	14.301	7.02399	0	
270	N270	0.032345	14.301	7.759176	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
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 Checked By: A. Tan

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
271	N271	0	14.301	8.5	0	
272	N272	0.032345	14.301	9.240824	0	
273	N273	0.129134	14.301	9.97601	0	
274	N274	0.28963	14.301	10.699962	0	
275	N275	0.512613	14.301	11.407171	0	
276	N276	0.796384	14.301	12.092255	0	
277	N277	1.138784	14.301	12.75	0	
278	N278	1.537208	14.301	13.3754	0	
279	N279	1.988622	14.301	13.963695	0	
280	N280	2.489592	14.301	14.510408	0	
281	N281	3.036305	14.301	15.011378	0	
282	N282	3.6246	14.301	15.462792	0	
283	N283	4.25	14.301	15.861216	0	
284	N284	4.907745	14.301	16.203616	0	
285	N285	5.592829	14.301	16.487387	0	
286	N286	6.300038	14.301	16.71037	0	
287	N287	7.02399	14.301	16.870866	0	
288	N288	7.759176	14.301	16.967655	0	
289	N289	8.5	19.068	17	0	
290	N290	9.240824	19.068	16.967655	0	
291	N291	9.97601	19.068	16.870866	0	
292	N292	10.699962	19.068	16.71037	0	
293	N293	11.407171	19.068	16.487387	0	
294	N294	12.092255	19.068	16.203616	0	
295	N295	12.75	19.068	15.861216	0	
296	N296	13.3754	19.068	15.462792	0	
297	N297	13.963695	19.068	15.011378	0	
298	N298	14.510408	19.068	14.510408	0	
299	N299	15.011378	19.068	13.963695	0	
300	N300	15.462792	19.068	13.3754	0	
301	N301	15.861216	19.068	12.75	0	
302	N302	16.203616	19.068	12.092255	0	
303	N303	16.487387	19.068	11.407171	0	
304	N304	16.71037	19.068	10.699962	0	
305	N305	16.870866	19.068	9.97601	0	
306	N306	16.967655	19.068	9.240824	0	
307	N307	17	19.068	8.5	0	
308	N308	16.967655	19.068	7.759176	0	
309	N309	16.870866	19.068	7.02399	0	
310	N310	16.71037	19.068	6.300038	0	
311	N311	16.487387	19.068	5.592829	0	
312	N312	16.203616	19.068	4.907745	0	
313	N313	15.861216	19.068	4.25	0	
314	N314	15.462792	19.068	3.6246	0	
315	N315	15.011378	19.068	3.036305	0	
316	N316	14.510408	19.068	2.489592	0	
317	N317	13.963695	19.068	1.988622	0	
318	N318	13.3754	19.068	1.537208	0	
319	N319	12.75	19.068	1.138784	0	
320	N320	12.092255	19.068	0.796384	0	
321	N321	11.407171	19.068	0.512613	0	
322	N322	10.699962	19.068	0.28963	0	
323	N323	9.97601	19.068	0.129134	0	
324	N324	9.240824	19.068	0.032345	0	
325	N325	8.5	19.068	0	0	
326	N326	7.759176	19.068	0.032345	0	
327	N327	7.02399	19.068	0.129134	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
328	N328	6.300038	19.068	0.28963	0	
329	N329	5.592829	19.068	0.512613	0	
330	N330	4.907745	19.068	0.796384	0	
331	N331	4.25	19.068	1.138784	0	
332	N332	3.6246	19.068	1.537208	0	
333	N333	3.036305	19.068	1.988622	0	
334	N334	2.489592	19.068	2.489592	0	
335	N335	1.988622	19.068	3.036305	0	
336	N336	1.537208	19.068	3.6246	0	
337	N337	1.138784	19.068	4.25	0	
338	N338	0.796384	19.068	4.907745	0	
339	N339	0.512613	19.068	5.592829	0	
340	N340	0.28963	19.068	6.300038	0	
341	N341	0.129134	19.068	7.02399	0	
342	N342	0.032345	19.068	7.759176	0	
343	N343	0	19.068	8.5	0	
344	N344	0.032345	19.068	9.240824	0	
345	N345	0.129134	19.068	9.97601	0	
346	N346	0.28963	19.068	10.699962	0	
347	N347	0.512613	19.068	11.407171	0	
348	N348	0.796384	19.068	12.092255	0	
349	N349	1.138784	19.068	12.75	0	
350	N350	1.537208	19.068	13.3754	0	
351	N351	1.988622	19.068	13.963695	0	
352	N352	2.489592	19.068	14.510408	0	
353	N353	3.036305	19.068	15.011378	0	
354	N354	3.6246	19.068	15.462792	0	
355	N355	4.25	19.068	15.861216	0	
356	N356	4.907745	19.068	16.203616	0	
357	N357	5.592829	19.068	16.487387	0	
358	N358	6.300038	19.068	16.71037	0	
359	N359	7.02399	19.068	16.870866	0	
360	N360	7.759176	19.068	16.967655	0	
361	N361	8.5	23.835	17	0	
362	N362	9.240824	23.835	16.967655	0	
363	N363	9.97601	23.835	16.870866	0	
364	N364	10.699962	23.835	16.71037	0	
365	N365	11.407171	23.835	16.487387	0	
366	N366	12.092255	23.835	16.203616	0	
367	N367	12.75	23.835	15.861216	0	
368	N368	13.3754	23.835	15.462792	0	
369	N369	13.963695	23.835	15.011378	0	
370	N370	14.510408	23.835	14.510408	0	
371	N371	15.011378	23.835	13.963695	0	
372	N372	15.462792	23.835	13.3754	0	
373	N373	15.861216	23.835	12.75	0	
374	N374	16.203616	23.835	12.092255	0	
375	N375	16.487387	23.835	11.407171	0	
376	N376	16.71037	23.835	10.699962	0	
377	N377	16.870866	23.835	9.97601	0	
378	N378	16.967655	23.835	9.240824	0	
379	N379	17	23.835	8.5	0	
380	N380	16.967655	23.835	7.759176	0	
381	N381	16.870866	23.835	7.02399	0	
382	N382	16.71037	23.835	6.300038	0	
383	N383	16.487387	23.835	5.592829	0	
384	N384	16.203616	23.835	4.907745	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
385	N385	15.861216	23.835	4.25	0	
386	N386	15.462792	23.835	3.6246	0	
387	N387	15.011378	23.835	3.036305	0	
388	N388	14.510408	23.835	2.489592	0	
389	N389	13.963695	23.835	1.988622	0	
390	N390	13.3754	23.835	1.537208	0	
391	N391	12.75	23.835	1.138784	0	
392	N392	12.092255	23.835	0.796384	0	
393	N393	11.407171	23.835	0.512613	0	
394	N394	10.699962	23.835	0.28963	0	
395	N395	9.97601	23.835	0.129134	0	
396	N396	9.240824	23.835	0.032345	0	
397	N397	8.5	23.835	0	0	
398	N398	7.759176	23.835	0.032345	0	
399	N399	7.02399	23.835	0.129134	0	
400	N400	6.300038	23.835	0.28963	0	
401	N401	5.592829	23.835	0.512613	0	
402	N402	4.907745	23.835	0.796384	0	
403	N403	4.25	23.835	1.138784	0	
404	N404	3.6246	23.835	1.537208	0	
405	N405	3.036305	23.835	1.988622	0	
406	N406	2.489592	23.835	2.489592	0	
407	N407	1.988622	23.835	3.036305	0	
408	N408	1.537208	23.835	3.6246	0	
409	N409	1.138784	23.835	4.25	0	
410	N410	0.796384	23.835	4.907745	0	
411	N411	0.512613	23.835	5.592829	0	
412	N412	0.28963	23.835	6.300038	0	
413	N413	0.129134	23.835	7.02399	0	
414	N414	0.032345	23.835	7.759176	0	
415	N415	0	23.835	8.5	0	
416	N416	0.032345	23.835	9.240824	0	
417	N417	0.129134	23.835	9.97601	0	
418	N418	0.28963	23.835	10.699962	0	
419	N419	0.512613	23.835	11.407171	0	
420	N420	0.796384	23.835	12.092255	0	
421	N421	1.138784	23.835	12.75	0	
422	N422	1.537208	23.835	13.3754	0	
423	N423	1.988622	23.835	13.963695	0	
424	N424	2.489592	23.835	14.510408	0	
425	N425	3.036305	23.835	15.011378	0	
426	N426	3.6246	23.835	15.462792	0	
427	N427	4.25	23.835	15.861216	0	
428	N428	4.907745	23.835	16.203616	0	
429	N429	5.592829	23.835	16.487387	0	
430	N430	6.300038	23.835	16.71037	0	
431	N431	7.02399	23.835	16.870866	0	
432	N432	7.759176	23.835	16.967655	0	
433	N433	8.5	28.602	17	0	
434	N434	9.240824	28.602	16.967655	0	
435	N435	9.97601	28.602	16.870866	0	
436	N436	10.699962	28.602	16.71037	0	
437	N437	11.407171	28.602	16.487387	0	
438	N438	12.092255	28.602	16.203616	0	
439	N439	12.75	28.602	15.861216	0	
440	N440	13.3754	28.602	15.462792	0	
441	N441	13.963695	28.602	15.011378	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
442	N442	14.510408	28.602	14.510408	0	
443	N443	15.011378	28.602	13.963695	0	
444	N444	15.462792	28.602	13.3754	0	
445	N445	15.861216	28.602	12.75	0	
446	N446	16.203616	28.602	12.092255	0	
447	N447	16.487387	28.602	11.407171	0	
448	N448	16.71037	28.602	10.699962	0	
449	N449	16.870866	28.602	9.97601	0	
450	N450	16.967655	28.602	9.240824	0	
451	N451	17	28.602	8.5	0	
452	N452	16.967655	28.602	7.759176	0	
453	N453	16.870866	28.602	7.02399	0	
454	N454	16.71037	28.602	6.300038	0	
455	N455	16.487387	28.602	5.592829	0	
456	N456	16.203616	28.602	4.907745	0	
457	N457	15.861216	28.602	4.25	0	
458	N458	15.462792	28.602	3.6246	0	
459	N459	15.011378	28.602	3.036305	0	
460	N460	14.510408	28.602	2.489592	0	
461	N461	13.963695	28.602	1.988622	0	
462	N462	13.3754	28.602	1.537208	0	
463	N463	12.75	28.602	1.138784	0	
464	N464	12.092255	28.602	0.796384	0	
465	N465	11.407171	28.602	0.512613	0	
466	N466	10.699962	28.602	0.28963	0	
467	N467	9.97601	28.602	0.129134	0	
468	N468	9.240824	28.602	0.032345	0	
469	N469	8.5	28.602	0	0	
470	N470	7.759176	28.602	0.032345	0	
471	N471	7.02399	28.602	0.129134	0	
472	N472	6.300038	28.602	0.28963	0	
473	N473	5.592829	28.602	0.512613	0	
474	N474	4.907745	28.602	0.796384	0	
475	N475	4.25	28.602	1.138784	0	
476	N476	3.6246	28.602	1.537208	0	
477	N477	3.036305	28.602	1.988622	0	
478	N478	2.489592	28.602	2.489592	0	
479	N479	1.988622	28.602	3.036305	0	
480	N480	1.537208	28.602	3.6246	0	
481	N481	1.138784	28.602	4.25	0	
482	N482	0.796384	28.602	4.907745	0	
483	N483	0.512613	28.602	5.592829	0	
484	N484	0.28963	28.602	6.300038	0	
485	N485	0.129134	28.602	7.02399	0	
486	N486	0.032345	28.602	7.759176	0	
487	N487	0	28.602	8.5	0	
488	N488	0.032345	28.602	9.240824	0	
489	N489	0.129134	28.602	9.97601	0	
490	N490	0.28963	28.602	10.699962	0	
491	N491	0.512613	28.602	11.407171	0	
492	N492	0.796384	28.602	12.092255	0	
493	N493	1.138784	28.602	12.75	0	
494	N494	1.537208	28.602	13.3754	0	
495	N495	1.988622	28.602	13.963695	0	
496	N496	2.489592	28.602	14.510408	0	
497	N497	3.036305	28.602	15.011378	0	
498	N498	3.6246	28.602	15.462792	0	



Company : Verizon
 Designer : B. Davies
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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
499	N499	4.25	28.602	15.861216	0	
500	N500	4.907745	28.602	16.203616	0	
501	N501	5.592829	28.602	16.487387	0	
502	N502	6.300038	28.602	16.71037	0	
503	N503	7.02399	28.602	16.870866	0	
504	N504	7.759176	28.602	16.967655	0	
505	N505	8.5	33.369	17	0	
506	N506	9.240824	33.369	16.967655	0	
507	N507	9.97601	33.369	16.870866	0	
508	N508	10.699962	33.369	16.71037	0	
509	N509	11.407171	33.369	16.487387	0	
510	N510	12.092255	33.369	16.203616	0	
511	N511	12.75	33.369	15.861216	0	
512	N512	13.3754	33.369	15.462792	0	
513	N513	13.963695	33.369	15.011378	0	
514	N514	14.510408	33.369	14.510408	0	
515	N515	15.011378	33.369	13.963695	0	
516	N516	15.462792	33.369	13.3754	0	
517	N517	15.861216	33.369	12.75	0	
518	N518	16.203616	33.369	12.092255	0	
519	N519	16.487387	33.369	11.407171	0	
520	N520	16.71037	33.369	10.699962	0	
521	N521	16.870866	33.369	9.97601	0	
522	N522	16.967655	33.369	9.240824	0	
523	N523	17	33.369	8.5	0	
524	N524	16.967655	33.369	7.759176	0	
525	N525	16.870866	33.369	7.02399	0	
526	N526	16.71037	33.369	6.300038	0	
527	N527	16.487387	33.369	5.592829	0	
528	N528	16.203616	33.369	4.907745	0	
529	N529	15.861216	33.369	4.25	0	
530	N530	15.462792	33.369	3.6246	0	
531	N531	15.011378	33.369	3.036305	0	
532	N532	14.510408	33.369	2.489592	0	
533	N533	13.963695	33.369	1.988622	0	
534	N534	13.3754	33.369	1.537208	0	
535	N535	12.75	33.369	1.138784	0	
536	N536	12.092255	33.369	0.796384	0	
537	N537	11.407171	33.369	0.512613	0	
538	N538	10.699962	33.369	0.28963	0	
539	N539	9.97601	33.369	0.129134	0	
540	N540	9.240824	33.369	0.032345	0	
541	N541	8.5	33.369	0	0	
542	N542	7.759176	33.369	0.032345	0	
543	N543	7.02399	33.369	0.129134	0	
544	N544	6.300038	33.369	0.28963	0	
545	N545	5.592829	33.369	0.512613	0	
546	N546	4.907745	33.369	0.796384	0	
547	N547	4.25	33.369	1.138784	0	
548	N548	3.6246	33.369	1.537208	0	
549	N549	3.036305	33.369	1.988622	0	
550	N550	2.489592	33.369	2.489592	0	
551	N551	1.988622	33.369	3.036305	0	
552	N552	1.537208	33.369	3.6246	0	
553	N553	1.138784	33.369	4.25	0	
554	N554	0.796384	33.369	4.907745	0	
555	N555	0.512613	33.369	5.592829	0	



Company : Verizon
 Designer : B. Davies
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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
556	N556	0.28963	33.369	6.300038	0	
557	N557	0.129134	33.369	7.02399	0	
558	N558	0.032345	33.369	7.759176	0	
559	N559	0	33.369	8.5	0	
560	N560	0.032345	33.369	9.240824	0	
561	N561	0.129134	33.369	9.97601	0	
562	N562	0.28963	33.369	10.699962	0	
563	N563	0.512613	33.369	11.407171	0	
564	N564	0.796384	33.369	12.092255	0	
565	N565	1.138784	33.369	12.75	0	
566	N566	1.537208	33.369	13.3754	0	
567	N567	1.988622	33.369	13.963695	0	
568	N568	2.489592	33.369	14.510408	0	
569	N569	3.036305	33.369	15.011378	0	
570	N570	3.6246	33.369	15.462792	0	
571	N571	4.25	33.369	15.861216	0	
572	N572	4.907745	33.369	16.203616	0	
573	N573	5.592829	33.369	16.487387	0	
574	N574	6.300038	33.369	16.71037	0	
575	N575	7.02399	33.369	16.870866	0	
576	N576	7.759176	33.369	16.967655	0	
577	N577	8.5	38.136	17	0	
578	N578	9.240824	38.136	16.967655	0	
579	N579	9.97601	38.136	16.870866	0	
580	N580	10.699962	38.136	16.71037	0	
581	N581	11.407171	38.136	16.487387	0	
582	N582	12.092255	38.136	16.203616	0	
583	N583	12.75	38.136	15.861216	0	
584	N584	13.3754	38.136	15.462792	0	
585	N585	13.963695	38.136	15.011378	0	
586	N586	14.510408	38.136	14.510408	0	
587	N587	15.011378	38.136	13.963695	0	
588	N588	15.462792	38.136	13.3754	0	
589	N589	15.861216	38.136	12.75	0	
590	N590	16.203616	38.136	12.092255	0	
591	N591	16.487387	38.136	11.407171	0	
592	N592	16.71037	38.136	10.699962	0	
593	N593	16.870866	38.136	9.97601	0	
594	N594	16.967655	38.136	9.240824	0	
595	N595	17	38.136	8.5	0	
596	N596	16.967655	38.136	7.759176	0	
597	N597	16.870866	38.136	7.02399	0	
598	N598	16.71037	38.136	6.300038	0	
599	N599	16.487387	38.136	5.592829	0	
600	N600	16.203616	38.136	4.907745	0	
601	N601	15.861216	38.136	4.25	0	
602	N602	15.462792	38.136	3.6246	0	
603	N603	15.011378	38.136	3.036305	0	
604	N604	14.510408	38.136	2.489592	0	
605	N605	13.963695	38.136	1.988622	0	
606	N606	13.3754	38.136	1.537208	0	
607	N607	12.75	38.136	1.138784	0	
608	N608	12.092255	38.136	0.796384	0	
609	N609	11.407171	38.136	0.512613	0	
610	N610	10.699962	38.136	0.28963	0	
611	N611	9.97601	38.136	0.129134	0	
612	N612	9.240824	38.136	0.032345	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
613	N613	8.5	38.136	0	0	
614	N614	7.759176	38.136	0.032345	0	
615	N615	7.02399	38.136	0.129134	0	
616	N616	6.300038	38.136	0.28963	0	
617	N617	5.592829	38.136	0.512613	0	
618	N618	4.907745	38.136	0.796384	0	
619	N619	4.25	38.136	1.138784	0	
620	N620	3.6246	38.136	1.537208	0	
621	N621	3.036305	38.136	1.988622	0	
622	N622	2.489592	38.136	2.489592	0	
623	N623	1.988622	38.136	3.036305	0	
624	N624	1.537208	38.136	3.6246	0	
625	N625	1.138784	38.136	4.25	0	
626	N626	0.796384	38.136	4.907745	0	
627	N627	0.512613	38.136	5.592829	0	
628	N628	0.28963	38.136	6.300038	0	
629	N629	0.129134	38.136	7.02399	0	
630	N630	0.032345	38.136	7.759176	0	
631	N631	0	38.136	8.5	0	
632	N632	0.032345	38.136	9.240824	0	
633	N633	0.129134	38.136	9.97601	0	
634	N634	0.28963	38.136	10.699962	0	
635	N635	0.512613	38.136	11.407171	0	
636	N636	0.796384	38.136	12.092255	0	
637	N637	1.138784	38.136	12.75	0	
638	N638	1.537208	38.136	13.3754	0	
639	N639	1.988622	38.136	13.963695	0	
640	N640	2.489592	38.136	14.510408	0	
641	N641	3.036305	38.136	15.011378	0	
642	N642	3.6246	38.136	15.462792	0	
643	N643	4.25	38.136	15.861216	0	
644	N644	4.907745	38.136	16.203616	0	
645	N645	5.592829	38.136	16.487387	0	
646	N646	6.300038	38.136	16.71037	0	
647	N647	7.02399	38.136	16.870866	0	
648	N648	7.759176	38.136	16.967655	0	
649	N649	8.5	42.903	17	0	
650	N650	9.240824	42.903	16.967655	0	
651	N651	9.97601	42.903	16.870866	0	
652	N652	10.699962	42.903	16.71037	0	
653	N653	11.407171	42.903	16.487387	0	
654	N654	12.092255	42.903	16.203616	0	
655	N655	12.75	42.903	15.861216	0	
656	N656	13.3754	42.903	15.462792	0	
657	N657	13.963695	42.903	15.011378	0	
658	N658	14.510408	42.903	14.510408	0	
659	N659	15.011378	42.903	13.963695	0	
660	N660	15.462792	42.903	13.3754	0	
661	N661	15.861216	42.903	12.75	0	
662	N662	16.203616	42.903	12.092255	0	
663	N663	16.487387	42.903	11.407171	0	
664	N664	16.71037	42.903	10.699962	0	
665	N665	16.870866	42.903	9.97601	0	
666	N666	16.967655	42.903	9.240824	0	
667	N667	17	42.903	8.5	0	
668	N668	16.967655	42.903	7.759176	0	
669	N669	16.870866	42.903	7.02399	0	



Company : Verizon
 Designer : B. Davies
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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
670	N670	16.71037	42.903	6.300038	0	
671	N671	16.487387	42.903	5.592829	0	
672	N672	16.203616	42.903	4.907745	0	
673	N673	15.861216	42.903	4.25	0	
674	N674	15.462792	42.903	3.6246	0	
675	N675	15.011378	42.903	3.036305	0	
676	N676	14.510408	42.903	2.489592	0	
677	N677	13.963695	42.903	1.988622	0	
678	N678	13.3754	42.903	1.537208	0	
679	N679	12.75	42.903	1.138784	0	
680	N680	12.092255	42.903	0.796384	0	
681	N681	11.407171	42.903	0.512613	0	
682	N682	10.699962	42.903	0.28963	0	
683	N683	9.97601	42.903	0.129134	0	
684	N684	9.240824	42.903	0.032345	0	
685	N685	8.5	42.903	0	0	
686	N686	7.759176	42.903	0.032345	0	
687	N687	7.02399	42.903	0.129134	0	
688	N688	6.300038	42.903	0.28963	0	
689	N689	5.592829	42.903	0.512613	0	
690	N690	4.907745	42.903	0.796384	0	
691	N691	4.25	42.903	1.138784	0	
692	N692	3.6246	42.903	1.537208	0	
693	N693	3.036305	42.903	1.988622	0	
694	N694	2.489592	42.903	2.489592	0	
695	N695	1.988622	42.903	3.036305	0	
696	N696	1.537208	42.903	3.6246	0	
697	N697	1.138784	42.903	4.25	0	
698	N698	0.796384	42.903	4.907745	0	
699	N699	0.512613	42.903	5.592829	0	
700	N700	0.28963	42.903	6.300038	0	
701	N701	0.129134	42.903	7.02399	0	
702	N702	0.032345	42.903	7.759176	0	
703	N703	0	42.903	8.5	0	
704	N704	0.032345	42.903	9.240824	0	
705	N705	0.129134	42.903	9.97601	0	
706	N706	0.28963	42.903	10.699962	0	
707	N707	0.512613	42.903	11.407171	0	
708	N708	0.796384	42.903	12.092255	0	
709	N709	1.138784	42.903	12.75	0	
710	N710	1.537208	42.903	13.3754	0	
711	N711	1.988622	42.903	13.963695	0	
712	N712	2.489592	42.903	14.510408	0	
713	N713	3.036305	42.903	15.011378	0	
714	N714	3.6246	42.903	15.462792	0	
715	N715	4.25	42.903	15.861216	0	
716	N716	4.907745	42.903	16.203616	0	
717	N717	5.592829	42.903	16.487387	0	
718	N718	6.300038	42.903	16.71037	0	
719	N719	7.02399	42.903	16.870866	0	
720	N720	7.759176	42.903	16.967655	0	
721	N721	8.5	47.67	17	0	
722	N722	9.240824	47.67	16.967655	0	
723	N723	9.97601	47.67	16.870866	0	
724	N724	10.699962	47.67	16.71037	0	
725	N725	11.407171	47.67	16.487387	0	
726	N726	12.092255	47.67	16.203616	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
727	N727	12.75	47.67	15.861216	0	
728	N728	13.3754	47.67	15.462792	0	
729	N729	13.963695	47.67	15.011378	0	
730	N730	14.510408	47.67	14.510408	0	
731	N731	15.011378	47.67	13.963695	0	
732	N732	15.462792	47.67	13.3754	0	
733	N733	15.861216	47.67	12.75	0	
734	N734	16.203616	47.67	12.092255	0	
735	N735	16.487387	47.67	11.407171	0	
736	N736	16.71037	47.67	10.699962	0	
737	N737	16.870866	47.67	9.97601	0	
738	N738	16.967655	47.67	9.240824	0	
739	N739	17	47.67	8.5	0	
740	N740	16.967655	47.67	7.759176	0	
741	N741	16.870866	47.67	7.02399	0	
742	N742	16.71037	47.67	6.300038	0	
743	N743	16.487387	47.67	5.592829	0	
744	N744	16.203616	47.67	4.907745	0	
745	N745	15.861216	47.67	4.25	0	
746	N746	15.462792	47.67	3.6246	0	
747	N747	15.011378	47.67	3.036305	0	
748	N748	14.510408	47.67	2.489592	0	
749	N749	13.963695	47.67	1.988622	0	
750	N750	13.3754	47.67	1.537208	0	
751	N751	12.75	47.67	1.138784	0	
752	N752	12.092255	47.67	0.796384	0	
753	N753	11.407171	47.67	0.512613	0	
754	N754	10.699962	47.67	0.28963	0	
755	N755	9.97601	47.67	0.129134	0	
756	N756	9.240824	47.67	0.032345	0	
757	N757	8.5	47.67	0	0	
758	N758	7.759176	47.67	0.032345	0	
759	N759	7.02399	47.67	0.129134	0	
760	N760	6.300038	47.67	0.28963	0	
761	N761	5.592829	47.67	0.512613	0	
762	N762	4.907745	47.67	0.796384	0	
763	N763	4.25	47.67	1.138784	0	
764	N764	3.6246	47.67	1.537208	0	
765	N765	3.036305	47.67	1.988622	0	
766	N766	2.489592	47.67	2.489592	0	
767	N767	1.988622	47.67	3.036305	0	
768	N768	1.537208	47.67	3.6246	0	
769	N769	1.138784	47.67	4.25	0	
770	N770	0.796384	47.67	4.907745	0	
771	N771	0.512613	47.67	5.592829	0	
772	N772	0.28963	47.67	6.300038	0	
773	N773	0.129134	47.67	7.02399	0	
774	N774	0.032345	47.67	7.759176	0	
775	N775	0	47.67	8.5	0	
776	N776	0.032345	47.67	9.240824	0	
777	N777	0.129134	47.67	9.97601	0	
778	N778	0.28963	47.67	10.699962	0	
779	N779	0.512613	47.67	11.407171	0	
780	N780	0.796384	47.67	12.092255	0	
781	N781	1.138784	47.67	12.75	0	
782	N782	1.537208	47.67	13.3754	0	
783	N783	1.988622	47.67	13.963695	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
784	N784	2.489592	47.67	14.510408	0	
785	N785	3.036305	47.67	15.011378	0	
786	N786	3.6246	47.67	15.462792	0	
787	N787	4.25	47.67	15.861216	0	
788	N788	4.907745	47.67	16.203616	0	
789	N789	5.592829	47.67	16.487387	0	
790	N790	6.300038	47.67	16.71037	0	
791	N791	7.02399	47.67	16.870866	0	
792	N792	7.759176	47.67	16.967655	0	
793	N793	8.5	47.67	10.2	0	
794	N794	8.648165	47.67	10.193531	0	
795	N795	8.795202	47.67	10.174173	0	
796	N796	8.939992	47.67	10.142074	0	
797	N797	9.081434	47.67	10.097477	0	
798	N798	9.218451	47.67	10.040723	0	
799	N799	9.35	47.67	9.972243	0	
800	N800	9.47508	47.67	9.892558	0	
801	N801	9.592739	47.67	9.802276	0	
802	N802	9.702082	47.67	9.702082	0	
803	N803	9.802276	47.67	9.592739	0	
804	N804	9.892558	47.67	9.47508	0	
805	N805	9.972243	47.67	9.35	0	
806	N806	10.040723	47.67	9.218451	0	
807	N807	10.097477	47.67	9.081434	0	
808	N808	10.142074	47.67	8.939992	0	
809	N809	10.174173	47.67	8.795202	0	
810	N810	10.193531	47.67	8.648165	0	
811	N811	10.2	47.67	8.5	0	
812	N812	10.193531	47.67	8.351835	0	
813	N813	10.174173	47.67	8.204798	0	
814	N814	10.142074	47.67	8.060008	0	
815	N815	10.097477	47.67	7.918566	0	
816	N816	10.040723	47.67	7.781549	0	
817	N817	9.972243	47.67	7.65	0	
818	N818	9.892558	47.67	7.52492	0	
819	N819	9.802276	47.67	7.407261	0	
820	N820	9.702082	47.67	7.297918	0	
821	N821	9.592739	47.67	7.197724	0	
822	N822	9.47508	47.67	7.107442	0	
823	N823	9.35	47.67	7.027757	0	
824	N824	9.218451	47.67	6.959277	0	
825	N825	9.081434	47.67	6.902523	0	
826	N826	8.939992	47.67	6.857926	0	
827	N827	8.795202	47.67	6.825827	0	
828	N828	8.648165	47.67	6.806469	0	
829	N829	8.5	47.67	6.8	0	
830	N830	8.351835	47.67	6.806469	0	
831	N831	8.204798	47.67	6.825827	0	
832	N832	8.060008	47.67	6.857926	0	
833	N833	7.918566	47.67	6.902523	0	
834	N834	7.781549	47.67	6.959277	0	
835	N835	7.65	47.67	7.027757	0	
836	N836	7.52492	47.67	7.107442	0	
837	N837	7.407261	47.67	7.197724	0	
838	N838	7.297918	47.67	7.297918	0	
839	N839	7.197724	47.67	7.407261	0	
840	N840	7.107442	47.67	7.52492	0	



