

January 31, 2023

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

Re: Notice of Exempt Modification – AT&T Mobility Site 13682835 EM-CING-138-200909; EM-CING-138-210805; EM-CING-138-190403 AT&T Telecommunications Facility @ 23 Stonybrook Road, Stratford, CT 06614 AKA Ruth Road

Dear Ms. Bachman,

Enclosed please find three (3) sets of Exempt Modification application packages for the above referenced site and check number 00040848 in the amount of Six Hundred Twenty Five Dollars (\$625.00). The application package consists of The Exempt Modification Letter and Letter of Authorization from the tower owner; and:

- Exhibit 1 Property Card and GIS
- Exhibit 2 Construction Drawings
- Exhibit 3 Structural Analysis Report
- Exhibit 4 Antenna Mount Analysis Report
- Exhibit 5 EME Study Report
- Exhibit 6 Prior CSC Approvals
- Exhibit 7 Four (4) Notice Confirmations

A pdf copy of these same documents has been emailed to your office this day.

As always, if you have any questions or comments, please feel free to contact me.

Sincerely,

Jack Andrews

Zoning Manager, Centerline Communications

10130 Donleigh Drive Columbia, MD 21046

443-677-0144



January 25, 2023

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

Re: Notice of Exempt Modification – AT&T Mobility Site 13682835 EM-CING-138-200909; EM-CING-138-210805; EM-CING-138-190403 AT&T Wireless Telecommunications Facility @ 23 Stonybrook Road, Stratford, CT 06614 AKA Ruth Road

Dear Ms. Bachman,

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred and nineteen (119) foot tall monopole tower at 23 Stonybrook Road, Stratford, CT 06614 (Latitude: 41.20327777, Longitude: -73.148625). The property is also identified as being on "Ruth Street" on the Stratford GIS webpage. The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Stoneybrook Management LLC.

AT&T proposes to remove nine (9) existing antennas and one (1) squid and replace them with twelve (12) new panel antennas with four (4) RRHs and two (2) squids at the existing centerline of one hundred seventeen (117) feet on the existing one hundred nineteen (119) foot tall monopole, as more particularly detailed on the enclosed Construction Drawings dated 1/14/2022. The proposal involves minimal groundwork: installing a Fronthaul Gateway and one (1) IDLE ECEDE.

The tower was approved by the Connecticut Siting Council in Docket 385 dated February 25, 2010, and modified July 19, 2019. Most recently, on October 26, 2020, the Siting Council approved EM-CING-138-200909 - AT&T Mobility notice of intent to modify the existing telecommunications facility with no change in the antenna centerline elevation. An AT&T facility was approved by the Council in EM-CING-138-190403.

Please accept this application as notification in accordance with R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72 (b)(2). In accordance with R.C.S.A §16-50j-73, a copy of this letter is being sent to the following individuals Laura R. Hoydick, the Mayor of the Town of Stratford; Daniel Brennan, the Zoning Enforcement Officer of the Town of Stratford; Blake Paynter the American Tower Corporation Project Manager as Tower Owner; and Stonybrook Management LLC as ground owner.

The applicant's proposal falls squarely within those activities explicitly provided for in R.C.S.A. § § 16-50j-72(b)(2):



- 1. The proposed modifications will NOT result in an increase in the height of the existing structure. AT&T's antennas and associated lines will be installed at the existing mount height of on the tower; please see page C-201 of the drawings. The new antennas will not exceed the height of the existing antennas.
- 2. The proposed modifications will NOT require an extension of the site boundary.
- 3. The proposed modifications will NOT increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4. The operation of the modified facility will NOT increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. Please see the RF emissions calculation for AT&T's modified facility enclosed herewith.
- 5. The proposed modifications will NOT cause an ineligible change or alteration in the physical or environmental characteristics of the site.
- 6. The existing structure and its foundation can support the proposed loading. Please see the structural analysis dated January 20, 2023, prepared by American Tower Corporation, and enclosed herewith.

For the foregoing reasons, AT&T respectfully requests that the Council approve this request for the exempt modifications under R.C.S.A. § 16-50j-72(b)(2), for this tower located at 23 Stonybrook Road, Stratford, CT 06614.

If you have any questions, please feel free to contact me.

Sincerely,

Jack Andrews

Zoning Manager, Centerline Communications

10130 Donleigh Drive Columbia, MD 21046

443-677-0144

Enclosures:

Exhibit 1 – Property Card and GIS

Exhibit 2 – Construction Drawings

Exhibit 3 – Structural Analysis Report

Exhibit 4 – Antenna Mount Analysis Report

Exhibit 5 – EME Study Report Exhibit 6 – Prior CSC Approvals

Exhibit 7 – Four (4) Notice Confirmations

cc: American Tower Corporation - Tower Operator/Owner Eversource (F/K/A Conn Power & Light) - Property Owner Laura R. Hoydick - the Mayor of Stratford Daniel Brennan – Stratford Zoning Enforcement Officer



LETTER OF AUTHORIZATION

CENTERLINE COMMUNICATIONS LLC/ AT&T MOBILITY

I, Margaret Robinson, Vice President, US Tower Legal Division on behalf of American Tower*, owner/operator of the tower facility located at the address identified below (the "Tower Facilities"), do hereby authorize AT&T MOBILITY, CENTERLINE COMMUNICATIONS LLC, its successors and assigns, to act as American Tower's non-exclusive agent for the purpose of filing and securing any zoning, land-use, building permit and/or electrical permit application(s) and approvals of the applicable jurisdiction for and to conduct the construction of the installation of antennas and related telecommunications equipment on the Tower Facility located at the above address. This installation shall not affect adjoining lands and will occur only within the area leased by American Tower.

American Tower understands that the application may be denied, modified or approved with conditions. The above authorization is limited to the acceptance by American Tower of conditions related to American Tower's installation. Any such conditions of approval or modifications will not be effective unless approved in writing by American Tower.

The above authorization does not permit AT&T MOBILITY, CENTERLINE COMMUNICATIONS LLC to modify or alter any existing permit(s) and/or zoning or land-use conditions or impose any additional conditions unrelated to American Tower's installation of telecommunications equipment without the prior written approval of American Tower.

*American Tower includes all affiliates and subsidiaries of American Tower Corporation.

| ATC Asset # | Site Name | Project Number | Site Address |
|-------------|-------------------------------|----------------|--|
| 283420 | STONEYBROOK RD CT | 13682835 | 23 Stonybrook Road, Stratford, Connecticut |
| 243036 | WEST HAVEN & RT 162 CT | 13682841 | 668 Jones Hill Road, West Haven, Connecticut |
| 302479 | Rkhl - Rocky Hill | 13683394 | 699 West Street, Rocky Hill, Connecticut |
| 302537 | Middletown CT 3 | 13747862 | 47 Inwood Road, Rocky Hill, Connecticut |
| 302535 | Milford CT 2 | 13748383 | 185 Research Drive, Milford, Connecticut |
| 302473 | E H F R - Prestige Park | 13748397 | 310 Prestige Park Road, East Hartford, Connecticut |
| 302505 | Wshn - West Haven | 13748405 | 204 Burwell Street, West Haven, Connecticut |
| 302489 | Enfd - Enfield | 13753208 | 77 Town Farm Road, Enfield, Connecticut |
| 302524 | Beacon Falls | 13753210 | 664 Rimmon Hill Road, Seymour, Connecticut |
| 310968 | WSPT-WESTPORT REBUILD CT | 13753216 | 180A Bayberry Lane, Westport, Connecticut |
| 302526 | Naugatuck (telephone Pole) | 13753218 | 585 South Main St. (soc. Club), Naugatuck, Connecticut |
| 310972 | WATERFORD REBUILD CT | 13753547 | 15 Miner Lane, Waterford, Connecticut |
| 302538 | Parsonage Hill Aka Wallin | 13753549 | 922 Northrop Road, Wallingford, Connecticut |
| 370624 | Mankes Silo | 13754283 | 1338 Highland Ave, Cheshire, Connecticut |



| CORPORATION | | | | | | |
|-------------|----------------------------------|----------|---|--|--|--|
| 88017 | SHELTON-TRUMBULL | 13755484 | 14 OXFORD DRIVE/BOOTH HILL RD, Shelton, Connecticut | | | |
| 414240 | Byram Park CT | 13755490 | 48 RITCH AVENUE WEST, Greenwich, Connecticut | | | |
| 283423 | NAUGATUCK CT | 13755758 | 880 Andrew Mountain Road, Naugatuck, Connecticut | | | |
| 302480 | Woodbridge CT 1 | 13756843 | 77 Pease Road, Woodbridge, Connecticut | | | |
| 411183 | WATERFORD CT | 13756866 | 53 Dayton Rd. Waterford, Connecticut | | | |
| 302540 | Madison CT 6 | 13757740 | 8 Old 79, Madison, Connecticut | | | |
| 411259 | CT Collinsville CAC 802816 CT | 13757764 | 650 Albany Turnpike, Collinsville, Connecticut | | | |
| 411256 | CANTON CT | 13757774 | 14 CANTON SPRINGS ROAD, Canton, Connecticut | | | |
| 302493 | Nrwc - Norwich | 13757776 | 225 Rogers Road, Norwich, Connecticut | | | |
| 302476 | Wtbr - Waterbury | 13757794 | 352 Garden Circle, Waterbury, Connecticut | | | |
| 302475 | Sttn - Southington | 13757796 | 80 Shuttle Meadow Road, Southington, Connecticut | | | |
| 302494 | Hddm - Haddam | 13757798 | 139 Morris Hubbard Rd, Higganum, Connecticut | | | |
| 283419 | PINE ORCHARD BRANFORD CT | 13757800 | 123 Pine Orchard Road, Brrandford, Connecticut | | | |
| 302482 | North Havent CT 1 | 13757802 | 15 Dewight Street, North Haven, Connecticut | | | |
| 302485 | Mdfd - Middlefield | 13757806 | 134 Kikapoo Road, Middlefield, Connecticut | | | |
| 302500 | Brst - Bristol | 13757810 | 790 Willis Street, Bristol, Connecticut | | | |
| 302467 | Bilkays Express | 13757812 | 90 North Plains Industrial Rd. Wallingford, Connecticut | | | |
| 302536 | Cherry Hill-branford | 13759895 | 4 Beaver Road, Brandford, Connecticut | | | |
| 302482 | North Havent CT 1 | 14050356 | 15 Dewight Street, North Haven, Connecticut | | | |
| 311305 | GLFD-GUILFORD REBUILD CT | 14050358 | 10 Tanner Marsh Road, Guilford, Connecticut | | | |
| 411261 | CROMWELLSW CT | 14089799 | 99 Christian Hill Road, Cromwell, Connecticut | | | |
| 302481 | Hrfr - South | 14090117 | 289 Mountain Street, Hartford, Connecticut | | | |

Signature:

Margaret Robinson, Vice President

US Tower Legal Division

See attached Notary Block



LETTER OF AUTHORIZATION CENTERLINE COMMUNICATIONS LLC/ AT&T MOBILITY

NOTARY BLOCK

COMMONWEALTH OF MASSACHUSETTS County of Middlesex

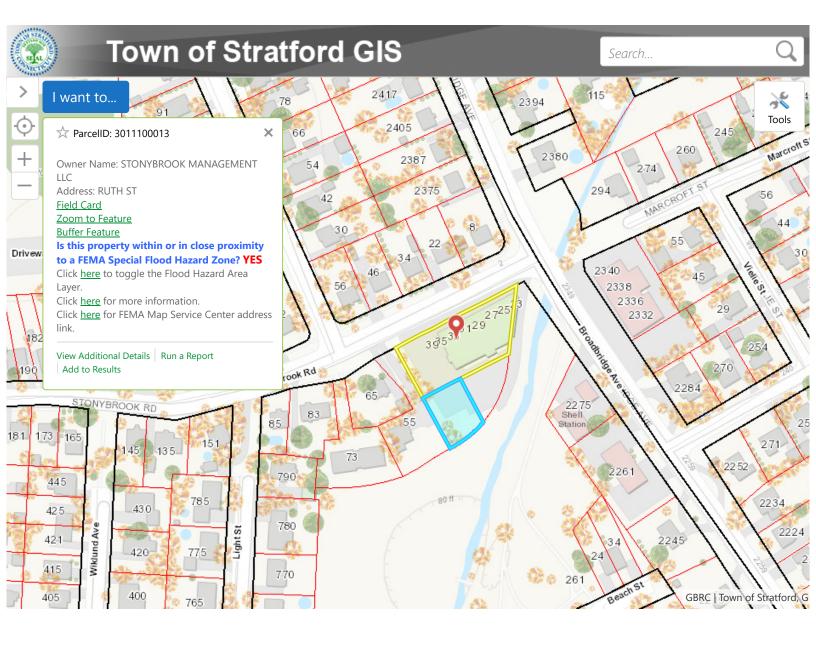
This instrument was acknowledged before me by Margaret Robinson, Vice President, UST Legal of American Tower (Tower Facility owner), personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same.

WITNESS my hand and official seal, this 30th day of June, 2022.

NOTARY SEAL

MELISSA ANN METZLER
Notary Public
Commonwealth of Massachusetts
My Commission Expires March 14, 2025

Notary Public My Commission Expires: March 14, 2025





RUTH ST

Location RUTH ST Mblu 30/11 10/ 13//

Acct# 1499000 Owner STONYBROOK MANAGEMENT

LLC

PBN Assessment \$169,540

Appraisal \$242,200 **PID** 15511

Building Count 1 Sewer Use E00

EPA Action

Current Value

| Appraisal | | | | | | |
|----------------|--------------|----------|-----------|--|--|--|
| Valuation Year | Improvements | Land | Total | | | |
| 2019 | \$180,000 | \$62,200 | \$242,200 | | | |
| | Assessment | | | | | |
| Valuation Year | Improvements | Land | Total | | | |
| 2019 | \$126,000 | \$43,540 | \$169,540 | | | |

Owner of Record

Owner STONYBROOK MANAGEMENT LLC Sale Price \$0

Co-Owner Certificate

 Address
 124 KNAPP ST
 Book
 2604

 EASTON, CT 06612
 Page
 0275

 Sale Date
 03/24/2005

Instrument 25

Ownership History

| Ownership History | | | | | | | |
|---|-----|--|----|------------|------|------|--|
| Owner Sale Price Certificate Instrument S | | | | | Book | Page | |
| STONYBROOK MANAGEMENT LLC | \$0 | | 25 | 03/24/2005 | 2604 | 0275 | |
| STONYBROOK CENTER INC THE | \$0 | | | 08/13/1969 | 0451 | 0378 | |

Building 1 : Section 1

Year Built:

Living Area: 0

Building Percent Good:

| Buildi | ing Attributes | | | | |
|--------------------|----------------|--|--|--|--|
| Field Description | | | | | |
| Style: | Outbuildings | | | | |
| Model | | | | | |
| Grade: | | | | | |
| Stories: | | | | | |
| Occupancy | | | | | |
| Exterior Wall 1 | | | | | |
| Exterior Wall 2 | | | | | |
| Roof Structure: | | | | | |
| Roof Cover | | | | | |
| Interior Wall 1 | | | | | |
| Interior Wall 2 | | | | | |
| Interior Flr 1 | | | | | |
| Interior Flr 2 | | | | | |
| Heat Fuel | | | | | |
| Heat Type: | | | | | |
| AC Type: | | | | | |
| Total Bedrooms: | | | | | |
| Total Bthrms: | | | | | |
| Total Half Baths: | | | | | |
| Total Xtra Fixtrs: | | | | | |
| Total Rooms: | | | | | |
| Bath Style: | | | | | |
| Kitchen Style: | | | | | |
| Total Kitchens | | | | | |
| Whirlpool Tub | | | | | |
| Fireplaces | | | | | |
| Rec Room Area | | | | | |
| Rec Room Quality | | | | | |
| Num Park | | | | | |
| Fireplaces 2 | | | | | |
| Fndtn Cndtn | | | | | |

Building Photo



(https://images.vgsi.com/photos/StratfordCTPhotos/\00\04\29\92.JPG)

Building Layout

Building Layout (ParcelSketch.ashx?pid=15511&bid=15511)

| Building Sub-Areas (sq ft) | <u>Legend</u> |
|--------------------------------|---------------|
| No Data for Building Sub-Areas | |

| Basement | |
|----------|--|
|----------|--|

Extra Features

| Extra Features | <u>Legend</u> |
|----------------------------|---------------|
| No Data for Extra Features | |

Land

| Land Use | | Land Line Valua | Land Line Valuation | |
|---------------|-------------|-----------------|---------------------|--|
| Use Code | 337 | Size (Acres) | 0.11 | |
| Description | Parking Lot | Frontage | 0 | |
| Zone | | Depth | 0 | |
| Neighborhood | 080 | Assessed Value | \$43,540 | |
| Alt Land Appr | No | Appraised Value | \$62,200 | |
| Category | | | | |

Outbuildings

| Outbuildings <u>Leg</u> | | | | | | <u>Legend</u> |
|-------------------------|-------------------|----------|-----------------|--------------|-----------|---------------|
| Code | Description | Sub Code | Sub Description | Size | Value | Bldg # |
| PAV | Paving | AS | Asphalt | 5000.00 S.F. | \$5,000 | 1 |
| СТР | Cell Tower - Pole | | | 1.00 Units | \$175,000 | 1 |

Valuation History

| Appraisal | | | | | | |
|----------------|--------------|----------|-----------|--|--|--|
| Valuation Year | Improvements | Land | Total | | | |
| 2021 | \$180,000 | \$62,200 | \$242,200 | | | |
| 2020 | \$180,000 | \$62,200 | \$242,200 | | | |
| 2019 | \$180,000 | \$62,200 | \$242,200 | | | |

| Assessment | | | | | | |
|----------------|--------------|----------|-----------|--|--|--|
| Valuation Year | Improvements | Land | Total | | | |
| 2021 | \$126,000 | \$43,540 | \$169,540 | | | |
| 2020 | \$126,000 | \$43,540 | \$169,540 | | | |
| 2019 | \$126,000 | \$43,540 | \$169,540 | | | |



JOHN D MIRANDA 23 STONYBROOK ROAD

STRATFORD,CT 06614-3715

Call before you dia.



AMERICAN TOWER®

ATC SITE NAME: STONEYBROOK RD CT

ATC SITE NUMBER: 283420

AT&T PACE NUMBERS: MRCTB052098, MRCTB051448,

MRCTB053107

AT&T SITE ID: CTL02381 AT&T FA CODE: 12906923

AT&T SITE NAME: STRATFORD STONYBROOK RD

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614

AT&T LTE 7C/5G NR 1SR CBAND



LOCATION MAP

AMENDMENT PLAN COMPLIANCE CODE PROJECT SUMMARY PROJECT DESCRIPTION SHEET INDEX ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED SITE ADDRESS: DESCRIPTION: DATE: BY: N ACCORDANCE WITH THE CURRENT EDITIONS OF THE AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: OLLOWING CODES AS ADOPTED BY THE LOCAL 23 STONYBROOK ROAD G-001 TITLE SHEET 0 04/20/22 BR SOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS STRATFORD, CT 06614 REMOVE (9) ANTENNA(S) AND (1) SQUID(S) O BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO COUNTY: FAIRFIELD G-002 GENERAL NOTES Ω 04/20/22 BR INSTALL (12) ANTENNA(S), (4) RRH(S) AND (2) SQUID(S) HESE CODES 2018 CONNECTICUT STATE BUILDING CODE-AMENDMENTS EXISTING (15) RRH(S), (3) DC TRUNK(S), (1) SQUID(S) AND (1) FIBER DETAILED SITE PLAN BR C-101 GEOGRAPHIC COORDINATES: Ω 04/20/22 TO IBC 2015 LATITUDE: 41.20327777 C-201 TOWER ELEVATION 0 BR INTERNATIONAL BUILDING CODE 2015, INTERNATIONAL 04/20/22 LONGITUDE: -73.148625 CODE COUNCIL RF SCHEDULE AND ANTENNA INSTALLATION BR GROUND ELEVATION: 77' AMSL GROUND WORK TIA-222-G-4, STRUCTURAL STANDARD FOR ANTENNA INSTALL (1) FRONTHAUL GATEWAY. (1) IDLE XCEDE SUPPORTING STRUCTURES AND ANTENNAS C-501 CONSTRUCTION DETAILS 0 04/20/22 BR ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND E-501 GROUNDING DETAILS Λ 04/20/22 BR OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL **ENGINEERS** R-601 SUPPLEMENTAL PROJECT NOTES STEEL CONSTRUCTION MANUAL 14TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION R-602 SUPPLEMENTAL THE FACILITY IS UNMANNED. CITY/COUNTY ORDINANCES A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. PROJECT TEAM R-603 SUPPLEMENTAL THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND. TOWER OWNER: APPLICANT: DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL AMERICAN TOWER AT&T MOBILITY IS REQUIRED. IS REQUIRED. HANDICAP ACCESS IS NOT REQUIRED. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLE DTO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A). AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, ANDIOR REPLACEMENT OF PRANSMARS FOR THAT INVOLVES THE 10 PRESIDENTIAL WAY 550 COCHITUATE ROAD WOBURN, MA 01801 SUITES 13 & 14 FRAMINGHAM, MA 01701 **UTILITY COMPANIES** ENGINEER: POWER COMPANY: N/A DEWBERRY ENGINEERS INC. PHONE: N/A TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL 99 SUMMER STREET CHANGE UNDER CFR § 1.61000 (B)(7). TELEPHONE COMPANY: N/A PHONE: N/A BOSTON, MA 02110 PROJECT LOCATION DIRECTIONS PHONE: 617 695 3400 FROM DOWNTOWN NEW HAVEN START OUT GOING NORTHEAST FAX: 617.695.3310 ON CHURCH ST TOWARD WALL ST. CHURCH ST BECOMES WHITNEY AVE, TURN RIGHT ONTO TRUMBULL ST. TURN SLIGHT PROPERTY OWNER:

LEFT TO TAKE THE I-91 S/I-91 N RAMP, MERGE ONTO I-91 S TOWARD I-95/NEW LONDON/N.Y.CITY. MERGE ONTO I-95 S VIA THE

EXIT ON THE LEFT TOWARD N Y CITY, TAKE EXIT 32 TOWARD W

BROAD ST/STRATFORD. MERGE ONTO LINDEN AVE. TAKE THE 1ST

RIGHT ONTO W BROAD ST. TAKE THE 1ST RIGHT ONTO W BROAD ST. TURN RIGHT ONTO BARNUM AVE/US-1 N. TAKE THE 2ND LEFT ONTO BROADBRIDGE AVE. TURN LEFT ONTO STONYBROOK



Dewberry

Dewberry Engineers Inc. 99 SUMMER STREET SUITE 700 BOSTON, MA 02110 PHONE: 617.695.3400 EAX: 617.695.3310

| EV. | DESCRIPTION | BY | DATE |
|---------------------|-------------|----|----------|
| A. | PRELIM | BR | 01/14/22 |
| ҈ | FINAL | BR | 04/20/22 |
| $\overline{}$ | | | |
| $\overline{\wedge}$ | | | |
| $\overline{\wedge}$ | | _ | |

ATC SITE NUMBER:

ATC SITE NAME: STONEYBROOK RD CT

AT&T SITE NAME:

STRATFORD STONYBROOK RD

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614

SEAL:





| DATE DRAWN: | 01/14/22 |
|--------------|-------------|
| ATC JOB NO: | 13682835_D1 |
| CUSTOMER ID: | CTL02381 |
| CUSTOMER #: | 12906923 |

TITLE SHEET

G-001

GENERAL CONSTRUCTION NOTES:

- OWNER FURNISHED MATERIALS, AT&T "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
 - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
 - AC/TELCO INTERFACE BOX (PPC)
 - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
 - TOWERS, MONOPOLES TOWER LIGHTING
 - GENERATORS & LIQUID PROPANE TANK
 - ANTENNA STANDARD RRACKETS, FRAMES AND PIPES FOR MOUNTING.
 - ANTENNAS (INSTALLED BY OTHERS)
 - TRANSMISSION LINE
 - TRANSMISSION LINE JUMPERS
 - TRANSMISSION LINE CONNECTORS WITH WEATHERPROCEING KITS.
 - TRANSMISSION LINE GROUND KITS
 - HANGERS
 - HOISTING GRIPS BTS EQUIPMENT
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE STEIN INCLUDING SILD HOT INLINED TO. SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WINGS, GROUNDING WINGS, GROUNDING WINGS, GROUNDING WINGS, GROUNDING WINGS, CONDINGON, STRUCTURE, STRUCTURE, STRUCTURE, STRUCTURE, STRUCTURE, STRUCTURE, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEPPERS AND RUBBER MATTING, REBARL CONNEGET CASSIONS, PROS ANDIORA GUERE MOUNTS, MISCELLANEOUS PASTENERS, CABLE TRAVIS, NON-STANDARD ANTERNA FRAMES AND ALL OTHERN METAL AND LAGGE ROUNED TO COMPILE THE LOSS ACCORDING TO PROMITE AND AND STRUCTURE OF THE CONTROL OF THE CONTRO
- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION
- CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED
- ALL DIMENSIONS TO DE AND ON EXISTING BUILDINGS DRAINAGE STRUCTURES AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL FLEMENTS
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING ANCHOR BOLTS, ETC.
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE ATÂT REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION, ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE ATÂT REP PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T CONSTRUCTION MANAGER
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET CONTRACTOR SHALL NOTIFY THE AT&T REP AND ENGINEER OF RECORD IMMEDIATELY
- CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT
- CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH AT&T AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T REP TO

- DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T SPECIFICATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- CONTRACTOR SHALL NOTIFY AT&T REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND ADPROVAL
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PER AND PEN AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION. TEMPORARY SHORING, SCAFFOLDING, TERRICH BOXESSLOPING, BARRENS, ETC.
- THE CONTRACTOR SHALL PROTECT AT HIS WAYL SPENSE. ALL EXISTING FACULTIES AND SIGN OF HIS REV WORK LABLE TO ANIBY DURING HIS CONTRIBUTION PERSON. ANY DAMAGE CALLSED BY MEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE LEBENTS DUE TO NO ELECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OF ANY OTHER CONTRACTOR, SHALL BE REPRIEDED AT HIS NSE TO THE OWNER'S SATISFACTION
- ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBSECT TO THE APPROVAL OF THE ATTS TREP. ANY WORK FOUND BY THE ATTS TREP TO BE OF INFERIOR QUALITY ANDIOR WORKMANSHIP SHALL BE REPLACED ANDOR REWORKED AT CONTRACTOR EXPENSE UNIT. APPROVAL IS OBTAINED.
- IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES ANDIOR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
- ATÁT FURNISHED EQUIPMENT SHALL BE PICKEÐ-UP AT THE ATÁT WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTHEIN BINJERC, STORED, UNCRATE, PROTECTE AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
- AT&T OR HIS ARCHITECTIENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACTOR ATO COST TO AT&T OR THEIR CONTRACTOR ATO COST TO AT&T OR THEIR

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

- WORK INCLUDED:
 - ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF
 - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND AT&T SPECIFICATIONS
 - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
 - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
 - LANTIMAL LAN STOLL PROVIDE FLUX (4) SEIS OF SWEEP FESTS LISBING.
 OWNER FER FESTS STOLL FROM THE FEST SERVICE TO THE PROJECT IMMAGER.
 SWEEP TESTS SHALL BE AS PER ATTACHED RTS THIMMUM FIELD TESTING.
 RECOMMENDED FOR ATTEMA AND HELLAY COARLY. CARLE SYSTEMS" DATED.
 10/503. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE
 AND BE BOUND AND SUBMITTEE DITHIN 100 WEER FOR WORK COMMENDED.
 - INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER NAVIPACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ATTENNA AND EQUIPMENT PER MAUPFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
 - G. ANTENNA AND COAXIAL CABLE GROUNDING:
- ALL EXTERIOR #6 GREEN GROUND WIRE 'DAISY CHAIN' CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
- ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE

RESPONSIBILITY OF THE GENERAL CONTRACTOR





99 SUMMER STREET SUITE 700 BOSTON MA 02110 PHONE: 617.695.3400 FAX: 617.695.3310

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| <u> </u> | FINAL | BR | 04/20/22 |
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ATC SITE NUMBER: 283420

ATC SITE NAME: STONEYBROOK RD CT

AT&T SITE NAME:

STRATFORD STONYBROOK RD

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614

SEAL:





DATE DRAWN: 01/14/22 13682835 D1 ATC JOB NO: CUSTOMER ID: CTL02381 CUSTOMER #: 12906923

GENERAL NOTES

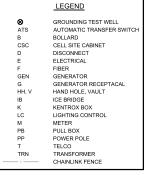
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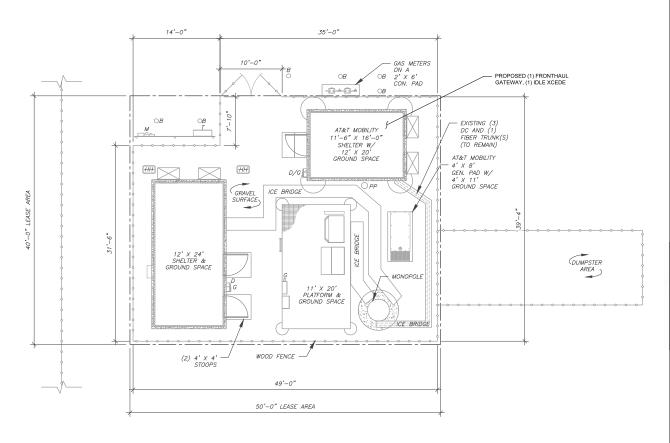
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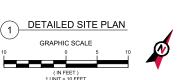
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SITE PLAN NOTES:

- THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
- ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL
 PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW
 PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL SPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
- 3. THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.











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SITE ADDRESS:
23 STONYBROOK ROAD
STRATFORD, CT 06614

SEAL:



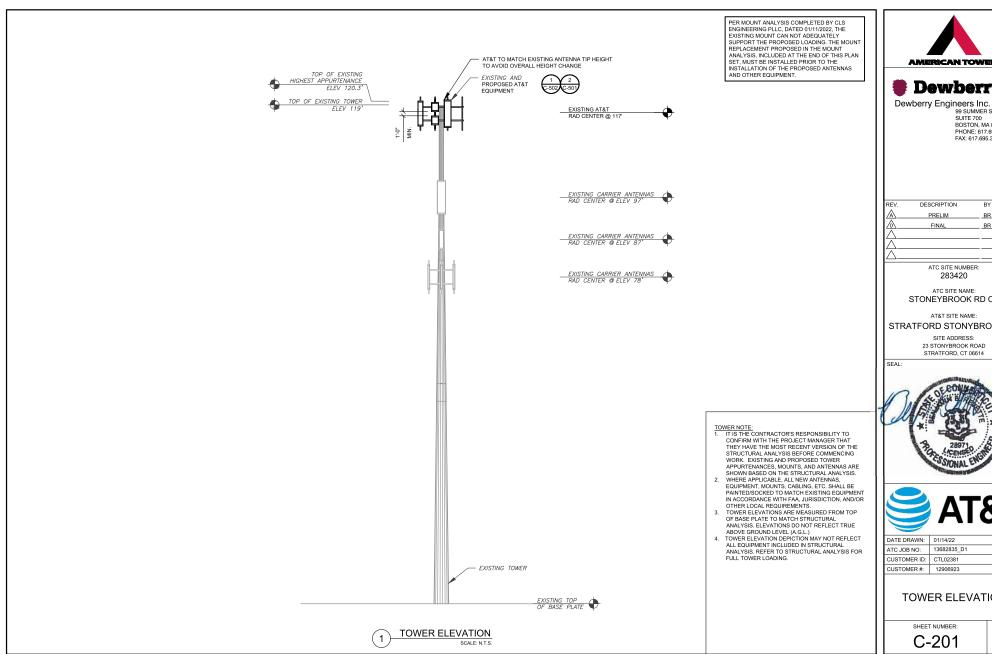


| | DATE DRAWN: | 01/14/22 |
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| | ATC JOB NO: | 13682835_D1 |
| ı | CUSTOMER ID: | CTL02381 |
| | CUSTOMER #: | 12906923 |
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DETAILED SITE PLAN

SHEET NUMBER:

C-101







99 SUMMER STREET SUITE 700 BOSTON, MA 02110 PHONE: 617.695.3400 FAX: 617.695.3310

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SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



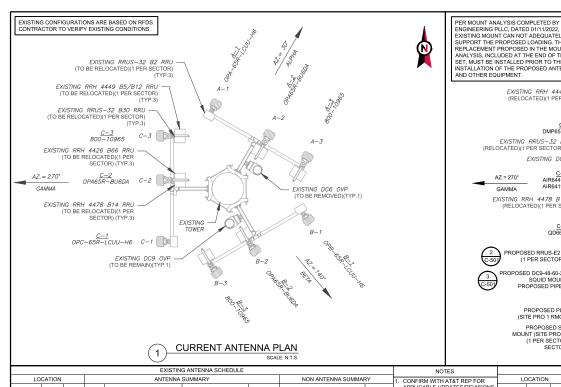


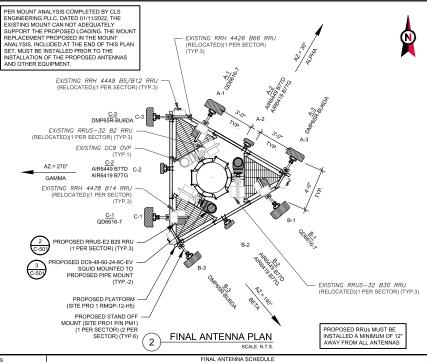
| DATE DRAWN: | 01/14/22 |
|--------------|-------------|
| ATC JOB NO: | 13682835_D1 |
| CUSTOMER ID: | CTL02381 |
| CUSTOMER #: | 12906923 |
| | |

TOWER ELEVATION

SHEET NUMBER:

C-201





| EXISTING ANTENNA SCHEDULE | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|------|------|-----|-----------------|--------------------------------------|--------------------------------------|---------------------------------------|--------------------------------|------------|----|--|--|--|--|--|--|--|--|--|----|-----------|--------------------------------------|-----|--------------------------------|
| LOCATION ANTENNA SUMMARY | | | | | | | NON ANTENNA SUMMARY | | 1. | | | | | | | | | | | | | | | |
| SECTOR | RAD | AZ | POS | ANTENNA | BAND STATUS | | ADDITIONAL TOWER MOUNTED EQUIPMENT | STATUS | | | | | | | | | | | | | | | | |
| | | | A1 | OPA-65R-LCUU-H6 | LTE 1900 | RMV | RRUS-32 B2 | REL | ١. | | | | | | | | | | | | | | | |
| ALPHA | 117' | 30° | 30° | A2 | OPA65R-BU6DA | LTE AWS, LTE 700 | RMV | RRH 4478 B14 RRH 4426 B66 | REL REL | 2 | | | | | | | | | | | | | | |
| | | | | A3 | 800-10965 | LTE 850, 5G 850, LTE WCS, LTE 700 | RMV | RRH 4449 B5/B12 RRUS-32 B30 | REL REL |]3 | | | | | | | | | | | | | | |
| BETA | 117' | | B1 | OPA-65R-LCUU-H6 | LTE 1900 | RMV | RRUS-32 B2 | REL | 1 | | | | | | | | | | | | | | | |
| | | 140* | B2 | OPA65R-BU6DA | LTE AWS, LTE 700 | RMV | RRH 4478 B14 RRH 4426 B66 | REL REL | 1 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | В3 | 800-10965 | LTE 850, 5G 850, LTE WCS, LTE 700 | RMV | RRH 4449 B5/B12 RRUS-32 B30 |
| | | | C1 | OPA-65R-LCUU-H6 | LTE 1900 | RMV | RRUS-32 B2 | REL | 1 | | | | | | | | | | | | | | | |
| GAMMA | 117' | 270° | C2 | OPA65R-BU6DA | LTE AWS, LTE 700 | RMV | RRH 4478 B14 RRH 4426 B66 | REL REL | 1 | | | | | | | | | | | | | | | |
| | | | C3 | 800-10965 | LTE 850, 5G 850, LTE WCS, LTE 700 | RMV | RRH 4449 B5/B12 RRUS-32 B30 | REL REL | 1 | | | | | | | | | | | | | | | |
| | 4. | | | | | | | | | | | | | | | | | | | | | | | |