Company : Verizon
 Designer : B. Davies
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 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
841	N841	7.027757	47.67	7.65	0	
842	N842	6.959277	47.67	7.781549	0	
843	N843	6.902523	47.67	7.918566	0	
844	N844	6.857926	47.67	8.060008	0	
845	N845	6.825827	47.67	8.204798	0	
846	N846	6.806469	47.67	8.351835	0	
847	N847	6.8	47.67	8.5	0	
848	N848	6.806469	47.67	8.648165	0	
849	N849	6.825827	47.67	8.795202	0	
850	N850	6.857926	47.67	8.939992	0	
851	N851	6.902523	47.67	9.081434	0	
852	N852	6.959277	47.67	9.218451	0	
853	N853	7.027757	47.67	9.35	0	
854	N854	7.107442	47.67	9.47508	0	
855	N855	7.197724	47.67	9.592739	0	
856	N856	7.297918	47.67	9.702082	0	
857	N857	7.407261	47.67	9.802276	0	
858	N858	7.52492	47.67	9.892558	0	
859	N859	7.65	47.67	9.972243	0	
860	N860	7.781549	47.67	10.040723	0	
861	N861	7.918566	47.67	10.097477	0	
862	N862	8.060008	47.67	10.142074	0	
863	N863	8.204798	47.67	10.174173	0	
864	N864	8.351835	47.67	10.193531	0	
865	N865	8.5	47.67	11.9	0	
866	N866	8.79633	47.67	11.887062	0	
867	N867	9.090404	47.67	11.848346	0	
868	N868	9.379985	47.67	11.784148	0	
869	N869	9.662868	47.67	11.694955	0	
870	N870	9.936902	47.67	11.581446	0	
871	N871	10.2	47.67	11.444486	0	
872	N872	10.45016	47.67	11.285117	0	
873	N873	10.685478	47.67	11.104551	0	
874	N874	10.904163	47.67	10.904163	0	
875	N875	11.104551	47.67	10.685478	0	
876	N876	11.285117	47.67	10.45016	0	
877	N877	11.444486	47.67	10.2	0	
878	N878	11.581446	47.67	9.936902	0	
879	N879	11.694955	47.67	9.662868	0	
880	N880	11.784148	47.67	9.379985	0	
881	N881	11.848346	47.67	9.090404	0	
882	N882	11.887062	47.67	8.79633	0	
883	N883	11.9	47.67	8.5	0	
884	N884	11.887062	47.67	8.20367	0	
885	N885	11.848346	47.67	7.909596	0	
886	N886	11.784148	47.67	7.620015	0	
887	N887	11.694955	47.67	7.337132	0	
888	N888	11.581446	47.67	7.063098	0	
889	N889	11.444486	47.67	6.8	0	
890	N890	11.285117	47.67	6.54984	0	
891	N891	11.104551	47.67	6.314522	0	
892	N892	10.904163	47.67	6.095837	0	
893	N893	10.685478	47.67	5.895449	0	
894	N894	10.45016	47.67	5.714883	0	
895	N895	10.2	47.67	5.555514	0	
896	N896	9.936902	47.67	5.418554	0	
897	N897	9.662868	47.67	5.305045	0	



Company : Verizon
 Designer : B. Davies
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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
898	N898	9.379985	47.67	5.215852	0	
899	N899	9.090404	47.67	5.151654	0	
900	N900	8.79633	47.67	5.112938	0	
901	N901	8.5	47.67	5.1	0	
902	N902	8.20367	47.67	5.112938	0	
903	N903	7.909596	47.67	5.151654	0	
904	N904	7.620015	47.67	5.215852	0	
905	N905	7.337132	47.67	5.305045	0	
906	N906	7.063098	47.67	5.418554	0	
907	N907	6.8	47.67	5.555514	0	
908	N908	6.54984	47.67	5.714883	0	
909	N909	6.314522	47.67	5.895449	0	
910	N910	6.095837	47.67	6.095837	0	
911	N911	5.895449	47.67	6.314522	0	
912	N912	5.714883	47.67	6.54984	0	
913	N913	5.555514	47.67	6.8	0	
914	N914	5.418554	47.67	7.063098	0	
915	N915	5.305045	47.67	7.337132	0	
916	N916	5.215852	47.67	7.620015	0	
917	N917	5.151654	47.67	7.909596	0	
918	N918	5.112938	47.67	8.20367	0	
919	N919	5.1	47.67	8.5	0	
920	N920	5.112938	47.67	8.79633	0	
921	N921	5.151654	47.67	9.090404	0	
922	N922	5.215852	47.67	9.379985	0	
923	N923	5.305045	47.67	9.662868	0	
924	N924	5.418554	47.67	9.936902	0	
925	N925	5.555514	47.67	10.2	0	
926	N926	5.714883	47.67	10.45016	0	
927	N927	5.895449	47.67	10.685478	0	
928	N928	6.095837	47.67	10.904163	0	
929	N929	6.314522	47.67	11.104551	0	
930	N930	6.54984	47.67	11.285117	0	
931	N931	6.8	47.67	11.444486	0	
932	N932	7.063098	47.67	11.581446	0	
933	N933	7.337132	47.67	11.694955	0	
934	N934	7.620015	47.67	11.784148	0	
935	N935	7.909596	47.67	11.848346	0	
936	N936	8.20367	47.67	11.887062	0	
937	N937	8.5	47.67	13.6	0	
938	N938	8.944494	47.67	13.580593	0	
939	N939	9.385606	47.67	13.52252	0	
940	N940	9.819977	47.67	13.426222	0	
941	N941	10.244303	47.67	13.292432	0	
942	N942	10.655353	47.67	13.12217	0	
943	N943	11.05	47.67	12.91673	0	
944	N944	11.42524	47.67	12.677675	0	
945	N945	11.778217	47.67	12.406827	0	
946	N946	12.106245	47.67	12.106245	0	
947	N947	12.406827	47.67	11.778217	0	
948	N948	12.677675	47.67	11.42524	0	
949	N949	12.91673	47.67	11.05	0	
950	N950	13.12217	47.67	10.655353	0	
951	N951	13.292432	47.67	10.244303	0	
952	N952	13.426222	47.67	9.819977	0	
953	N953	13.52252	47.67	9.385606	0	
954	N954	13.580593	47.67	8.944494	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
955	N955	13.6	47.67	8.5	0	
956	N956	13.580593	47.67	8.055506	0	
957	N957	13.52252	47.67	7.614394	0	
958	N958	13.426222	47.67	7.180023	0	
959	N959	13.292432	47.67	6.755697	0	
960	N960	13.12217	47.67	6.344647	0	
961	N961	12.91673	47.67	5.95	0	
962	N962	12.677675	47.67	5.57476	0	
963	N963	12.406827	47.67	5.221783	0	
964	N964	12.106245	47.67	4.893755	0	
965	N965	11.778217	47.67	4.593173	0	
966	N966	11.42524	47.67	4.322325	0	
967	N967	11.05	47.67	4.08327	0	
968	N968	10.655353	47.67	3.87783	0	
969	N969	10.244303	47.67	3.707568	0	
970	N970	9.819977	47.67	3.573778	0	
971	N971	9.385606	47.67	3.47748	0	
972	N972	8.944494	47.67	3.419407	0	
973	N973	8.5	47.67	3.4	0	
974	N974	8.055506	47.67	3.419407	0	
975	N975	7.614394	47.67	3.47748	0	
976	N976	7.180023	47.67	3.573778	0	
977	N977	6.755697	47.67	3.707568	0	
978	N978	6.344647	47.67	3.87783	0	
979	N979	5.95	47.67	4.08327	0	
980	N980	5.57476	47.67	4.322325	0	
981	N981	5.221783	47.67	4.593173	0	
982	N982	4.893755	47.67	4.893755	0	
983	N983	4.593173	47.67	5.221783	0	
984	N984	4.322325	47.67	5.57476	0	
985	N985	4.08327	47.67	5.95	0	
986	N986	3.87783	47.67	6.344647	0	
987	N987	3.707568	47.67	6.755697	0	
988	N988	3.573778	47.67	7.180023	0	
989	N989	3.47748	47.67	7.614394	0	
990	N990	3.419407	47.67	8.055506	0	
991	N991	3.4	47.67	8.5	0	
992	N992	3.419407	47.67	8.944494	0	
993	N993	3.47748	47.67	9.385606	0	
994	N994	3.573778	47.67	9.819977	0	
995	N995	3.707568	47.67	10.244303	0	
996	N996	3.87783	47.67	10.655353	0	
997	N997	4.08327	47.67	11.05	0	
998	N998	4.322325	47.67	11.42524	0	
999	N999	4.593173	47.67	11.778217	0	
1000	N1000	4.893755	47.67	12.106245	0	
1001	N1001	5.221783	47.67	12.406827	0	
1002	N1002	5.57476	47.67	12.677675	0	
1003	N1003	5.95	47.67	12.91673	0	
1004	N1004	6.344647	47.67	13.12217	0	
1005	N1005	6.755697	47.67	13.292432	0	
1006	N1006	7.180023	47.67	13.426222	0	
1007	N1007	7.614394	47.67	13.52252	0	
1008	N1008	8.055506	47.67	13.580593	0	
1009	N1009	8.5	47.67	15.3	0	
1010	N1010	9.092659	47.67	15.274124	0	
1011	N1011	9.680808	47.67	15.196693	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1012	N1012	10.25997	47.67	15.068296	0	
1013	N1013	10.825737	47.67	14.88991	0	
1014	N1014	11.373804	47.67	14.662893	0	
1015	N1015	11.9	47.67	14.388973	0	
1016	N1016	12.40032	47.67	14.070234	0	
1017	N1017	12.870956	47.67	13.709102	0	
1018	N1018	13.308326	47.67	13.308326	0	
1019	N1019	13.709102	47.67	12.870956	0	
1020	N1020	14.070234	47.67	12.40032	0	
1021	N1021	14.388973	47.67	11.9	0	
1022	N1022	14.662893	47.67	11.373804	0	
1023	N1023	14.88991	47.67	10.825737	0	
1024	N1024	15.068296	47.67	10.25997	0	
1025	N1025	15.196693	47.67	9.680808	0	
1026	N1026	15.274124	47.67	9.092659	0	
1027	N1027	15.3	47.67	8.5	0	
1028	N1028	15.274124	47.67	7.907341	0	
1029	N1029	15.196693	47.67	7.319192	0	
1030	N1030	15.068296	47.67	6.74003	0	
1031	N1031	14.88991	47.67	6.174263	0	
1032	N1032	14.662893	47.67	5.626196	0	
1033	N1033	14.388973	47.67	5.1	0	
1034	N1034	14.070234	47.67	4.59968	0	
1035	N1035	13.709102	47.67	4.129044	0	
1036	N1036	13.308326	47.67	3.691674	0	
1037	N1037	12.870956	47.67	3.290898	0	
1038	N1038	12.40032	47.67	2.929766	0	
1039	N1039	11.9	47.67	2.611027	0	
1040	N1040	11.373804	47.67	2.337107	0	
1041	N1041	10.825737	47.67	2.11009	0	
1042	N1042	10.25997	47.67	1.931704	0	
1043	N1043	9.680808	47.67	1.803307	0	
1044	N1044	9.092659	47.67	1.725876	0	
1045	N1045	8.5	47.67	1.7	0	
1046	N1046	7.907341	47.67	1.725876	0	
1047	N1047	7.319192	47.67	1.803307	0	
1048	N1048	6.74003	47.67	1.931704	0	
1049	N1049	6.174263	47.67	2.11009	0	
1050	N1050	5.626196	47.67	2.337107	0	
1051	N1051	5.1	47.67	2.611027	0	
1052	N1052	4.59968	47.67	2.929766	0	
1053	N1053	4.129044	47.67	3.290898	0	
1054	N1054	3.691674	47.67	3.691674	0	
1055	N1055	3.290898	47.67	4.129044	0	
1056	N1056	2.929766	47.67	4.59968	0	
1057	N1057	2.611027	47.67	5.1	0	
1058	N1058	2.337107	47.67	5.626196	0	
1059	N1059	2.11009	47.67	6.174263	0	
1060	N1060	1.931704	47.67	6.74003	0	
1061	N1061	1.803307	47.67	7.319192	0	
1062	N1062	1.725876	47.67	7.907341	0	
1063	N1063	1.7	47.67	8.5	0	
1064	N1064	1.725876	47.67	9.092659	0	
1065	N1065	1.803307	47.67	9.680808	0	
1066	N1066	1.931704	47.67	10.25997	0	
1067	N1067	2.11009	47.67	10.825737	0	
1068	N1068	2.337107	47.67	11.373804	0	



Company : Verizon
Designer : B. Davies
Job Number : 370624 - 66728021
Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1069	N1069	2.611027	47.67	11.9	0	
1070	N1070	2.929766	47.67	12.40032	0	
1071	N1071	3.290898	47.67	12.870956	0	
1072	N1072	3.691674	47.67	13.308326	0	
1073	N1073	4.129044	47.67	13.709102	0	
1074	N1074	4.59968	47.67	14.070234	0	
1075	N1075	5.1	47.67	14.388973	0	
1076	N1076	5.626196	47.67	14.662893	0	
1077	N1077	6.174263	47.67	14.88991	0	
1078	N1078	6.74003	47.67	15.068296	0	
1079	N1079	7.319192	47.67	15.196693	0	
1080	N1080	7.907341	47.67	15.274124	0	
1081	N1081	9.35	47.67	7.65	0	
1082	N1082	9.35	47.67	7.744444	0	
1083	N1083	9.35	47.67	7.838889	0	
1084	N1084	9.35	47.67	7.933333	0	
1085	N1085	9.35	47.67	8.027778	0	
1086	N1086	9.35	47.67	8.122222	0	
1087	N1087	9.35	47.67	8.216667	0	
1088	N1088	9.35	47.67	8.311111	0	
1089	N1089	9.35	47.67	8.405556	0	
1090	N1090	9.35	47.67	8.5	0	
1091	N1091	9.35	47.67	8.594444	0	
1092	N1092	9.35	47.67	8.688889	0	
1093	N1093	9.35	47.67	8.783333	0	
1094	N1094	9.35	47.67	8.877778	0	
1095	N1095	9.35	47.67	8.972222	0	
1096	N1096	9.35	47.67	9.066667	0	
1097	N1097	9.35	47.67	9.161111	0	
1098	N1098	9.35	47.67	9.255556	0	
1099	N1099	9.35	47.67	9.35	0	
1100	N1100	9.255556	47.67	7.65	0	
1101	N1101	9.255556	47.67	7.744444	0	
1102	N1102	9.255556	47.67	7.838889	0	
1103	N1103	9.255556	47.67	7.933333	0	
1104	N1104	9.255556	47.67	8.027778	0	
1105	N1105	9.255556	47.67	8.122222	0	
1106	N1106	9.255556	47.67	8.216667	0	
1107	N1107	9.255556	47.67	8.311111	0	
1108	N1108	9.255556	47.67	8.405556	0	
1109	N1109	9.255556	47.67	8.5	0	
1110	N1110	9.255556	47.67	8.594444	0	
1111	N1111	9.255556	47.67	8.688889	0	
1112	N1112	9.255556	47.67	8.783333	0	
1113	N1113	9.255556	47.67	8.877778	0	
1114	N1114	9.255556	47.67	8.972222	0	
1115	N1115	9.255556	47.67	9.066667	0	
1116	N1116	9.255556	47.67	9.161111	0	
1117	N1117	9.255556	47.67	9.255556	0	
1118	N1118	9.255556	47.67	9.35	0	
1119	N1119	9.161111	47.67	7.65	0	
1120	N1120	9.161111	47.67	7.744444	0	
1121	N1121	9.161111	47.67	7.838889	0	
1122	N1122	9.161111	47.67	7.933333	0	
1123	N1123	9.161111	47.67	8.027778	0	
1124	N1124	9.161111	47.67	8.122222	0	
1125	N1125	9.161111	47.67	8.216667	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1126	N1126	9.161111	47.67	8.311111	0	
1127	N1127	9.161111	47.67	8.405556	0	
1128	N1128	9.161111	47.67	8.5	0	
1129	N1129	9.161111	47.67	8.594444	0	
1130	N1130	9.161111	47.67	8.688889	0	
1131	N1131	9.161111	47.67	8.783333	0	
1132	N1132	9.161111	47.67	8.877778	0	
1133	N1133	9.161111	47.67	8.972222	0	
1134	N1134	9.161111	47.67	9.066667	0	
1135	N1135	9.161111	47.67	9.161111	0	
1136	N1136	9.161111	47.67	9.255556	0	
1137	N1137	9.161111	47.67	9.35	0	
1138	N1138	9.066667	47.67	7.65	0	
1139	N1139	9.066667	47.67	7.744444	0	
1140	N1140	9.066667	47.67	7.838889	0	
1141	N1141	9.066667	47.67	7.933333	0	
1142	N1142	9.066667	47.67	8.027778	0	
1143	N1143	9.066667	47.67	8.122222	0	
1144	N1144	9.066667	47.67	8.216667	0	
1145	N1145	9.066667	47.67	8.311111	0	
1146	N1146	9.066667	47.67	8.405556	0	
1147	N1147	9.066667	47.67	8.5	0	
1148	N1148	9.066667	47.67	8.594444	0	
1149	N1149	9.066667	47.67	8.688889	0	
1150	N1150	9.066667	47.67	8.783333	0	
1151	N1151	9.066667	47.67	8.877778	0	
1152	N1152	9.066667	47.67	8.972222	0	
1153	N1153	9.066667	47.67	9.066667	0	
1154	N1154	9.066667	47.67	9.161111	0	
1155	N1155	9.066667	47.67	9.255556	0	
1156	N1156	9.066667	47.67	9.35	0	
1157	N1157	8.972222	47.67	7.65	0	
1158	N1158	8.972222	47.67	7.744444	0	
1159	N1159	8.972222	47.67	7.838889	0	
1160	N1160	8.972222	47.67	7.933333	0	
1161	N1161	8.972222	47.67	8.027778	0	
1162	N1162	8.972222	47.67	8.122222	0	
1163	N1163	8.972222	47.67	8.216667	0	
1164	N1164	8.972222	47.67	8.311111	0	
1165	N1165	8.972222	47.67	8.405556	0	
1166	N1166	8.972222	47.67	8.5	0	
1167	N1167	8.972222	47.67	8.594444	0	
1168	N1168	8.972222	47.67	8.688889	0	
1169	N1169	8.972222	47.67	8.783333	0	
1170	N1170	8.972222	47.67	8.877778	0	
1171	N1171	8.972222	47.67	8.972222	0	
1172	N1172	8.972222	47.67	9.066667	0	
1173	N1173	8.972222	47.67	9.161111	0	
1174	N1174	8.972222	47.67	9.255556	0	
1175	N1175	8.972222	47.67	9.35	0	
1176	N1176	8.877778	47.67	7.65	0	
1177	N1177	8.877778	47.67	7.744444	0	
1178	N1178	8.877778	47.67	7.838889	0	
1179	N1179	8.877778	47.67	7.933333	0	
1180	N1180	8.877778	47.67	8.027778	0	
1181	N1181	8.877778	47.67	8.122222	0	
1182	N1182	8.877778	47.67	8.216667	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1183	N1183	8.877778	47.67	8.311111	0	
1184	N1184	8.877778	47.67	8.405556	0	
1185	N1185	8.877778	47.67	8.5	0	
1186	N1186	8.877778	47.67	8.594444	0	
1187	N1187	8.877778	47.67	8.688889	0	
1188	N1188	8.877778	47.67	8.783333	0	
1189	N1189	8.877778	47.67	8.877778	0	
1190	N1190	8.877778	47.67	8.972222	0	
1191	N1191	8.877778	47.67	9.066667	0	
1192	N1192	8.877778	47.67	9.161111	0	
1193	N1193	8.877778	47.67	9.255556	0	
1194	N1194	8.877778	47.67	9.35	0	
1195	N1195	8.783333	47.67	7.65	0	
1196	N1196	8.783333	47.67	7.744444	0	
1197	N1197	8.783333	47.67	7.838889	0	
1198	N1198	8.783333	47.67	7.933333	0	
1199	N1199	8.783333	47.67	8.027778	0	
1200	N1200	8.783333	47.67	8.122222	0	
1201	N1201	8.783333	47.67	8.216667	0	
1202	N1202	8.783333	47.67	8.311111	0	
1203	N1203	8.783333	47.67	8.405556	0	
1204	N1204	8.783333	47.67	8.5	0	
1205	N1205	8.783333	47.67	8.594444	0	
1206	N1206	8.783333	47.67	8.688889	0	
1207	N1207	8.783333	47.67	8.783333	0	
1208	N1208	8.783333	47.67	8.877778	0	
1209	N1209	8.783333	47.67	8.972222	0	
1210	N1210	8.783333	47.67	9.066667	0	
1211	N1211	8.783333	47.67	9.161111	0	
1212	N1212	8.783333	47.67	9.255556	0	
1213	N1213	8.783333	47.67	9.35	0	
1214	N1214	8.688889	47.67	7.65	0	
1215	N1215	8.688889	47.67	7.744444	0	
1216	N1216	8.688889	47.67	7.838889	0	
1217	N1217	8.688889	47.67	7.933333	0	
1218	N1218	8.688889	47.67	8.027778	0	
1219	N1219	8.688889	47.67	8.122222	0	
1220	N1220	8.688889	47.67	8.216667	0	
1221	N1221	8.688889	47.67	8.311111	0	
1222	N1222	8.688889	47.67	8.405556	0	
1223	N1223	8.688889	47.67	8.5	0	
1224	N1224	8.688889	47.67	8.594444	0	
1225	N1225	8.688889	47.67	8.688889	0	
1226	N1226	8.688889	47.67	8.783333	0	
1227	N1227	8.688889	47.67	8.877778	0	
1228	N1228	8.688889	47.67	8.972222	0	
1229	N1229	8.688889	47.67	9.066667	0	
1230	N1230	8.688889	47.67	9.161111	0	
1231	N1231	8.688889	47.67	9.255556	0	
1232	N1232	8.688889	47.67	9.35	0	
1233	N1233	8.594444	47.67	7.65	0	
1234	N1234	8.594444	47.67	7.744444	0	
1235	N1235	8.594444	47.67	7.838889	0	
1236	N1236	8.594444	47.67	7.933333	0	
1237	N1237	8.594444	47.67	8.027778	0	
1238	N1238	8.594444	47.67	8.122222	0	
1239	N1239	8.594444	47.67	8.216667	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1240	N1240	8.594444	47.67	8.311111	0	
1241	N1241	8.594444	47.67	8.405556	0	
1242	N1242	8.594444	47.67	8.5	0	
1243	N1243	8.594444	47.67	8.594444	0	
1244	N1244	8.594444	47.67	8.688889	0	
1245	N1245	8.594444	47.67	8.783333	0	
1246	N1246	8.594444	47.67	8.877778	0	
1247	N1247	8.594444	47.67	8.972222	0	
1248	N1248	8.594444	47.67	9.066667	0	
1249	N1249	8.594444	47.67	9.161111	0	
1250	N1250	8.594444	47.67	9.255556	0	
1251	N1251	8.594444	47.67	9.35	0	
1252	N1252	8.5	47.67	7.65	0	
1253	N1253	8.5	47.67	7.744444	0	
1254	N1254	8.5	47.67	7.838889	0	
1255	N1255	8.5	47.67	7.933333	0	
1256	N1256	8.5	47.67	8.027778	0	
1257	N1257	8.5	47.67	8.122222	0	
1258	N1258	8.5	47.67	8.216667	0	
1259	N1259	8.5	47.67	8.311111	0	
1260	N1260	8.5	47.67	8.405556	0	
1261	N1261	8.5	47.67	8.5	0	
1262	N1262	8.5	47.67	8.594444	0	
1263	N1263	8.5	47.67	8.688889	0	
1264	N1264	8.5	47.67	8.783333	0	
1265	N1265	8.5	47.67	8.877778	0	
1266	N1266	8.5	47.67	8.972222	0	
1267	N1267	8.5	47.67	9.066667	0	
1268	N1268	8.5	47.67	9.161111	0	
1269	N1269	8.5	47.67	9.255556	0	
1270	N1270	8.5	47.67	9.35	0	
1271	N1271	8.405556	47.67	7.65	0	
1272	N1272	8.405556	47.67	7.744444	0	
1273	N1273	8.405556	47.67	7.838889	0	
1274	N1274	8.405556	47.67	7.933333	0	
1275	N1275	8.405556	47.67	8.027778	0	
1276	N1276	8.405556	47.67	8.122222	0	
1277	N1277	8.405556	47.67	8.216667	0	
1278	N1278	8.405556	47.67	8.311111	0	
1279	N1279	8.405556	47.67	8.405556	0	
1280	N1280	8.405556	47.67	8.5	0	
1281	N1281	8.405556	47.67	8.594444	0	
1282	N1282	8.405556	47.67	8.688889	0	
1283	N1283	8.405556	47.67	8.783333	0	
1284	N1284	8.405556	47.67	8.877778	0	
1285	N1285	8.405556	47.67	8.972222	0	
1286	N1286	8.405556	47.67	9.066667	0	
1287	N1287	8.405556	47.67	9.161111	0	
1288	N1288	8.405556	47.67	9.255556	0	
1289	N1289	8.405556	47.67	9.35	0	
1290	N1290	8.311111	47.67	7.65	0	
1291	N1291	8.311111	47.67	7.744444	0	
1292	N1292	8.311111	47.67	7.838889	0	
1293	N1293	8.311111	47.67	7.933333	0	
1294	N1294	8.311111	47.67	8.027778	0	
1295	N1295	8.311111	47.67	8.122222	0	
1296	N1296	8.311111	47.67	8.216667	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1297	N1297	8.311111	47.67	8.311111	0	
1298	N1298	8.311111	47.67	8.405556	0	
1299	N1299	8.311111	47.67	8.5	0	
1300	N1300	8.311111	47.67	8.594444	0	
1301	N1301	8.311111	47.67	8.688889	0	
1302	N1302	8.311111	47.67	8.783333	0	
1303	N1303	8.311111	47.67	8.877778	0	
1304	N1304	8.311111	47.67	8.972222	0	
1305	N1305	8.311111	47.67	9.066667	0	
1306	N1306	8.311111	47.67	9.161111	0	
1307	N1307	8.311111	47.67	9.255556	0	
1308	N1308	8.311111	47.67	9.35	0	
1309	N1309	8.216667	47.67	7.65	0	
1310	N1310	8.216667	47.67	7.744444	0	
1311	N1311	8.216667	47.67	7.838889	0	
1312	N1312	8.216667	47.67	7.933333	0	
1313	N1313	8.216667	47.67	8.027778	0	
1314	N1314	8.216667	47.67	8.122222	0	
1315	N1315	8.216667	47.67	8.216667	0	
1316	N1316	8.216667	47.67	8.311111	0	
1317	N1317	8.216667	47.67	8.405556	0	
1318	N1318	8.216667	47.67	8.5	0	
1319	N1319	8.216667	47.67	8.594444	0	
1320	N1320	8.216667	47.67	8.688889	0	
1321	N1321	8.216667	47.67	8.783333	0	
1322	N1322	8.216667	47.67	8.877778	0	
1323	N1323	8.216667	47.67	8.972222	0	
1324	N1324	8.216667	47.67	9.066667	0	
1325	N1325	8.216667	47.67	9.161111	0	
1326	N1326	8.216667	47.67	9.255556	0	
1327	N1327	8.216667	47.67	9.35	0	
1328	N1328	8.122222	47.67	7.65	0	
1329	N1329	8.122222	47.67	7.744444	0	
1330	N1330	8.122222	47.67	7.838889	0	
1331	N1331	8.122222	47.67	7.933333	0	
1332	N1332	8.122222	47.67	8.027778	0	
1333	N1333	8.122222	47.67	8.122222	0	
1334	N1334	8.122222	47.67	8.216667	0	
1335	N1335	8.122222	47.67	8.311111	0	
1336	N1336	8.122222	47.67	8.405556	0	
1337	N1337	8.122222	47.67	8.5	0	
1338	N1338	8.122222	47.67	8.594444	0	
1339	N1339	8.122222	47.67	8.688889	0	
1340	N1340	8.122222	47.67	8.783333	0	
1341	N1341	8.122222	47.67	8.877778	0	
1342	N1342	8.122222	47.67	8.972222	0	
1343	N1343	8.122222	47.67	9.066667	0	
1344	N1344	8.122222	47.67	9.161111	0	
1345	N1345	8.122222	47.67	9.255556	0	
1346	N1346	8.122222	47.67	9.35	0	
1347	N1347	8.027778	47.67	7.65	0	
1348	N1348	8.027778	47.67	7.744444	0	
1349	N1349	8.027778	47.67	7.838889	0	
1350	N1350	8.027778	47.67	7.933333	0	
1351	N1351	8.027778	47.67	8.027778	0	
1352	N1352	8.027778	47.67	8.122222	0	
1353	N1353	8.027778	47.67	8.216667	0	



Company : Verizon
Designer : B. Davies
Job Number : 370624 - 66728021
Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1354	N1354	8.027778	47.67	8.311111	0	
1355	N1355	8.027778	47.67	8.405556	0	
1356	N1356	8.027778	47.67	8.5	0	
1357	N1357	8.027778	47.67	8.594444	0	
1358	N1358	8.027778	47.67	8.688889	0	
1359	N1359	8.027778	47.67	8.783333	0	
1360	N1360	8.027778	47.67	8.877778	0	
1361	N1361	8.027778	47.67	8.972222	0	
1362	N1362	8.027778	47.67	9.066667	0	
1363	N1363	8.027778	47.67	9.161111	0	
1364	N1364	8.027778	47.67	9.255556	0	
1365	N1365	8.027778	47.67	9.35	0	
1366	N1366	7.933333	47.67	7.65	0	
1367	N1367	7.933333	47.67	7.744444	0	
1368	N1368	7.933333	47.67	7.838889	0	
1369	N1369	7.933333	47.67	7.933333	0	
1370	N1370	7.933333	47.67	8.027778	0	
1371	N1371	7.933333	47.67	8.122222	0	
1372	N1372	7.933333	47.67	8.216667	0	
1373	N1373	7.933333	47.67	8.311111	0	
1374	N1374	7.933333	47.67	8.405556	0	
1375	N1375	7.933333	47.67	8.5	0	
1376	N1376	7.933333	47.67	8.594444	0	
1377	N1377	7.933333	47.67	8.688889	0	
1378	N1378	7.933333	47.67	8.783333	0	
1379	N1379	7.933333	47.67	8.877778	0	
1380	N1380	7.933333	47.67	8.972222	0	
1381	N1381	7.933333	47.67	9.066667	0	
1382	N1382	7.933333	47.67	9.161111	0	
1383	N1383	7.933333	47.67	9.255556	0	
1384	N1384	7.933333	47.67	9.35	0	
1385	N1385	7.838889	47.67	7.65	0	
1386	N1386	7.838889	47.67	7.744444	0	
1387	N1387	7.838889	47.67	7.838889	0	
1388	N1388	7.838889	47.67	7.933333	0	
1389	N1389	7.838889	47.67	8.027778	0	
1390	N1390	7.838889	47.67	8.122222	0	
1391	N1391	7.838889	47.67	8.216667	0	
1392	N1392	7.838889	47.67	8.311111	0	
1393	N1393	7.838889	47.67	8.405556	0	
1394	N1394	7.838889	47.67	8.5	0	
1395	N1395	7.838889	47.67	8.594444	0	
1396	N1396	7.838889	47.67	8.688889	0	
1397	N1397	7.838889	47.67	8.783333	0	
1398	N1398	7.838889	47.67	8.877778	0	
1399	N1399	7.838889	47.67	8.972222	0	
1400	N1400	7.838889	47.67	9.066667	0	
1401	N1401	7.838889	47.67	9.161111	0	
1402	N1402	7.838889	47.67	9.255556	0	
1403	N1403	7.838889	47.67	9.35	0	
1404	N1404	7.744444	47.67	7.65	0	
1405	N1405	7.744444	47.67	7.744444	0	
1406	N1406	7.744444	47.67	7.838889	0	
1407	N1407	7.744444	47.67	7.933333	0	
1408	N1408	7.744444	47.67	8.027778	0	
1409	N1409	7.744444	47.67	8.122222	0	
1410	N1410	7.744444	47.67	8.216667	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1411	N1411	7.744444	47.67	8.311111	0	
1412	N1412	7.744444	47.67	8.405556	0	
1413	N1413	7.744444	47.67	8.5	0	
1414	N1414	7.744444	47.67	8.594444	0	
1415	N1415	7.744444	47.67	8.688889	0	
1416	N1416	7.744444	47.67	8.783333	0	
1417	N1417	7.744444	47.67	8.877778	0	
1418	N1418	7.744444	47.67	8.972222	0	
1419	N1419	7.744444	47.67	9.066667	0	
1420	N1420	7.744444	47.67	9.161111	0	
1421	N1421	7.744444	47.67	9.255556	0	
1422	N1422	7.744444	47.67	9.35	0	
1423	N1423	7.65	47.67	7.65	0	
1424	N1424	7.65	47.67	7.744444	0	
1425	N1425	7.65	47.67	7.838889	0	
1426	N1426	7.65	47.67	7.933333	0	
1427	N1427	7.65	47.67	8.027778	0	
1428	N1428	7.65	47.67	8.122222	0	
1429	N1429	7.65	47.67	8.216667	0	
1430	N1430	7.65	47.67	8.311111	0	
1431	N1431	7.65	47.67	8.405556	0	
1432	N1432	7.65	47.67	8.5	0	
1433	N1433	7.65	47.67	8.594444	0	
1434	N1434	7.65	47.67	8.688889	0	
1435	N1435	7.65	47.67	8.783333	0	
1436	N1436	7.65	47.67	8.877778	0	
1437	N1437	7.65	47.67	8.972222	0	
1438	N1438	7.65	47.67	9.066667	0	
1439	N1439	7.65	47.67	9.161111	0	
1440	N1440	7.65	47.67	9.255556	0	
1441	N1441	7.65	47.67	9.35	0	
1442	N1442	16.487387	48.2175	11.407171	0	
1443	N1443	16.487387	48.2175	5.592829	0	
1444	N1444	7.02399	48.2175	0.129134	0	
1445	N1445	1.988622	48.2175	3.036305	0	
1446	N1446	1.988622	48.2175	13.963695	0	
1447	N1447	7.02399	48.2175	16.870866	0	
1448	N1448	1.988622	48.2175	8.5	0	
1449	N1449	11.755689	48.2175	2.860981	0	
1450	N1450	11.755689	48.2175	14.139019	0	
1451	N1451	0.607622	47.67	8.5	0	
1452	N1452	12.446189	47.67	15.335	0	
1453	N1453	12.446189	47.67	1.665	0	
1454	N1454	0.607622	48.472083	8.5	0	
1455	N1455	12.446189	48.472083	15.335	0	
1456	N1456	12.446189	48.472083	1.665	0	
1457	N1457	1.988622	48.472083	8.5	0	
1458	N1458	11.755689	48.472083	2.860981	0	
1459	N1459	11.755689	48.472083	14.139019	0	
1460	N1460	0.607622	52.26375	8.5	0	
1461	N1461	12.446189	52.26375	15.335	0	
1462	N1462	12.446189	52.26375	1.665	0	
1463	N1463	1.988622	52.26375	8.5	0	
1464	N1464	11.755689	52.26375	2.860981	0	
1465	N1465	11.755689	52.26375	14.139019	0	
1466	N1466	1.988622	54.57625	8.5	0	
1467	N1467	11.755689	54.57625	2.860981	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1468	N1468	11.755689	54.57625	14.139019	0	
1469	N1469	1.988622	59.57625	8.5	0	
1470	N1470	11.755689	59.57625	2.860981	0	
1471	N1471	11.755689	59.57625	14.139019	0	
1472	N1472	1.988622	62.295	8.5	0	
1473	N1473	11.755689	62.295	2.860981	0	
1474	N1474	11.755689	62.295	14.139019	0	
1475	N1475	11.755689	48.408437	14.139019	0	
1476	N1476	2.854648	54.57625	9.	0	
1477	N1477	6.751762	54.57625	11.25	0	
1478	N1478	10.648876	54.57625	13.5	0	
1479	N1479	11.755689	54.57625	13.139019	0	
1480	N1480	11.755689	54.57625	8.639019	0	
1481	N1481	11.755689	54.57625	4.139019	0	
1482	N1482	10.889663	54.57625	3.360981	0	
1483	N1483	6.992549	54.57625	5.610981	0	
1484	N1484	3.095435	54.57625	7.860981	0	
1485	N1485	2.854648	59.57625	9.	0	
1486	N1486	6.751762	59.57625	11.25	0	
1487	N1487	10.648876	59.57625	13.5	0	
1488	N1488	11.755689	59.57625	13.139019	0	
1489	N1489	11.755689	59.57625	8.639019	0	
1490	N1490	11.755689	59.57625	4.139019	0	
1491	N1491	10.889663	59.57625	3.360981	0	
1492	N1492	6.992549	59.57625	5.610981	0	
1493	N1493	3.095435	59.57625	7.860981	0	
1494	N1494	17	52.26375	8.5	0	
1495	N1495	4.25	52.26375	1.138784	0	
1496	N1496	4.25	52.26375	15.861216	0	
1497	N1497	8.5	52.26375	17	0	
1498	N1498	9.240824	52.26375	16.967655	0	
1499	N1499	9.97601	52.26375	16.870866	0	
1500	N1500	10.699962	52.26375	16.71037	0	
1501	N1501	11.407171	52.26375	16.487387	0	
1502	N1502	12.092255	52.26375	16.203616	0	
1503	N1503	12.75	52.26375	15.861216	0	
1504	N1504	13.3754	52.26375	15.462792	0	
1505	N1505	13.963695	52.26375	15.011378	0	
1506	N1506	14.510408	52.26375	14.510408	0	
1507	N1507	15.011378	52.26375	13.963695	0	
1508	N1508	15.462792	52.26375	13.3754	0	
1509	N1509	15.861216	52.26375	12.75	0	
1510	N1510	16.203616	52.26375	12.092255	0	
1511	N1511	16.487387	52.26375	11.407171	0	
1512	N1512	16.71037	52.26375	10.699962	0	
1513	N1513	16.870866	52.26375	9.97601	0	
1514	N1514	16.967655	52.26375	9.240824	0	
1515	N1515	16.967655	52.26375	7.759176	0	
1516	N1516	16.870866	52.26375	7.02399	0	
1517	N1517	16.71037	52.26375	6.300038	0	
1518	N1518	16.487387	52.26375	5.592829	0	
1519	N1519	16.203616	52.26375	4.907745	0	
1520	N1520	15.861216	52.26375	4.25	0	
1521	N1521	15.462792	52.26375	3.6246	0	
1522	N1522	15.011378	52.26375	3.036305	0	
1523	N1523	14.510408	52.26375	2.489592	0	
1524	N1524	13.963695	52.26375	1.988622	0	



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1525	N1525	13.3754	52.26375	1.537208	0	
1526	N1526	12.75	52.26375	1.138784	0	
1527	N1527	12.092255	52.26375	0.796384	0	
1528	N1528	11.407171	52.26375	0.512613	0	
1529	N1529	10.699962	52.26375	0.28963	0	
1530	N1530	9.97601	52.26375	0.129134	0	
1531	N1531	9.240824	52.26375	0.032345	0	
1532	N1532	8.5	52.26375	0	0	
1533	N1533	7.759176	52.26375	0.032345	0	
1534	N1534	7.02399	52.26375	0.129134	0	
1535	N1535	6.300038	52.26375	0.28963	0	
1536	N1536	5.592829	52.26375	0.512613	0	
1537	N1537	4.907745	52.26375	0.796384	0	
1538	N1538	3.6246	52.26375	1.537208	0	
1539	N1539	3.036305	52.26375	1.988622	0	
1540	N1540	2.489592	52.26375	2.489592	0	
1541	N1541	1.988622	52.26375	3.036305	0	
1542	N1542	1.537208	52.26375	3.6246	0	
1543	N1543	1.138784	52.26375	4.25	0	
1544	N1544	0.796384	52.26375	4.907745	0	
1545	N1545	0.512613	52.26375	5.592829	0	
1546	N1546	0.28963	52.26375	6.300038	0	
1547	N1547	0.129134	52.26375	7.02399	0	
1548	N1548	0.032345	52.26375	7.759176	0	
1549	N1549	0	52.26375	8.5	0	
1550	N1550	0.032345	52.26375	9.240824	0	
1551	N1551	0.129134	52.26375	9.97601	0	
1552	N1552	0.28963	52.26375	10.699962	0	
1553	N1553	0.512613	52.26375	11.407171	0	
1554	N1554	0.796384	52.26375	12.092255	0	
1555	N1555	1.138784	52.26375	12.75	0	
1556	N1556	1.537208	52.26375	13.3754	0	
1557	N1557	1.988622	52.26375	13.963695	0	
1558	N1558	2.489592	52.26375	14.510408	0	
1559	N1559	3.036305	52.26375	15.011378	0	
1560	N1560	3.6246	52.26375	15.462792	0	
1561	N1561	4.907745	52.26375	16.203616	0	
1562	N1562	5.592829	52.26375	16.487387	0	
1563	N1563	6.300038	52.26375	16.71037	0	
1564	N1564	7.02399	52.26375	16.870866	0	
1565	N1565	7.759176	52.26375	16.967655	0	
1566	N1566	17	62.295	8.5	0	
1567	N1567	4.25	62.295	1.138784	0	
1568	N1568	4.25	62.295	15.861216	0	
1569	N1569	8.5	62.295	17	0	
1570	N1570	9.240824	62.295	16.967655	0	
1571	N1571	9.97601	62.295	16.870866	0	
1572	N1572	10.699962	62.295	16.71037	0	
1573	N1573	11.407171	62.295	16.487387	0	
1574	N1574	12.092255	62.295	16.203616	0	
1575	N1575	12.75	62.295	15.861216	0	
1576	N1576	13.3754	62.295	15.462792	0	
1577	N1577	13.963695	62.295	15.011378	0	
1578	N1578	14.510408	62.295	14.510408	0	
1579	N1579	15.011378	62.295	13.963695	0	
1580	N1580	15.462792	62.295	13.3754	0	
1581	N1581	15.861216	62.295	12.75	0	



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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1582	N1582	16.203616	62.295	12.092255	0	
1583	N1583	16.487387	62.295	11.407171	0	
1584	N1584	16.71037	62.295	10.699962	0	
1585	N1585	16.870866	62.295	9.97601	0	
1586	N1586	16.967655	62.295	9.240824	0	
1587	N1587	16.967655	62.295	7.759176	0	
1588	N1588	16.870866	62.295	7.02399	0	
1589	N1589	16.71037	62.295	6.300038	0	
1590	N1590	16.487387	62.295	5.592829	0	
1591	N1591	16.203616	62.295	4.907745	0	
1592	N1592	15.861216	62.295	4.25	0	
1593	N1593	15.462792	62.295	3.6246	0	
1594	N1594	15.011378	62.295	3.036305	0	
1595	N1595	14.510408	62.295	2.489592	0	
1596	N1596	13.963695	62.295	1.988622	0	
1597	N1597	13.3754	62.295	1.537208	0	
1598	N1598	12.75	62.295	1.138784	0	
1599	N1599	12.092255	62.295	0.796384	0	
1600	N1600	11.407171	62.295	0.512613	0	
1601	N1601	10.699962	62.295	0.28963	0	
1602	N1602	9.97601	62.295	0.129134	0	
1603	N1603	9.240824	62.295	0.032345	0	
1604	N1604	8.5	62.295	0	0	
1605	N1605	7.759176	62.295	0.032345	0	
1606	N1606	7.02399	62.295	0.129134	0	
1607	N1607	6.300038	62.295	0.28963	0	
1608	N1608	5.592829	62.295	0.512613	0	
1609	N1609	4.907745	62.295	0.796384	0	
1610	N1610	3.6246	62.295	1.537208	0	
1611	N1611	3.036305	62.295	1.988622	0	
1612	N1612	2.489592	62.295	2.489592	0	
1613	N1613	1.988622	62.295	3.036305	0	
1614	N1614	1.537208	62.295	3.6246	0	
1615	N1615	1.138784	62.295	4.25	0	
1616	N1616	0.796384	62.295	4.907745	0	
1617	N1617	0.512613	62.295	5.592829	0	
1618	N1618	0.28963	62.295	6.300038	0	
1619	N1619	0.129134	62.295	7.02399	0	
1620	N1620	0.032345	62.295	7.759176	0	
1621	N1621	0	62.295	8.5	0	
1622	N1622	0.032345	62.295	9.240824	0	
1623	N1623	0.129134	62.295	9.97601	0	
1624	N1624	0.28963	62.295	10.699962	0	
1625	N1625	0.512613	62.295	11.407171	0	
1626	N1626	0.796384	62.295	12.092255	0	
1627	N1627	1.138784	62.295	12.75	0	
1628	N1628	1.537208	62.295	13.3754	0	
1629	N1629	1.988622	62.295	13.963695	0	
1630	N1630	2.489592	62.295	14.510408	0	
1631	N1631	3.036305	62.295	15.011378	0	
1632	N1632	3.6246	62.295	15.462792	0	
1633	N1633	4.907745	62.295	16.203616	0	
1634	N1634	5.592829	62.295	16.487387	0	
1635	N1635	6.300038	62.295	16.71037	0	
1636	N1636	7.02399	62.295	16.870866	0	
1637	N1637	7.759176	62.295	16.967655	0	
1638	N1638	1.988622	64.836667	8.5	0	



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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1639	N1639	11.755689	64.836667	2.860981	0	
1640	N1640	11.755689	64.836667	14.139019	0	
1641	N1641	1.988622	69.503333	8.5	0	
1642	N1642	11.755689	69.503333	2.860981	0	
1643	N1643	11.755689	69.503333	14.139019	0	
1644	N1644	1.988622	72.545	8.5	0	
1645	N1645	11.755689	72.545	2.860981	0	
1646	N1646	11.755689	72.545	14.139019	0	
1647	N1647	2.854648	64.836667	9.	0	
1648	N1648	6.751762	64.836667	11.25	0	
1649	N1649	10.648876	64.836667	13.5	0	
1650	N1650	11.755689	64.836667	13.139019	0	
1651	N1651	11.755689	64.836667	8.639019	0	
1652	N1652	11.755689	64.836667	4.139019	0	
1653	N1653	10.889663	64.836667	3.360981	0	
1654	N1654	6.992549	64.836667	5.610981	0	
1655	N1655	3.095435	64.836667	7.860981	0	
1656	N1656	2.854648	69.503333	9.	0	
1657	N1657	6.751762	69.503333	11.25	0	
1658	N1658	10.648876	69.503333	13.5	0	
1659	N1659	11.755689	69.503333	13.139019	0	
1660	N1660	11.755689	69.503333	8.639019	0	
1661	N1661	11.755689	69.503333	4.139019	0	
1662	N1662	10.889663	69.503333	3.360981	0	
1663	N1663	6.992549	69.503333	5.610981	0	
1664	N1664	3.095435	69.503333	7.860981	0	
1665	N1665	8.5	72.545	8.5	0	
1666	N1666	8.5	72.545	17	0	
1667	N1667	9.240824	72.545	16.967655	0	
1668	N1668	9.97601	72.545	16.870866	0	
1669	N1669	10.699962	72.545	16.71037	0	
1670	N1670	11.407171	72.545	16.487387	0	
1671	N1671	12.092255	72.545	16.203616	0	
1672	N1672	12.75	72.545	15.861216	0	
1673	N1673	13.3754	72.545	15.462792	0	
1674	N1674	13.963695	72.545	15.011378	0	
1675	N1675	14.510408	72.545	14.510408	0	
1676	N1676	15.011378	72.545	13.963695	0	
1677	N1677	15.462792	72.545	13.3754	0	
1678	N1678	15.861216	72.545	12.75	0	
1679	N1679	16.203616	72.545	12.092255	0	
1680	N1680	16.487387	72.545	11.407171	0	
1681	N1681	16.71037	72.545	10.699962	0	
1682	N1682	16.870866	72.545	9.97601	0	
1683	N1683	16.967655	72.545	9.240824	0	
1684	N1684	17	72.545	8.5	0	
1685	N1685	16.967655	72.545	7.759176	0	
1686	N1686	16.870866	72.545	7.02399	0	
1687	N1687	16.71037	72.545	6.300038	0	
1688	N1688	16.487387	72.545	5.592829	0	
1689	N1689	16.203616	72.545	4.907745	0	
1690	N1690	15.861216	72.545	4.25	0	
1691	N1691	15.462792	72.545	3.6246	0	
1692	N1692	15.011378	72.545	3.036305	0	
1693	N1693	14.510408	72.545	2.489592	0	
1694	N1694	13.963695	72.545	1.988622	0	
1695	N1695	13.3754	72.545	1.537208	0	