APPLICABLE UP AND MOST REC GC TO CAP ALL 2. CONFIRM SPACE EQUIP DOES NO CONFLICTS NO CLIMBING PEGS 3. THE ANTENNA C IS A SCHEMATIC CONFIRM EXIST CONDITIONS INC LIMITED TO, AN MOUNT CONFIG TOWER ORIEN SHOWN ARE FO ONLY AND EXIS ARE APPROXIM CONTRACTOR EXISTING CONI OF ANY DISCRE 4. CONTRACTOR PROPER SEPAR ACCORDANCE FIRSTNET REQ

| | | | AND THE REAL PROPERTY OF THE P | | | | 11011 11 PER IL OLD BUILDING | | | |
|---|----------|------|--|-----------------|----------------------------|-----------------------------|------------------------------|------------------------------------|-------------|-----|
| H AT&T REP FOR | LOCATION | | | ANTENNA SUMMARY | | | | NON ANTENNA SUMMARY | | |
| JPDATES/REVISIONS CENT RFDS FOR IRATION (CONFIG). LL UNUSED PORTS. CING OF PROPOSED | SECTOR | RAD | AZ | POS | ANTENNA | BAND | STATUS | ADDITIONAL TOWER MOUNTED EQUIPMENT | STATU | |
| | | | | | | | | RRH 4426 B66 | REL | |
| | | | | A1 | QD6616-7 | LTE 700, 5G 1900, | ADD | RRH 4478 B14 | REL | |
| NOT CAUSE TOWER | | | | _^' | QD0010-7 | 5G AWS | ^00 | RRUS-32 B2 | REL | |
| OR IMPEDE TOWER | A. B | 4471 | 30° | | | | | RRUS-E2 B29 | ADD | |
| 3S. A ORIENTATION PLAN | ALPHA | 117' | 30- | A2 | AIR6449 B77D | 5C CBAND | ADD | | | |
| IC. ATC DID NOT | | | | A2 | AIR6419 B77G | SC CBAIND | ADD | - | | |
| STING SITE NCLUDING, BUT NOT NTENNA AZIMUTHS, IGURATIONS AND | | | | | D14D45D D140D4 | 5G 850 | | RRH 4449 B5/B12 | REL | |
| | | | | A3 | DMP65R-BU6DA | 56 850 | ADD | RRUS-32 B30 | REL | |
| | | 117' | 140° | B1 | QD6616-7 | LTE 700, 5G 1900, 5G AWS | ADD | RRH 4426 B66 | REL | |
| | | | | | | | | RRH 4478 B14 | REL | |
| NTATION. SCALES | BETA | | | | | | | RRUS-32 B2 | REL | |
| OR REFERENCE | | | | | | | | RRUS-E2 B29 | ADD | |
| ISTING DIMENSIONS MATE. THE | | | | B2 | AIR6449 B77D | 5C CBAND ADD | ADD | | | |
| SHALL VERIEVALL | | | | B2 | AIR6419 B77G | 5C CBAND | ADD | 1 . | - | |
| IDITIONS PRIOR TO | | | | | DIADOCD DIVIDA | 50.050 | 400 | RRH 4449 B5/B12 | REL | |
| AND NOTIFY ATC | | | | B3 | B3 DMP65R-BU6DA 5G 850 ADD | ADD | RRUS-32 B30 | REL | | |
| REPANCIES. | | | | | | | | RRH 4426 B66 | REL | |
| R TO ENSURE | | | | C1 | QD6616-7 | LTE 700, 5G 1900, | ADD | RRH 4478 B14 | REL | |
| ARATION IN | | | | 01 | QD6616-7 | 5G AWS | ADD | RRUS-32 B2 | REL | |
| WITH AT&T'S | | | | | | | | RRUS-E2 B29 | ADD | |
| QUIREMENTS (SEE | GAMMA | 117' | 270° | C2 | AIR6449 B77D | 5C CBAND | ADD | | | |
| | | | | C2 | AIR6419 B77G | 5C CBAND | ADD | - | - | |
| | | | | C3 | DMP65R-BU6DA | 50.050 | 400 | RRH 4449 B5/B12 | REL | |
| | | 1 | | | | U3 | DIMPOSK-BUODA | 5G 850 ADD | PPHS-32 B30 | PEI |

| | | | | | | STATUS ABBREVIA |
|----------------------------|---------|--------------------------|-----|-------|--------|-----------------|
| | | | | | | RMV: TO BE REW |
| EXISTING FIBER DISTRIBUTIO | N/SQUID | EXISTING CABLING SUMMARY | | | | REL: TO BE RELO |
| MODEL NUMBER | STATUS | COAX | DC | FIBER | STATUS | ADD: TO BE AD |
|) DC6-48-60-18-8F | RMV | - | (3) | (1) | RMN | |

(1) DC6-48-60-18-8F

(1) DC9-48-60-24-8C-EV

RMN

VIATIONS MOVED MAIN OCATED CABLE LENGTHS FOR JUMPERS JUNCTION BOX TO RRU: 15' RRU TO ANTENNA: 10'

EQUIPMENT SCHEDULES 3

| THIS PAGE CONTAINS CONFIDENTIAL, PROPRIETARY O | R TRADE SECRET |
|--|----------------|
| INFORMATION EXEMPT FROM DISCLOSURE UNDER A | PPLICABLE LAW. |

| FINAL FIBER DISTRIBUTION | SQUID | FINAL CABLING SUMMARY | | | | |
|--------------------------|--------|-----------------------|-----|-------|--------|--|
| MODEL NUMBER | STATUS | COAX | DC | FIBER | STATUS | |
| (2) DC9-48-60-24-8C-EV | ADD | - | (3) | (1) | RMN | |
| (1) DC9-48-60-24-8C-EV | RMN | - | - | - | - | |



Dewberry*

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ATC SITE NUMBER: 283420

ATC SITE NAME: STONEYBROOK RD CT

AT&T SITE NAME:

STRATFORD STONYBROOK RD

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614

SEAL:

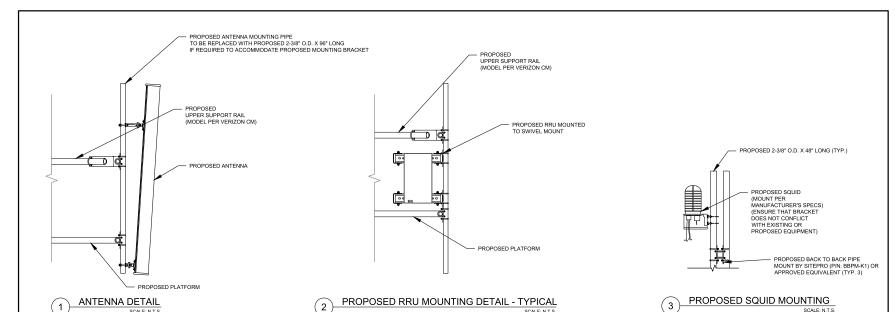


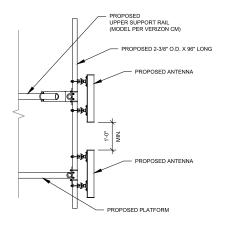


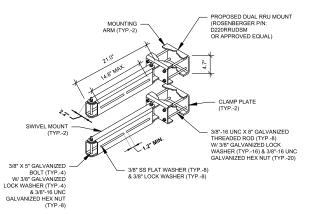
| DATE DRAWN: | 01/14/22 |
|--------------|-------------|
| ATC JOB NO: | 13682835_D1 |
| CUSTOMER ID: | CTL02381 |
| CUSTOMER #: | 12906923 |
| | |

RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER: C-401







PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL

5 PROPOSED SWIVEL MOUNT DETAIL



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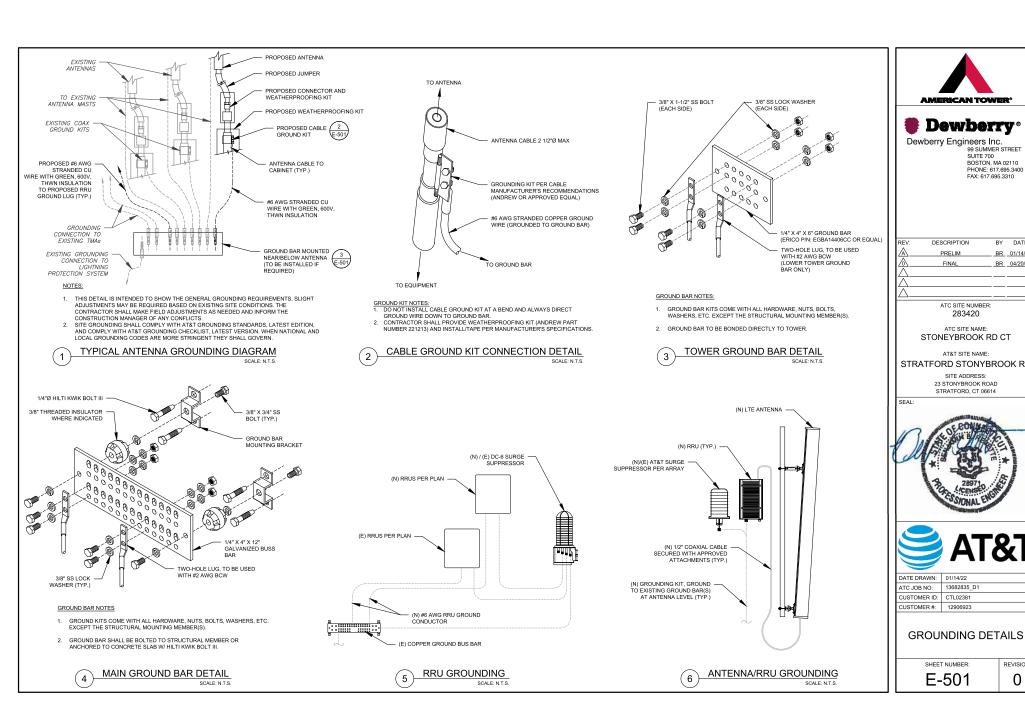


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| ATC JOB NO: | 13682835_D1 |
| CUSTOMER ID: | CTL02381 |
| CUSTOMER #: | 12906923 |
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CONSTRUCTION DETAILS

SHEET NUMBER:

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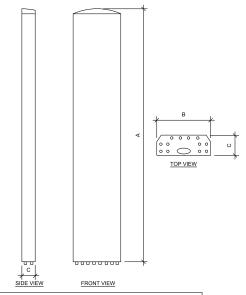


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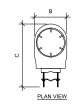
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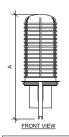
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REVISION



| ANTENN | ANTENNA SPECIFICATIONS | | | | | |
|---------------|------------------------|-------|------|-----------------|--|--|
| ANTENNA MODEL | А | В | С | WEIGHT (LBS) | | |
| QD6616-7 | 72.0" | 22.0" | 9.6" | 59.1 | | |
| AIR6449 B77D | 30.4" | 15.9" | 8.1" | 81.6 | | |
| AIR6419 B77G | 30.4" | 15.9" | 8.1" | 81.6 | | |
| DMP65R-BU6DA | 71.2" | 20.2" | 7.7" | 79.4 | | |

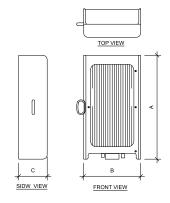




| SIDW VIEW | |
|-----------------------|--|
| RAYCAP SPECIFICATIONS | |

| RAYCAP SPECIFICATIONS | | | | |
|--------------------------------|-------|-------|-------|------|
| RAYCAP MODEL A B C WEIGH (LBS) | | | | |
| DC9-48-60-24-8C-EV | 31.4" | 18.3" | 10.2" | 16.0 |

1 EQUIPMENT SPECIFICATIONS
SCALE: N.T.S.



| RRU SPECIFICATIONS | | | | |
|------------------------------|-------|-------|------|------|
| RRU MODEL A B C WEIGHT (LBS) | | | | |
| 4415 B30 | 16.5" | 13.4" | 5.9" | 46.0 |



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| CUSTOMER #: | 12906923 |

SUPPLEMENTAL

SHEET NUMBER:

R-601



This report was prepared for American Tower Corporation by



Antenna Mount Analysis Report

ATC Site Name : STONEYBROOK RD CT

ATC Asset Number : 283420

Engineering Number : 13682835 C8 01

Mount Elevation : 118.75 ft

Carrier : AT&T Mobility

: MRCTB051448 Carrier Site Name

: CTL02381 **Carrier Site Number**

Site Location : 23 Stonybrook Road

Stratford, CT 06614-3715

41.203278, -73.148625

County : Fairfield

Date : January 11, 2022

Max Usage : 85%

Result : Contingent Pass*

*See conclusion for requirements

Prepared By: Snehitha Naraya **CLS Engineering, PLLC** Reviewed By: William Holt, P.F. **CLS Engineering, PLLC**

Digitally signed by William Holt William Holt Date: 2022.01.11 15:17:16



CLSENGINEERING • 319 Chapanoke Road, Suite 118, Raleigh, NC 27603 • Engineering@clsengineeringpllc.com

Mount Analysis for American Tower 283420 - STONEYBROOK RD CT

January 11, 2022 CLS Engineering, PLLC Project #41124-13682835_C8_01-01-MA

Conclusion

Based on the analysis, the antenna mount meets the requirements per the applicable codes listed above. The mounting configuration considered in this analysis will be capable of supporting the referenced loading pursuant to referenced standards once the following scope is executed:

AT&T CONMAT does not have parts which connect HSS tube to pipe. Hence proposing additional parts not listed in conmat for mounting equipment on standoff.

- Replace existing T-Arms with (1) proposed Site Pro 1 RMQP-12-H5 (ANT.46132) Platform w/ HRK12-HD (ANT.51651) Support Rail Kit. Do not install work support platform below proposed platform
- Install Site Pro 1 HRK12-HD (ANT.51651) Support Rail kit at 3'-6" above the existing platform horizontal pipe. Connect to all mount pipes using Site Pro 1 SCX2 crossover plate kits included in the Support Rail kit (12 total).
- Install (1) proposed 6 ft long pipe 2 STD, A53 Gr. B standoff mount pipe at each sector (3 total) as shown. Connect to existing standoff member using Site Pro 1 SQCX4-K crossover plate kits (3 total).
- All mount pipes are to be installed as shown in following sketches.
- Install proposed antennas such that they are vertically centered on platform base. Install proposed RRUS and TMAs behind the antennas.

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.

CLS ENGINEERING • 319 Chapanoke Road, Suite 118, Raleigh, NC 27603 • Engineering@clsengineeringpllc.com

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CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO

VERYIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.





99 SUMMER STREET SUITE 700 BOSTON, MA 02110 PHONE: 617.695.3400 FAX: 617.695.3310

ATC SITE NUMBER: 283420

ATC SITE NAME: STONEYBROOK RD CT

AT&T SITE NAME:

STRATFORD STONYBROOK RD SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614

SEAL:

Page 3



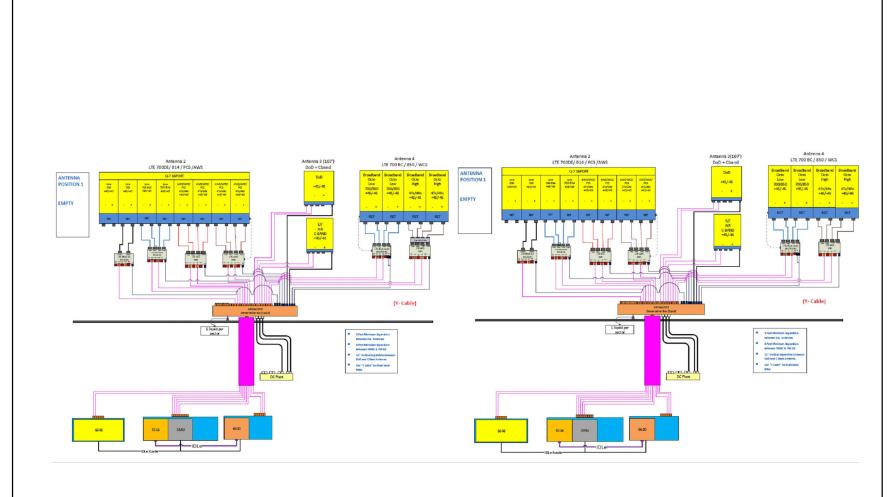
DATE DRAWN: 01/14/22 ATC JOB NO: 13682835 D1 CUSTOMER ID: CTL02381 CUSTOMER #: 12906923

SUPPLEMENTAL

SHEET NUMBER:

R-602

MOUNT ANALYSIS







Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617 695.3400
FAX: 617.695.3310

ATC SITE NUMBER: 283420

ATC SITE NAME: STONEYBROOK RD CT

AT&T SITE NAME:

STRATFORD STONYBROOK RD

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614

SEAL:



| DATE DRAWN: | 01/14/22 |
|--------------|-------------|
| ATC JOB NO: | 13682835_D1 |
| CUSTOMER ID: | CTL02381 |
| CUSTOMER #: | 12906923 |

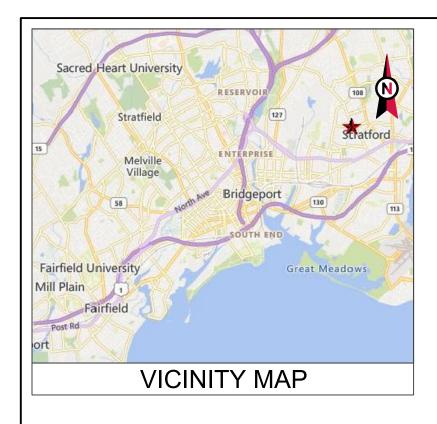
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CONTRACTOR IS TO CHECK WITH THE ATAT
CM TO ENSURE THIS IS THE MOST RECENT
VERSION OF THE RFDS.

R-603

RFDS PLUMBING DIAGRAM





SITE NAME: STONEYBROOK RD CT

SITE NUMBER: 283420

ATC PROJECT NUMBER: 13682835_C6_06

SITE ADDRESS: 23 STONYBROOK ROAD

STRATFORD, CT 06614



LOCATION MAP

119.7 FT MONOPOLE MODIFICATIONS

| PROJECT TEAM | PROJECT DESCRIPTION | SHEET | SHEET TITLE | REV. |
|---------------------------------|--|-------|---|------|
| | | G-002 | IBC GENERAL NOTES | 0 |
| TOWER OWNER | THE PROJECT DEPICTED IN THESE PLANS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE STRUCTURAL ANALYSIS COMPLETED | G-003 | SPECIAL INSPECTION CHECKLIST | 0 |
| AMERICAN TOWER | UNDER ENGINEERING PROJECT NUMBER 13682835_C3_03 DATED 01/24/22. SATISFACTORY COMPLETION OF THE WORK INDICATED IN THESE PLANS WILL | G-004 | BILL OF MATERIALS | 0 |
| 10 PRESIDENTAL WAY | RESULT IN THE STRUCTURE MEETING THE REQUIREMENTS OF THE SPECIFICATIONS UNDER WHICH THE STRUCTURAL WAS COMPLETED. | C-101 | DETAILED SITE PLAN | 0 |
| WOBURN, MA 01801 | of Edition 1000 GNDER WHICH THE CHROCHOTOLE WAS COME ELTED. | S-201 | MODIFICATION PROFILE | 0 |
| | PROJECT NOTE | S-501 | REINFORCEMENT INSTALLATION DETAILS | 0 |
| ENGINEERED BY | | S-502 | REINFORCEMENT INSTALLATION DETAILS | 0 |
| ATC TOWER SERVICES | THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. | S-503 | REINFORCEMENT INSTALLATION DETAILS (CONT'D) | 0 |
| 3500 REGENCY PARKWAY, SUITE 100 | § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF | S-504 | #20 STEP BOLT BRACKET INSTALLATION DETAILS | 0 |
| CARY, NC 27518 | TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.6100 (B)(7). | Z-501 | #20 BAR BRACKET [W8X21 T-BRACKET] | 0 |
| CARRIER INFORMATION | COMPLIANCE CODE | | | |
| CARRIER: AT&T MOBILITY | 001111 211 11102 0032 | | | |
| CARRIER SITE NAME: MRCTB051448 | ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS | | | |
| CARRIER SITE NUMBER: CTL02381 | ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. | | | |
| | 1. ANSI/TIA/EIA: STRUCTURAL STANDARDS (222-H EDITION) | | | |
| | 2. INTERNATIONAL BUILDING CODE (2015 IBC) | | | |
| | 3. CONNECTICUT STATE BUILDING CODE (2018) | | | |
| 044 | | | | |
| | PROJECT LOCATION | | | |
| | GEOGRAPHIC COORDINATES | | | |
| Know what's below. | LATITUDE: 41.20327777 | | | |
| Call before you dig. | LONGITUDE: -73.148625 | | | |
| | 20.10.1022. 10.11022 | | | |
| | | | | |
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NGINEERING SERVICE, 3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: PEC.0001553

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|---------------------|---------------|------------|----------|
| \triangle | FIRST ISSUE | <u>CWB</u> | 01/05/23 |
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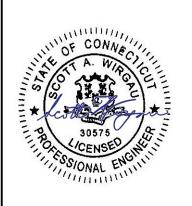
283420

ATC SITE NAME:

STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



| DRAWN BY: | CWB |
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| APPROVED BY: | RDB |
| DATE DRAWN: | 01/05/23 |
| ATC JOB NO: | 13682835_C6_06 |
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SHEET NUMBER:

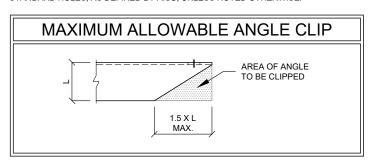
G-001

GENERAL

- ALL WORK TO BE COMPLETED PER APPLICABLE LOCAL, STATE, FEDERAL CODES AND ORDINANCES AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS FOR WIRELESS TOWER SITES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND ABIDING BY ALL REQUIRED PERMITS
- ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.
- 4. ANY SUBSTITUTIONS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- 5. ANY MANUFACTURED DESIGN ELEMENTS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY, PER ANSI/TIA-322 AND ANSI/ASSE A10.48, TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.
- 8. CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO. ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.

STRUCTURAL STEEL

- ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS. LATEST EDITION.
- ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
- ALL U-BOLTS SHALL BE ASTM A36 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.
- 4. FIELD CUT EDGES, EXCEPT DRILLED HOLES, SHALL BE GROUND SMOOTH.
- ALL FIELD CUT SURFACES, FIELD DRILLED HOLES & GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
- 6. ALL STRUCTURAL STEEL EMBEDDED IN THE CONCRETE SHALL BE APPLIED WITH (2) BRUSHED COATS OF POLYGUARD CA-9 MASTIC OR EQUIVALENT. REFER TO THE MANUFACTURER SPECIFICATIONS FOR SURFACE PREPARATION AND APPLICATION. APPLICATION OF POLYGUARD 400 WRAP IS NOT ESSENTIAL.
- 7. CONTRACTOR SHALL PERFORM WORK ON ONLY ONE (1) TOWER FACE AND REPLACE/REINFORCE ONE (1) BOLT/MEMBER AT A TIME.
- ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.



PAINT

 AS REQUIRED, CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1L.

WELDING

- ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
- ALL WELDS SHALL BE INSPECTED VISUALLY. IF DIRECTED BY ENGINEER OF RECORD, 25% OF WELDS
 SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE (100% IF REJECTABLE DEFECTS
 ARE FOUND) TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
- 3. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
- . ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER AND/OR BASE METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
- 5. IN CASES WHERE BASE METAL GRADE IS UNKNOWN, ALL WELDING ON LATTICE TOWERS SHALL BE DONE WITH E70XX ELECTRODES; ALL WELDING ON POLE STRUCTURES SHALL BE DONE WITH E80XX ELECTRODES, UNLESS NOTED OTHERWISE.
- 6. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.

BOLT TIGHTENING PROCEDURE

- STRUCTURAL CONNECTIONS TO BE ASSEMBLED AND INSPECTED IN ACCORDANCE WITH RCSC SPECIFICATIONS.
- FLANGE BOLTS SHALL BE INSTALLED AND TIGHTENED USING DIRECT TENSION INDICATING (DTI)
 SQUIRTER WASHERS. DTI SQUIRTER WASHERS ARE TO BE INSTALLED AND ORIENTED / TIGHTENED PER
 MANUFACTURER SPECIFICATIONS TO ACHIEVE DESIRED LEVEL OF BOLT PRE-TENSION.
- 3. IN LIEU OF USING DTI SQUIRTER WASHERS, FLANGE BOLTS MAY BE TIGHTENED USING AISC / RCSC "TURN-OF-THE-NUT" METHOD, PENDING APPROVAL BY THE ENGINEER OF RECORD (EOR). TIGHTEN FLANGE BOLTS USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIAMETERS

| DOL: L | MOTHO OF TO AND INCEODING TOOK BIAMET | |
|--------|---|-----------------------------|
| 1/2" | BOLTS UP TO AND INCLUDING 2.0 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 5/8" | BOLTS UP TO AND INCLUDING 2.5 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 3/4" | BOLTS UP TO AND INCLUDING 3.0 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 7/8" | BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 1" | BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 1-1/8" | BOLTS UP TO AND INCLUDING 4.5 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 1-1/4" | BOLTS UP TO AND INCLUDING 5.0 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 1-3/8" | BOLTS UP TO AND INCLUDING 5.5 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |
| 1-1/2" | BOLTS UP TO AND INCLUDING 6.0 INCH LENGTH | +1/3 TURN BEYOND SNUG TIGHT |

BOLT LENGTHS OVER FOUR DIAMETERS BUT NOT EXCEEDING EIGHT DIAMETERS

| 1/2" | BOLTS 2.25 TO 4.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
|--------|--------------------------------|-----------------------------|
| 5/8" | BOLTS 2.75 TO 5.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
| 3/4" | BOLTS 3.25 TO 6.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
| 7/8" | BOLTS 3.75 TO 7.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
| 1" | BOLTS 4.25 TO 8.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
| 1-1/8" | BOLTS 4.75 TO 9.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
| 1-1/4" | BOLTS 5.25 TO 10.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
| 1-3/8" | BOLTS 5.75 TO 11.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |
| 1-1/2" | BOLTS 6.25 TO 12.0 INCH LENGTH | +1/2 TURN BEYOND SNUG TIGHT |

4. SPLICE BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8.2.1 OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS", LOCATED IN THE AISC MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8.2.1 THROUGH 8.2.4.

8.2.1 TURN-OF-NUT PRETENSIONING

BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1, UNTIL ALL THE BOLTS ARE SIMULTANEOUSLY SNUG TIGHT AND THE CONNECTION IS FULLY COMPACTED. FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.

ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1 OF THE SPECIFICATION.

ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT INSERTION OF THE BOLTS WITHOUT UNDUE DAMAGE TO THE THREADS. BOLTS SHALL BE PLACED IN ALL HOLES WITH WASHERS POSITIONED AS REQUIRED AND NUTS THREADED TO COMPLETE THE ASSEMBLY. COMPACTING THE JOINT TO THE SNUG-TIGHT CONDITION SHALL PROGRESS SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT. THE SNUG-TIGHTENED CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.

APPLICABLE CODES AND STANDARDS

- ANSI/TIA: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, 222-H EDITION.
- 2. 2018 CONNECTICUT STATE BUILDING CODE.
- 2015 INTERNATIONAL BUILDING CODE.
- ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. REFERENCE LATEST APPROPRIATE EDITION TO MATCH LOCAL AND/OR INTERNATIONAL BUILDING CODE(S) LISTED ABOVE.
- CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.
- AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION. LATEST EDITION.
- 7. AWS: AMERICAN WELDING SOCIETY D1.1, STRUCTURAL WELDING CODE, LATEST EDITION

SPECIAL INSPECTION

- A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH IBC 2015, SECTION 1704 AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
 - a) STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELD ONLY)
 b) HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 EXTENSION
 FLANGE BOLTS TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD)
- THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER IN ACCORDANCE WITH IBC 2015, SECTION 1704, UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTIONS.



AMERICAN TOWER®

A.T. ENGINEERING SERVICE, PLLC

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CARY, NC 27518

PHONE: (919) 468-0112

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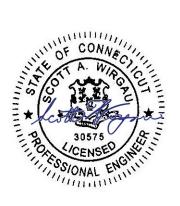
283420

ATC SITE NAME:

STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



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| APPROVED BY: | RDB |
| DATE DRAWN: | 01/05/23 |
| ATC JOB NO: | 13682835_C6_06 |

IBC GENERAL NOTES

SHEET NUMBER:

REVISION

G-002

MODIFICATION INSPECTION NOTES

THE SPECIAL INSPECTION (SI) PROCEDURE IS INTENDED TO CONFIRM THAT CONSTRUCTION AND INSTALLATION MEETS ENGINEERING DESIGN, ATC PROCEDURES AND ATC STANDARD SPECIFICATIONS FOR WIRELESS TOWER SITES

TO ENSURE THAT THE REQUIREMENTS OF THE SI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR AND THE INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED FROM AMERICAN TOWER CORPORATION (ATC). IT IS EXPECTED THAT EACH PARTY WILL PROACTIVELY REACH OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR AMERICAN TOWER POINT OF CONTACT.

SPECIAL INSPECTOR

THE SPECIAL INSPECTOR IS REQUIRED TO CONTACT THE GENERAL CONTRACTOR AS SOON AS RECEIVING A POFROM ATC. UPON RECEIVING A POFROM ATC THE SPECIAL INSPECTOR AT A MINIMUM MUST:

- REVIEW THE REQUIREMENTS OF THE SI CHECKLIST.
- WORK WITH THE GENERAL CONTRACTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
- ANY CONCERNS WITH THE SCOPE OF WORK OR PROJECT COMMITMENT MUST BE RELAYED TO THE ATC POINT OF CONTACT IMMEDIATELY.

THE SPECIAL INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR INSPECTION AND TEST REPORTS, REVIEWING THESE DOCUMENTS FOR ADHERENCE TO CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE SI REPORT TO AMERICAN TOWER CORPORATION.

GENERAL CONTRACTOR

THE GENERAL CONTRACTOR IS REQUIRED TO CONTACT THE SI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE SI CHECKLIST.
- WORK WITH THE SITO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS.

THE GENERAL CONTRACTOR SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE SI CHECKLIST.

| INSPECTION DOCUMENT | DESCRIPTION | INSPECTION TESTING | RESPONSIBILITY | SI REVIEW REQUIRED | | | INSPECTION FREQUENC | |
|---|--|--------------------|----------------|---------------------|--|---------|---------------------|------------|
| INSPECTION DOCUMENT | DESCRIPTION | REQUIRED | RESPONSIBILITY | PRE CX DURING CX PO | | POST CX | PERIODIC | CONTINUOUS |
| SPECIAL INSPECTION FIELD WORK & REPORT | DOCUMENTATION AND SITE VISIT CONDUCTED BY AN ATC APPROVED SPECIAL INSPECTOR AS REQUIRED BY ATC AND OTHER AUTHORITIES HAVING JURISDICTION. INSPECTION PARAMETERS TO FOLLOW ATC'S STANDARD SPECIFICATION FOR WIRELESS TOWER SITES. | * | SI | | | * | | |
| ENGINEERING ASSEMBLY DRAWINGS | GC SHALL SUBMIT DRAWINGS TO SI FOR INCLUSION IN SI REPORT | ✓ | GC | * | | | | |
| FABRICATED MATERIAL VERIFICATION & INSPECTION | MTR AND OR MILL CERTIFICATIONS FOR SUPPLIED MATERIALS GC SHALL SUPPLY SI WITH REPORTS TO BE INCLUDED IN SI REPORT WHEN REQUIRED BY ATC | • | SI | • | | | | |
| CERTIFIED WELD INSPECTION | INSPECTION AND REPORT OF STRUCTURAL WELDING PERFORMED DURING PROJECT COMPLETED BY A CWI AND INCLUDED WITHIN SI REPORT | | GC / TA | | | | | |
| FOUNDATION INSPECTION & VERIFICATION | VISUAL OBSERVATION AND APPROVAL OF FOUNDATION EXCAVATION, REBAR PLACEMENT, CASING/SHORING/FORMING PLACEMENT, AND ANCHOR TEMPLATE AND ANCHOR PLACEMENT - TO BE SI APPROVED PRIOR TO CONCRETE POUR AND DOCUMENTED IN THE SI REPORT | | SI | | | | | |
| ANCHOR, ROCK ANCHOR OR HELICAL PULL-OUT TEST | PULL TESTING OF INSTALLED ANCHORS TO BE COMPLETED AND DOCUMENTED IN SI REPORT | | GC / TA | | | | | |
| CONCRETE INSPECTION & VERIFICATION | CONCRETE MIX DESIGN, SLUMP TEST, COMPRESSIVE TESTING, AND SAMPLE GATHERING TECHNIQUES ARE TO BE PROVIDED FOR INCLUSION IN THE SI REPORT. SI SHALL VERIFY CONCRETE PLACEMENT AS REQUIRED BY THE DESIGN DOCUMENTS (INSPECTION FREQUENCY IS MARKED CONTINUOUS) | | GC / TA | | | | | |
| DYWIDAG PLACEMENT/ANCHOR BOLT EMBEDMENT - EPOXY/GROUT INSTALL | ANCHOR/BAR EMBEDMENT, HOLE SIZE, EPOXY/GROUT TYPE, INSTALLATION TEMPERATURE AND INSTALLATION SHALL BE VERIFIED BY THE SI AND INCLUDED IN THE SI REPORT | | GC / SI | | | | | |
| BASE PLATE GROUT INSPECTION & VERIFICATION | BASE PLATE GROUTING TYPE AND PLACEMENT SHALL BE CONFIRMED BY THE SI AND INCLUDED IN THE SI REPORT | | GC / SI | | | | | |
| EARTHWORK INSPECTION & VERIFICATION | EXCAVATION, FILL, SLOPE, GRADE AND OTHER EARTHWORK REQUIREMENTS PER PLANS SHALL BE VERIFIED BY THE SI AND INCLUDED IN THE SI REPORT | | GC / TA | | | | | |
| COMPACTION VERIFICATION | CONTRACTOR SHALL PROVIDE AN INDEPENDENT THIRD PARTY CERTIFIED INSPECTION WHICH PROVIDES TEST RESULTS FOR COMPACTION TEST OF SOILS IN PLACE TO ASTM STANDARDS. | | GC / TA | | | | | |
| GROUND TESTING & VERIFICATION | GC SHALL PROVIDE DOCUMENTATION SHOWING THAT THE GROUNDING SYSTEM SHALL HAVE A MEASURED RESISTANCE TO THE GROUND OF NOT MORE THAN THE RECOMMENDED 10 OHMS. PER THE ATC CONSTRUCTION SPECIFICATION UNDER SECTION 2.15 THIS DOCUMENTATION MUST BE AN INDEPENDENT CERTIFICATION. | | GC | | | | | |
| STEEL CONSTRUCTION INSPECTION & VERIFICATION | VISUAL OBSERVATION AND APPROVAL OF STEEL CONSTRUCTION TO BE PERFORMED BY THE SI. INSPECTION TO INCLUDE VERIFICATION OF NEW CONSTRUCTION OR MODIFICATION OF EXISTING CONSTRUCTION PER ENGINEERED PLANS. DETAILED VERIFICATION SHALL BE INCLUDED IN SI REPORT. | • | SI | | | * | * | |
| ON-SITE COLD GALVANIZING VERIFICATION | SI SHALL VERIFY WITH GC ALL COLD GALVANIZATION TYPE AND APPLICATION AND INCLUDE SUMMARY IN SI REPORT | ✓ | GC | | | * | * | |
| GUY WIRE TENSIONING & TOWER ALIGNMENT REPORT | GC SHALL PROVIDE SI EVIDENCE OF PROPER GUY TENSIONING AND TOWER PLUMB PER PLANS. SI SHALL VERIFY AND INCLUDE PLUMB AND TENSION REPORTING IN SI REPORT. | | GC | | | | | |
| GC AS-BUILT DRAWINGS WITH CONSTRUCTION RED-LINES | GC SHALL SUBMIT "AS-BUILT" DRAWINGS INDICATING ANY APPROVED CHANGES TO ENGINEERED PLANS TO SI FOR APPROVAL/REVIEW AND INCLUSION IN SI REPORT | ✓ | GC | | | * | | |
| SI AS-BUILT DRAWINGS WITH INSPECTION RED-LINES (AS REQUIRED) | SI SHALL SUBMIT "AS-BUILT" DRAWINGS INDICATING ANY APPROVED CHANGES TO ENGINEERED PLANS WITHIN SI REPORT | ✓ | SI | | | * | | |
| TIA INSPECTION | SI SHALL COMPLETE TIA INSPECTION AND PROVIDE SEPARATE TIA INSPECTION DOCUMENTATION TO ATC CM | | SI | | | | | |
| PHOTOGRAPHS | PHOTOGRAPHIC EVIDENCE OF SPECIAL INSPECTION, ON SITE REMEDIATION, AND ITEMS FAILING INSPECTION & REQUIRING FOLLOW UP TO BE INCLUDED WITHIN THE SI REPORT. COMPLETE PHOTO LOG IS TO BE SUBMITTED WITHIN SI REPORT. | ✓ | GC / SI | | | • | | |

NOTE: SPECIAL INSPECTIONS ARE INTENDED TO BE A COLLABORATIVE EFFORT BETWEEN GC AND SI. WHENEVER POSSIBLE GC IS TO PROVIDE SI WITH PHOTOGRAPHIC OR OTHER ACCEPTABLE EVIDENCE OF PROPER INSTALLATION IF PERIODIC INSPECTION FREQUENCY IS ACCEPTABLE. THE GC AND SI SHALL WORK TO COMPILE EVIDENCE OF PROPER CONSTRUCTION AND LIMIT THE NUMBER OF SI SITE VISITS REQUIRED.