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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1696	N1696	12.75	72.545	1.138784	0	
1697	N1697	12.092255	72.545	0.796384	0	
1698	N1698	11.407171	72.545	0.512613	0	
1699	N1699	10.699962	72.545	0.28963	0	
1700	N1700	9.97601	72.545	0.129134	0	
1701	N1701	9.240824	72.545	0.032345	0	
1702	N1702	8.5	72.545	0	0	
1703	N1703	7.759176	72.545	0.032345	0	
1704	N1704	7.02399	72.545	0.129134	0	
1705	N1705	6.300038	72.545	0.28963	0	
1706	N1706	5.592829	72.545	0.512613	0	
1707	N1707	4.907745	72.545	0.796384	0	
1708	N1708	4.25	72.545	1.138784	0	
1709	N1709	3.6246	72.545	1.537208	0	
1710	N1710	3.036305	72.545	1.988622	0	
1711	N1711	2.489592	72.545	2.489592	0	
1712	N1712	1.988622	72.545	3.036305	0	
1713	N1713	1.537208	72.545	3.6246	0	
1714	N1714	1.138784	72.545	4.25	0	
1715	N1715	0.796384	72.545	4.907745	0	
1716	N1716	0.512613	72.545	5.592829	0	
1717	N1717	0.28963	72.545	6.300038	0	
1718	N1718	0.129134	72.545	7.02399	0	
1719	N1719	0.032345	72.545	7.759176	0	
1720	N1720	0	72.545	8.5	0	
1721	N1721	0.032345	72.545	9.240824	0	
1722	N1722	0.129134	72.545	9.97601	0	
1723	N1723	0.28963	72.545	10.699962	0	
1724	N1724	0.512613	72.545	11.407171	0	
1725	N1725	0.796384	72.545	12.092255	0	
1726	N1726	1.138784	72.545	12.75	0	
1727	N1727	1.537208	72.545	13.3754	0	
1728	N1728	1.988622	72.545	13.963695	0	
1729	N1729	2.489592	72.545	14.510408	0	
1730	N1730	3.036305	72.545	15.011378	0	
1731	N1731	3.6246	72.545	15.462792	0	
1732	N1732	4.25	72.545	15.861216	0	
1733	N1733	4.907745	72.545	16.203616	0	
1734	N1734	5.592829	72.545	16.487387	0	
1735	N1735	6.300038	72.545	16.711037	0	
1736	N1736	7.02399	72.545	16.870866	0	
1737	N1737	7.759176	72.545	16.967655	0	
1738	N1738	8.5	78	8.5	0	
1739	N1739	8.5	62.295	8.5	0	
1740	N1740	8.5	52.26375	8.5	0	
1741	N1741	8.5	38.136	8.5	0	
1742	N1742	8.5	28.602	8.5	0	
1743	N1743	8.5	19.068	8.5	0	
1744	N1744	8.5	9.534	8.5	0	
1745	N1745	5.95	72.545	8.5	0	
1746	N1746	5.95	62.295	8.5	0	
1747	N1747	5.95	52.26375	8.5	0	
1748	N1748	5.95	47.67	8.5	0	
1749	N1749	5.95	38.136	8.5	0	
1750	N1750	5.95	28.602	8.5	0	
1751	N1751	5.95	19.068	8.5	0	
1752	N1752	5.95	9.534	8.5	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diaphragm
1753	N1753	11.05	72.545	8.5	0	
1754	N1754	11.05	62.295	8.5	0	
1755	N1755	11.05	52.26375	8.5	0	
1756	N1756	11.05	47.67	8.5	0	
1757	N1757	11.05	38.136	8.5	0	
1758	N1758	11.05	28.602	8.5	0	
1759	N1759	11.05	19.068	8.5	0	
1760	N1760	11.05	9.534	8.5	0	
1761	N1761	8.5	72.545	5.95	0	
1762	N1762	8.5	62.295	5.95	0	
1763	N1763	8.5	52.26375	5.95	0	
1764	N1764	8.5	47.67	5.95	0	
1765	N1765	8.5	38.136	5.95	0	
1766	N1766	8.5	28.602	5.95	0	
1767	N1767	8.5	19.068	5.95	0	
1768	N1768	8.5	9.534	5.95	0	
1769	N1769	8.5	72.545	11.05	0	
1770	N1770	8.5	62.295	11.05	0	
1771	N1771	8.5	52.26375	11.05	0	
1772	N1772	8.5	47.67	11.05	0	
1773	N1773	8.5	38.136	11.05	0	
1774	N1774	8.5	28.602	11.05	0	
1775	N1775	8.5	19.068	11.05	0	
1776	N1776	8.5	9.534	11.05	0	

Load Combinations

	Description	Solve	PD...	SRSS	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		DL	1.4												
2	1.2D + 1.6W AZI 000	Yes	Y		DL	1.2	W...	1.6										
3	1.2D + 1.6W AZI 090	Yes	Y		DL	1.2	W...	1.6										

Joint Loads and Enforced Displacements (BLC 1 : Dead)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
1	N1485	L	Y	-234
2	N1486	L	Y	-234
3	N1487	L	Y	-234
4	N1488	L	Y	-234
5	N1489	L	Y	-234
6	N1490	L	Y	-234
7	N1491	L	Y	-234
8	N1492	L	Y	-234
9	N1493	L	Y	-234
10	N1656	L	Y	-167.717
11	N1658	L	Y	-167.717
12	N1659	L	Y	-167.717
13	N1661	L	Y	-167.717
14	N1662	L	Y	-167.717
15	N1664	L	Y	-167.717
16	N1642	L	Y	-2303

Joint Loads and Enforced Displacements (BLC 2 : Wind Load Z)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
1	N1665	L	Z	1557.68



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Joint Loads and Enforced Displacements (BLC 2 : Wind Load Z) (Continued)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
2	N1739	L	Z	3022.257
3	N1740	L	Z	2131.311
4	N1261	L	Z	2035.193
5	N1741	L	Z	2671.958
6	N1742	L	Z	2580.431
7	N1743	L	Z	2460.491
8	N1744	L	Z	2394.184

Joint Loads and Enforced Displacements (BLC 3 : Wind Load X)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
1	N1665	L	X	1557.68
2	N1739	L	X	3022.257
3	N1740	L	X	2131.311
4	N1261	L	X	2035.193
5	N1741	L	X	2671.958
6	N1742	L	X	2580.431
7	N1743	L	X	2460.491
8	N1744	L	X	2394.184

Joint Loads and Enforced Displacements (BLC 4 : Partial Z Wind Load 1)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
1	N1745	L	Z	1168.26
2	N1746	L	Z	2266.693
3	N1747	L	Z	1598.483
4	N1748	L	Z	1526.395
5	N1749	L	Z	2003.968
6	N1750	L	Z	1935.323
7	N1751	L	Z	1845.368
8	N1752	L	Z	1795.638

Joint Loads and Enforced Displacements (BLC 5 : Partial Z Wind Load 2)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
1	N1753	L	Z	1168.26
2	N1754	L	Z	2266.693
3	N1755	L	Z	1598.483
4	N1756	L	Z	1526.395
5	N1757	L	Z	2003.968
6	N1758	L	Z	1935.323
7	N1759	L	Z	1845.368
8	N1760	L	Z	1795.638

Joint Loads and Enforced Displacements (BLC 6 : Partial X Wind Load 1)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
1	N1761	L	X	1168.26
2	N1762	L	X	2266.693
3	N1763	L	X	1598.483
4	N1764	L	X	1526.395
5	N1765	L	X	2003.968
6	N1766	L	X	1935.323
7	N1767	L	X	1845.368
8	N1768	L	X	1795.638

Joint Loads and Enforced Displacements (BLC 7 : Partial X Wind Load 2)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
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 Checked By: A. Tan

Joint Loads and Enforced Displacements (BLC 7 : Partial X Wind Load 2) (Continued)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/ft, lb*s^2*ft)]
1	N1769	L	X	1168.26
2	N1770	L	X	2266.693
3	N1771	L	X	1598.483
4	N1772	L	X	1526.395
5	N1773	L	X	2003.968
6	N1774	L	X	1935.323
7	N1775	L	X	1845.368
8	N1776	L	X	1795.638

Member AISC 13th(360-05): LRFD Steel Code Checks

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
1	1	M7 W8x18	.004	0	.001	2.732	y	103239.568	236700	17.475	63.75	2....	H1-...
2	1	M8 W8x18	.006	0	.002	2.732	y	103239.568	236700	17.475	63.75	2....	H1-...
3	1	M9 W8x18	.028	5.464	.008	2.732	y	103239.568	236700	17.475	63.75	2....	H1-...
4	1	M10 W8x18	.026	0	.008	2.732	y	103239.568	236700	17.475	63.75	2....	H1-...
5	1	M11 W8x18	.010	0	.003	2.732	y	103239.568	236700	17.475	63.75	2....	H1-...
6	1	M12 W8x18	.011	5.464	.003	2.732	y	103239.568	236700	17.475	63.75	2....	H1-...
7	1	M13 HSS5x...	.003	802	.002	0		214085.766	214488	25.92	25.92	1....	H1-...
8	1	M14 HSS5x...	.005	0	.003	0		214447.443	214488	25.92	25.92	2....	H1-...
9	1	M15 HSS5x...	.004	802	.002	0		214085.766	214488	25.92	25.92	1....	H1-...
10	1	M16 HSS5x...	.005	0	.003	.255		214447.443	214488	25.92	25.92	1.3	H1-...
11	1	M17 HSS5x...	.003	802	.002	0		214085.766	214488	25.92	25.92	1....	H1-...
12	1	M18 HSS5x...	.004	0	.003	.191		214447.443	214488	25.92	25.92	1....	H1-...
13	1	M19 HSS5x...	.006	3.792	.002	3.792		205676.885	214488	25.92	25.92	1....	H1-...
14	1	M20 HSS5x...	.019	3.792	.003	3.792		205676.885	214488	25.92	25.92	2....	H1-...
15	1	M21 HSS5x...	.019	0	.005	0		211167.318	214488	25.92	25.92	2....	H1-...
16	1	M22 HSS5x...	.015	3.125	.002	0		199399.559	214488	25.92	25.92	2....	H1-...
17	1	M23 HSS5x...	.038	2.719	.007	2.719		209911.733	214488	25.92	25.92	1....	H1-...
18	1	M24 HSS5x...	.014	3.792	.003	3.792		205676.885	214488	25.92	25.92	1....	H1-...
19	1	M25 HSS5x...	.020	3.792	.003	3.792		205676.885	214488	25.92	25.92	2....	H1-...
20	1	M26 HSS5x...	.020	0	.005	0		211167.318	214488	25.92	25.92	2....	H1-...
21	1	M27 HSS5x...	.013	2.083	.001	5		199399.559	214488	25.92	25.92	2....	H1-...
22	1	M28 HSS5x...	.017	2.719	.004	2.719		209911.733	214488	25.92	25.92	2....	H1-...
23	1	M29 HSS5x...	.020	3.792	.003	3.792		205676.885	214488	25.92	25.92	1....	H1-...
24	1	M30 HSS5x...	.020	0	.006	0		211167.318	214488	25.92	25.92	1....	H1-...
25	1	M31 HSS5x...	.014	885	.002	5		199399.559	214488	25.92	25.92	2.19	H1-...
26	1	M32 HSS5x...	.027	2.719	.005	2.719		209911.733	214488	25.92	25.92	2....	H1-...
27	1	M33 HSS5x...	.004	1.422	.001	3.792		205676.885	214488	25.92	25.92	2....	H1-...
28	1	M34 L3x3x4	.099	6.835	.003	13.67	z	4137.277	46656	1.688	2.46	1....	H2-1
29	1	M35 L3x3x4	.008	13.67	.000	0	y	9792.371	46656	1.688	2.305	1	H2-1
30	1	M36 L3x3x4	.106	6.693	.003	0	z	9792.371	46656	1.688	2.46	1....	H2-1
31	1	M37 L3x3x4	.098	6.693	.003	13.67	z	4137.277	46656	1.688	2.46	1....	H2-1
32	1	M38 L3x3x4	.009	13.67	.000	0	y	5107.749	46656	1.688	2.305	1	H2-1
33	1	M39 L3x3x4	.098	6.693	.003	0	z	4137.277	46656	1.688	2.46	1....	H2-1
34	1	M40 L4x3x4	.083	5.522	.003	0	z	10507.512	54756	1.844	3.54	1....	H2-1
35	1	M41 L4x3x4	.005	11....	.000	0	y	8511.085	54756	1.844	3.54	1....	H2-1
36	1	M42 L4x3x4	.073	5.639	.003	0	z	8511.356	54756	1.844	3.13	1....	H2-1
37	1	M43 L4x3x4	.068	5.522	.003	11....	z	8511.356	54756	1.844	3.54	1....	H2-1
38	1	M44 L4x3x4	.005	11....	.000	0	y	8511.356	54756	1.844	3.357	1	H2-1
39	1	M45 L4x3x4	.070	5.522	.003	0	z	8511.356	54756	1.844	3.13	1....	H2-1
40	1	M46 L4x3x4	.171	1	.017	0	y	49075.98	54756	1.795	4.805	1.67	H2-1
41	1	M47 L4x3x4	.124	1	.014	0	y	49075.98	54756	1.795	4.805	1....	H2-1
42	1	M48 L4x3x4	.099	1	.015	.042	y	49075.98	54756	1.795	4.805	1....	H2-1
43	1	M49 L4x3x4	.176	1	.018	0	y	49075.98	54756	1.795	4.805	1.67	H2-1
44	1	M50 L4x3x4	.134	1	.015	0	y	49075.98	54756	1.795	4.805	1....	H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

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Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
45	1	M51	L4x3x4	101	1	.015	0	y	49075.98	54756	1.795	4.805	1.... H2-1
46	1	M52	L4x3x4	174	0	.010	3.141	y	35430.911	54756	1.795	4.695	2.14 H2-1
47	1	M53	L4x3x4	144	4.5	.009	2.109	y	35430.911	54756	1.795	4.66	2.... H2-1
48	1	M54	L4x3x4	144	0	.011	0	y	48552.733	54756	1.795	4.805	1.... H2-1
49	1	M55	L4x3x4	126	0	.005	0	y	35430.911	54756	1.795	4.704	2.... H2-1
50	1	M56	L4x3x4	123	4.5	.005	0	y	35430.911	54756	1.795	4.705	2.... H2-1
51	1	M57	L4x3x4	122	0	.011	0	y	48552.733	54756	1.795	4.805	1.... H2-1
52	1	M58	L4x3x4	163	4.5	.005	0	z	35430.911	54756	1.844	3.948	1.... H2-1
53	1	M59	L4x3x4	162	0	.005	4.5	z	35430.911	54756	1.844	3.948	1.... H2-1
54	1	M60	L4x3x4	084	0	.011	.24	y	48552.733	54756	1.795	4.805	1.... H2-1
55	1	M61	L4x3x4	185	0	.008	0	y	35430.911	54756	1.795	4.702	2.16 H2-1
56	1	M62	L4x3x4	155	4.5	.007	2.578	y	35430.911	54756	1.795	4.689	2.... H2-1
57	1	M63	L4x3x4	145	0	.011	0	y	48552.733	54756	1.795	4.805	1.... H2-1
58	1	M64	L4x3x4	135	0	.005	0	y	35430.911	54756	1.795	4.704	2.... H2-1
59	1	M65	L4x3x4	131	4.5	.005	0	y	35430.911	54756	1.795	4.705	2.... H2-1
60	1	M66	L4x3x4	124	0	.011	0	y	48552.733	54756	1.795	4.805	1.... H2-1
61	1	M67	L4x3x4	114	4.5	.003	0	z	35430.911	54756	1.844	4.118	1.... H2-1
62	1	M68	L4x3x4	114	0	.003	4.5	z	35430.911	54756	1.844	4.109	1.... H2-1
63	1	M69	L4x3x4	084	0	.012	0	y	48552.733	54756	1.795	4.805	1.... H2-1
64	1	M70	L3x3x4	031	2.5	.002	0	z	26816.408	46656	1.688	3.388	1.... H2-1
65	1	M71	L3x3x4	036	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
66	1	M72	L3x3x4	025	2.5	.002	0	z	26816.408	46656	1.688	3.388	1.... H2-1
67	1	M73	L3x3x4	027	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
68	1	M74	L3x3x4	032	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
69	1	M75	L3x3x4	025	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
70	1	M76	L3x3x4	025	2.5	.003	0	z	26816.408	46656	1.688	3.388	1.... H2-1
71	1	M77	L3x3x4	029	2.5	.001	5	z	26816.408	46656	1.688	3.388	1.... H2-1
72	1	M78	L3x3x4	022	2.5	.003	0	z	26816.408	46656	1.688	3.388	1.... H2-1
73	1	M79	L3x3x4	042	3.363	.004	6.727	z	17085.709	46656	1.688	3.16	1.... H2-1
74	1	M80	L3x3x4	028	3.363	.004	6.727	z	17085.709	46656	1.688	3.16	1.... H2-1
75	1	M81	L3x3x4	030	3.363	.002	0	y	17085.709	46656	1.688	3.16	1.... H2-1
76	1	M82	L3x3x4	026	3.363	.002	0	y	17085.709	46656	1.688	3.16	1.... H2-1
77	1	M83	L3x3x4	028	3.363	.003	0	z	17085.709	46656	1.688	3.16	1.... H2-1
78	1	M84	L3x3x4	029	3.363	.003	0	z	17085.709	46656	1.688	3.16	1.... H2-1
79	1	M85	L4x4x4	013	14....	.000	0	y	8564.442	62532	3.138	5.609	2.... H2-1
80	1	M86	L4x4x4	053	0	.003	14....	z	8564.442	62532	3.138	5.673	2.36 H2-1
81	1	M87	L4x4x4	055	0	.003	0	z	8564.442	62532	3.138	5.613	2.... H2-1
82	1	M88	L6x6x5	006	.742	.001	0	z	25726.472	118908	9.302	11.907	1.... H2-1
83	1	M89	L6x6x5	006	0	.000	.742	y	25726.472	118908	9.302	11.548	1.... H2-1
84	1	M90	L6x6x5	006	0	.000	.742	y	25726.472	118908	9.302	11.546	1.... H2-1
85	1	M91	L6x6x5	006	0	.000	.742	y	25726.472	118908	9.302	11.578	1.... H2-1
86	1	M92	L6x6x5	006	0	.000	.742	y	25726.472	118908	9.302	11.561	1.... H2-1
87	1	M93	L6x6x5	005	0	.002	0	z	25726.472	118908	9.302	12.551	1.... H2-1
88	1	M94	L6x6x5	005	.742	.002	0	z	25726.472	118908	9.302	11.954	1.... H2-1
89	1	M95	L6x6x5	005	0	.001	0	z	25726.472	118908	9.302	11.735	1.03 H2-1
90	1	M96	L6x6x5	005	0	.000	.742	y	25726.472	118908	9.302	11.637	1.... H2-1
91	1	M97	L6x6x5	004	0	.000	0	z	25726.472	118908	9.302	11.711	1.... H2-1
92	1	M98	L6x6x5	004	0	.000	.008	z	25726.472	118908	9.302	11.736	1.03 H2-1
93	1	M99	L6x6x5	004	0	.001	0	z	25726.472	118908	9.302	11.96	1.... H2-1
94	1	M100	L6x6x5	003	0	.000	.742	y	25726.472	118908	9.302	11.667	1.02 H2-1
95	1	M101	L6x6x5	003	0	.000	.116	z	25726.472	118908	9.302	11.97	1.... H2-1
96	1	M102	L6x6x5	002	0	.000	0	z	25726.472	118908	9.302	12.188	1.... H2-1
97	1	M103	L6x6x5	002	0	.000	.008	z	25726.472	118908	9.302	12.333	1.... H2-1
98	1	M104	L6x6x5	001	0	.000	0	z	25726.472	118908	9.302	12.739	1.2 H2-1
99	1	M105	L6x6x5	001	.742	.000	0	z	25726.472	118908	9.302	11.903	1.... H2-1
100	1	M106	L6x6x5	001	.742	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
101	1	M107	L6x6x5	001	.742	.000	.154	z	25726.472	118908	9.302	16.767	1 H2-1



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...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
102	1	M108	L6x6x5	.002	.742	.000	.193	z	25726.472	118908	9.302	16.767	1	H2-1
103	1	M109	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
104	1	M110	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
105	1	M111	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
106	1	M112	L6x6x5	.003	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
107	1	M113	L6x6x5	.003	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
108	1	M114	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
109	1	M115	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
110	1	M116	L6x6x5	.004	.742	.000	.062	z	25726.472	118908	9.302	16.767	1	H2-1
111	1	M117	L6x6x5	.005	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
112	1	M118	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
113	1	M119	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
114	1	M120	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
115	1	M121	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
116	1	M122	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
117	1	M123	L6x6x5	.005	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
118	1	M124	L6x6x5	.005	.742	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
119	1	M125	L6x6x5	.005	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
120	1	M126	L6x6x5	.005	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
121	1	M127	L6x6x5	.005	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
122	1	M128	L6x6x5	.005	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
123	1	M129	L6x6x5	.005	0	.001	.695	z	25726.472	118908	9.302	16.767	1	H2-1
124	1	M130	L6x6x5	.004	.742	.001	.124	z	25726.472	118908	9.302	16.767	1	H2-1
125	1	M131	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
126	1	M132	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
127	1	M133	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
128	1	M134	L6x6x5	.003	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
129	1	M135	L6x6x5	.003	0	.001	.425	z	25726.472	118908	9.302	16.767	1	H2-1
130	1	M136	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
131	1	M137	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
132	1	M138	L6x6x5	.002	0	.000	.015	z	25726.472	118908	9.302	16.767	1	H2-1
133	1	M139	L6x6x5	.002	0	.000	.054	z	25726.472	118908	9.302	16.767	1	H2-1
134	1	M140	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
135	1	M141	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
136	1	M142	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
137	1	M143	L6x6x5	.001	.742	.000	.015	z	25726.472	118908	9.302	13.026	1....	H2-1
138	1	M144	L6x6x5	.002	.742	.000	.1	z	25726.472	118908	9.302	12.366	1....	H2-1
139	1	M145	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	12.104	1....	H2-1
140	1	M146	L6x6x5	.003	.742	.001	0	z	25726.472	118908	9.302	12.001	1....	H2-1
141	1	M147	L6x6x5	.003	0	.001	.742	y	25726.472	118908	9.302	11.627	1....	H2-1
142	1	M148	L6x6x5	.003	.742	.001	0	z	25726.472	118908	9.302	12.302	1....	H2-1
143	1	M149	L6x6x5	.004	.742	.000	0	z	25726.472	118908	9.302	11.738	1....	H2-1
144	1	M150	L6x6x5	.004	.742	.000	.008	z	25726.472	118908	9.302	11.746	1....	H2-1
145	1	M151	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	11.633	1....	H2-1
146	1	M152	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	11.633	1....	H2-1
147	1	M153	L6x6x5	.005	0	.001	.008	z	25726.472	118908	9.302	11.974	1....	H2-1
148	1	M154	L6x6x5	.005	.742	.002	0	z	25726.472	118908	9.302	12.038	1....	H2-1
149	1	M155	L6x6x5	.006	.742	.000	0	y	25726.472	118908	9.302	11.558	1....	H2-1
150	1	M156	L6x6x5	.006	.742	.000	0	y	25726.472	118908	9.302	11.561	1....	H2-1
151	1	M157	L6x6x5	.006	.742	.000	0	y	25726.472	118908	9.302	11.55	1....	H2-1
152	1	M158	L6x6x5	.006	.742	.000	0	y	25726.472	118908	9.302	11.543	1....	H2-1
153	1	M159	L6x6x5	.006	0	.001	0	z	25726.472	118908	9.302	11.897	1....	H2-1
154	1	M160	L3x3x4	.065	5.522	.002	11....	z	6078.334	46656	1.688	2.675	1....	H2-1
155	1	M161	L3x3x4	.006	11....	.000	0	y	6078.334	46656	1.688	2.534	1	H2-1
156	1	M162	L3x3x4	.065	5.522	.002	11....	z	6078.334	46656	1.688	2.675	1....	H2-1
157	1	M163	L4x4x4	.053	14....	.003	0	z	8564.442	62532	3.138	5.749	2....	H2-1
158	1	M164	L4x4x4	.054	14....	.003	14....	z	8564.442	62532	3.138	5.749	2....	H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
159	1	M165	L4x4x4	.009	0	.000	0	y	8564.442	62532	3.138	5.595	2...	H2-1
160	1	M166	L6x6x5	.002	.742	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
161	1	M167	L6x6x5	.001	.054	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
162	1	M168	L6x6x5	.001	.626	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
163	1	M169	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
164	1	M170	L6x6x5	.001	0	.001	.239	z	25726.472	118908	9.302	16.767	1	H2-1
165	1	M171	L6x6x5	.008	.742	.004	0	z	25726.472	118908	9.302	14.238	1...	H2-1
166	1	M172	L6x6x5	.006	0	.003	0	z	25726.472	118908	9.302	16.767	1	H2-1
167	1	M173	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
168	1	M174	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
169	1	M175	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
170	1	M176	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
171	1	M177	L6x6x5	.001	0	.001	0	y	25726.472	118908	9.302	16.767	1	H2-1
172	1	M178	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
173	1	M179	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
174	1	M180	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
175	1	M181	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
176	1	M182	L6x6x5	.000	.742	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
177	1	M183	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
178	1	M184	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
179	1	M185	L6x6x5	.001	.742	.000	.039	z	25726.472	118908	9.302	12.856	1...	H2-1
180	1	M186	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	12.239	1...	H2-1
181	1	M187	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	12.032	1...	H2-1
182	1	M188	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	11.879	1...	H2-1
183	1	M189	L6x6x5	.002	.742	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
184	1	M190	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
185	1	M191	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	12.19	1...	H2-1
186	1	M192	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	11.89	1...	H2-1
187	1	M193	L6x6x5	.002	.742	.000	.742	y	25726.472	118908	9.302	12.012	1...	H2-1
188	1	M194	L6x6x5	.001	0	.000	.039	z	25726.472	118908	9.302	13.464	1.35	H2-1
189	1	M195	L6x6x5	.006	.742	.002	0	z	25726.472	118908	9.302	12.958	1...	H2-1
190	1	M196	L6x6x5	.005	0	.002	.008	z	25726.472	118908	9.302	12.758	1...	H2-1
191	1	M197	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	13.2	1...	H2-1
192	1	M198	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.914	1...	H2-1
193	1	M199	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	11.805	1...	H2-1
194	1	M200	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.964	1...	H2-1
195	1	M201	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.322	2...	H2-1
196	1	M202	L6x6x5	.002	.742	.003	0	z	25726.472	118908	9.302	16.23	2...	H2-1
197	1	M203	L6x6x5	.002	.742	.000	.742	y	25726.472	118908	9.302	11.877	1...	H2-1
198	1	M204	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.773	1...	H2-1
199	1	M205	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.883	1...	H2-1
200	1	M206	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.941	1...	H2-1
201	1	M207	L6x6x5	.002	0	.002	.054	z	25726.472	118908	9.302	16.205	2...	H2-1
202	1	M208	L6x6x5	.001	.742	.002	0	z	25726.472	118908	9.302	16.168	2...	H2-1
203	1	M209	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.837	1...	H2-1
204	1	M210	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.785	1...	H2-1
205	1	M211	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.879	1...	H2-1
206	1	M212	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.039	1...	H2-1
207	1	M213	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	15.926	2...	H2-1
208	1	M214	L6x6x5	.001	.742	.001	.425	z	25726.472	118908	9.302	16.177	2...	H2-1
209	1	M215	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	11.79	1...	H2-1
210	1	M216	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	11.775	1...	H2-1
211	1	M217	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.219	1...	H2-1
212	1	M218	L6x6x5	.002	.742	.000	.015	z	25726.472	118908	9.302	13.153	1...	H2-1
213	1	M219	L6x6x5	.010	.742	.003	0	z	25726.472	118908	9.302	13.613	1...	H2-1
214	1	M220	L6x6x5	.007	0	.002	.031	z	25726.472	118908	9.302	16.767	1	H2-1
215	1	M221	L6x6x5	.002	0	.000	.046	z	25726.472	118908	9.302	16.767	1	H2-1