TABLEVE

TABLE KEY: SI - ATC APPROVED SPECIAL INSPECTOR

GC - GENERAL CONTRACTOR

CX - CONSTRUCTION

CM - CONSTRUCTION MANAGER

TA - 3RD PARTY TESTING AGENCY ATC - AMERICAN TOWER CORPORATION

AMERICAN TOWER®

A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

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| \triangle | FIRST ISSUE | <u>CWB</u> | 01/05/23 |
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ATC SITE NUMBER:

283420

ATC SITE NAME:

STONEYBROOK RD CT CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



| DRAWN BY: | CWB |
|--------------|----------------|
| APPROVED BY: | RDB |
| DATE DRAWN: | 01/05/23 |
| ATC JOB NO: | 13682835_C6_06 |

SPECIAL INSPECTION CHECKLIST

SHEET NUMBER:

REVISION

G-003

BILL OF MATERIALS

| 3 3 UP DASARCH FOR MINERAL SHARMARE 3 3 UP DASARCH FOR MINERAL SHARMARE 5 8 WEST 123 ST TEMPARTON MINERAL SHARMARE 6 8 WEST 123 ST TEMPARTON MINERAL SHARMARE 150 137 LESSON 255 ST A00 NODE BUND DOLT ASSON, 160 W SPRING SLEDY E A40 | | QUANTITY PROVIDED | PART NUMBER | DESCRIPTION | LENGTH | SHEET LIST | PART WEIGHT | WEIGHT (lb) | NOTES |
|--|-----|----------------------|------------------------|--|-----------|------------|----------------|----------------|-----------------------------------|
| 21 21 V821-20 W8X21 T2UN TEATH TOWNSTON WILLOWST TOWNST TOWN | | | | #20 DYWIDAG RENFORCEMENT MATERIAL & HARDWARE | | | | | |
| S | 3 | 3 | DYD-20-ATR-PF | #20 ALL THREAD ROD (PER FT) | 20'-0" | S-502 | 334.0 | 1002 | GALVANIZED |
| 6 | | | | | | | | | |
| 84 86 | | | | | | | | | |
| 137 | 6 | 6 | W821-12U-S | TERMINATION WELDMENT | 3'-6 3/4" | S-502 | 89.1 | 535 | #20 T-BRACKET |
| 137 | | | | | | | | | |
| 16 | | | | | | | | | |
| 1 | 130 | 137 | UB-580-3125 | U-BOLT ASSEMBLIES FOR #20 ROD | | | | | GALVANIZED |
| 1 | | | //0005 | OTEN DOLT ME DIVER | | | | | |
| 1 1 | | <u> </u> | | | | | | | ALLEA OTENIEDO A AA ETDINAMO |
| FLANSE BOLTS 9 BK-1000-425-A460-MAG BOLT, 1°D A490 W HH-LIWPM, MAGN 565 COATING 4 1 1/4" | | | | | | | | | |
| 8 9 BK-1000-425-A490 MAG BOLT, TYP A490 W HAN LAW HW, MAGN 565 COATHOL 4 114" ALLFASTENERS. 2STED/1414A490MA ADDITIONAL MATERIAL 8 HARDWARE 8 | 1 | 1 | | ROUND LEG IN I ERMEDIA I E BRACKET | | | | | ALLFASTENERS - 14AFRHC12 |
| 8 9 BK-1006-425-A490 MAG BOLT, TYS A490 WI HAN LKWFW, MAGNI 555 COATTNO ADDITIONAL MATERIAL & HARDWARE BO 09 NG-0638-1438-A490 NEXIDER BLIND BOLT ASSEMB, N20 WI SPRING SLEEVE, A490 | | | | FLANOF DOLTO | | | | | |
| ADDITIONAL MATERIAL 8 HARDWARE 68 66 NG 0588 1438 A4400 NEXCEND BUILD BOLT ASSEMB, M20 W SPRINS SLEEVE A4600 ALLFASTENERS. 2NG2008 ALLFASTENERS. 2NG2008 ALLFASTENERS. 2NG2008 | | | DIZ 1000 10F A 100 MAC | | 4 1/4" | | | | ALLEA CTENEDO - OCTDOMAMA ADONA A |
| 66 | 8 | 9 | BK-1000-425-A490-MAG | BOLT, 170 A490 VV/ HHIN-LKVV-FVV, WAGNI 565 COATING | 4 1/4 | | | | ALLFASTENERS - 25TBU1414A49UWFA |
| 66 | | | | ADDITIONAL MATERIAL & HARDWARE | | | | | |
| | 66 | 69 | NG-0938-1438-A490 | | | | | | ALLEA STENERS - 2NG2036 |
| | | | 110-0000-1400-71400 | THE COLLAR DELIVE BOLT ACCESSES, INCO VICTORING CELLUL, A430 | | | | | 71ELI 71E11E10 - 21102000 |
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| | | | | | | | | | |
| TOTAL WEIGHT (II) 2470 | | | | | | | | | |
| TOTAL METOUT (b) 2470 | | | | | | | | | |
| TOTAL WEIGHT (II.) 2470 | | * | | | | | | | |
| TOTAL MEIOUT (III) 2470 | | | | | | | | | |
| TOTAL MITIOUT (II) 2470 | | | | | | | | | |
| TOTAL MISIOLIT (II) 2170 | | | | | | | | | |
| TOTAL MEIOUT (II) 2 170 | | | | | | | | | |
| TOTAL MEIOUT (IL) 2 170 | | - | | | | | | | |
| TOTAL MEIOUT (IL) 2 170 | | | | | | | | | |
| TOTAL MITICULT (IL) 2 170 | | | | | | | | | |
| TOTAL MICIOUT (III) 2 170 | | | | | | | | | |
| TOTAL MELOUT (IL) 2 170 | | | | | | | | | |
| INTAL WEIGHT IN 1 Z.I/V 1 PAGE II | 1 | | | | * | TOTAL WE | IGHT (Ib) | 2,170 | PAGE 1 OF 1 |



NGINEERING SERVICE, P 3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: PEC.0001553

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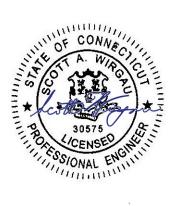
283420

ATC SITE NAME:

STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



| DRAWN BY: | CWB |
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BILL OF MATERIALS

SHEET NUMBER:

REVISION:

G-004

LEGEND

GROUNDING TEST WELL AV, A/V ATS AIR VENT AUTOMATIC TRANSFER SWITCH BOLLARD CABINET COAX SHROUD

C CS CSC D CELL SITE CABINET ELECTRICAL FIRER

. GEN GENERATOR G HH, V HFC HSM IB GENERATOR RECEPTACLE HAND HOLE, VAULT

HYDROGEN FUEL CELL HYDROGEN STORAGE MATERIAL ICE BRIDGE KENTROX BOX

K LC LPG M LIGHTING CONTROL LIQUID PROPANE GAS METER OHW OVERHEAD WIRE

P PB PP PULL BOX POWER POLE TELCO TRANSFORMER

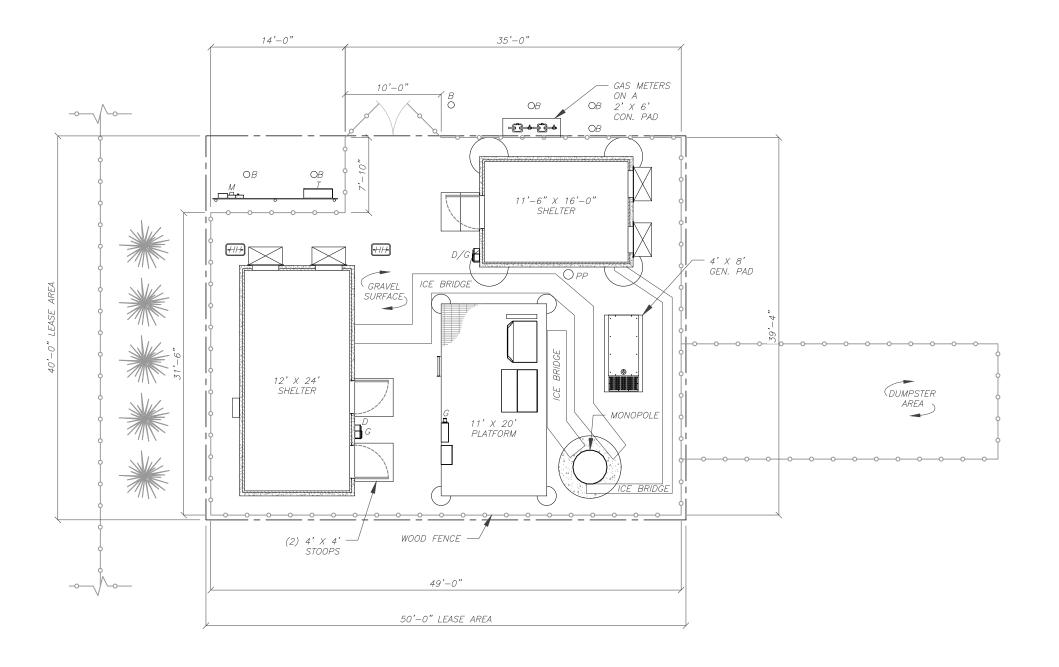
PROPERTY LINE — — — ADJACENT PROPERTY LINE

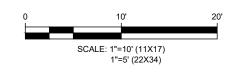
— LEASE AREA

EASEMENT WOOD FENCE WIRE FENCE
METAL FENCE GUARD RAIL CHAINLINK FENCE ROAD (DIRT)

ROAD (STONE) ROAD (PAVED)









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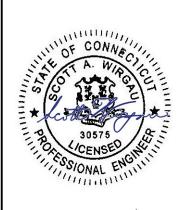
283420

ATC SITE NAME:

STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



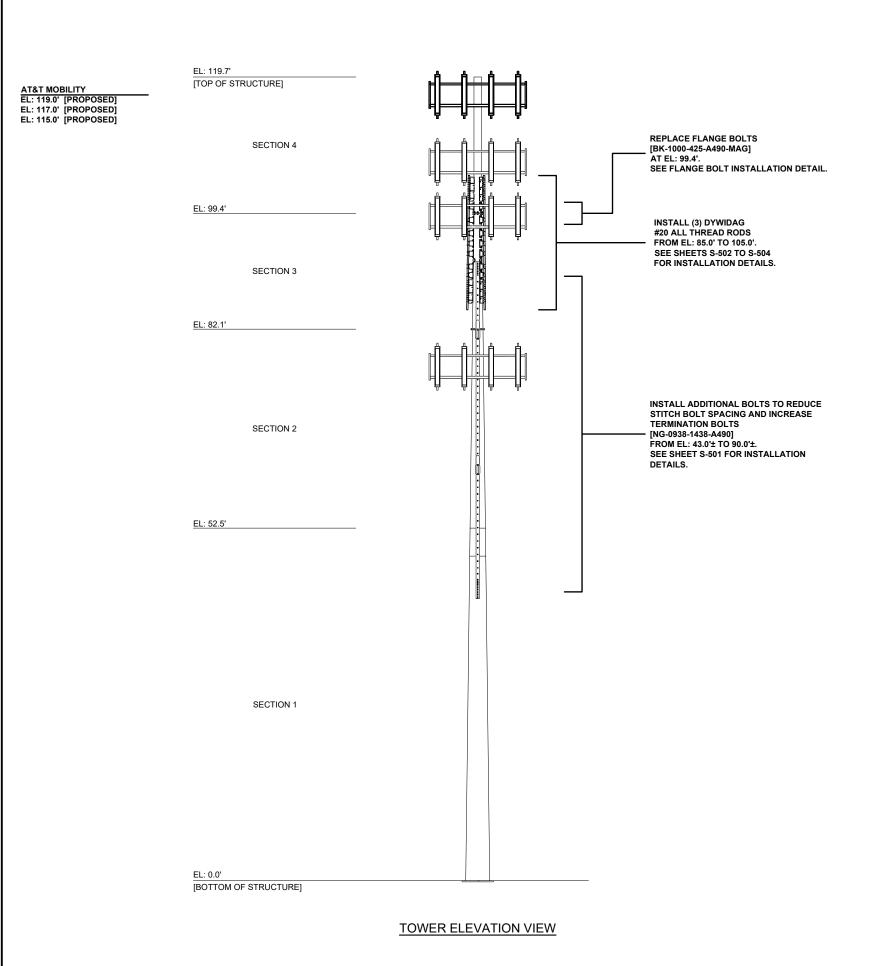
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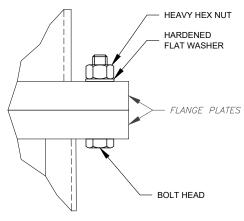
DETAILED SITE PLAN

SHEET NUMBER:

REVISION:

C-101





FLANGE BOLT INSTALLATION TYPICAL DETAIL

ALL FLANGE BOLTS SHALL BE TIGHTENED BY USING AISC/RCSC "TURN-OF-THE-NUT" METHODOLOGY. SEE SHEET G-002 FOR DETAILS



- 1. PROPOSED AT&T MOBILITY COAX TO BE INSTALLED INSIDE MONOPOLE.
- 2. BASE FLANGE WELD AND STIFFENER PLATE WELDS (WHEN PRESENT)
 ARE TO BE INSPECTED VISUALLY AND BY NDT METHODS BY A
 CERTIFIED WELD INSPECTOR WITH NDT LEVEL II CERTIFICATION.
 RESULTS ARE TO BE SENT TO PMI@AMERICANTOWER.COM.
- 3. CONTACT AMERICAN TOWER FIELD OPERATIONS WHEN EXISTING EQUIPMENT INTERFERES WITH INSTALLATION OF MODIFICATIONS.

 ONCE APPROVED, EXISTING EQUIPMENT MAY BE TEMPORARILY MOVED DURING INSTALLATION & REINSTALLED TO THE ORIGINAL HEIGHT & LOCATION BY CONTRACTOR POST COMPLETION OF MODIFICATIONS.



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CARY, NC 27518
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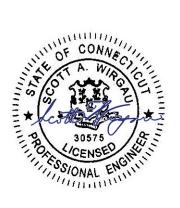
283420

ATC SITE NAME:

STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



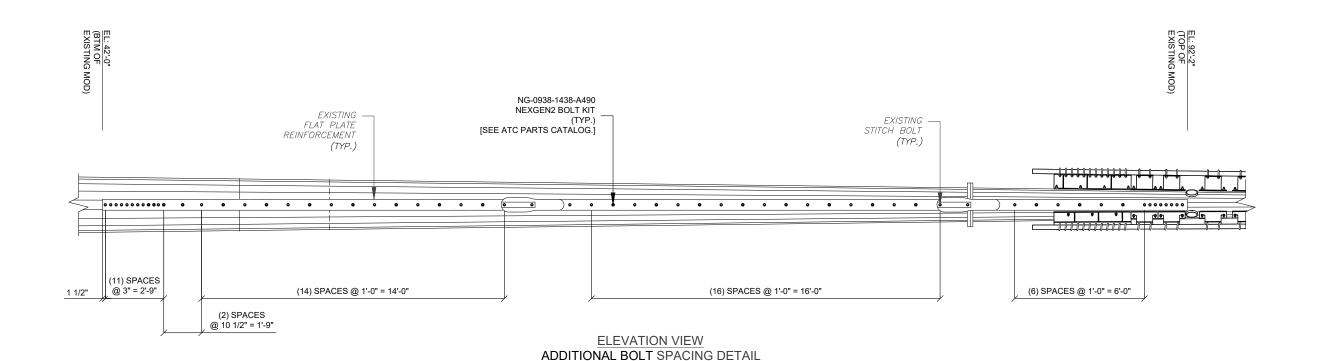
| DRAWN BY: | CWB |
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| APPROVED BY: | RDB |
| DATE DRAWN: | 01/05/23 |
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MODIFICATION PROFILE

SHEET NUMBER:

REVISION

S-201





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SUITE 100
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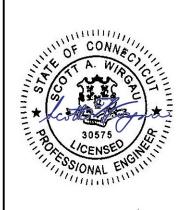
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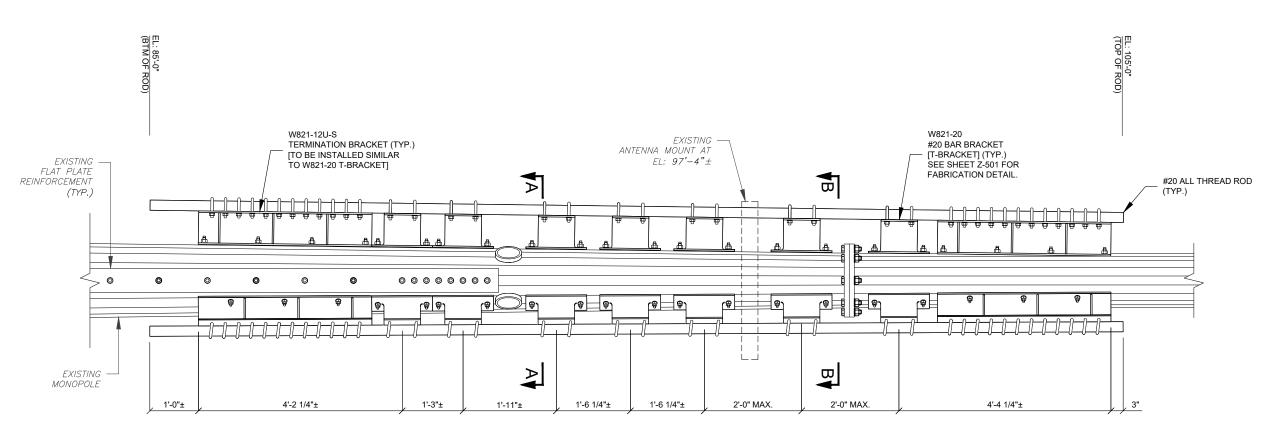
REINFORCEMENT INSTALLATION DETAILS

SHEET NUMBER:

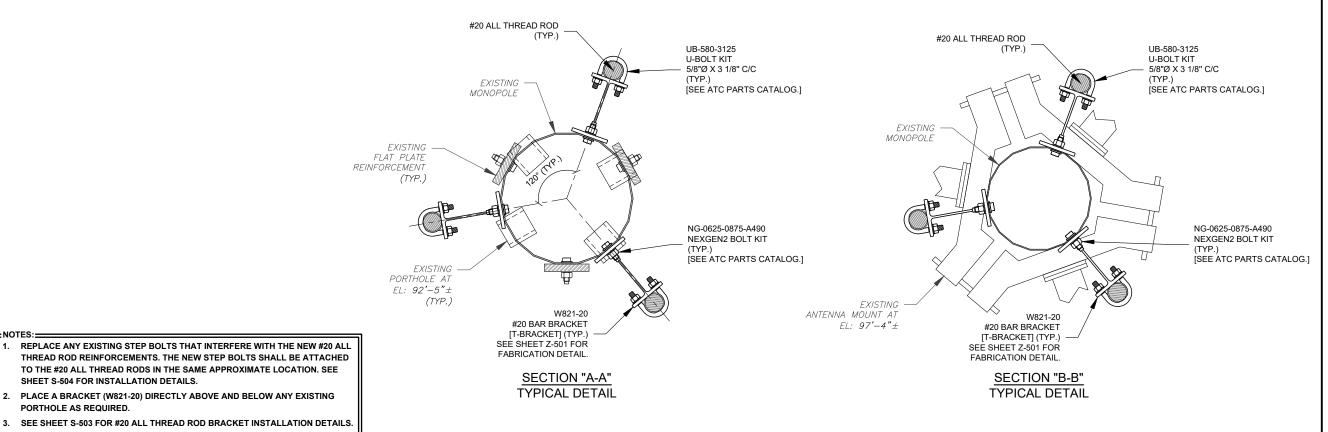
REVISION:

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SUITE 100 **CARY, NC 27518**

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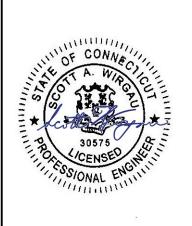
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REINFORCEMENT **INSTALLATION DETAILS**

SHEET NUMBER:

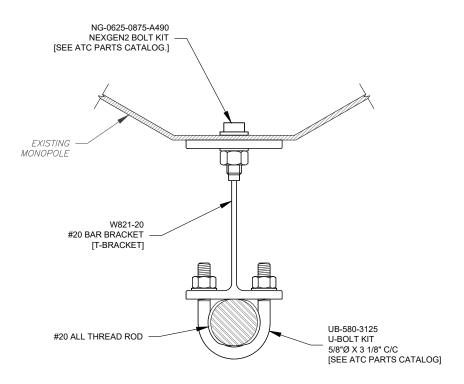
REVISION S-502 0

4. NG-0938-1438-A490 NEXGEN2 BOLT KITS ARE SUPPLIED AS REQUIRED FOR BAR BRACKET CONNECTIONS THAT FALL WITHIN SLIP JOINT LOCATIONS.

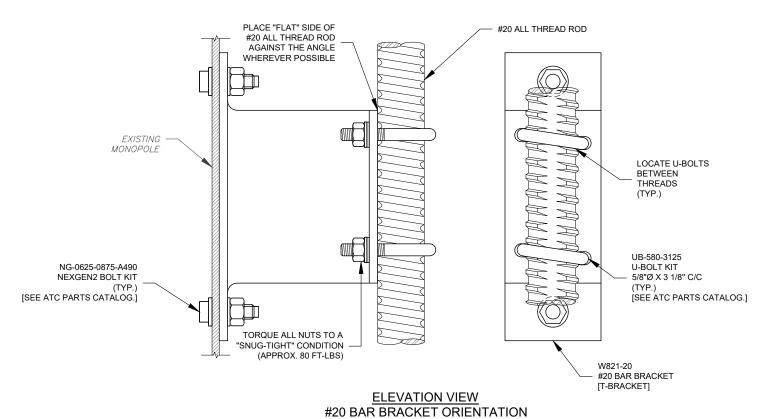
SHEET S-504 FOR INSTALLATION DETAILS.

PORTHOLE AS REQUIRED.

NOTES:=



PLAN VIEW #20 BAR BRACKET ORIENTATION [W8X21 T-BRACKET]



[W8X21 T-BRACKET]

AMERICAN TOWER®

A.T. ENGINEERING SERVICE, PLLC 3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: PEC.0001553

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STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614

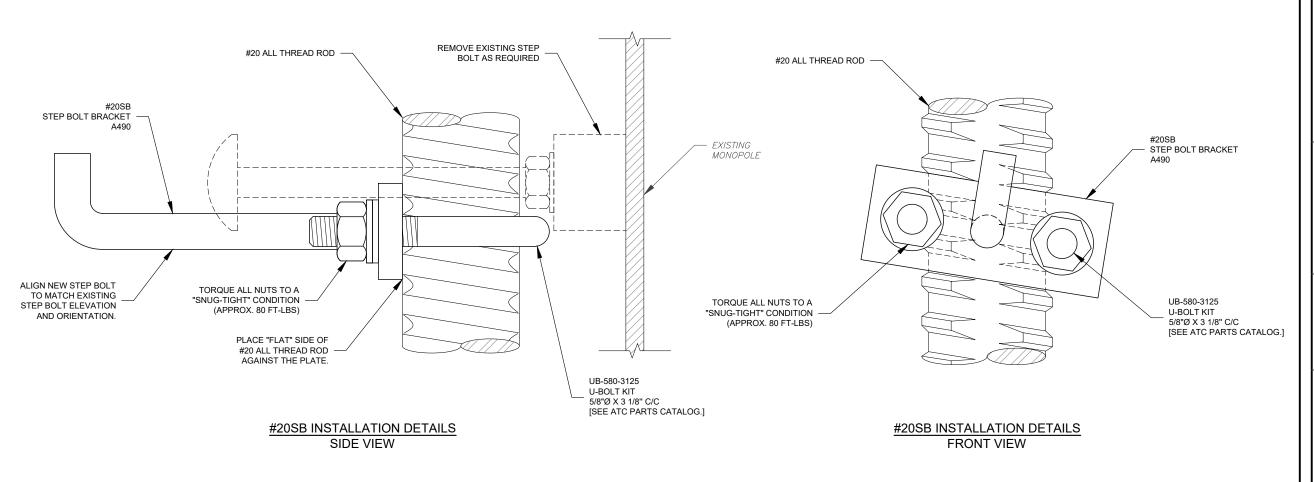


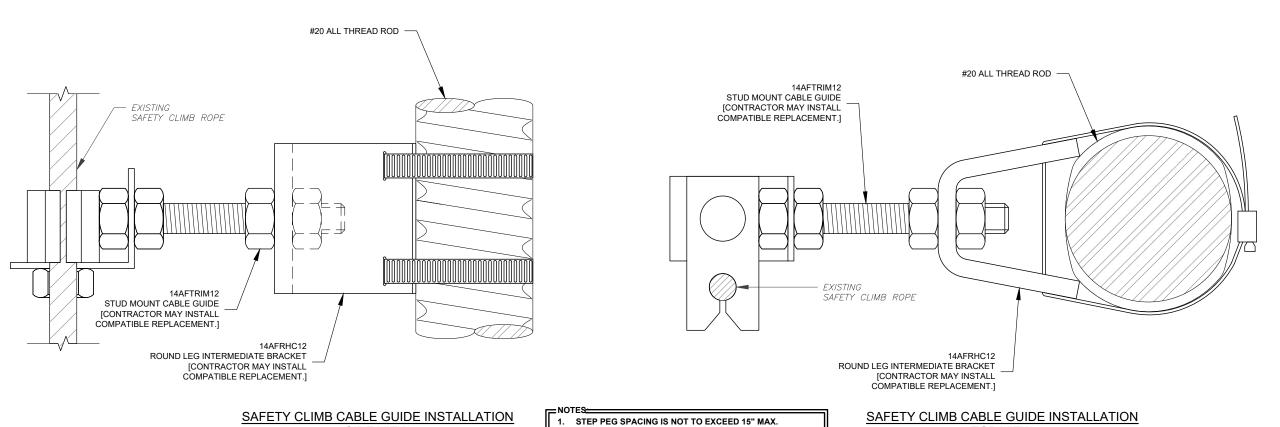
| DRAWN BY: | CWB |
|--------------|----------------|
| APPROVED BY: | RDB |
| DATE DRAWN: | 01/05/23 |
| ATC JOB NO: | 13682835_C6_06 |

REINFORCEMENT **INSTALLATION DETAILS** (CONT'D)

SHEET NUMBER:

S-503





DYWIDAG BAR.

EXCEED 20' MAX.

STAGGERED OR 30" MAX. ON ANY SINGLE SIDE OF THE

SAFETY CLIMB CABLE GUIDE SPACING IS NOT TO

SIDE VIEW

AMERICAN TOWER® A.T. ENGINEERING SERVICE, PLLC

3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: PEC.0001553

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| | REV. | DESCRIPTION | BY | DATE |
|--|---------------------|-------------|------------|----------|
| | \triangle_{-} | FIRST ISSUE | <u>CWB</u> | 01/05/23 |
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ATC SITE NUMBER:

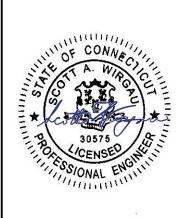
283420

ATC SITE NAME:

STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



| DRAWN BY: | CWB |
|--------------|----------------|
| APPROVED BY: | RDB |
| DATE DRAWN: | 01/05/23 |
| ATC JOB NO: | 13682835_C6_06 |

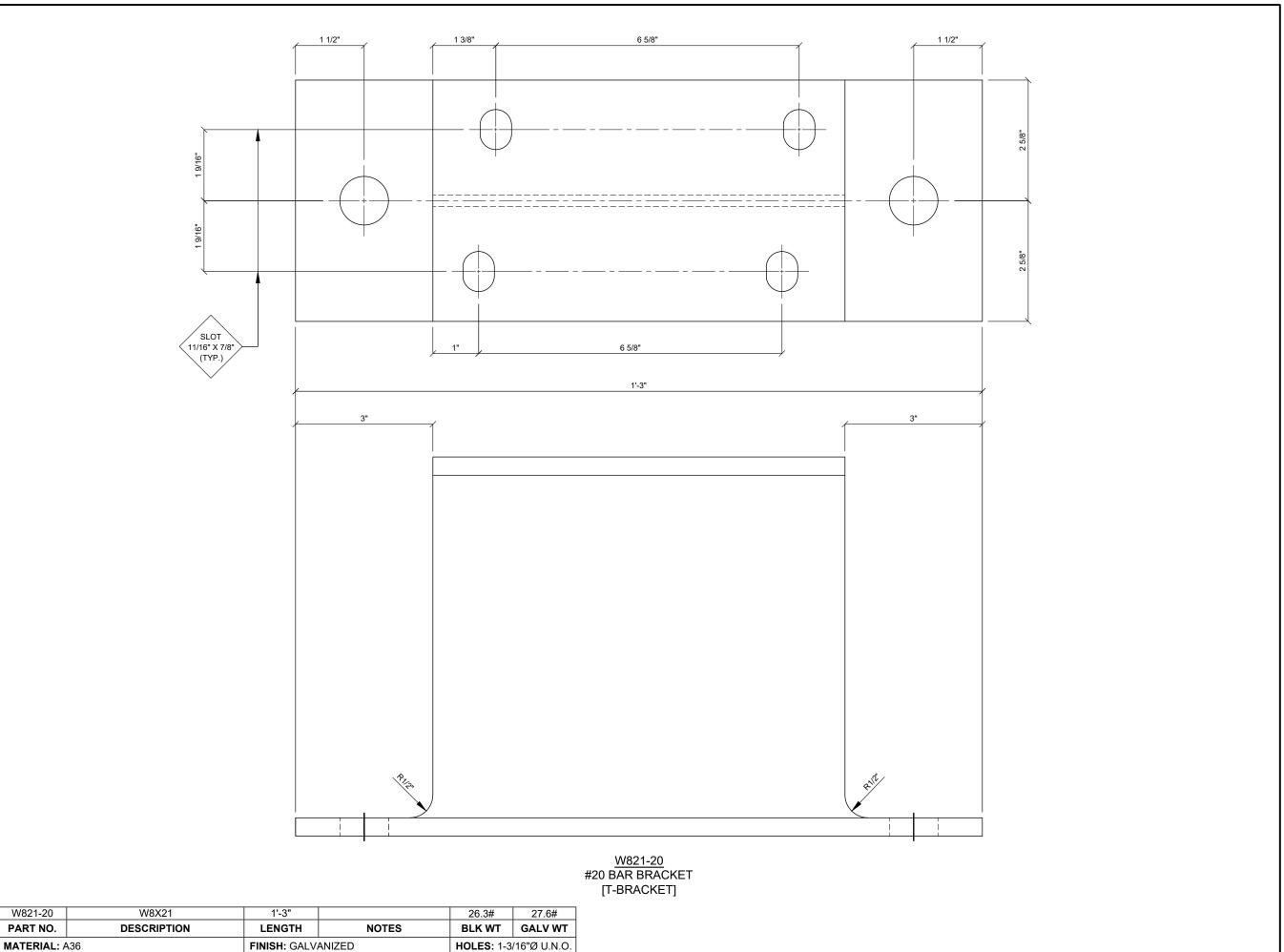
#20 STEP BOLT BRACKET **INSTALLATION DETAILS**

SHEET NUMBER:

TOP VIEW

REVISION

S-504





3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
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| RE | V. DESCRIPTION | BY | DATE |
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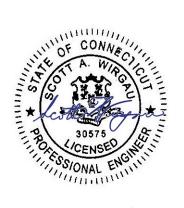
283420

ATC SITE NAME:

STONEYBROOK RD CT

CONNECTICUT

SITE ADDRESS: 23 STONYBROOK ROAD STRATFORD, CT 06614



| DRAWN BY: | CWB |
|--------------|----------------|
| APPROVED BY: | RDB |
| DATE DRAWN: | 01/05/23 |
| ATC JOB NO: | 13682835_C6_06 |

#20 BAR BRACKET [W8X21 T-BRACKET]

SHEET NUMBER:

REVISION:

Z-501



Radio Frequency Emissions Analysis Report

March 16, 2022

American Tower on behalf of AT&T

Site Name: STRATFORD STONYBROOK ROAD
Site Address: 23 STONYBROOK ROAD, STRATFORD, CT 06614

FA#: 12906923 USID: 149436

Site Compliance Summary

Compliance Status: Compliant

Carrier MPE% 5.41997300%

of FCC General Population Allowable Limit:

Composite MPE% 5.42129800%

of FCC General Population Allowable Limit:



March 16, 2022

AT&T New England Attn: John Benedetto, RF Manager 5050 Cochituate Road Suite 550 - 13&14 Framingham, MA 01701

Emissions Analysis for Site: STRATFORD STONYBROOK ROAD

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed AT&T facility to be located on a monopole near **23 STONYBROOK ROAD, STRATFORD CT 06614** for the purpose of determining whether the emissions from the proposed facility are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μ W/cm2). The number of μ W/cm² calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

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

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

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (μ W/cm²). The general population exposure limits for the 700 MHz (LTE) band is 467 μ W/cm², 800 (LTE) band is 533 μ W/cm², 850 (5G) band is 567 μ W/cm², 1900 MHz (PCS), 2100 (AWS), 2300 (WCS) and 5 GHz (B46) bands is 1000 μ W/cm².

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.



Calculations

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

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

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

| RRH # | Frequency Band | Technology | Channel Count | Transmit Power per Channel (W) |
|-------|-------------------|------------|---------------|-----------------------------------|
| 1 | 700 | LTE | 2 | 30 |
| 2 | 700 | LTE | 4 | 30 |
| 3 | 1900 | LTE | 4 | 30 |
| 4 | 2100 | AWS | 4 | 45 |
| 5 | 3700 | 5G C-Band | 1 | 108.4 |
| 6 | 3450 | 5G DoD | 1 | 54.2 |
| 6 | 3450 | 5G DoD | 1 | 54.2 |
| 7 | 700 | LTE | 4 | 30 |
| 7 | 850 | 5G | 4 | 30 |
| 8 | 2300 | WCS | 4 | 18 |

Table 1: Channel Data Table



The following antennas listed in Table 2 were used in the modeling for transmission in the 700 MHz (LTE), 850 MHz (5G), 1900 MHz (PCS), 2100 MHz (AWS), 2300 MHz (WCS) and 5 GHz (Band 46) frequency bands. This is based on information from the carrier with regard to anticipated antenna selection.

| Sector | Antenna Number | Make / Model | Centerline (ft) |
|--------|----------------|---------------------|-----------------|
| A | 1 | QUINTEL QD6616-7 V1 | 117.4 |
| A | 1 | QUINTEL QD6616-7 V1 | 117.4 |
| A | 1 | QUINTEL QD6616-7 V1 | 117.4 |
| A | 1 | QUINTEL QD6616-7 V1 | 117.4 |
| A | 2 | ERICSSON AIR6449 | 115.2 |
| A | 3 | ERICSSON AIR6419 | 118.5 |
| A | 3 | ERICSSON AIR6419 | 118.5 |
| A | 4 | CCI DMP65R-BU6D | 117.4 |
| A | 4 | CCI DMP65R-BU6D | 117.4 |
| A | 4 | CCI DMP65R-BU6D | 117.4 |
| В | 5 | QUINTEL QD6616-7 V1 | 117.4 |
| В | 5 | QUINTEL QD6616-7 V1 | 117.4 |
| В | 5 | QUINTEL QD6616-7 V1 | 117.4 |
| В | 5 | QUINTEL QD6616-7 V1 | 117.4 |
| В | 6 | ERICSSON AIR6449 | 115.2 |
| В | 7 | ERICSSON AIR6419 | 118.5 |
| В | 7 | ERICSSON AIR6419 | 118.5 |
| В | 8 | JMA MX10FRO440-xx | 117.4 |
| В | 8 | JMA MX10FRO440-xx | 117.4 |
| В | 8 | CCI DMP65R-BU6D | 117.4 |
| G | 9 | QUINTEL QD6616-7 V1 | 117.4 |
| G | 9 | QUINTEL QD6616-7 V1 | 117.4 |
| G | 9 | QUINTEL QD6616-7 V1 | 117.4 |
| G | 9 | QUINTEL QD6616-7 V1 | 117.4 |
| G | 10 | ERICSSON AIR6449 | 115.2 |
| G | 11 | ERICSSON AIR6419 | 118.5 |
| G | 11 | ERICSSON AIR6419 | 118.5 |
| G | 12 | CCI DMP65R-BU6D | 117.4 |
| G | 12 | CCI DMP65R-BU6D | 117.4 |
| G | 12 | CCI DMP65R-BU6D | 117.4 |

Table 2: Antenna Data

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



Results

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

TX

| | | | | | | TX | | |
|-----------|---------------------|-------------------|---------------|-----------------|---------------|-----------|------------|--------------|
| ID | Make / Model | Frequency Band | Gain (dBd) | Centerline (ft) | Channel Count | Power (W) | ERP (W) | MPE % |
| AT&T A 1 | QUINTEL QD6616-7 V1 | 700 | | 117.4 | 2 | 30 | 944.6289 | 0.000011000 |
| | QUINTEL QD6616-7 V1 | | 11.9711 | 117.4 | 4 | 30 | 1889.2579 | 0.000022000 |
| | QUINTEL QD6616-7 V1 | | 15.1762 | 117.4 | 4 | 30 | | 0.000012000 |
| AT&T A 1 | QUINTEL QD6616-7 V1 | 2100 | 15.3631 | 117.4 | 4 | 45 | 6188.4588 | 0.000018000 |
| | ERICSSON AIR6449 | | 23.55 | 115.2 | 1 | 108.4 | 24548.7443 | 0.000152000 |
| AT&T A 3 | ERICSSON AIR6419 | 3450 | 22.85 | 118.5 | 1 | 54.2 | 10447.1850 | 1.805159000 |
| AT&T A 3 | ERICSSON AIR6419 | 3450 | 22.85 | 118.5 | 1 | 54.2 | 10408.6345 | 0.007735000 |
| AT&T A 4 | CCI DMP65R-BU6D | 700 | 11.75 | 117.4 | 4 | 30 | 1795.4828 | 0.000023000 |
| AT&T A 4 | CCI DMP65R-BU6D | 850 | 11.45 | 117.4 | 4 | 30 | 1675.6420 | 0.000016000 |
| AT&T A 4 | CCI DMP65R-BU6D | 2300 | 15.25 | 117.4 | 4 | 18 | 2411.7512 | 0.000009000 |
| AT&T B 5 | QUINTEL QD6616-7 V1 | 700 | 11.9711 | 117.4 | 2 | 30 | 944.6289 | 0.000022000 |
| AT&T B 5 | QUINTEL QD6616-7 V1 | 700 | 11.9711 | 117.4 | 4 | 30 | 1889.2579 | 0.000044000 |
| AT&T B 5 | QUINTEL QD6616-7 V1 | 1900 | 15.1762 | 117.4 | 4 | 30 | 3951.8572 | 0.000023000 |
| AT&T B 5 | QUINTEL QD6616-7 V1 | 2100 | 15.3631 | 117.4 | 4 | 45 | 6188.4588 | 0.000037000 |
| АТ&Т В 6 | ERICSSON AIR6449 | 3700 | 23.55 | 115.2 | 1 | 108.4 | 24548.7443 | 0.000205000 |
| AT&T B 7 | ERICSSON AIR6419 | 3450 | 22.85 | 118.5 | 1 | 54.2 | 10447.1850 | 0.901401000 |
| AT&T B 7 | ERICSSON AIR6419 | 3450 | 22.85 | 118.5 | 1 | 54.2 | 10408.6345 | 0.901401000 |
| АТ&Т В 8 | JMA MX10FRO440-xx | 700 | 12.45 | 117.4 | 4 | 30 | 2109.5083 | 0.000312000 |
| АТ&Т В 8 | JMA MX10FRO440-xx | 850 | 12.85 | 117.4 | 4 | 30 | 2313.0299 | 0.000102000 |
| АТ&Т В 8 | CCI DMP65R-BU6D | 2300 | 15.25 | 117.4 | 4 | 18 | 2411.7512 | 0.000016000 |
| AT&T G 9 | QUINTEL QD6616-7 V1 | 700 | 11.9711 | 117.4 | 2 | 30 | 944.6289 | 0.000020000 |
| AT&T G 9 | QUINTEL QD6616-7 V1 | 700 | 11.9711 | 117.4 | 4 | 30 | 1889.2579 | 0.000041000 |
| AT&T G 9 | QUINTEL QD6616-7 V1 | 1900 | 15.1762 | 117.4 | 4 | 30 | 3951.8572 | 0.000022000 |
| AT&T G 9 | QUINTEL QD6616-7 V1 | 2100 | 15.3631 | 117.4 | 4 | 45 | 6188.4588 | 0.000038000 |
| AT&T G 10 | ERICSSON AIR6449 | 3700 | 23.55 | 115.2 | 1 | 108.4 | 24548.7443 | 0.000200000 |
| AT&T G 1 | ERICSSON AIR6419 | 3450 | 22.85 | 118.5 | 1 | 54.2 | 10447.1850 | 0.901421000 |
| AT&T G 11 | ERICSSON AIR6419 | 3450 | 22.85 | 118.5 | 1 | 54.2 | 10408.6345 | 0.901421000 |
| AT&T G 12 | CCI DMP65R-BU6D | 700 | 11.75 | 117.4 | 4 | 30 | 1795.4828 | 0.000044000 |
| AT&T G 12 | CCI DMP65R-BU6D | 850 | 11.45 | 117.4 | 4 | 30 | 1675.6420 | 0.000030000 |
| AT&T G 12 | CCI DMP65R-BU6D | 2300 | 15.25 | 117.4 | 4 | 18 | 2411.7512 | 0.000016000 |
| | | | | | | A | T&T MPE% | 5.41997300 % |