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Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
216	1	M222	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
217	1	M223	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
218	1	M224	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
219	1	M225	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
220	1	M226	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
221	1	M227	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
222	1	M228	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
223	1	M229	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
224	1	M230	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
225	1	M231	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
226	1	M232	L6x6x5	.001	.742	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
227	1	M233	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
228	1	M234	L6x6x5	.001	.61	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
229	1	M235	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
230	1	M236	L6x6x5	.001	.116	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
231	1	M237	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
232	1	M238	HSS5....	.026	0	.006	0		182684.746	185328	25.65	25.65	1.4	H1-...
233	1	M239	HSS5....	.014	3.549	.002	0		176566.922	185328	25.65	25.65	2....	H1-...
234	1	M240	HSS5....	.027	3.042	.006	3.042		181554.182	185328	25.65	25.65	1....	H1-...
235	1	M241	HSS5....	.046	0	.010	0		182684.746	185328	25.65	25.65	1....	H1-...
236	1	M242	HSS5....	.013	2.674	.001	0		176566.922	185328	25.65	25.65	1.25	H1-...
237	1	M243	HSS5....	.025	3.042	.005	3.042		181554.182	185328	25.65	25.65	2....	H1-...
238	1	M244	HSS5....	.032	0	.008	0		182684.746	185328	25.65	25.65	2.16	H1-...
239	1	M245	HSS5....	.012	1.896	.001	4.667		176566.922	185328	25.65	25.65	2....	H1-...
240	1	M246	HSS5....	.018	3.042	.004	3.042		181554.182	185328	25.65	25.65	1....	H1-...
241	1	M247	L4x3x4	.109	1	.010	0	y	49075.98	54756	1.795	4.805	1....	H2-1
242	1	M248	L4x3x4	.048	1	.006	0	y	49075.98	54756	1.795	4.805	1....	H2-1
243	1	M249	L4x3x4	.040	1	.009	0	y	49075.98	54756	1.844	4.805	1....	H2-1
244	1	M250	L4x3x4	.113	1	.011	0	y	49075.98	54756	1.795	4.805	1....	H2-1
245	1	M251	L4x3x4	.054	1	.006	0	y	49075.98	54756	1.795	4.805	1....	H2-1
246	1	M252	L4x3x4	.038	1	.008	.063	y	49075.98	54756	1.844	4.805	1....	H2-1
247	1	M253	L4x3x4	.145	4.5	.008	0	y	35430.911	54756	1.844	4.936	1....	H2-1
248	1	M254	L4x3x4	.142	0	.007	0	y	35430.911	54756	1.844	4.936	1....	H2-1
249	1	M255	L4x3x4	.079	0	.007	1.278	z	48552.733	54756	1.795	4.805	1....	H2-1
250	1	M256	L4x3x4	.048	0	.002	0	y	35430.911	54756	1.795	4.715	2....	H2-1
251	1	M257	L4x3x4	.078	4.5	.003	0	y	35430.911	54756	1.795	4.7	2....	H2-1
252	1	M258	L4x3x4	.077	0	.007	0	y	48552.733	54756	1.795	4.805	1....	H2-1
253	1	M259	L4x3x4	.168	4.5	.006	0	z	35430.911	54756	1.844	4.201	1....	H2-1
254	1	M260	L4x3x4	.164	0	.005	4.5	z	35430.911	54756	1.844	4.218	1....	H2-1
255	1	M261	L4x3x4	.050	0	.007	1.278	z	48552.733	54756	1.844	4.805	1....	H2-1
256	1	M262	L4x3x4	.116	0	.005	0	y	35430.911	54756	1.795	4.653	2....	H2-1
257	1	M263	L4x3x4	.096	.937	.004	.375	y	35430.911	54756	1.844	4.936	1....	H2-1
258	1	M264	L4x3x4	.082	0	.007	1.278	z	48552.733	54756	1.795	4.805	1....	H2-1
259	1	M265	L4x3x4	.053	0	.002	0	y	35430.911	54756	1.795	4.712	2....	H2-1
260	1	M266	L4x3x4	.075	4.5	.003	0	y	35430.911	54756	1.795	4.701	2....	H2-1
261	1	M267	L4x3x4	.073	0	.007	0	y	48552.733	54756	1.795	4.805	1....	H2-1
262	1	M268	L4x3x4	.112	4.5	.003	0	z	35430.911	54756	1.844	4.071	1....	H2-1
263	1	M269	L4x3x4	.112	0	.003	4.5	z	35430.911	54756	1.844	4.083	1....	H2-1
264	1	M270	L4x3x4	.051	0	.007	1.278	z	48552.733	54756	1.844	4.805	1....	H2-1
265	1	M271	L4x3x4	.021	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1
266	1	M272	L4x3x4	.018	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1
267	1	M273	L4x3x4	.017	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1
268	1	M274	L4x3x4	.017	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1
269	1	M275	L4x3x4	.015	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1
270	1	M276	L4x3x4	.018	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1
271	1	M277	L4x3x4	.016	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1
272	1	M278	L4x3x4	.013	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1....	H2-1



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Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
273	1 M279	L4x3x4	.014	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
274	1 M280	L4x3x4	.030	3.241	.004	6.483	z	24508.492	54756	1.844	4.315	1.... H2-1
275	1 M281	L4x3x4	.023	3.241	.004	0	z	24508.492	54756	1.844	4.315	1.... H2-1
276	1 M282	L4x3x4	.016	3.174	.001	6.483	y	24508.492	54756	1.844	4.315	1.... H2-1
277	1 M283	L4x3x4	.018	3.174	.001	6.483	y	24508.492	54756	1.795	3.777	1.... H2-1
278	1 M284	L4x3x4	.022	3.241	.003	6.483	z	24508.492	54756	1.844	3.777	1.... H2-1
279	1 M285	L4x3x4	.027	3.241	.003	0	z	24508.492	54756	1.844	3.777	1.... H2-1
280	1 M292	LL4x4x...	.009	6.511	.001	0	z	82406.735	125064	12.586	5.548	2.... H1-...
281	1 M293	LL4x4x...	.004	0	.001	6.511	z	82406.735	125064	12.586	8.877	2.... H1-...
282	1 M294	LL4x4x...	.005	0	.001	0	z	82406.735	125064	12.586	5.548	2.... H1-...
283	1 M295	L6x6x5	.008	0	.003	0	z	25726.472	118908	9.302	12.27	1.... H2-1
284	1 M296	L6x6x5	.005	0	.001	0	z	25726.472	118908	9.302	11.912	1.... H2-1
285	1 M297	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	11.565	1.... H2-1
286	1 M298	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	11.558	1.... H2-1
287	1 M299	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	11.725	1.... H2-1
288	1 M300	L6x6x5	.008	.742	.003	0	z	25726.472	118908	9.302	12.512	1.... H2-1
289	1 M301	L6x6x5	.003	.742	.002	0	z	25726.472	118908	9.302	13.502	1.... H2-1
290	1 M302	L6x6x5	.003	.742	.000	.742	y	25726.472	118908	9.302	11.561	1.... H2-1
291	1 M303	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.603	1.... H2-1
292	1 M304	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.703	1.... H2-1
293	1 M305	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.759	1.... H2-1
294	1 M306	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	13.127	1.... H2-1
295	1 M307	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	12.802	1.... H2-1
296	1 M308	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	12.492	1.... H2-1
297	1 M309	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.509	1.... H2-1
298	1 M310	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.841	1.... H2-1
299	1 M311	L6x6x5	.001	.742	.000	.046	z	25726.472	118908	9.302	12.076	1.... H2-1
300	1 M312	L6x6x5	.004	.742	.002	0	z	25726.472	118908	9.302	13.82	1.... H2-1
301	1 M313	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
302	1 M314	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
303	1 M315	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
304	1 M316	L6x6x5	.002	.742	.000	.031	z	25726.472	118908	9.302	16.767	1 H2-1
305	1 M317	L6x6x5	.003	.742	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
306	1 M318	L6x6x5	.003	.742	.002	.742	y	25726.472	118908	9.302	16.767	1 H2-1
307	1 M319	L6x6x5	.008	0	.005	.039	z	25726.472	118908	9.302	14.872	1.... H2-1
308	1 M320	L6x6x5	.003	.742	.001	.054	z	25726.472	118908	9.302	16.767	1 H2-1
309	1 M321	L6x6x5	.004	.742	.000	.139	z	25726.472	118908	9.302	16.767	1 H2-1
310	1 M322	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
311	1 M323	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
312	1 M324	L6x6x5	.011	.742	.006	.185	z	25726.472	118908	9.302	14.785	1.... H2-1
313	1 M325	L6x6x5	.004	.742	.004	0	z	25726.472	118908	9.302	16.767	1 H2-1
314	1 M326	L6x6x5	.004	0	.001	.742	y	25726.472	118908	9.302	16.767	1 H2-1
315	1 M327	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
316	1 M328	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
317	1 M329	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
318	1 M330	L6x6x5	.007	.742	.006	0	z	25726.472	118908	9.302	15.972	2.... H2-1
319	1 M331	L6x6x5	.005	.742	.003	.015	z	25726.472	118908	9.302	16.767	1 H2-1
320	1 M332	L6x6x5	.005	0	.001	.742	y	25726.472	118908	9.302	16.767	1 H2-1
321	1 M333	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
322	1 M334	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
323	1 M335	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
324	1 M336	L6x6x5	.004	0	.003	0	z	25726.472	118908	9.302	16.767	1 H2-1
325	1 M337	L6x6x5	.003	.742	.003	0	z	25726.472	118908	9.302	16.767	1 H2-1
326	1 M338	L6x6x5	.003	.742	.001	0	y	25726.472	118908	9.302	16.767	1 H2-1
327	1 M339	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
328	1 M340	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
329	1 M341	L6x6x5	.003	0	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
330	1	M342	L6x6x5	.003	.742	.002	.054	z	25726.472	118908	9.302	16.151	2.... H2-1
331	1	M343	L6x6x5	.002	.742	.001	.015	z	25726.472	118908	9.302	16.767	1 H2-1
332	1	M344	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
333	1	M345	L6x6x5	.002	0	.000	.286	z	25726.472	118908	9.302	16.767	1 H2-1
334	1	M346	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
335	1	M347	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
336	1	M348	L6x6x5	.005	.742	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
337	1	M349	L6x6x5	.011	0	.003	0	z	25726.472	118908	9.302	13.56	1.... H2-1
338	1	M350	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	13.162	1.... H2-1
339	1	M351	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	11.836	1.... H2-1
340	1	M352	L6x6x5	.001	.742	.000	.008	z	25726.472	118908	9.302	12.254	1.... H2-1
341	1	M353	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	12.606	1.... H2-1
342	1	M354	L6x6x5	.005	.742	.002	.27	z	25726.472	118908	9.302	12.738	1.2 H2-1
343	1	M355	L6x6x5	.003	0	.003	0	z	25726.472	118908	9.302	16.767	1 H2-1
344	1	M356	L6x6x5	.002	.742	.000	.008	z	25726.472	118908	9.302	12.06	1.... H2-1
345	1	M357	L6x6x5	.003	.742	.000	0	z	25726.472	118908	9.302	11.812	1.... H2-1
346	1	M358	L6x6x5	.003	.742	.000	0	y	25726.472	118908	9.302	11.574	1.... H2-1
347	1	M359	L6x6x5	.003	0	.001	.742	y	25726.472	118908	9.302	11.551	1.... H2-1
348	1	M360	L6x6x5	.003	0	.003	.085	z	25726.472	118908	9.302	15.964	2.... H2-1
349	1	M361	L6x6x5	.004	.742	.002	0	z	25726.472	118908	9.302	12.098	1.... H2-1
350	1	M362	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	11.572	1.... H2-1
351	1	M363	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	11.562	1.... H2-1
352	1	M364	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	11.57	1.... H2-1
353	1	M365	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	11.883	1.... H2-1
354	1	M366	L6x6x5	.005	.742	.004	0	z	25726.472	118908	9.302	16.767	1 H2-1
355	1	M370	HSS5x...	.004	5.455	.002	5.455		196651.072	214488	25.92	25.92	2.... H1-...
356	1	M371	LL4x4x...	.017	10.1	.001	10.1	y	72438.769	125064	12.586	5.548	2.... H1-...
357	1	M372	LL4x4x...	.020	10.1	.001	10.1	z	72438.769	125064	12.586	5.548	2.... H1-...
358	1	M373	LL4x4x...	.018	10.1	.002	10.1	z	72438.769	125064	12.586	5.548	2.... H1-...
359	1	M374	LL4x4x...	.015	0	.002	0	z	72438.769	125064	12.586	8.877	2.... H1-...
360	1	M375	LL4x4x...	.018	0	.002	0	z	72438.769	125064	12.586	8.877	2.... H1-...
361	1	M376	LL4x4x...	.017	0	.001	0	z	72438.769	125064	12.586	8.877	2.... H1-...
362	1	M377	LL4x4x...	.013	0	.001	0	y	72438.769	125064	12.586	8.877	2.... H1-...
363	1	M378	LL4x4x...	.016	0	.001	10.1	z	72438.769	125064	12.586	8.877	2.... H1-...
364	1	M379	LL4x4x...	.017	0	.002	0	z	72438.769	125064	12.586	8.877	2.... H1-...
365	1	M380	LL4x4x...	.014	0	.002	0	z	72438.769	125064	12.586	5.548	2.... H1-...
366	1	M381	LL4x4x...	.019	0	.002	0	z	72438.769	125064	12.586	5.548	2.... H1-...
367	1	M382	LL4x4x...	.021	0	.001	0	z	72438.769	125064	12.586	5.548	2.... H1-...
368	2	M7	W8x18	.002	5.464	.001	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
369	2	M8	W8x18	.002	5.464	.000	2.732	y	103239.568	236700	17.475	63.75	1.... H1-...
370	2	M9	W8x18	.026	5.464	.008	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
371	2	M10	W8x18	.025	0	.008	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
372	2	M11	W8x18	.007	0	.001	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
373	2	M12	W8x18	.008	5.464	.002	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
374	2	M13	HSS5x...	.002	802	.001	0		214085.766	214488	25.92	25.92	1.... H1-...
375	2	M14	HSS5x...	.004	0	.003	0		214447.443	214488	25.92	25.92	1.... H1-...
376	2	M15	HSS5x...	.004	802	.002	0		214085.766	214488	25.92	25.92	1.... H1-...
377	2	M16	HSS5x...	.004	255	.002	255		214447.443	214488	25.92	25.92	1.... H1-...
378	2	M17	HSS5x...	.002	802	.001	0		214085.766	214488	25.92	25.92	1.... H1-...
379	2	M18	HSS5x...	.006	0	.003	.191		214447.443	214488	25.92	25.92	1.... H1-...
380	2	M19	HSS5x...	.004	3.792	.001	3.792		205676.885	214488	25.92	25.92	1.77 H1-...
381	2	M20	HSS5x...	.015	3.792	.002	3.792		205676.885	214488	25.92	25.92	2.... H1-...
382	2	M21	HSS5x...	.015	0	.004	0		211167.318	214488	25.92	25.92	2.... H1-...
383	2	M22	HSS5x...	.013	3.177	.001	0		199399.559	214488	25.92	25.92	2.... H1-...
384	2	M23	HSS5x...	.032	2.719	.006	2.719		209911.733	214488	25.92	25.92	1.... H1-...
385	2	M24	HSS5x...	.012	3.792	.002	3.792		205676.885	214488	25.92	25.92	1.... H1-...
386	2	M25	HSS5x...	.018	3.792	.002	3.792		205676.885	214488	25.92	25.92	1.... H1-...



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
387	2	M26	HSS5x...	.018	0	.005	0	211167.318	214488	25.92	25.92	2....	H1-...	
388	2	M27	HSS5x...	.011	2.031	.001	5	199399.559	214488	25.92	25.92	2....	H1-...	
389	2	M28	HSS5x...	.015	2.719	.004	2.719	209911.733	214488	25.92	25.92	2....	H1-...	
390	2	M29	HSS5x...	.017	3.792	.002	3.792	205676.885	214488	25.92	25.92	1....	H1-...	
391	2	M30	HSS5x...	.017	0	.005	0	211167.318	214488	25.92	25.92	1....	H1-...	
392	2	M31	HSS5x...	.013	.99	.002	5	199399.559	214488	25.92	25.92	2....	H1-...	
393	2	M32	HSS5x...	.023	2.719	.004	2.719	209911.733	214488	25.92	25.92	2....	H1-...	
394	2	M33	HSS5x...	.003	1.382	.001	3.792	205676.885	214488	25.92	25.92	1....	H1-...	
395	2	M34	L3x3x4	.085	6.835	.002	0	z	4137.277	46656	1.688	2.46	1....	H2-1
396	2	M35	L3x3x4	.009	13.67	.000	0	y	9792.371	46656	1.688	2.305	1	H2-1
397	2	M36	L3x3x4	.090	6.693	.002	0	z	9792.371	46656	1.688	2.46	1....	H2-1
398	2	M37	L3x3x4	.084	6.693	.002	13.67	z	4137.277	46656	1.688	2.46	1....	H2-1
399	2	M38	L3x3x4	.008	13.67	.000	0	y	5107.749	46656	1.688	2.305	1	H2-1
400	2	M39	L3x3x4	.084	6.693	.002	0	z	4137.277	46656	1.688	2.46	1....	H2-1
401	2	M40	L4x3x4	.071	5.522	.002	11....	z	10507.512	54756	1.844	3.54	1....	H2-1
402	2	M41	L4x3x4	.005	11....	.000	0	y	8511.085	54756	1.844	3.54	1....	H2-1
403	2	M42	L4x3x4	.062	5.639	.002	0	z	8511.356	54756	1.844	3.13	1....	H2-1
404	2	M43	L4x3x4	.058	5.522	.002	0	z	8511.356	54756	1.844	3.54	1....	H2-1
405	2	M44	L4x3x4	.005	11....	.000	0	y	8511.356	54756	1.844	3.357	1	H2-1
406	2	M45	L4x3x4	.060	5.522	.002	0	z	8511.356	54756	1.844	3.13	1....	H2-1
407	2	M46	L4x3x4	.143	1	.014	.031	y	49075.98	54756	1.795	4.805	1.67	H2-1
408	2	M47	L4x3x4	.107	1	.012	0	y	49075.98	54756	1.795	4.805	1....	H2-1
409	2	M48	L4x3x4	.089	1	.013	.302	y	49075.98	54756	1.795	4.805	1....	H2-1
410	2	M49	L4x3x4	.147	1	.015	0	y	49075.98	54756	1.795	4.805	1.67	H2-1
411	2	M50	L4x3x4	.115	1	.013	0	y	49075.98	54756	1.795	4.805	1....	H2-1
412	2	M51	L4x3x4	.090	1	.014	0	y	49075.98	54756	1.795	4.805	1....	H2-1
413	2	M52	L4x3x4	.145	0	.008	0	y	35430.911	54756	1.795	4.694	2....	H2-1
414	2	M53	L4x3x4	.128	4.5	.008	0	y	35430.911	54756	1.795	4.673	2....	H2-1
415	2	M54	L4x3x4	.127	0	.010	0	y	48552.733	54756	1.795	4.805	1....	H2-1
416	2	M55	L4x3x4	.108	0	.004	0	y	35430.911	54756	1.795	4.704	2....	H2-1
417	2	M56	L4x3x4	.106	4.5	.004	0	y	35430.911	54756	1.795	4.705	2....	H2-1
418	2	M57	L4x3x4	.105	0	.010	0	y	48552.733	54756	1.795	4.805	1....	H2-1
419	2	M58	L4x3x4	.140	4.5	.004	0	z	35430.911	54756	1.844	3.95	1....	H2-1
420	2	M59	L4x3x4	.139	0	.004	4.5	z	35430.911	54756	1.844	3.954	1....	H2-1
421	2	M60	L4x3x4	.067	0	.009	.013	y	48552.733	54756	1.795	4.805	1....	H2-1
422	2	M61	L4x3x4	.155	0	.006	0	y	35430.911	54756	1.795	4.701	2....	H2-1
423	2	M62	L4x3x4	.137	4.5	.006	0	y	35430.911	54756	1.795	4.69	2....	H2-1
424	2	M63	L4x3x4	.129	0	.010	.04	y	48552.733	54756	1.795	4.805	1....	H2-1
425	2	M64	L4x3x4	.116	0	.004	0	y	35430.911	54756	1.795	4.704	2....	H2-1
426	2	M65	L4x3x4	.112	4.5	.004	0	y	35430.911	54756	1.795	4.705	2....	H2-1
427	2	M66	L4x3x4	.106	0	.010	0	y	48552.733	54756	1.795	4.805	1....	H2-1
428	2	M67	L4x3x4	.101	0	.002	0	z	35430.911	54756	1.795	4.126	1....	H2-1
429	2	M68	L4x3x4	.097	0	.002	4.5	z	35430.911	54756	1.844	4.096	1....	H2-1
430	2	M69	L4x3x4	.068	0	.010	0	y	48552.733	54756	1.795	4.805	1....	H2-1
431	2	M70	L3x3x4	.026	2.5	.002	0	z	26816.408	46656	1.688	3.388	1....	H2-1
432	2	M71	L3x3x4	.031	2.5	.001	0	z	26816.408	46656	1.688	3.388	1....	H2-1
433	2	M72	L3x3x4	.022	2.5	.002	0	z	26816.408	46656	1.688	3.388	1....	H2-1
434	2	M73	L3x3x4	.023	2.5	.001	0	z	26816.408	46656	1.688	3.388	1....	H2-1
435	2	M74	L3x3x4	.028	2.5	.001	0	z	26816.408	46656	1.688	3.388	1....	H2-1
436	2	M75	L3x3x4	.021	2.5	.001	0	z	26816.408	46656	1.688	3.388	1....	H2-1
437	2	M76	L3x3x4	.022	2.5	.002	0	z	26816.408	46656	1.688	3.388	1....	H2-1
438	2	M77	L3x3x4	.025	2.5	.001	5	z	26816.408	46656	1.688	3.388	1....	H2-1
439	2	M78	L3x3x4	.018	2.5	.002	0	z	26816.408	46656	1.688	3.388	1....	H2-1
440	2	M79	L3x3x4	.035	3.363	.004	6.727	z	17085.709	46656	1.688	3.16	1....	H2-1
441	2	M80	L3x3x4	.024	3.363	.003	6.727	z	17085.709	46656	1.688	3.16	1....	H2-1
442	2	M81	L3x3x4	.026	3.363	.002	0	y	17085.709	46656	1.688	3.16	1....	H2-1
443	2	M82	L3x3x4	.023	3.363	.002	6.727	y	17085.709	46656	1.688	3.16	1....	H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
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 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
444	2	M83	L3x3x4	.024	3.363	.002	0	z	17085.709	46656	1.688	3.16	1....	H2-1
445	2	M84	L3x3x4	.024	3.363	.003	6.727	z	17085.709	46656	1.688	3.16	1....	H2-1
446	2	M85	L4x4x4	.011	14....	.000	0	y	8564.442	62532	3.138	5.588	2....	H2-1
447	2	M86	L4x4x4	.046	0	.003	14....	z	8564.442	62532	3.138	5.553	2.19	H2-1
448	2	M87	L4x4x4	.048	0	.003	0	z	8564.442	62532	3.138	5.723	2....	H2-1
449	2	M88	L6x6x5	.005	.742	.001	0	z	25726.472	118908	9.302	11.803	1....	H2-1
450	2	M89	L6x6x5	.005	0	.000	.742	y	25726.472	118908	9.302	11.608	1....	H2-1
451	2	M90	L6x6x5	.005	0	.000	.742	y	25726.472	118908	9.302	11.609	1....	H2-1
452	2	M91	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	11.711	1....	H2-1
453	2	M92	L6x6x5	.004	0	.000	0	z	25726.472	118908	9.302	11.866	1.05	H2-1
454	2	M93	L6x6x5	.003	0	.002	0	z	25726.472	118908	9.302	15.571	1....	H2-1
455	2	M94	L6x6x5	.005	0	.001	0	z	25726.472	118908	9.302	12.257	1....	H2-1
456	2	M95	L6x6x5	.004	0	.001	.17	z	25726.472	118908	9.302	12.128	1....	H2-1
457	2	M96	L6x6x5	.003	0	.000	0	z	25726.472	118908	9.302	11.921	1....	H2-1
458	2	M97	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	12.051	1.08	H2-1
459	2	M98	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	12.218	1....	H2-1
460	2	M99	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.598	1....	H2-1
461	2	M100	L6x6x5	.001	0	.000	.209	z	25726.472	118908	9.302	13.572	1....	H2-1
462	2	M101	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
463	2	M102	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
464	2	M103	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
465	2	M104	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
466	2	M105	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
467	2	M106	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
468	2	M107	L6x6x5	.003	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
469	2	M108	L6x6x5	.003	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
470	2	M109	L6x6x5	.003	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
471	2	M110	L6x6x5	.004	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
472	2	M111	L6x6x5	.003	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
473	2	M112	L6x6x5	.004	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
474	2	M113	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
475	2	M114	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
476	2	M115	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
477	2	M116	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
478	2	M117	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
479	2	M118	L6x6x5	.007	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
480	2	M119	L6x6x5	.005	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
481	2	M120	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
482	2	M121	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
483	2	M122	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
484	2	M123	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
485	2	M124	L6x6x5	.004	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
486	2	M125	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
487	2	M126	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
488	2	M127	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
489	2	M128	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
490	2	M129	L6x6x5	.003	0	.001	.402	z	25726.472	118908	9.302	16.767	1	H2-1
491	2	M130	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
492	2	M131	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
493	2	M132	L6x6x5	.002	0	.000	.572	z	25726.472	118908	9.302	16.767	1	H2-1
494	2	M133	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
495	2	M134	L6x6x5	.001	0	.000	.008	z	25726.472	118908	9.302	16.767	1	H2-1
496	2	M135	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
497	2	M136	L6x6x5	.000	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
498	2	M137	L6x6x5	.000	.742	.000	.062	z	25726.472	118908	9.302	16.161	2....	H2-1
499	2	M138	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	13.299	1....	H2-1
500	2	M139	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	12.548	1....	H2-1



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...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
501	2	M140	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	12.318	1.... H2-1
502	2	M141	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	11.931	1.06 H2-1
503	2	M142	L6x6x5	.003	.742	.001	0	z	25726.472	118908	9.302	13.515	1.... H2-1
504	2	M143	L6x6x5	.003	.742	.000	0	z	25726.472	118908	9.302	11.866	1.05 H2-1
505	2	M144	L6x6x5	.004	.742	.000	0	z	25726.472	118908	9.302	11.813	1.... H2-1
506	2	M145	L6x6x5	.004	.742	.000	0	z	25726.472	118908	9.302	11.732	1.03 H2-1
507	2	M146	L6x6x5	.004	.742	.000	0	z	25726.472	118908	9.302	11.72	1.... H2-1
508	2	M147	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	11.753	1.... H2-1
509	2	M148	L6x6x5	.005	.742	.001	216	z	25726.472	118908	9.302	12.033	1.... H2-1
510	2	M149	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	11.6	1.01 H2-1
511	2	M150	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	11.595	1.... H2-1
512	2	M151	L6x6x5	.005	.742	.000	0	y	25726.472	118908	9.302	11.55	1.... H2-1
513	2	M152	L6x6x5	.006	.742	.000	0	y	25726.472	118908	9.302	11.554	1.... H2-1
514	2	M153	L6x6x5	.006	0	.001	0	z	25726.472	118908	9.302	11.963	1.... H2-1
515	2	M154	L6x6x5	.006	.742	.001	0	z	25726.472	118908	9.302	11.97	1.... H2-1
516	2	M155	L6x6x5	.006	0	.000	.742	y	25726.472	118908	9.302	11.542	1.... H2-1
517	2	M156	L6x6x5	.006	0	.000	.742	y	25726.472	118908	9.302	11.542	1.... H2-1
518	2	M157	L6x6x5	.006	0	.000	.742	y	25726.472	118908	9.302	11.551	1.... H2-1
519	2	M158	L6x6x5	.006	0	.000	.742	y	25726.472	118908	9.302	11.561	1.... H2-1
520	2	M159	L6x6x5	.005	0	.001	0	z	25726.472	118908	9.302	11.99	1.07 H2-1
521	2	M160	L3x3x4	.055	5.522	.002	0	z	6078.334	46656	1.688	2.675	1.... H2-1
522	2	M161	L3x3x4	.005	11....	.000	0	y	6078.334	46656	1.688	2.534	1 H2-1
523	2	M162	L3x3x4	.055	5.522	.002	0	z	6078.334	46656	1.688	2.675	1.... H2-1
524	2	M163	L4x4x4	.046	14....	.003	0	z	8564.442	62532	3.138	5.749	2.... H2-1
525	2	M164	L4x4x4	.046	14....	.003	14....	z	8564.442	62532	3.138	5.749	2.... H2-1
526	2	M165	L4x4x4	.008	0	.000	0	y	8564.442	62532	3.138	5.597	2.25 H2-1
527	2	M166	L6x6x5	.001	.742	.002	0	z	25726.472	118908	9.302	16.767	1 H2-1
528	2	M167	L6x6x5	.001	.07	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
529	2	M168	L6x6x5	.001	.626	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
530	2	M169	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
531	2	M170	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
532	2	M171	L6x6x5	.005	.742	.003	0	z	25726.472	118908	9.302	14.317	1.... H2-1
533	2	M172	L6x6x5	.003	0	.002	0	z	25726.472	118908	9.302	16.767	1 H2-1
534	2	M173	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
535	2	M174	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
536	2	M175	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
537	2	M176	L6x6x5	.000	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
538	2	M177	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	16.767	1 H2-1
539	2	M178	L6x6x5	.000	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
540	2	M179	L6x6x5	.000	.742	.000	0	y	25726.472	118908	8.075	16.767	1 H2-1
541	2	M180	L6x6x5	.000	.742	.000	0	y	25726.472	118908	9.302	11.998	1.... H2-1
542	2	M181	L6x6x5	.000	.742	.000	0	y	25726.472	118908	9.302	11.603	1.... H2-1
543	2	M182	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	11.556	1.... H2-1
544	2	M183	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
545	2	M184	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.144	2.... H2-1
546	2	M185	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	11.869	1.... H2-1
547	2	M186	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	11.859	1.... H2-1
548	2	M187	L6x6x5	.001	.742	.000	.742	y	25726.472	118908	9.302	11.781	1.... H2-1
549	2	M188	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	11.713	1.... H2-1
550	2	M189	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.202	2.... H2-1
551	2	M190	L6x6x5	.001	.742	.002	0	z	25726.472	118908	9.302	16.26	2.3 H2-1
552	2	M191	L6x6x5	.002	.742	.000	.742	y	25726.472	118908	9.302	11.94	1.... H2-1
553	2	M192	L6x6x5	.002	.742	.000	.742	y	25726.472	118908	9.302	11.793	1.... H2-1
554	2	M193	L6x6x5	.002	.742	.000	.742	y	25726.472	118908	9.302	11.912	1.... H2-1
555	2	M194	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.276	1.... H2-1
556	2	M195	L6x6x5	.008	.742	.002	0	z	25726.472	118908	9.302	13.069	1.... H2-1
557	2	M196	L6x6x5	.002	.742	.001	.742	y	25726.472	118908	9.302	11.706	1.... H2-1



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...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
558	2	M197	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	13.441	1...	H2-1
559	2	M198	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.837	1...	H2-1
560	2	M199	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	11.783	1...	H2-1
561	2	M200	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.93	1.06	H2-1
562	2	M201	L6x6x5	.001	0	.002	.008	z	25726.472	118908	9.302	16.288	2...	H2-1
563	2	M202	L6x6x5	.001	.742	.002	0	z	25726.472	118908	9.302	16.251	2...	H2-1
564	2	M203	L6x6x5	.002	.742	.000	.742	y	25726.472	118908	9.302	11.907	1...	H2-1
565	2	M204	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.81	1...	H2-1
566	2	M205	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.933	1...	H2-1
567	2	M206	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.035	1...	H2-1
568	2	M207	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.391	2...	H2-1
569	2	M208	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
570	2	M209	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	11.98	1...	H2-1
571	2	M210	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	11.886	1...	H2-1
572	2	M211	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.164	1...	H2-1
573	2	M212	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.557	1...	H2-1
574	2	M213	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
575	2	M214	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
576	2	M215	L6x6x5	.000	0	.000	.742	y	25726.472	118908	9.302	15.864	2...	H2-1
577	2	M216	L6x6x5	.000	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
578	2	M217	L6x6x5	.000	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
579	2	M218	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	15.009	1.78	H2-1
580	2	M219	L6x6x5	.008	.742	.003	0	z	25726.472	118908	9.302	13.826	1...	H2-1
581	2	M220	L6x6x5	.006	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
582	2	M221	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
583	2	M222	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
584	2	M223	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
585	2	M224	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
586	2	M225	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
587	2	M226	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
588	2	M227	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
589	2	M228	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
590	2	M229	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
591	2	M230	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
592	2	M231	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
593	2	M232	L6x6x5	.001	.742	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
594	2	M233	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
595	2	M234	L6x6x5	.001	.602	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
596	2	M235	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
597	2	M236	L6x6x5	.001	.147	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
598	2	M237	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
599	2	M238	HSS5...	.022	0	.005	0		182684.746	185328	25.65	25.65	1...	H1-...
600	2	M239	HSS5...	.011	3.5	.001	0		176566.922	185328	25.65	25.65	2...	H1-...
601	2	M240	HSS5...	.023	3.042	.005	3.042		181554.182	185328	25.65	25.65	1.1	H1-...
602	2	M241	HSS5...	.039	0	.008	0		182684.746	185328	25.65	25.65	1...	H1-...
603	2	M242	HSS5...	.011	2.674	.001	0		176566.922	185328	25.65	25.65	1...	H1-...
604	2	M243	HSS5...	.022	3.042	.004	3.042		181554.182	185328	25.65	25.65	2...	H1-...
605	2	M244	HSS5...	.027	0	.006	0		182684.746	185328	25.65	25.65	2...	H1-...
606	2	M245	HSS5...	.010	1.896	.001	4.667		176566.922	185328	25.65	25.65	2...	H1-...
607	2	M246	HSS5...	.016	3.042	.003	3.042		181554.182	185328	25.65	25.65	2...	H1-...
608	2	M247	L4x3x4	.091	1	.008	0	y	49075.98	54756	1.795	4.805	1...	H2-1
609	2	M248	L4x3x4	.041	1	.005	0	y	49075.98	54756	1.795	4.805	1...	H2-1
610	2	M249	L4x3x4	.034	1	.008	0	y	49075.98	54756	1.844	4.805	1...	H2-1
611	2	M250	L4x3x4	.095	1	.009	0	y	49075.98	54756	1.795	4.805	1...	H2-1
612	2	M251	L4x3x4	.046	1	.005	0	y	49075.98	54756	1.795	4.805	1...	H2-1
613	2	M252	L4x3x4	.032	1	.007	.052	y	49075.98	54756	1.844	4.805	1...	H2-1
614	2	M253	L4x3x4	.124	4.5	.007	0	y	35430.911	54756	1.844	4.936	1.88	H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
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Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
615	2	M254	L4x3x4	.121	0	.006	.797	y	35430.911	54756	1.844	4.936	1.... H2-1
616	2	M255	L4x3x4	.070	0	.006	1.278	z	48552.733	54756	1.795	4.805	1.... H2-1
617	2	M256	L4x3x4	.041	0	.002	0	y	35430.911	54756	1.795	4.715	2.... H2-1
618	2	M257	L4x3x4	.067	4.5	.002	0	y	35430.911	54756	1.795	4.7	2.... H2-1
619	2	M258	L4x3x4	.066	0	.006	0	y	48552.733	54756	1.795	4.805	1.... H2-1
620	2	M259	L4x3x4	.144	4.5	.005	0	z	35430.911	54756	1.844	4.194	1.25 H2-1
621	2	M260	L4x3x4	.141	0	.005	4.5	z	35430.911	54756	1.844	4.227	1.... H2-1
622	2	M261	L4x3x4	.044	0	.006	1.278	z	48552.733	54756	1.844	4.805	1.... H2-1
623	2	M262	L4x3x4	.097	0	.005	2.297	y	35430.911	54756	1.795	4.645	2.... H2-1
624	2	M263	L4x3x4	.082	.984	.004	.141	y	35430.911	54756	1.844	4.936	1.... H2-1
625	2	M264	L4x3x4	.073	0	.006	1.278	z	48552.733	54756	1.795	4.805	1.... H2-1
626	2	M265	L4x3x4	.045	0	.002	0	y	35430.911	54756	1.795	4.712	2.... H2-1
627	2	M266	L4x3x4	.065	4.5	.002	0	y	35430.911	54756	1.795	4.701	2.... H2-1
628	2	M267	L4x3x4	.062	0	.006	0	y	48552.733	54756	1.795	4.805	1.... H2-1
629	2	M268	L4x3x4	.096	4.5	.003	0	z	35430.911	54756	1.844	4.062	1.... H2-1
630	2	M269	L4x3x4	.095	0	.002	4.5	z	35430.911	54756	1.844	4.095	1.... H2-1
631	2	M270	L4x3x4	.044	0	.006	1.278	z	48552.733	54756	1.844	4.805	1.... H2-1
632	2	M271	L4x3x4	.018	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
633	2	M272	L4x3x4	.016	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
634	2	M273	L4x3x4	.015	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
635	2	M274	L4x3x4	.014	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
636	2	M275	L4x3x4	.013	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
637	2	M276	L4x3x4	.015	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
638	2	M277	L4x3x4	.014	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
639	2	M278	L4x3x4	.011	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
640	2	M279	L4x3x4	.012	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.... H2-1
641	2	M280	L4x3x4	.026	3.241	.003	6.483	z	24508.492	54756	1.844	4.315	1.... H2-1
642	2	M281	L4x3x4	.020	3.241	.003	0	z	24508.492	54756	1.844	4.315	1.... H2-1
643	2	M282	L4x3x4	.014	3.174	.001	0	y	24508.492	54756	1.844	4.315	1.... H2-1
644	2	M283	L4x3x4	.016	3.174	.001	6.483	y	24508.492	54756	1.795	3.777	1.... H2-1
645	2	M284	L4x3x4	.019	3.241	.003	6.483	z	24508.492	54756	1.844	3.777	1.... H2-1
646	2	M285	L4x3x4	.024	3.241	.003	0	z	24508.492	54756	1.844	3.777	1.... H2-1
647	2	M292	LL4x4x...	.007	6.511	.001	6.511	z	82406.735	125064	12.586	5.548	2.... H1-...
648	2	M293	LL4x4x...	.003	6.511	.001	0	z	82406.735	125064	12.586	8.877	2.... H1-...
649	2	M294	LL4x4x...	.003	0	.001	0	z	82406.735	125064	12.586	5.548	2.... H1-...
650	2	M295	L6x6x5	.006	0	.002	0	z	25726.472	118908	9.302	12.039	1.... H2-1
651	2	M296	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	11.898	1.... H2-1
652	2	M297	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.588	1.... H2-1
653	2	M298	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.583	1.... H2-1
654	2	M299	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	11.702	1.... H2-1
655	2	M300	L6x6x5	.007	.742	.002	0	z	25726.472	118908	9.302	12.605	1.... H2-1
656	2	M301	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	14.351	1.... H2-1
657	2	M302	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.588	1.... H2-1
658	2	M303	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.711	1.... H2-1
659	2	M304	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	11.877	1.... H2-1
660	2	M305	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	12.012	1.... H2-1
661	2	M306	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.46	1.... H2-1
662	2	M307	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	13.542	1.... H2-1
663	2	M308	L6x6x5	.000	0	.000	0	z	25726.472	118908	9.302	15.706	2.... H2-1
664	2	M309	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
665	2	M310	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
666	2	M311	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
667	2	M312	L6x6x5	.003	.742	.002	.015	z	25726.472	118908	9.302	15.074	1.... H2-1
668	2	M313	L6x6x5	.002	.742	.002	0	z	25726.472	118908	9.302	16.767	1 H2-1
669	2	M314	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
670	2	M315	L6x6x5	.003	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
671	2	M316	L6x6x5	.003	.742	.000	.139	z	25726.472	118908	9.302	16.767	1 H2-1



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...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
672	2	M317	L6x6x5	.003	.742	.001	.031	z	25726.472	118908	9.302	16.767	1	H2-1
673	2	M318	L6x6x5	.003	.742	.002	0	y	25726.472	118908	9.302	16.767	1	H2-1
674	2	M319	L6x6x5	.007	0	.005	.008	z	25726.472	118908	9.302	15.26	1...	H2-1
675	2	M320	L6x6x5	.003	.742	.001	.023	z	25726.472	118908	9.302	16.767	1	H2-1
676	2	M321	L6x6x5	.004	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
677	2	M322	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
678	2	M323	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
679	2	M324	L6x6x5	.009	.742	.006	0	z	25726.472	118908	9.302	15.134	1...	H2-1
680	2	M325	L6x6x5	.003	.742	.004	0	z	25726.472	118908	9.302	16.767	1	H2-1
681	2	M326	L6x6x5	.004	0	.001	.742	y	25726.472	118908	9.302	16.767	1	H2-1
682	2	M327	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
683	2	M328	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
684	2	M329	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
685	2	M330	L6x6x5	.005	.742	.005	0	z	25726.472	118908	9.302	16.061	2...	H2-1
686	2	M331	L6x6x5	.004	.742	.003	0	z	25726.472	118908	9.302	16.767	1	H2-1
687	2	M332	L6x6x5	.004	0	.001	.742	y	25726.472	118908	9.302	16.767	1	H2-1
688	2	M333	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
689	2	M334	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
690	2	M335	L6x6x5	.003	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
691	2	M336	L6x6x5	.003	0	.003	0	z	25726.472	118908	9.302	16.767	1	H2-1
692	2	M337	L6x6x5	.003	0	.003	.023	z	25726.472	118908	9.302	16.239	2...	H2-1
693	2	M338	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
694	2	M339	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
695	2	M340	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
696	2	M341	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
697	2	M342	L6x6x5	.002	.742	.002	0	z	25726.472	118908	9.302	15.998	2...	H2-1
698	2	M343	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
699	2	M344	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
700	2	M345	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
701	2	M346	L6x6x5	.001	0	.000	.023	z	25726.472	118908	9.302	16.767	1	H2-1
702	2	M347	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
703	2	M348	L6x6x5	.004	.742	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
704	2	M349	L6x6x5	.010	0	.003	.008	z	25726.472	118908	9.302	13.287	1...	H2-1
705	2	M350	L6x6x5	.003	0	.000	.1	z	25726.472	118908	9.302	12.474	1...	H2-1
706	2	M351	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.636	1...	H2-1
707	2	M352	L6x6x5	.002	.742	.000	0	z	25726.472	118908	9.302	11.836	1...	H2-1
708	2	M353	L6x6x5	.003	.742	.001	0	z	25726.472	118908	9.302	12.259	1...	H2-1
709	2	M354	L6x6x5	.005	.742	.002	0	z	25726.472	118908	9.302	12.505	1...	H2-1
710	2	M355	L6x6x5	.003	0	.003	0	z	25726.472	118908	9.302	16.767	1	H2-1
711	2	M356	L6x6x5	.003	.742	.000	.1	z	25726.472	118908	9.302	11.913	1...	H2-1
712	2	M357	L6x6x5	.003	.742	.000	0	y	25726.472	118908	9.302	11.707	1...	H2-1
713	2	M358	L6x6x5	.004	0	.000	0	y	25726.472	118908	9.302	11.547	1...	H2-1
714	2	M359	L6x6x5	.004	0	.001	.742	y	25726.472	118908	9.302	11.545	1...	H2-1
715	2	M360	L6x6x5	.003	0	.003	0	z	25726.472	118908	9.302	14.911	1...	H2-1
716	2	M361	L6x6x5	.004	.742	.002	0	z	25726.472	118908	9.302	12.457	1...	H2-1
717	2	M362	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	11.575	1...	H2-1
718	2	M363	L6x6x5	.004	.742	.000	0	y	25726.472	118908	9.302	11.549	1...	H2-1
719	2	M364	L6x6x5	.004	0	.000	.742	y	25726.472	118908	9.302	11.589	1...	H2-1
720	2	M365	L6x6x5	.004	0	.000	0	z	25726.472	118908	9.302	11.809	1...	H2-1
721	2	M366	L6x6x5	.003	.742	.003	0	z	25726.472	118908	9.302	16.767	1	H2-1
722	2	M370	HSS5x...	.003	5.455	.001	5.455		196651.072	214488	25.92	25.92	2...	H1-...
723	2	M371	LL4x4x...	.014	10.1	.001	10.1	y	72438.769	125064	12.586	5.548	2...	H1-...
724	2	M372	LL4x4x...	.017	10.1	.001	10.1	z	72438.769	125064	12.586	5.548	2...	H1-...
725	2	M373	LL4x4x...	.016	10.1	.002	10.1	z	72438.769	125064	12.586	5.548	2...	H1-...
726	2	M374	LL4x4x...	.012	0	.002	0	z	72438.769	125064	12.586	8.877	2...	H1-...
727	2	M375	LL4x4x...	.015	0	.002	10.1	z	72438.769	125064	12.586	8.877	2...	H1-...
728	2	M376	LL4x4x...	.014	0	.001	0	z	72438.769	125064	12.586	8.877	2...	H1-...