Table 3: AT&T Antenna Inventory & Power Level



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

| Frequency Band | Technology | Centerline (ft.) | # of Channels | ERP W (Per Channel) | Total Power Density (μW/cm²) | Allowable MPE (μW/cm²) | MPE % |
|-------------------|------------|---------------------|---------------|------------------------|------------------------------------|------------------------------|------------|
| 700 | LTE | 117.4 | 2 | 472.3144741 | 0.0000520 | 467 | 0.00001100 |
| 700 | LTE | 117.4 | 4 | 472.3144741 | 0.0001040 | 467 | 0.00002200 |
| 1900 | LTE | 117.4 | 4 | 987.9643069 | 0.0001170 | 1000 | 0.00001200 |
| 2100 | AWS | 117.4 | 4 | 1547.114704 | 0.0001820 | 1000 | 0.00001800 |
| 3700 | 5G C-Band | 115.2 | 1 | 24548.74429 | 0.0015200 | 1000 | 0.00015200 |
| 3450 | 5G DoD | 118.5 | 1 | 10447.18503 | 18.0515940 | 1000 | 1.80515900 |
| 3450 | 5G DoD | 118.5 | 1 | 10408.63453 | 0.0773480 | 1000 | 0.00773500 |
| 700 | LTE | 117.4 | 4 | 448.8706968 | 0.0001090 | 467 | 0.00002300 |
| 850 | 5G | 117.4 | 4 | 418.9105083 | 0.0000910 | 567 | 0.00001600 |
| 2300 | WCS | 117.4 | 4 | 602.9377905 | 0.0000890 | 1000 | 0.00000900 |
| | | | | | Α | lpha MPE% | 1.81315700 |
| 700 | LTE | 117.4 | 2 | 472.3144741 | 0.0001020 | 467 | 0.00002200 |
| 700 | LTE | 117.4 | 4 | 472.3144741 | 0.0002040 | 467 | 0.00004400 |
| 1900 | LTE | 117.4 | 4 | 987.9643069 | 0.0002310 | 1000 | 0.00002300 |
| 2100 | AWS | 117.4 | 4 | 1547.114704 | 0.0003680 | 1000 | 0.00003700 |
| 3700 | 5G C-Band | 115.2 | 1 | 24548.74429 | 0.0020530 | 1000 | 0.00020500 |
| 3450 | 5G DoD | 118.5 | 1 | 10447.18503 | 9.0140080 | 1000 | 0.90140100 |
| 3450 | 5G DoD | 118.5 | 1 | 10408.63453 | 9.0140080 | 1000 | 0.90140100 |
| 700 | LTE | 117.4 | 4 | 527.3770842 | 0.0014540 | 467 | 0.00031200 |
| 850 | 5G | 117.4 | 4 | 578.257474 | 0.0005810 | 567 | 0.00010200 |
| 2300 | WCS | 117.4 | 4 | 602.9377905 | 0.0001620 | 1000 | 0.00001600 |
| | | | | | | Beta MPE% | 1.80356300 |
| 700 | LTE | 117.4 | 2 | 472.3144741 | 0.0000950 | 467 | 0.00002000 |
| 700 | LTE | 117.4 | 4 | 472.3144741 | 0.0001900 | 467 | 0.00004100 |
| 1900 | LTE | 117.4 | 4 | 987.9643069 | 0.0002210 | 1000 | 0.00002200 |
| 2100 | AWS | 117.4 | 4 | 1547.114704 | 0.0003760 | 1000 | 0.00003800 |
| 3700 | 5G C-Band | 115.2 | 1 | 24548.74429 | 0.0020050 | 1000 | 0.00020000 |
| 3450 | 5G DoD | 118.5 | 1 | 10447.18503 | 9.0142140 | 1000 | 0.90142100 |
| 3450 | 5G DoD | 118.5 | 1 | 10408.63453 | 9.0142140 | 1000 | 0.90142100 |
| 700 | LTE | 117.4 | 4 | 448.8706968 | 0.0002040 | 467 | 0.00004400 |
| 850 | 5G | 117.4 | 4 | 418.9105083 | 0.0001710 | 567 | 0.00003000 |



| 2300 | WCS | 117.4 | 4 | 602.9377905 | 0.0001610 | 1000 | 0.00001600 |
|------|-----|-------|---|-------------|-----------|----------|--------------|
| | | | | | Gan | nma MPE% | 1.80325300 |
| | | | | | Α | T&T MPE% | 5.41997300 % |

Table 4: AT&T Maximum Sector MPE Power Values



Summary

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

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

| Carrier | | Predicted MPE % |
|---------|-----------|-----------------|
| | AT&T | 5.41997300% |
| | T-Mobile | 0.00039000% |
| | Sprint | 0.00018800% |
| | Verizon | 0.00074700% |
| | Composite | 5.42129800% |

Table 5: Total Predicted MPE(%) by Carrier

Compliance Status:

The anticipated composite MPE value for this site assuming all carriers present is **5.42129800**% of the allowable FCC established general population limit sampled at the ground level.

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

Katrina Styx
RF Compliance Consultant
Centerline Communications, LLC

750 West Center St. Suite 301 West Bridgewater, MA 02379



Post Modification Structural Analysis Report

Structure 119 ft Monopole

STONEYBROOK RD CT **ATC Asset Name**

ATC Asset Number : 283420

Engineering Number : 13682835_C4_08

Proposed Carrier : AT&T MOBILITY

Carrier Site Name MRCTB051448

Carrier Site Number : CTL02381

Site Location : 23 Stonybrook Road

Stratford, CT 06614-3715

41.2033, -73.1486

County : Fairfield

Date January 20, 2023

Max Usage 96%

Analysis Result Pass

Prepared By: Reviewed

Thomas Pham Structural Engineer II

The Pa

COA: PEC.0001553



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| Foundation Reactions & Usages | 5 |
| Antenna Deflection, Twist, and Sway | 5 |
| Standard Conditions | 6 |
| Calculations | Attached |



Introduction

The purpose of this report is to summarize results of a post-modification structural analysis performed on the 119 ft Monopole tower to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

| Tower Drawing: | Valmont Order #20380-10, dated July 30, 2010 |
|-----------------------------|--|
| Foundation Drawing: | Valmont Order #20380-60, dated June 11, 2010 |
| Geotechnical Report: | Terracon Project #J2105132, dated April 2, 2010 |
| Modification: | TES Job #13142, dated November 12, 2014 |
| iviodification: | ATC Project #13682835_C6_06, dated January 5, 2023 (Pending) |

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

| Basic Wind Speed: | 119 mph (3-second gust) |
|--------------------------------------|--|
| Basic Wind Speed w/ Ice: | 50 mph (3-second gust) w/ 1.00" radial ice concurrent |
| Code(s): | ANSI/TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code |
| Exposure Category: | В |
| Risk Category: | II . |
| Topographic Factor Procedure: | Method 1 |
| Topographic Category: | 1 |
| Spectral Response: | $Ss = 0.21, S_1 = 0.05$ |
| Site Class: | D - Stiff Soil - Default |

^{*}Wind load and Ice thickness have been reduced by applicable existing structure load modification factors in accordance with TIA-222-H, ANNEX-S

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 the pending modifications cited in the supporting documents table are not completed, the results of this analysis are no longer valid, and AT&T Mobility should contact American Tower's Site Manager for further direction on how to proceed.

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/Reserved Loading

| Elev.* | Qty | Equipment | Lines | Carrier |
|--------|--|-------------------------------------|----------------------------------|----------------------|
| | 1 | Raycap RDIDC-9181-PF-48 | | |
| | 3 Fujitsu TA08025-B604 3 Fujitsu TA08025-B605 (1) 1.75" (44.5mm) Hybrid 3 JMA Wireless MX08FRO665-21 1 Platform with Handrails | | | |
| 107.0' | 3 | Fujitsu TA08025-B605 | (1) 1.75" (44.5mm) Hybrid | DISH WIRELESS L.L.C. |
| | 3 | JMA Wireless MX08FRO665-21 | | |
| | 1 | Platform with Handrails | | |
| | 3 | Ericsson AIR32 B66Aa/B2a | | |
| | 3 | Ericsson Air6449 B41 | | |
| 97.0′ | 3 | Ericsson RRUS 4415 B25 | (1) 1 1/4" (1.25"- 31.8mm) Fiber | |
| 97.0 | 3 | Ericsson Radio 4449 B71 B85A | (2) 1 5/8" Hybriflex | T-MOBILE |
| | 3 | RFS APXVAARR24_43-U-NA20 | (12) 7/8" Coax | |
| | 1 | Platform with Handrails | (2) 1 5/8" Hybriflex | |
| 96.9' | 3 | Ericsson RRUS 01 B2 w/ Solar Shield | | |
| | 3 | T-Arm | | |
| | 1 | RFS DB-C1-12C-24AB-0Z | | |
| 77.0′ | 3 | Samsung B2/B66A RRH-BR049 | (2) 1 E/0" Hybrifloy | VERIZON WIRELESS |
| //.0 | 3 | Samsung B5/B13 RRH-BR04C | (2) 1 5/8" Hybriflex | VERIZON WIRELESS |
| | 3 | Samsung MT6407-77A | | |
| | 6 | Quintel QS6656-5D | | |

⁽If table breaks across pages, please see previous page for data in merged cells)

Proposed Carrier Final Loading

| Elev.* | Qty | Equipment | Lines | Carrier |
|--------|-----|-------------------------------|--|---------------|
| 119.0' | 3 | Ericsson Air 6449 B77D | - | AT&T MOBILITY |
| | 1 | Commscope WCS-IMFQ-AMT | | |
| | 1 | Raycap DC9-48-60-24-8C-EV | | |
| | 1 | Raycap DC9-48-60-24-8C-EV | | |
| | 3 | CCI DMP65R-BU6DA | | AT&T MOBILITY |
| | 3 | Ericsson RRUS 32 B2 | (1) 0.40" (10.3mm) Fiber (3) 0.82" (20.8mm) 8 AWG 6 (4) 0.92" (23.4mm) Cable (1) 2" conduit | |
| 117.0′ | 3 | Ericsson RRUS 4426 B66 | | |
| 117.0 | 3 | Ericsson RRUS 4449 B5, B12 | | |
| | 3 | Ericsson RRUS 4478 B14 | | |
| | 3 | Ericsson RRUS E2 B29 | | |
| | 3 | Ericsson RRUS-32 B30 (77 lbs) | | |
| | 3 | Quintel QD6616-7 | | |
| | 1 | Platform with Handrails | | |
| 115.0' | 3 | Ericsson AIR 6419 B77G | - | AT&T MOBILITY |

⁽If table breaks across pages, please see previous page for data in merged cells)

Install proposed lines inside the pole shaft.

^{*}Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

^{*}Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.



Structure Usages

| Structural Component | Usage | Pass/Fail |
|----------------------|-------|-----------|
| Anchor Rods | 57% | Pass |
| Base Plate | 32% | Pass |
| Shaft | 90% | Pass |
| Flange Bolts | 16% | Pass |
| Flange Plates | 71% | Pass |
| Reinforcement | 96% | Pass |

Foundation Reactions & Usages

| Reaction Component | Analysis Reactions | Usage |
|--------------------|-----------------------|-------|
| Moment (k-ft) | 1918.2 | 52% |
| Axial (k) | 40.1 | 5% |
| Shear (k) | 19.3 | 27% |

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.

Antenna Deflection, Twist, and Sway

| Elev. | Antenna | Carrier | Deflection | Twist | Sway [Rotation] |
|--------|---------------------------|------------------|------------|-------|--------------------|
| 119.0' | Ericsson Air 6449 B77D | AT&T MOBILITY | 2.242' | N/A | 2.180° |
| | Quintel QD6616-7 | | 2.4654 | N/A | |
| 117.04 | CCI DMP65R-BU6DA | AT&T MOBILITY 2. | | | 2.1009 |
| 117.0′ | Raycap DC9-48-60-24-8C-EV | | 2.165′ | | 2.180° |
| | Ericsson RRUS E2 B29 | | | | |
| 115.0' | Ericsson AIR 6419 B77G | AT&T MOBILITY | 2.089' | N/A | 2.180° |

^{*}Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-H



Standard Conditions

All engineering services performed by A.T. Engineering Services LLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts, and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T.
 Engineering Services LLC

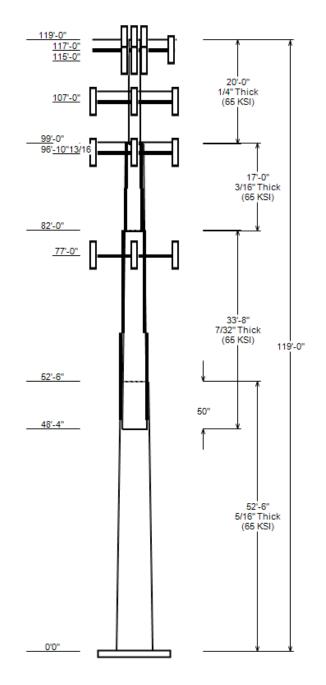
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Services LLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

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

| ANALYSIS PARAMETERS | | | | | | | |
|---------------------|---------|-----------------|------------------|-----------------------------|-------------------------------|--|--|
| Nominal Wind: | 116 mph | Ice Wind: 49 n | nph w/ 0.85" ice | Service Wind: | 60 mph | | |
| Risk Category: | II | Exposure: | В | S_s: 0.207 | S ₁ : 0.054 | | |
| Topo Category: | 1 | Topo Factor: | Method 1 | Topo Feature: | | | |
| Structure Height: | 119 ft | Base Elevation: | 0.00 ft | Structure Type: | Custom | | |
| Base Diameter: | 42 in | Base Rotation: | 0° | Taper: | 0.3000 (in/ft) | | |



GLOBAL BASE REACTIONS

| | Moment | Axial | Shear |
|----------------------|----------|-------|-------|
| Load Case | (kip-ft) | (kip) | (kip) |
| 1.2D + 1.0W | 1918.22 | 40.10 | 19.30 |
| 0.9D + 1.0W | 1868.96 | 30.06 | 19.27 |
| 1.2D + 1.0Di + 1.0Wi | 477.06 | 50.77 | 4.83 |
| 1.2D + 1.0Ev + 1.0Eh | 106.60 | 40.63 | 1.01 |
| 0.9D - 1.0Ev + 1.0Eh | 103.12 | 27.95 | 1.01 |
| 1.0D + 1.0W | 455.69 | 33.45 | 4.64 |

| | | P | OLE SEC | TION PR | ROPERTIE | S | | |
|---------|--------|----------|-------------|---------|------------|-----------------|----------|-------------------|
| | Length | Flat Dia | ameter (in) | Thick | Joint | Joint Length | Pole | Yield Strength |
| Section | (ft) | Тор | Bottom | (in) | Type | (in) | Shape | (ksi) |
| 1 | 52.500 | 26.25 | 42.00 | 0.312 | | 0.000 | 18 Sides | 65 |
| 2 | 33.667 | 17.84 | 27.94 | 0.219 | Slip Joint | 50.000 | 18 Sides | 65 |
| 3 | 17.000 | 12.74 | 17.84 | 0.188 | Butt Joint | 0.000 | 18 Sides | 65 |
| 4 | 20.000 | 12.56 | 12.56 | 0.250 | Butt Joint | 0.000 | 18 Sides | 65 |

| D | ISCRETE APPURTENANCE | L | INEAR APPURTENANCE |
|-------|------------------------------------|---------|----------------------------------|
| Elev | | Elev To | |
| | Description | (ft) | |
| 119.0 | (3) Ericsson Air 6449 B77D | 117.0 | (1) 2" conduit |
| 117.0 | (1) Commscope WCS-IMFQ-AMT | 117.0 | (1) 0.92" (23.4mm) Cable |
| 117.0 | (3) Ericsson RRUS 4426 B66 | 117.0 | (3) 0.92" (23.4mm) Cable |
| 117.0 | (3) Ericsson RRUS 4478 B14 | 117.0 | (3) 0.82" (20.8mm) 8 AWG 6 |
| 117.0 | (3) Ericsson RRUS 4449 B5, B12 | 117.0 | (1) 0.40" (10.3mm) Fiber |
| 117.0 | (3) Ericsson RRUS 32 B2 | 107.0 | (1) 1.75" (44.5mm) Hybrid |
| 117.0 | (3) Ericsson RRUS E2 B29 | 105.0 | (1) W8 Brackets for #20 |
| 117.0 | (3) Ericsson RRUS-32 B30 (77 lbs) | 105.0 | (1) W8 Brackets for #20 |
| 117.0 | (1) Raycap DC9-48-60-24-8C-EV | 105.0 | (1) W8 Brackets for #20 |
| 117.0 | (1) Raycap DC9-48-60-24-8C-EV | 105.0 | (1) #20 w/ W Brackets |
| 117.0 | (3) CCI DMP65R-BU6DA | 105.0 | (1) #20 w/ W Brackets |
| 117.0 | (1) Generic Flat Platform with Han | 105.0 | (1) #20 w/ W Brackets |
| 117.0 | (3) Quintel QD6616-7 | 97.0 | (6) 7/8" Coax |
| 115.0 | (3) Ericsson AIR 6419 B77G | 97.0 | (2) 1 5/8" Hybriflex |
| 107.0 | (1) Raycap RDIDC-9181-PF-48 | 97.0 | (1) 1 1/4" (1.25"- 31.8mm) Fiber |
| 107.0 | (3) Fujitsu TA08025-B605 | 92.0 | (1) 1" Flat Plate |
| 107.0 | (3) Fujitsu TA08025-B604 | 92.0 | (1) 1" Flat Plate |
| 107.0 | (3) JMA Wireless MX08FRO665-21 | 92.0 | (1) 1" Flat Plate |
| 107.0 | (1) Generic Flat Platform with Han | 87.0 | (6) 7/8" Coax |
| 97.0 | (3) Ericsson Radio 4449 B71 B85A | 77.0 | (2) 1 5/8" Hybriflex |
| 97.0 | (3) Ericsson RRUS 4415 B25 | | |
| 97.0 | (3) Ericsson Air6449 B41 | | |
| 97.0 | (3) Ericsson AIR32 B66Aa/B2a | | |
| 97.0 | (3) RFS APXVAARR24_43-U-NA20 | | |
| 97.0 | (1) Generic Flat Platform with Han | | |
| 96.9 | (3) Ericsson RRUS 01 B2 w/ Solar S | | |
| 77.0 | (3) Samsung B2/B66A RRH-BR049 | | |
| | (0) 0 | | |