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...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
729	2	M377	LL4x4x...	.010	0	.001	0	y	72438.769	125064	12.586	8.877	2.... H1-...
730	2	M378	LL4x4x...	.014	0	.001	0	z	72438.769	125064	12.586	8.877	2.... H1-...
731	2	M379	LL4x4x...	.015	0	.002	0	z	72438.769	125064	12.586	8.877	2.... H1-...
732	2	M380	LL4x4x...	.012	0	.002	0	z	72438.769	125064	12.586	8.877	2.... H1-...
733	2	M381	LL4x4x...	.016	0	.002	0	z	72438.769	125064	12.586	5.548	2.29 H1-...
734	2	M382	LL4x4x...	.017	0	.001	0	z	72438.769	125064	12.586	5.548	2.... H1-...
735	3	M7	W8x18	.003	5.464	.001	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
736	3	M8	W8x18	.004	0	.001	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
737	3	M9	W8x18	.020	5.464	.006	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
738	3	M10	W8x18	.019	0	.006	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
739	3	M11	W8x18	.006	0	.001	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
740	3	M12	W8x18	.007	5.464	.001	2.732	y	103239.568	236700	17.475	63.75	2.... H1-...
741	3	M13	HSS5x...	.003	802	.001	0		214085.766	214488	25.92	25.92	1.... H1-...
742	3	M14	HSS5x...	.002	255	.002	0		214447.443	214488	25.92	25.92	1.... H1-...
743	3	M15	HSS5x...	.003	802	.002	0		214085.766	214488	25.92	25.92	1.... H1-...
744	3	M16	HSS5x...	.002	0	.002	255		214447.443	214488	25.92	25.92	2.... H1-...
745	3	M17	HSS5x...	.002	802	.001	0		214085.766	214488	25.92	25.92	1.... H1-...
746	3	M18	HSS5x...	.001	0	.002	191		214447.443	214488	25.92	25.92	2.17 H1-...
747	3	M19	HSS5x...	.004	3.792	.001	3.792		205676.885	214488	25.92	25.92	1.... H1-...
748	3	M20	HSS5x...	.015	3.792	.002	3.792		205676.885	214488	25.92	25.92	1.... H1-...
749	3	M21	HSS5x...	.015	0	.004	0		211167.318	214488	25.92	25.92	2.19 H1-...
750	3	M22	HSS5x...	.013	3.438	.001	0		199399.559	214488	25.92	25.92	2.25 H1-...
751	3	M23	HSS5x...	.033	2.719	.007	2.719		209911.733	214488	25.92	25.92	1.... H1-...
752	3	M24	HSS5x...	.010	3.792	.002	3.792		205676.885	214488	25.92	25.92	1.... H1-...
753	3	M25	HSS5x...	.016	3.792	.002	3.792		205676.885	214488	25.92	25.92	1.... H1-...
754	3	M26	HSS5x...	.016	0	.004	0		211167.318	214488	25.92	25.92	2.... H1-...
755	3	M27	HSS5x...	.010	2.396	.001	5		199399.559	214488	25.92	25.92	2.... H1-...
756	3	M28	HSS5x...	.016	2.719	.004	2.719		209911.733	214488	25.92	25.92	2.... H1-...
757	3	M29	HSS5x...	.017	3.792	.003	3.792		205676.885	214488	25.92	25.92	1.... H1-...
758	3	M30	HSS5x...	.017	0	.005	0		211167.318	214488	25.92	25.92	1.94 H1-...
759	3	M31	HSS5x...	.012	1.146	.002	5		199399.559	214488	25.92	25.92	2.19 H1-...
760	3	M32	HSS5x...	.024	2.719	.005	2.719		209911.733	214488	25.92	25.92	2.... H1-...
761	3	M33	HSS5x...	.003	869	.001	3.792		205676.885	214488	25.92	25.92	2.... H1-...
762	3	M34	L3x3x4	.084	6.835	.002	0	z	4137.277	46656	1.688	2.46	1.... H2-1
763	3	M35	L3x3x4	.007	13.67	.000	0	y	9792.371	46656	1.688	2.305	1 H2-1
764	3	M36	L3x3x4	.089	6.693	.002	0	z	9792.371	46656	1.688	2.46	1.... H2-1
765	3	M37	L3x3x4	.084	6.693	.002	0	z	4137.277	46656	1.688	2.46	1.... H2-1
766	3	M38	L3x3x4	.008	13.67	.000	0	y	5107.749	46656	1.688	2.305	1 H2-1
767	3	M39	L3x3x4	.084	6.693	.002	0	z	4137.277	46656	1.688	2.46	1.... H2-1
768	3	M40	L4x3x4	.072	5.522	.002	11....	z	10507.512	54756	1.844	3.54	1.... H2-1
769	3	M41	L4x3x4	.004	11....	.000	0	y	8511.085	54756	1.844	3.54	1.... H2-1
770	3	M42	L4x3x4	.062	5.639	.002	0	z	8511.356	54756	1.844	3.13	1.... H2-1
771	3	M43	L4x3x4	.058	5.522	.002	0	z	8511.356	54756	1.844	3.54	1.... H2-1
772	3	M44	L4x3x4	.005	11....	.000	0	y	8511.356	54756	1.844	3.357	1 H2-1
773	3	M45	L4x3x4	.060	5.522	.002	0	z	8511.356	54756	1.844	3.13	1.... H2-1
774	3	M46	L4x3x4	.145	1	.014	0	y	49075.98	54756	1.795	4.805	1.67 H2-1
775	3	M47	L4x3x4	.111	1	.013	0	y	49075.98	54756	1.795	4.805	1.... H2-1
776	3	M48	L4x3x4	.083	1	.013	.01	y	49075.98	54756	1.795	4.805	1.... H2-1
777	3	M49	L4x3x4	.149	1	.015	.938	y	49075.98	54756	1.795	4.805	1.67 H2-1
778	3	M50	L4x3x4	.120	1	.013	0	y	49075.98	54756	1.795	4.805	1.... H2-1
779	3	M51	L4x3x4	.084	1	.013	.052	y	49075.98	54756	1.795	4.805	1.... H2-1
780	3	M52	L4x3x4	.146	0	.008	0	y	35430.911	54756	1.795	4.694	2.... H2-1
781	3	M53	L4x3x4	.126	4.5	.008	1.219	y	35430.911	54756	1.795	4.668	2.... H2-1
782	3	M54	L4x3x4	.126	0	.009	0	y	48552.733	54756	1.795	4.805	1.... H2-1
783	3	M55	L4x3x4	.113	0	.004	0	y	35430.911	54756	1.795	4.703	2.... H2-1
784	3	M56	L4x3x4	.100	4.5	.004	0	y	35430.911	54756	1.795	4.707	2.... H2-1
785	3	M57	L4x3x4	.099	0	.009	0	y	48552.733	54756	1.795	4.805	1.... H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
786	3	M58	L4x3x4	140	4.5	.004	0	z	35430.911	54756	1.844	3.948	1.... H2-1
787	3	M59	L4x3x4	139	0	.004	4.5	z	35430.911	54756	1.844	3.948	1.... H2-1
788	3	M60	L4x3x4	.074	0	.010	.027	y	48552.733	54756	1.795	4.805	1.... H2-1
789	3	M61	L4x3x4	.157	0	.006	3.375	y	35430.911	54756	1.795	4.702	2.... H2-1
790	3	M62	L4x3x4	.135	4.5	.006	0	y	35430.911	54756	1.795	4.69	2.... H2-1
791	3	M63	L4x3x4	.127	0	.010	0	y	48552.733	54756	1.795	4.805	1.... H2-1
792	3	M64	L4x3x4	.120	0	.004	0	y	35430.911	54756	1.795	4.702	2.16 H2-1
793	3	M65	L4x3x4	.107	4.5	.004	0	y	35430.911	54756	1.795	4.707	2.... H2-1
794	3	M66	L4x3x4	.101	0	.009	0	y	48552.733	54756	1.795	4.805	1.... H2-1
795	3	M67	L4x3x4	.097	4.5	.002	0	z	35430.911	54756	1.844	4.114	1.... H2-1
796	3	M68	L4x3x4	.097	0	.002	4.5	z	35430.911	54756	1.844	4.117	1.... H2-1
797	3	M69	L4x3x4	.075	0	.010	0	y	48552.733	54756	1.795	4.805	1.... H2-1
798	3	M70	L3x3x4	.026	2.5	.002	0	z	26816.408	46656	1.688	3.388	1.... H2-1
799	3	M71	L3x3x4	.031	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
800	3	M72	L3x3x4	.022	2.5	.002	0	z	26816.408	46656	1.688	3.388	1.... H2-1
801	3	M73	L3x3x4	.024	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
802	3	M74	L3x3x4	.028	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
803	3	M75	L3x3x4	.021	2.5	.001	0	z	26816.408	46656	1.688	3.388	1.... H2-1
804	3	M76	L3x3x4	.021	2.5	.002	0	z	26816.408	46656	1.688	3.388	1.... H2-1
805	3	M77	L3x3x4	.025	2.5	.001	5	z	26816.408	46656	1.688	3.388	1.... H2-1
806	3	M78	L3x3x4	.019	2.5	.002	0	z	26816.408	46656	1.688	3.388	1.... H2-1
807	3	M79	L3x3x4	.035	3.363	.004	0	z	17085.709	46656	1.688	3.16	1.... H2-1
808	3	M80	L3x3x4	.024	3.363	.003	6.727	z	17085.709	46656	1.688	3.16	1.... H2-1
809	3	M81	L3x3x4	.027	3.363	.002	6.727	y	17085.709	46656	1.688	3.16	1.... H2-1
810	3	M82	L3x3x4	.022	3.363	.001	0	y	17085.709	46656	1.688	3.16	1.... H2-1
811	3	M83	L3x3x4	.023	3.363	.002	0	z	17085.709	46656	1.688	3.16	1.... H2-1
812	3	M84	L3x3x4	.025	3.363	.002	0	z	17085.709	46656	1.688	3.16	1.... H2-1
813	3	M85	L4x4x4	.009	14....	.000	0	y	8564.442	62532	3.138	5.604	2.... H2-1
814	3	M86	L4x4x4	.046	0	.003	14....	z	8564.442	62532	3.138	5.697	2.... H2-1
815	3	M87	L4x4x4	.047	0	.003	0	z	8564.442	62532	3.138	5.635	2.... H2-1
816	3	M88	L6x6x5	.003	.742	.001	0	z	25726.472	118908	9.302	12.033	1.... H2-1
817	3	M89	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.556	1.... H2-1
818	3	M90	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.554	1.... H2-1
819	3	M91	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.57	1.... H2-1
820	3	M92	L6x6x5	.003	.742	.000	0	y	25726.472	118908	9.302	11.557	1.... H2-1
821	3	M93	L6x6x5	.003	0	.001	.742	y	25726.472	118908	9.302	11.624	1.... H2-1
822	3	M94	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	13.783	1.... H2-1
823	3	M95	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.596	1.01 H2-1
824	3	M96	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.588	1.... H2-1
825	3	M97	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.652	1.... H2-1
826	3	M98	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.672	1.... H2-1
827	3	M99	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.841	1.... H2-1
828	3	M100	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	11.644	1.... H2-1
829	3	M101	L6x6x5	.001	0	.000	.703	z	25726.472	118908	9.302	11.926	1.06 H2-1
830	3	M102	L6x6x5	.001	0	.000	.386	z	25726.472	118908	9.302	12.123	1.... H2-1
831	3	M103	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.259	1.... H2-1
832	3	M104	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.671	1.... H2-1
833	3	M105	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	12.57	1.... H2-1
834	3	M106	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
835	3	M107	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
836	3	M108	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
837	3	M109	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	16.767	1 H2-1
838	3	M110	L6x6x5	.001	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
839	3	M111	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
840	3	M112	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	16.767	1 H2-1
841	3	M113	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1
842	3	M114	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1 H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
843	3	M115	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
844	3	M116	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
845	3	M117	L6x6x5	.002	.742	.001	0	y	25726.472	118908	9.302	16.767	1	H2-1
846	3	M118	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
847	3	M119	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
848	3	M120	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
849	3	M121	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
850	3	M122	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
851	3	M123	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
852	3	M124	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
853	3	M125	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
854	3	M126	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
855	3	M127	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
856	3	M128	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
857	3	M129	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
858	3	M130	L6x6x5	.002	.742	.001	.533	z	25726.472	118908	9.302	16.767	1	H2-1
859	3	M131	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
860	3	M132	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
861	3	M133	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
862	3	M134	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
863	3	M135	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
864	3	M136	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
865	3	M137	L6x6x5	.001	0	.000	.023	z	25726.472	118908	9.302	16.767	1	H2-1
866	3	M138	L6x6x5	.001	0	.000	.008	z	25726.472	118908	9.302	16.767	1	H2-1
867	3	M139	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
868	3	M140	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
869	3	M141	L6x6x5	.002	.742	.001	.008	z	25726.472	118908	9.302	16.767	1	H2-1
870	3	M142	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	13.017	1....	H2-1
871	3	M143	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	11.643	1....	H2-1
872	3	M144	L6x6x5	.001	.742	.000	.031	z	25726.472	118908	9.302	12.096	1....	H2-1
873	3	M145	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	12.001	1....	H2-1
874	3	M146	L6x6x5	.001	.742	.000	.348	z	25726.472	118908	9.302	11.945	1....	H2-1
875	3	M147	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	11.923	1....	H2-1
876	3	M148	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	12.476	1....	H2-1
877	3	M149	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	11.668	1.02	H2-1
878	3	M150	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	11.716	1....	H2-1
879	3	M151	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	11.593	1....	H2-1
880	3	M152	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	11.601	1.01	H2-1
881	3	M153	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	12.158	1....	H2-1
882	3	M154	L6x6x5	.003	.742	.001	.023	z	25726.472	118908	9.302	12.195	1....	H2-1
883	3	M155	L6x6x5	.003	.742	.000	0	y	25726.472	118908	9.302	11.56	1....	H2-1
884	3	M156	L6x6x5	.003	.742	.000	0	y	25726.472	118908	9.302	11.564	1....	H2-1
885	3	M157	L6x6x5	.003	.742	.000	0	y	25726.472	118908	9.302	11.554	1....	H2-1
886	3	M158	L6x6x5	.003	0	.000	0	y	25726.472	118908	9.302	11.553	1....	H2-1
887	3	M159	L6x6x5	.003	0	.001	0	z	25726.472	118908	9.302	12	1....	H2-1
888	3	M160	L3x3x4	.055	5.522	.002	0	z	6078.334	46656	1.688	2.675	1....	H2-1
889	3	M161	L3x3x4	.005	11....	.000	0	y	6078.334	46656	1.688	2.534	1	H2-1
890	3	M162	L3x3x4	.055	5.522	.002	0	z	6078.334	46656	1.688	2.675	1....	H2-1
891	3	M163	L4x4x4	.046	14....	.003	0	z	8564.442	62532	3.138	5.751	2....	H2-1
892	3	M164	L4x4x4	.046	14....	.003	14....	z	8564.442	62532	3.138	5.751	2....	H2-1
893	3	M165	L4x4x4	.008	0	.000	0	y	8564.442	62532	3.138	5.596	2....	H2-1
894	3	M166	L6x6x5	.001	.742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
895	3	M167	L6x6x5	.001	.1	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
896	3	M168	L6x6x5	.001	.595	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
897	3	M169	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
898	3	M170	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
899	3	M171	L6x6x5	.008	.742	.004	0	z	25726.472	118908	9.302	13.953	1....	H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

May 25, 2016
 8:22 AM
 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
900	3	M172	L6x6x5	.006	0	.003	0	z	25726.472	118908	9.302	16.767	1	H2-1
901	3	M173	L6x6x5	.002	0	.001	015	z	25726.472	118908	9.302	16.767	1	H2-1
902	3	M174	L6x6x5	.001	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
903	3	M175	L6x6x5	.001	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
904	3	M176	L6x6x5	.001	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
905	3	M177	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
906	3	M178	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
907	3	M179	L6x6x5	.000	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
908	3	M180	L6x6x5	.000	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
909	3	M181	L6x6x5	.000	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
910	3	M182	L6x6x5	.000	742	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
911	3	M183	L6x6x5	.001	742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
912	3	M184	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
913	3	M185	L6x6x5	.000	742	.000	278	z	25726.472	118908	9.302	13.681	1.4	H2-1
914	3	M186	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	12.509	1....	H2-1
915	3	M187	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	12.213	1....	H2-1
916	3	M188	L6x6x5	.001	742	.000	0	y	25726.472	118908	9.302	12.031	1....	H2-1
917	3	M189	L6x6x5	.001	742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
918	3	M190	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
919	3	M191	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	12.729	1....	H2-1
920	3	M192	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	12.118	1.09	H2-1
921	3	M193	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	12.312	1....	H2-1
922	3	M194	L6x6x5	.000	0	.000	0	z	25726.472	118908	9.302	15.017	1....	H2-1
923	3	M195	L6x6x5	.006	742	.003	0	z	25726.472	118908	9.302	13.314	1....	H2-1
924	3	M196	L6x6x5	.003	0	.002	0	z	25726.472	118908	9.302	12.797	1....	H2-1
925	3	M197	L6x6x5	.001	742	.001	0	z	25726.472	118908	9.302	16.384	2....	H2-1
926	3	M198	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.129	1....	H2-1
927	3	M199	L6x6x5	.001	742	.000	0	y	25726.472	118908	9.302	11.968	1....	H2-1
928	3	M200	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.312	1....	H2-1
929	3	M201	L6x6x5	.001	742	.002	054	z	25726.472	118908	9.302	16.767	1	H2-1
930	3	M202	L6x6x5	.001	0	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
931	3	M203	L6x6x5	.001	742	.000	742	y	25726.472	118908	9.302	12.084	1....	H2-1
932	3	M204	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	11.908	1....	H2-1
933	3	M205	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.052	1.08	H2-1
934	3	M206	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.227	1....	H2-1
935	3	M207	L6x6x5	.001	742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
936	3	M208	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
937	3	M209	L6x6x5	.001	0	.000	742	y	25726.472	118908	9.302	12.072	1....	H2-1
938	3	M210	L6x6x5	.001	0	.000	742	y	25726.472	118908	9.302	11.918	1....	H2-1
939	3	M211	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.057	1....	H2-1
940	3	M212	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	12.388	1....	H2-1
941	3	M213	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	15.964	2....	H2-1
942	3	M214	L6x6x5	.001	0	.001	494	z	25726.472	118908	9.302	16.767	1	H2-1
943	3	M215	L6x6x5	.001	0	.000	742	y	25726.472	118908	9.302	11.963	1....	H2-1
944	3	M216	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	11.941	1....	H2-1
945	3	M217	L6x6x5	.000	0	.000	742	y	25726.472	118908	9.302	12.35	1.13	H2-1
946	3	M218	L6x6x5	.001	742	.000	0	z	25726.472	118908	9.302	13.129	1....	H2-1
947	3	M219	L6x6x5	.006	742	.002	008	z	25726.472	118908	9.302	13.582	1....	H2-1
948	3	M220	L6x6x5	.003	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
949	3	M221	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
950	3	M222	L6x6x5	.000	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
951	3	M223	L6x6x5	.000	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
952	3	M224	L6x6x5	.000	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
953	3	M225	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
954	3	M226	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.519	2....	H2-1
955	3	M227	L6x6x5	.000	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
956	3	M228	L6x6x5	.001	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1



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...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
957	3	M229	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
958	3	M230	L6x6x5	.001	0	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
959	3	M231	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
960	3	M232	L6x6x5	.001	.742	.001	.131	z	25726.472	118908	9.302	16.767	1	H2-1
961	3	M233	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
962	3	M234	L6x6x5	.001	.116	.000	.742	y	25726.472	118908	9.302	16.767	1	H2-1
963	3	M235	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
964	3	M236	L6x6x5	.001	.124	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
965	3	M237	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
966	3	M238	HSS5...	.021	0	.005	0		182684.746	185328	25.65	25.65	1.44	H1-...
967	3	M239	HSS5...	.012	3.743	.002	0		176566.922	185328	25.65	25.65	2.00	H1-...
968	3	M240	HSS5...	.023	3.042	.005	3.042		181554.182	185328	25.65	25.65	1.00	H1-...
969	3	M241	HSS5...	.038	0	.008	0		182684.746	185328	25.65	25.65	1.00	H1-...
970	3	M242	HSS5...	.011	2.819	.001	0		176566.922	185328	25.65	25.65	1.00	H1-...
971	3	M243	HSS5...	.022	3.042	.004	3.042		181554.182	185328	25.65	25.65	1.00	H1-...
972	3	M244	HSS5...	.027	0	.006	0		182684.746	185328	25.65	25.65	2.16	H1-...
973	3	M245	HSS5...	.010	2.09	.001	4.667		176566.922	185328	25.65	25.65	2.00	H1-...
974	3	M246	HSS5...	.017	3.042	.004	3.042		181554.182	185328	25.65	25.65	1.00	H1-...
975	3	M247	L4x3x4	.092	1	.008	.021	y	49075.98	54756	1.795	4.805	1.00	H2-1
976	3	M248	L4x3x4	.043	1	.005	0	y	49075.98	54756	1.795	4.805	1.00	H2-1
977	3	M249	L4x3x4	.034	1	.007	.031	y	49075.98	54756	1.844	4.805	1.00	H2-1
978	3	M250	L4x3x4	.095	1	.009	0	y	49075.98	54756	1.795	4.805	1.00	H2-1
979	3	M251	L4x3x4	.049	1	.005	0	y	49075.98	54756	1.795	4.805	1.00	H2-1
980	3	M252	L4x3x4	.033	1	.007	.01	y	49075.98	54756	1.844	4.805	1.00	H2-1
981	3	M253	L4x3x4	.124	4.5	.007	2.109	y	35430.911	54756	1.844	4.936	1.00	H2-1
982	3	M254	L4x3x4	.121	0	.006	0	y	35430.911	54756	1.844	4.936	1.00	H2-1
983	3	M255	L4x3x4	.069	0	.006	1.278	z	48552.733	54756	1.795	4.805	1.00	H2-1
984	3	M256	L4x3x4	.044	0	.002	0	y	35430.911	54756	1.795	4.712	2.00	H2-1
985	3	M257	L4x3x4	.064	4.5	.002	0	y	35430.911	54756	1.795	4.701	2.00	H2-1
986	3	M258	L4x3x4	.062	0	.005	0	y	48552.733	54756	1.795	4.805	1.00	H2-1
987	3	M259	L4x3x4	.144	4.5	.005	0	z	35430.911	54756	1.844	4.205	1.00	H2-1
988	3	M260	L4x3x4	.141	0	.005	4.5	z	35430.911	54756	1.844	4.212	1.00	H2-1
989	3	M261	L4x3x4	.043	0	.006	1.278	z	48552.733	54756	1.844	4.805	1.00	H2-1
990	3	M262	L4x3x4	.098	0	.005	0	y	35430.911	54756	1.795	4.648	2.00	H2-1
991	3	M263	L4x3x4	.083	.937	.004	.562	y	35430.911	54756	1.844	4.936	1.00	H2-1
992	3	M264	L4x3x4	.072	0	.006	1.278	z	48552.733	54756	1.795	4.805	1.00	H2-1
993	3	M265	L4x3x4	.048	0	.002	0	y	35430.911	54756	1.795	4.71	2.00	H2-1
994	3	M266	L4x3x4	.061	4.5	.002	0	y	35430.911	54756	1.795	4.703	2.16	H2-1
995	3	M267	L4x3x4	.059	0	.005	0	y	48552.733	54756	1.795	4.805	1.00	H2-1
996	3	M268	L4x3x4	.096	4.5	.002	0	z	35430.911	54756	1.844	4.075	1.00	H2-1
997	3	M269	L4x3x4	.095	0	.002	4.5	z	35430.911	54756	1.844	4.075	1.00	H2-1
998	3	M270	L4x3x4	.043	0	.006	1.278	z	48552.733	54756	1.844	4.805	1.00	H2-1
999	3	M271	L4x3x4	.018	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1000	3	M272	L4x3x4	.016	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1001	3	M273	L4x3x4	.015	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1002	3	M274	L4x3x4	.015	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1003	3	M275	L4x3x4	.013	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1004	3	M276	L4x3x4	.015	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1005	3	M277	L4x3x4	.014	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1006	3	M278	L4x3x4	.011	2.333	.001	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1007	3	M279	L4x3x4	.013	2.333	.003	4.667	z	34526.553	54756	1.844	4.693	1.00	H2-1
1008	3	M280	L4x3x4	.026	3.241	.003	6.483	z	24508.492	54756	1.844	4.315	1.00	H2-1
1009	3	M281	L4x3x4	.020	3.241	.003	0	z	24508.492	54756	1.844	4.315	1.00	H2-1
1010	3	M282	L4x3x4	.014	3.174	.001	6.483	y	24508.492	54756	1.844	4.315	1.00	H2-1
1011	3	M283	L4x3x4	.015	3.174	.001	0	y	24508.492	54756	1.795	3.777	1.00	H2-1
1012	3	M284	L4x3x4	.019	3.241	.003	0	z	24508.492	54756	1.844	3.777	1.00	H2-1
1013	3	M285	L4x3x4	.023	3.241	.003	0	z	24508.492	54756	1.844	3.777	1.00	H2-1



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...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn	
1014	3	M292	LL4x4x..	.006	6.511	.001	0	z	82406.735	125064	12.586	5.548	2....	H1-...
1015	3	M293	LL4x4x..	.004	0	.001	0	z	82406.735	125064	12.586	8.877	2....	H1-...
1016	3	M294	LL4x4x..	.005	0	.001	0	z	82406.735	125064	12.586	5.548	2....	H1-...
1017	3	M295	L6x6x5	.006	0	.002	0	z	25726.472	118908	9.302	12.537	1....	H2-1
1018	3	M296	L6x6x5	.003	0	.001	0	z	25726.472	118908	9.302	12.011	1....	H2-1
1019	3	M297	L6x6x5	.003	0	.000	742	y	25726.472	118908	9.302	11.579	1....	H2-1
1020	3	M298	L6x6x5	.002	0	.000	742	y	25726.472	118908	9.302	11.563	1....	H2-1
1021	3	M299	L6x6x5	.003	742	.000	0	y	25726.472	118908	9.302	11.796	1.04	H2-1
1022	3	M300	L6x6x5	.006	742	.002	68	z	25726.472	118908	9.302	12.742	1.2	H2-1
1023	3	M301	L6x6x5	.002	742	.001	0	z	25726.472	118908	9.302	14.535	1....	H2-1
1024	3	M302	L6x6x5	.002	742	.000	742	y	25726.472	118908	9.302	11.565	1....	H2-1
1025	3	M303	L6x6x5	.002	0	.000	742	y	25726.472	118908	9.302	11.607	1....	H2-1
1026	3	M304	L6x6x5	.002	0	.000	742	y	25726.472	118908	9.302	11.726	1....	H2-1
1027	3	M305	L6x6x5	.001	0	.000	618	z	25726.472	118908	9.302	12.142	1....	H2-1
1028	3	M306	L6x6x5	.001	742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
1029	3	M307	L6x6x5	.004	0	.001	0	z	25726.472	118908	9.302	13.22	1....	H2-1
1030	3	M308	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	12.892	1.23	H2-1
1031	3	M309	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	13.004	1....	H2-1
1032	3	M310	L6x6x5	.000	742	.000	015	z	25726.472	118908	9.302	16.767	1	H2-1
1033	3	M311	L6x6x5	.000	742	.000	0	z	25726.472	118908	9.302	15.31	1....	H2-1
1034	3	M312	L6x6x5	.003	742	.001	0	z	25726.472	118908	9.302	13.99	1....	H2-1
1035	3	M313	L6x6x5	.001	0	.001	0	z	25726.472	118908	9.302	15.961	2....	H2-1
1036	3	M314	L6x6x5	.001	742	.000	015	z	25726.472	118908	9.302	16.767	1	H2-1
1037	3	M315	L6x6x5	.001	742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
1038	3	M316	L6x6x5	.002	742	.000	386	z	25726.472	118908	9.302	16.767	1	H2-1
1039	3	M317	L6x6x5	.002	742	.000	487	z	25726.472	118908	9.302	16.767	1	H2-1
1040	3	M318	L6x6x5	.003	742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
1041	3	M319	L6x6x5	.009	0	.004	0	z	25726.472	118908	9.302	14.431	1....	H2-1
1042	3	M320	L6x6x5	.002	742	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
1043	3	M321	L6x6x5	.002	742	.000	564	z	25726.472	118908	9.302	16.767	1	H2-1
1044	3	M322	L6x6x5	.002	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1045	3	M323	L6x6x5	.002	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
1046	3	M324	L6x6x5	.010	742	.005	0	z	25726.472	118908	9.302	14.427	1....	H2-1
1047	3	M325	L6x6x5	.003	0	.003	0	z	25726.472	118908	9.302	16.184	2....	H2-1
1048	3	M326	L6x6x5	.003	0	.001	742	y	25726.472	118908	9.302	16.767	1	H2-1
1049	3	M327	L6x6x5	.003	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
1050	3	M328	L6x6x5	.003	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1051	3	M329	L6x6x5	.003	0	.001	0	z	25726.472	118908	9.302	16.767	1	H2-1
1052	3	M330	L6x6x5	.007	742	.004	0	z	25726.472	118908	9.302	15.133	1....	H2-1
1053	3	M331	L6x6x5	.003	742	.002	0	z	25726.472	118908	9.302	16.767	1	H2-1
1054	3	M332	L6x6x5	.003	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1055	3	M333	L6x6x5	.003	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1056	3	M334	L6x6x5	.003	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1057	3	M335	L6x6x5	.003	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
1058	3	M336	L6x6x5	.002	0	.003	417	z	25726.472	118908	9.302	16.767	1	H2-1
1059	3	M337	L6x6x5	.002	742	.002	031	z	25726.472	118908	9.302	16.767	1	H2-1
1060	3	M338	L6x6x5	.002	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
1061	3	M339	L6x6x5	.002	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1062	3	M340	L6x6x5	.002	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1063	3	M341	L6x6x5	.002	0	.000	031	z	25726.472	118908	9.302	16.767	1	H2-1
1064	3	M342	L6x6x5	.004	742	.002	0	z	25726.472	118908	9.302	15.323	1....	H2-1
1065	3	M343	L6x6x5	.001	742	.000	0	y	25726.472	118908	9.302	16.767	1	H2-1
1066	3	M344	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
1067	3	M345	L6x6x5	.001	0	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
1068	3	M346	L6x6x5	.001	0	.000	742	y	25726.472	118908	9.302	16.767	1	H2-1
1069	3	M347	L6x6x5	.001	742	.000	0	z	25726.472	118908	9.302	16.767	1	H2-1
1070	3	M348	L6x6x5	.004	742	.001	008	z	25726.472	118908	9.302	16.767	1	H2-1



Company : Verizon
 Designer : B. Davies
 Job Number : 370624 - 66728021
 Model Name : Mankes Silo, CT

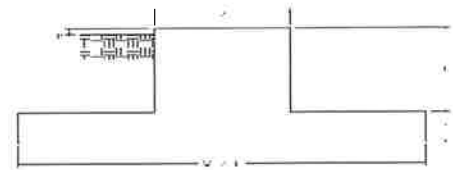
May 25, 2016
 8:22 AM
 Checked By: A. Tan

Member AISC 13th(360-05): LRFD Steel Code Checks (Continued)

...	Member	Shape	UC Max	Loc...	Shear UC	Loc...	Dir	phi*Pnc[lb]	phi*Pnt[lb]	phi*Mn...	phi*Mn...	Cb	Eqn
1071	3	M349	L6x6x5	.009	0	.003	0	z	25726.472	118908	9.302	13.602	1.... H2-1
1072	3	M350	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	13.478	1.... H2-1
1073	3	M351	L6x6x5	.001	0	.000	0	y	25726.472	118908	9.302	11.622	1.... H2-1
1074	3	M352	L6x6x5	.001	.742	.000	.239	z	25726.472	118908	9.302	12.448	1.... H2-1
1075	3	M353	L6x6x5	.002	.742	.001	0	z	25726.472	118908	9.302	12.892	1.23 H2-1
1076	3	M354	L6x6x5	.005	.742	.002	0	z	25726.472	118908	9.302	13.1	1.... H2-1
1077	3	M355	L6x6x5	.004	0	.002	0	z	25726.472	118908	9.302	16.767	1 H2-1
1078	3	M356	L6x6x5	.001	.742	.000	0	z	25726.472	118908	9.302	12.573	1.... H2-1
1079	3	M357	L6x6x5	.002	.742	.000	0	y	25726.472	118908	9.302	11.873	1.... H2-1
1080	3	M358	L6x6x5	.002	0	.000	0	y	25726.472	118908	9.302	11.575	1.... H2-1
1081	3	M359	L6x6x5	.002	0	.000	.742	y	25726.472	118908	9.302	11.575	1.... H2-1
1082	3	M360	L6x6x5	.002	.742	.002	0	z	25726.472	118908	9.302	16.767	1 H2-1
1083	3	M361	L6x6x5	.002	.742	.002	0	z	25726.472	118908	9.302	12.219	1.... H2-1
1084	3	M362	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.58	1.... H2-1
1085	3	M363	L6x6x5	.003	.742	.000	0	y	25726.472	118908	9.302	11.564	1.... H2-1
1086	3	M364	L6x6x5	.003	0	.000	.742	y	25726.472	118908	9.302	11.594	1.... H2-1
1087	3	M365	L6x6x5	.002	0	.000	0	z	25726.472	118908	9.302	12.126	1.... H2-1
1088	3	M366	L6x6x5	.005	.742	.003	0	z	25726.472	118908	9.302	16.767	1 H2-1
1089	3	M370	HSS5x...	.004	5.455	.001	5.455		196651.072	214488	25.92	25.92	2.... H1-...
1090	3	M371	LL4x4x...	.015	10.1	.001	10.1	y	72438.769	125064	12.586	5.548	2.... H1-...
1091	3	M372	LL4x4x...	.018	10.1	.001	10.1	z	72438.769	125064	12.586	5.548	2.... H1-...
1092	3	M373	LL4x4x...	.016	10.1	.002	10.1	z	72438.769	125064	12.586	5.548	2.... H1-...
1093	3	M374	LL4x4x...	.013	10.1	.002	10.1	z	72438.769	125064	12.586	8.877	2.48 H1-...
1094	3	M375	LL4x4x...	.015	0	.002	10.1	z	72438.769	125064	12.586	8.877	2.... H1-...
1095	3	M376	LL4x4x...	.015	0	.001	0	z	72438.769	125064	12.586	8.877	2.... H1-...
1096	3	M377	LL4x4x...	.011	0	.001	0	y	72438.769	125064	12.586	8.877	2.... H1-...
1097	3	M378	LL4x4x...	.014	0	.001	10.1	z	72438.769	125064	12.586	8.877	2.... H1-...
1098	3	M379	LL4x4x...	.014	0	.002	10.1	z	72438.769	125064	12.586	8.877	2.... H1-...
1099	3	M380	LL4x4x...	.012	0	.002	0	z	72438.769	125064	12.586	5.548	2.... H1-...
1100	3	M381	LL4x4x...	.017	0	.002	0	z	72438.769	125064	12.586	5.548	2.... H1-...
1101	3	M382	LL4x4x...	.018	0	.001	0	z	72438.769	125064	12.586	5.548	2.... H1-...

Site Name: Mankes Silo, CT
 Site Number: 370624
 Engineering Number: 66728021
 Engineer: B. Davies
 Date: 05/25/16
 Tower Type: MP

Program Last Updated: 11/15/2012



Design Loads (Unfactored)

Design / Analysis / Mapping:	Mapping
Compression/Leg:	48.3 k
Uplift/Leg:	48.1 k
Total Shear:	11.4 k
Moment:	6.4 k-ft
Tower + Appurtenance Weight:	520.0 k
Depth to Base of Foundation:	3.75 ft
Diameter of Pier (d):	0.00 ft
Height of Pier above Ground (h):	0.00
Width of Pad (W):	16.84 ft
Length of Pad (L):	16.84 ft
Thickness of Pad (t):	3.75 ft
Tower Leg Center to Center:	0.00 ft
Number of Tower Legs:	1.0 (1 if MP or GT)
Tower Center from Mat Center:	0.00 ft
Depth Below Ground Surface to Water Table:	99.00 ft
Unit Weight of Concrete:	150.0 pcf
Unit Weight of Soil Above Water Table:	100.0 pcf
Unit Weight of Water:	62.4 pcf
Unit Weight of Soil Below Water Table:	50.0 pcf
Friction Angle of Uplift:	30.00 Degrees
Ultimate Coefficient of Shear Friction:	0.35
Allowable Compressive Bearing Pressure:	5000.0 psf
Ultimate Passive Pressure on Pad Face:	0.0 psf
Allowable Capacity Increase:	1.33

Overturing Factor of Safety

Design OTM:	49.3 k-ft
OTM Resistance:	5776.0 k-ft
OTM Resistance / Design OTM Factor of Safety:	117.24 Result: OK

Soil Bearing Pressure Usage:

Net Bearing Pressure:	2021 psf
Allowable Bearing Pressure:	6650 psf
Net Bearing Pressure/Allowable Bearing Pressure:	0.30 Result: OK
Load Direction Controlling Design Bearing Pressure:	Diagonal to Pad Edge

Sliding Factor of Safety

Total Ultimate Sliding Resistance:	237.8 k
Sliding Resistance/Sliding Design Factor of Safety:	20.78 Result: OK

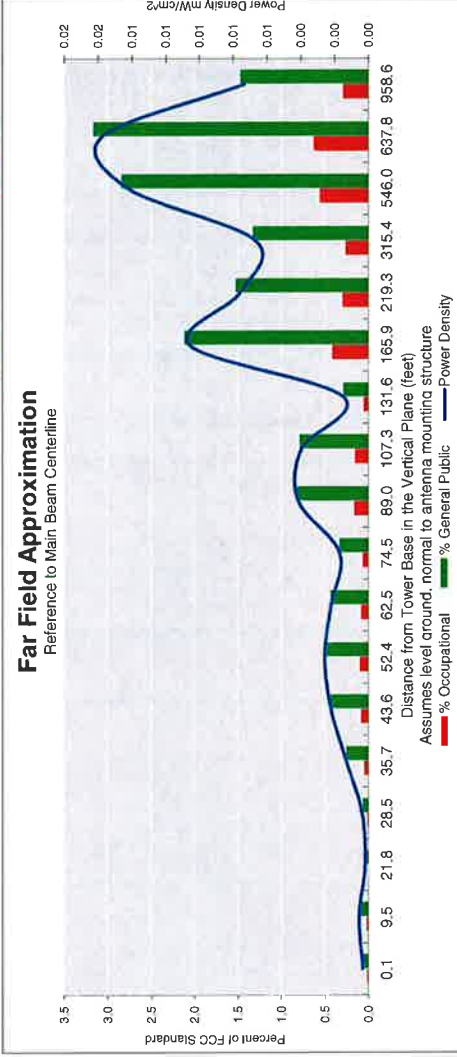
ATTACHMENT 6

Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emitter Far Field Model
Dipole/Wire/Yagi Antenna Types**



Location:	CHESHIRE NORTH CT
Site #:	2-0337
Date:	06/02/16
Name:	Jaime Laredo
File Name:	CHESHIRE NORTH CT - FF POWER (LTE-700).xlsx
Operating Freq. (MHz):	746.0
Antenna Height (ft):	70.0
Antenna Gain (dB):	14.8
Antenna Size (in.):	72.0
Downtilt (degrees):	2.0
Feedline Loss (dB):	0.0
ERP (W):	1035.8
No. of Channels:	1



Calc Angle	90.0	82.0	72.0	67.0	62.0	57.0	52.0	47.0	42.0	37.0	32.0	27.0	22.0	17.0	12.0	7.0	6.0	4.0
Solve for r, dx to antenna	67.0	67.7	70.5	72.8	75.9	79.9	85.1	91.6	100.2	111.4	126.5	147.6	178.9	229.3	322.4	550.0	641.3	961.0
Distance from Antenna Structure Base in Horizontal plane	0.1	9.5	21.8	28.5	35.7	43.6	52.4	62.5	74.5	89.0	107.3	131.6	165.9	219.3	315.4	546.0	637.8	958.6
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.09	12.3	9.92	2	0.2	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.4	0.3	0.3	0.6	0.6	0.3
Percent of General Population Standard	0.1	0.1	0.0	0.1	0.3	0.4	0.5	0.4	0.3	0.8	0.8	0.3	2.1	1.5	1.3	2.8	3.2	1.5

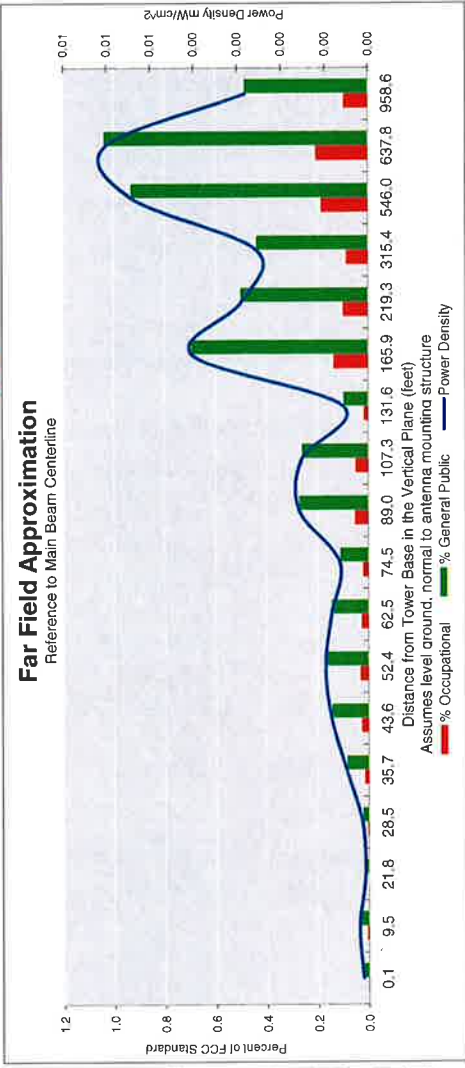
Antenna Type: **SBNHH-1D65B**
Max%: **3.17%**

Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emmitter Far Field Model
Dipole/Wire/Yagi Antenna Types**



Location:	CHESHIRE NORTH CT
Site #:	2-0337
Date:	06/02/16
Name:	Jaime Laredo
File Name:	CHESHIRE NORTH CT - FF POWER (Cellular).xlsx
Operating Freq. (MHz):	869.0
Antenna Height (ft):	70.0
Antenna Gain (dBi):	15.5
Antenna Size (in.):	72.0
Downtilt (degrees):	2.0
Feedline Loss (dB):	0.0
ERP (W):	332.6
No. of Channels:	9



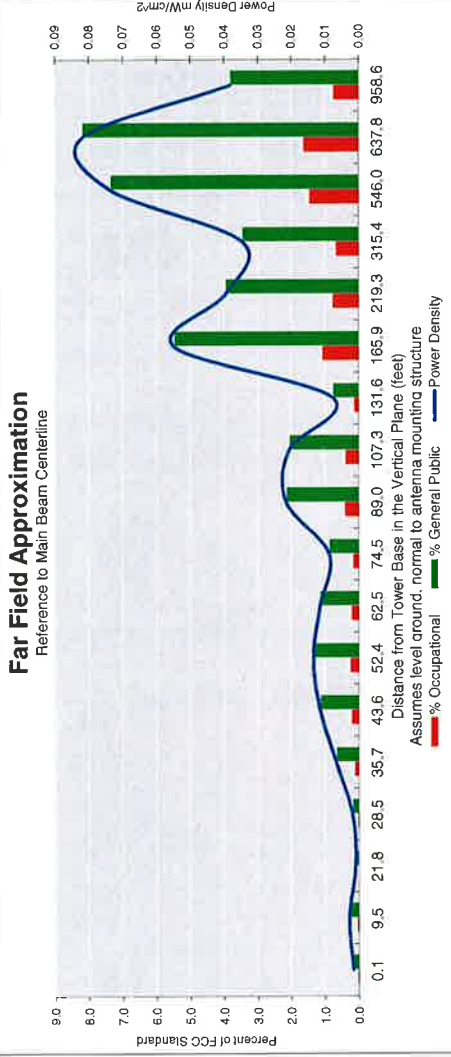
Calc Angle	90.0	82.0	72.0	67.0	62.0	57.0	52.0	47.0	42.0	37.0	32.0	27.0	22.0	17.0	12.0	7.0	6.0	4.0
Solve for r, dx to antenna	67.0	67.7	70.5	72.8	75.9	79.9	85.1	91.6	100.2	111.4	126.5	147.6	178.9	229.3	322.4	550.0	641.3	961.0
Distance from Antenna Structure Base in Horizontal plane	0.1	9.5	21.8	28.5	35.7	43.6	52.4	62.5	74.5	89.0	107.3	131.6	165.9	219.3	315.4	546.0	637.8	958.6
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.03	9.92	2	0.2	0	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.1
Percent of General Population Standard	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.1	0.7	0.5	0.4	0.9	1.0	0.5

Antenna Type: **SRNHH-1D65B**
Max%: 1.04%

Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emmitter Far Field Model
Dipole/Wire/Yagi Antenna Types**

Location:	CHESHIRE NORTH CT
Site #:	2-0337
Date:	06/02/16
Name:	Jaime Laredo
File Name:	CHESHIRE NORTH CT - FF POWER (PCS).xlsx
Operating Freq. (MHz):	1970.0
Antenna Height (ft):	70.0
Antenna Gain (dBi):	18.4
Antenna Size (in.):	72.0
Downtilt (degrees):	2.0
Feedline Loss (dB):	0.0
ERP (W):	2333.0
No. of Channels:	1



Calc Angle	90.0	82.0	72.0	67.0	62.0	57.0	52.0	47.0	42.0	37.0	32.0	27.0	22.0	17.0	12.0	7.0	6.0	4.0
Solve for, dx to antenna	67.0	67.7	70.5	72.8	75.9	79.9	85.1	91.6	100.2	111.4	126.5	147.6	178.9	229.3	322.4	550.0	641.3	961.0
Distance from Antenna Structure Base in Horizontal plane	0.1	9.5	21.8	28.5	35.7	43.6	52.4	62.5	74.5	89.0	107.3	131.6	165.9	219.3	315.4	546.0	637.8	958.6
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.03	12.3	9.92	2	0.2	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.05	0.04	0.03	0.07	0.08	0.04
Percent of Occupational Standard	0.0	0.1	0.0	0.0	0.1	0.2	0.3	0.2	0.2	0.4	0.4	0.2	1.1	0.8	0.7	1.5	1.6	0.8
Percent of General Population Standard	0.2	0.3	0.1	0.2	0.7	1.2	1.3	1.2	0.9	2.2	2.1	0.8	5.5	4.0	3.5	7.4	8.2	3.8

Antenna Type: SBNHH-1D65B

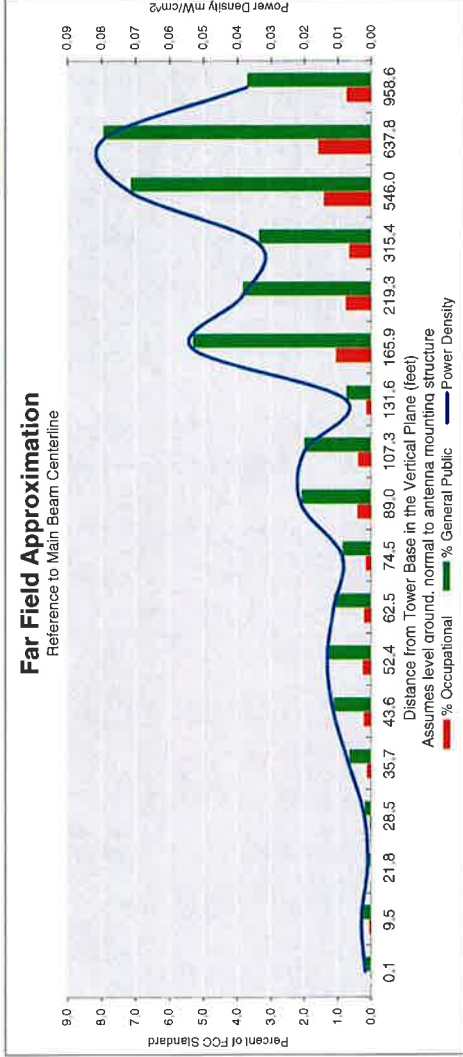
Max%: 8.20%

Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emmitter Far Field Model
Dipole/Wire/Yagi Antenna Types**



Location:	CHESHIRE NORTH CT
Site #:	2-0337
Date:	06/02/16
Name:	Jaime Laredo
File Name:	CHESHIRE NORTH CT - FF POWER (LTE-AWS).xlsx
Operating Freq. (MHz):	2145.0
Antenna Height (ft):	70.0
Antenna Gain (dBi):	18.3
Antenna Size (in.):	72.0
Downtilt (degrees):	2.0
Feedline Loss (dB):	0.0
ERP (W):	2306.5
No. of Channels:	1



Calc Angle	90.0	82.0	72.0	67.0	62.0	57.0	52.0	47.0	42.0	37.0	32.0	27.0	22.0	17.0	12.0	7.0	6.0	4.0
Solve for r, dx to antenna	67.0	67.7	70.5	72.8	75.9	79.9	85.1	91.6	100.2	111.4	126.5	147.6	178.9	229.3	322.4	550.0	641.3	961.0
Distance from Antenna Structure Base in Horizontal plane	0.1	9.5	21.8	28.5	35.7	43.6	52.4	62.5	74.5	89.0	107.3	131.6	165.9	219.3	315.4	546.0	637.8	958.6
Angle from Main Beam (reference to horizontal plane)	-90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.03	9.92	2	0.2	0	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.05	0.04	0.03	0.07	0.08	0.04
Percent of Occupational Standard	0.0	0.1	0.0	0.0	0.1	0.2	0.3	0.2	0.2	0.4	0.4	0.4	1.1	0.8	0.7	1.4	1.6	0.7
Percent of General Population Standard	0.2	0.3	0.1	0.2	0.7	1.1	1.3	1.1	0.9	2.1	2.0	0.7	5.3	3.8	3.4	7.2	8.0	3.7

Antenna Type: **SBNHH-1D65B**
Max%: 7.56%

ATTACHMENT 7

June 3, 2016

Via Certificate of Mailing

Michael A. Milone, Town Manager
Town of Cheshire
Town Hall
84 South Main Street
Cheshire, CT 06410

Re: **Proposed Telecommunications Facility at 1338 Highland Avenue in Cheshire, Connecticut**

Dear Mr. Milone:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Sub-Petition for Declaratory Ruling (“Sub-Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install antennas and related equipment on the existing 78-foot farm silo structure at 1338 Highland Avenue in Cheshire (the “Property”). Cellco intends to install twelve (12) antennas and nine (9) remote radio heads at the 70-foot level inside the silo. The antennas will be located behind RF transparent screening panels. Equipment associated with Cellco’s antennas will be located inside an existing shelter on the Property. Cellco will also install an emergency back-up generator adjacent to the equipment shelters.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-533). A copy of the full Sub-Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

14735440-v1

Robinson+Cole

Michael A. Milone
June 3, 2016
Page 2

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the attached Sub-Petition.

Please contact me if you have any questions regarding this proposal.

Sincerely,



Kenneth C. Baldwin

Attachment

June 3, 2016

Via Certificate of Mailing

MUDDDM LLC
1338 Highland Avenue
Cheshire, CT 06410

Re: **Proposed Telecommunications Facility at 1338 Highland Avenue in Cheshire, Connecticut**

Dear Sir or Madam:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Sub-Petition for Declaratory Ruling (“Sub-Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install antennas and related equipment on the existing 78-foot farm silo structure at 1338 Highland Avenue in Cheshire (the “Property”). Cellco intends to install twelve (12) antennas and nine (9) remote radio heads at the 70-foot level inside the silo. The antennas will be located behind RF transparent screening panels. Equipment associated with Cellco’s antennas will be located inside an existing shelter on the Property. Cellco will also install an emergency back-up generator adjacent to the equipment shelters.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-533). A copy of the full Sub-Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

Robinson+Cole

MUDDDM LLC

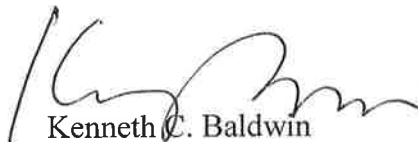
June 3, 2016

Page 2

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the attached Sub-Petition.

Please contact me if you have any questions regarding this proposal.

Sincerely,



Kenneth C. Baldwin

Attachment

June 3, 2016

Via Certificate of Mailing

Heather Douglas Wilkins
Territory Manager-Business Development
Northeast (New England/NY)
American Tower Corporation
10 Presidential Way
Woburn, MA 01801

Re: **Proposed Telecommunications Facility at 1338 Highland Avenue in Cheshire, Connecticut**

Dear Ms. Wilkins:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Sub-Petition for Declaratory Ruling (“Sub-Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install antennas and related equipment on the existing 78-foot farm silo structure at 1338 Highland Avenue in Cheshire (the “Property”). Cellco intends to install twelve (12) antennas and nine (9) remote radio heads at the 70-foot level inside the silo. The antennas will be located behind RF transparent screening panels. Equipment associated with Cellco’s antennas will be located inside an existing shelter on the Property. Cellco will also install an emergency back-up generator adjacent to the equipment shelters.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-533). A copy of the full Sub-Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

14735514-v1


Robinson+Cole

Heather Douglas Wilkins
June 3, 2016
Page 2

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the attached Sub-Petition.

Please contact me if you have any questions regarding this proposal.

Sincerely,



Kenneth C. Baldwin

Attachment

ATTACHMENT 8

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

June 3, 2016

Via Certificate of Mailing

«Name_and_Address»

Re: **Proposed Telecommunications Facility at 1338 Highland Avenue in Cheshire, Connecticut**

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Sub-Petition for Declaratory Ruling (“Sub-Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install antennas and related equipment on the existing 78-foot farm silo structure at 1338 Highland Avenue in Cheshire (the “Property”). Cellco intends to install twelve (12) antennas and nine (9) remote radio heads at the 70-foot level inside the silo. The antennas will be located behind RF transparent screening panels. Equipment associated with Cellco’s antennas will be located inside an existing shelter on the Property. Cellco will also install an emergency back-up generator adjacent to the equipment shelters.

As presented in the Sub-Petition, the proposed facility improvements at the Property constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-533). A copy of the full Sub-Petition is attached for your review.

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the Sub-Petition.

June 3, 2016
Page 2

This notice is being sent to you because you are listed as an owner of land that abuts the Property. If you have any questions regarding the Sub-Petition, the Council's process for reviewing the Sub-Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact the Council directly at 860-827-2935.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Attachment

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTING PROPERTY OWNERS

1338 HIGHLAND AVENUE, CHESHIRE, CONNECTICUT

	Property Address	Owner and Mailing Address
1.	1364 Highland Avenue	STD Associates P.O. Box 905 Middlebury, CT 06762
2.	1312 Highland Avenue	Diane M. Ulbrich L/U Margaret M. Barth 291 Tucker Hill Road Middlebury, CT 06762
3.	1331 Highland Avenue	Rock Associates LLC 1331 Highland Avenue Cheshire, CT 06410
4.	1355 Highland Avenue	Cheshire Industrial Development LLC 275 Schoolhouse Road Cheshire, CT 06410