LOAD CASE KEY

| 1.2D + 1.0W | 115.99 mph Wind with No Ice |
|----------------------|------------------------------------|
| 0.9D + 1.0W | 115.99 mph Wind with No Ice (Reduc |
| 1.2D + 1.0Di + 1.0Wi | 48.73 mph Wind with 0.85" Radial I |
| 1.2D + 1.0Ev + 1.0Eh | Seismic |
| 0.9D - 1.0Ev + 1.0Eh | Seismic (Reduced DL) |
| 1.0D + 1.0W | 60 mph Wind with No Ice |

77.0 (3) Samsung B5/B13 RRH-BR04C 77.0 (1) RFS DB-C1-12C-24AB-0Z

77.0 (3) Samsung MT6407-77A

77.0 (6) Quintel QS6656-5D77.0 (3) Generic Round T-Arm

ASSET: 283420, STONEYBROOK RD CT CODE: ANSI/TIA-222-H PROJECT: 13682835_C4_08 CUSTOMER: AT&T MOBILITY

ANALYSIS PARAMETERS

Location: Fairfield County,CT 119 ft Height: Type and Shape: Custom, 18 Sides Base Diameter: 42.00 in Manufacturer: Valmont Top Diameter: 12.56 in K_d (non-service): 0.95 Taper: 0.3000 in/ft K_e: 1.00 Rotation: 0.000°

ICE & WIND PARAMETERS

П Risk Category: **Design Wind Speed:** 116 mph В Design Wind Speed w/ Ice: 49 mph **Exposure Category: Topo Factor Procedure:** Method 1 Design Ice Thickness: 0.85 in Topographic Category: 1 Service Wind Speed: 60 mph **Crest Height:** 0 ft HMSL: 77.00 ft

SEISMIC PARAMETERS

Analysis Method: Equivalent Lateral Force Method

1.2D + 1.0W

0.9D + 1.0W

2.99 Site Class: D - Stiff Soil Period Based on Rayleigh Method (sec): 6 P: 1 0.030 T_L (sec): Cs: S_{s:} 0.207 S_{1:} 0.054 C_s Max: 0.030 Fa: 1.600 $F_{v:}$ 2.400 C_s Min: 0.030

S_{ds:} 0.221 S_{d1:} 0.086

LOAD CASES

115.99 mph Wind with No Ice

115.99 mph Wind with No Ice (Reduced DL) 1.2D + 1.0Di + 1.0Wi 48.73 mph Wind with 0.85" Radial Ice

1.2D + 1.0Ev + 1.0Eh Seismic

0.9D - 1.0Ev + 1.0Eh Seismic (Reduced DL)

1.0D + 1.0W 60 mph Wind with No Ice

| | SHAFT SECTION PROPERTIES | | | | | | | | | | | | | | | | | | |
|---------|--------------------------|------------|-------------|---------------|----------------------|-------------|-------------|--------------|---------------|--------------------------|--------------|--------------|-------------|--------------|---------------|--------------------------|--------------|-------|------------------|
| | | | | | laint | _ | | | Botto | m | | | | | Т | ор | | | |
| Section | Length (ft) | Thick (in) | Fy (ksi) | Joint Type | Joint Len (in) | Weight (lb) | Dia (in) | Elev (ft) | Area (in²) | lx (in ⁴) | W/t Ratio | D/t Ratio | Dia (in) | Elev (ft) | Area (in²) | lx (in ⁴) | W/t Ratio | | Taper (in/ft) |
| 1-18 | 52.50 | 0.3125 | 65 | | 0.00 | 5,991 | 42.00 | 0.000 | 41.35 | 9,078.5 | 21.94 | 134.40 | 26.25 | 52.50 | 25.73 | 2,186.6 | 13.05 | 84.00 | 0.3000 |
| 2-18 | 33.67 | 0.2188 | 65 | Slip | 50.00 | 1,803 | 27.94 | 48.333 | 19.25 | 1,868.6 | 20.75 | 127.69 | 17.84 | 82.00 | 12.24 | 479.9 | 12.61 | 81.53 | 0.3000 |
| 3-18 | 17.00 | 0.1875 | 65 | Butt | 0.00 | 520 | 17.84 | 82.000 | 10.50 | 413.4 | 15.01 | 95.14 | 12.74 | 99.00 | 7.47 | 148.6 | 10.22 | 67.94 | 0.3000 |
| 4-18 | 20.00 | 0.2500 | 65 | Butt | 0.00 | 665 | 12.56 | 99.000 | 9.77 | 187.1 | 7.10 | 50.25 | 12.56 | 119.00 | 9.77 | 187.1 | 7.10 | 50.25 | 0.0000 |
| | | | _ | | | | | | | | | | | | | | | | |

Total Shaft Weight 8,979

| | | DISCRETE | APPURT | ENANCE P | ROPERTIES | | | | | |
|--------|--------------------------------|----------|--------|----------|-----------|--------|-------------|-----------|--------|-------------|
| Attach | | | | | | No Ice | | | Ice | |
| Elev | 5 | 0. | | Vert Ecc | Weight | EPAa | Orientation | Weight | EPAa | Orientation |
| (ft) | Description | Qty | Ka | (ft) | (lb) | (sf) | Factor | (lb) | (sf) | Factor |
| 119.00 | Ericsson Air 6449 B77D | 3 | 0.75 | 0.000 | 81.60 | 4.028 | 0.65 | 138.61 | 4.790 | 0.65 |
| 117.00 | Generic Flat Platform with Han | 1 | 1.00 | 0.000 | 2500.00 | 42.400 | 1.00 | 3483.14 | 54.006 | 1.00 |
| 117.00 | CCI DMP65R-BU6DA | 3 | 0.75 | 0.000 | 79.40 | 12.709 | 0.63 | 221.96 | 14.252 | 0.63 |
| 117.00 | Raycap DC9-48-60-24-8C-EV | 1 | 0.75 | 0.000 | 16.00 | 4.788 | 0.50 | 87.45 | 5.602 | 0.50 |
| 117.00 | Quintel QD6616-7 | 3 | 0.75 | 0.000 | 130.00 | 51.400 | 0.64 | 291.89 | 57.345 | 0.64 |
| 117.00 | Commscope WCS-IMFQ-AMT | 1 | 0.75 | 0.000 | 29.50 | 0.989 | 0.50 | 48.14 | 1.355 | 0.50 |
| 117.00 | Raycap DC9-48-60-24-8C-EV | 1 | 0.75 | 0.000 | 16.00 | 4.788 | 0.50 | 87.45 | 5.602 | 0.50 |
| 117.00 | Ericsson RRUS 4426 B66 | 3 | 0.75 | 0.000 | 48.40 | 1.650 | 0.50 | 73.11 | 2.120 | 0.50 |
| 117.00 | Ericsson RRUS 4478 B14 | 3 | 0.75 | 0.000 | 59.90 | 1.842 | 0.50 | 90.50 | 2.338 | 0.50 |
| 117.00 | Ericsson RRUS 4449 B5, B12 | 3 | 0.75 | 0.000 | 71.00 | 1.969 | 0.50 | 106.67 | 2.485 | 0.50 |
| 117.00 | Ericsson RRUS 32 B2 | 3 | 0.75 | 1.000 | 53.00 | 2.743 | 0.50 | 93.70 | 3.390 | 0.50 |
| 117.00 | Ericsson RRUS E2 B29 | 3 | 0.75 | 0.000 | 60.00 | 3.145 | 0.62 | 104.76 | 3.786 | 0.62 |
| 117.00 | Ericsson RRUS-32 B30 (77 lbs) | 3 | 0.75 | 0.000 | 77.00 | 3.314 | 0.50 | 130.82 | 4.024 | 0.50 |
| 115.00 | Ericsson AIR 6419 B77G | 3 | 0.75 | 0.000 | 66.10 | 3.797 | 0.65 | 119.63 | 4.524 | 0.65 |
| 107.00 | Generic Flat Platform with Han | 1 | 1.00 | 0.000 | 2500.00 | 42.400 | 1.00 | 3474.31 | 53.902 | 1.00 |
| 107.00 | JMA Wireless MX08FRO665-21 | 3 | 0.75 | 0.000 | 64.50 | 12.489 | 0.64 | 205.47 | 14.030 | 0.64 |
| 107.00 | Fujitsu TA08025-B604 | 3 | 0.75 | 0.000 | 63.90 | 1.962 | 0.50 | 95.88 | 2.467 | 0.50 |
| 107.00 | Raycap RDIDC-9181-PF-48 | 1 | 0.75 | 0.000 | 21.90 | 1.867 | 0.50 | 53.11 | 2.361 | 0.50 |
| 107.00 | Fujitsu TA08025-B605 | 3 | 0.75 | 0.000 | 75.00 | 1.962 | 0.50 | 109.36 | 2.467 | 0.50 |
| 97.00 | RFS APXVAARR24_43-U-NA20 | 3 | 0.75 | 0.000 | 127.90 | 20.243 | 0.63 | 341.30 | 22.259 | 0.63 |
| 97.00 | Ericsson AIR32 B66Aa/B2a | 3 | 0.75 | 0.000 | 132.20 | 6.510 | 0.71 | 218.96 | 7.701 | 0.71 |
| 97.00 | Ericsson Air6449 B41 | 3 | 0.75 | 0.000 | 104.00 | 5.682 | 0.63 | 178.08 | 6.545 | 0.63 |
| 97.00 | Ericsson RRUS 4415 B25 | 3 | 0.75 | 0.000 | 46.00 | 1.842 | 0.50 | 72.65 | 2.330 | 0.50 |
| 97.00 | Ericsson Radio 4449 B71 B85A | 3 | 0.75 | 0.000 | 75.00 | 1.650 | 0.50 | 107.69 | 2.112 | 0.50 |
| 97.00 | Generic Flat Platform with Han | 1 | 1.00 | 0.000 | 2500.00 | 42.400 | 1.00 | 3465.66 | 53.800 | 1.00 |
| 96.90 | Ericsson RRUS 01 B2 w/ Solar S | 3 | 0.75 | 0.000 | 44.00 | 3.146 | 0.50 | 86.44 | 3.793 | 0.50 |
| 77.00 | Quintel QS6656-5D | 6 | 0.80 | 0.000 | 88.00 | 8.133 | 0.74 | 193.70 | 9.612 | 0.74 |
| 77.00 | Samsung MT6407-77A | 3 | 0.80 | 0.000 | 81.60 | 4.709 | 0.61 | 135.67 | 5.515 | 0.61 |
| 77.00 | RFS DB-C1-12C-24AB-0Z | 1 | 0.80 | 0.000 | 32.00 | 4.056 | 0.50 | 99.42 | 4.780 | 0.50 |
| 77.00 | Samsung B2/B66A RRH-BR049 | 3 | 0.80 | 0.000 | 84.40 | 1.875 | 0.50 | 118.24 | 2.354 | 0.50 |
| 77.00 | Samsung B5/B13 RRH-BR04C | 3 | 0.80 | 0.000 | 70.30 | 1.875 | 0.50 | 100.65 | 2.354 | 0.50 |
| 77.00 | Generic Round T-Arm | 3 | 0.75 | 0.000 | 312.50 | 9.700 | 0.67 | 451.09 | 14.074 | 0.67 |
| Totals | Row Count: 32 | 83 | | | 14,166.50 | | | 22,740.27 | | |

| | | | | LINEAR | APPURTE | NANCE PF | ROPERTIES | 3 | | | | |
|----------------------|--------------------|--|------------------|-------------------|---------|-------------|---------------------------------|---------------------------------|------------------|-------------------------------|--------------------|----------------------|
| Elev From (ft) | Elev To (ft) | Load Case Azimuth (deg): 0.00 Qty Description | Diameter (in) | Weight (lb/ft) | Flat | Max/ Row | Distance Between Rows(in) | Distance Between Cols(in) | Azimuth (deg) | Distance From Face (in) | Exposed To Wind | Carrier |
| 0.00 | 117.00 | 3 0.82" (20.8mm) 8 AWG | 0.82 | 0.62 | N | 0 | 0 | 0 | 0 | 0 | N | AT&T MOBILITY |
| 0.00 | 117.00 | 3 0.92" (23.4mm) Cable | 0.92 | 0.89 | N | 0 | 0 | 0 | 0 | 0 | N | AT&T MOBILITY |
| 0.00 | 117.00 | 1 0.92" (23.4mm) Cable | 0.92 | 0.89 | N | 0 | 0 | 0 | 0 | 0 | N | AT&T MOBILITY |
| 0.00 | 117.00 | 1 2" conduit | 2.38 | 3.65 | N | 0 | 0 | 0 | 0 | 0 | N | AT&T MOBILITY |
| 0.00 | 117.00 | 1 0.40" (10.3mm) Fiber | 0.4 | 0.09 | N | 0 | 0 | 0 | 0 | 0 | N | AT&T MOBILITY |
| 0.00 | 107.00 | 1 1.75" (44.5mm) Hybrid | 1.75 | 2.72 | N | 0 | 0 | 0 | 0 | 0 | N | DISH WIRELESS L.L.C. |
| 85.00 | 105.00 | 1 W8 Brackets for #20 | 2.48 | 6.3 | Υ | 1 | 0 | 0 | 120 | 2.9 | Υ | |
| 85.00 | 105.00 | 1 W8 Brackets for #20 | 2.48 | 6.3 | Υ | 1 | 0 | 0 | 240 | 2.9 | Υ | |
| 85.00 | 105.00 | 1 #20 w/ W Brackets | 2.5 | 0 | N | 1 | 0 | 0 | 0 | 8.28 | Υ | |
| 85.00 | 105.00 | 1 #20 w/ W Brackets | 2.5 | 0 | N | 1 | 0 | 0 | 240 | 8.28 | Υ | |

| | | | | LINEAR | APPURTE | NANCE PF | ROPERTIES | 3 | | | | |
|----------------------|--------------------|--|------------------|-------------------|---------|-------------|---------------------------------|---------------------------------|---------|-------------------------------|--------------------|------------------|
| Elev From (ft) | Elev To (ft) | Load Case Azimuth (deg): 0.00 Qty Description | Diameter (in) | Weight (lb/ft) | Flat | Max/ Row | Distance Between Rows(in) | Distance Between Cols(in) | Azimuth | Distance From Face (in) | Exposed To Wind | |
| 855.00 | 105.00 | 1 W8 Brackets for #20 | 2.48 | 6.3 | Υ | 1 | 0 | 0 | 0 | 2.9 | Υ | |
| 85.00 | 105.00 | 1 #20 w/ W Brackets | 2.5 | 0 | N | 1 | 0 | 0 | 120 | 8.28 | Υ | |
| 0.00 | 97.00 | 6 7/8" Coax | 1.09 | 0.33 | N | 6 | 0 | 0.5 | 90 | 0.5 | Υ | T-MOBILE |
| 0.00 | 97.00 | 2 1 5/8" Hybriflex | 1.98 | 1.3 | N | 0 | 0 | 0 | 0 | 0 | N | T-MOBILE |
| 0.00 | 97.00 | 1 1 1/4" (1.25"- 31.8mm | 1.25 | 1.05 | N | 0 | 0 | 0 | 0 | 0 | N | T-MOBILE |
| 42.00 | 92.00 | 1 1" Flat Plate | 1 | 30.45 | Υ | 1 | 0 | 0 | 330 | 0 | Υ | |
| 42.00 | 92.00 | 1 1" Flat Plate | 1 | 30.45 | Υ | 1 | 0 | 0 | 210 | 0 | Υ | |
| 42.00 | 92.00 | 1 1" Flat Plate | 1 | 30.45 | Υ | 1 | 0 | 0 | 90 | 0 | Υ | |
| 0.00 | 87.00 | 6 7/8" Coax | 1.09 | 0.33 | N | 0 | 0 | 0 | 0 | 0 | N | T-MOBILE |
| 0.00 | 77.00 | 2 1 5/8" Hybriflex | 1.98 | 1.3 | N | 0 | 0 | 0 | 0 | 0 | N | VERIZON WIRELESS |

| | | | | | ADDITION | NAL STEEL | | | | |
|----------------------|--------------------|-----|------------------------|-------------|----------------|-----------------|--------------|-------------|-----------------|---------------|
| | | | | | | Intermediate Co | onnectors . | | _ | |
| Elev From (ft) | Elev To (ft) | Qty | Description | Fy (ksi) | Offset (in) | Bracket Type | Spacing (in) | Length (in) | Connectors | Continuation? |
| 45.00 | 62.00 | 3 | PL PL 6" x 1" | 55 | 0.00 | 5/8" Hollo Bolt | 12.00 | 3.00 | 5/8" Hollo Bolt | N |
| 62.00 | 82.00 | 3 | PL PL 6" x 1" | 55 | 0.00 | 5/8" Hollo Bolt | 12.00 | 3.00 | 5/8" Hollo Bolt | N |
| 82.00 | 90.13 | 3 | PL PL 6" x 1" | 55 | 0.00 | 5/8" Hollo Bolt | 12.00 | 3.00 | 5/8" Hollo Bolt | N |
| 90.13 | 99.00 | 3 | SOL #20 All Thread Bar | 80 | 8.28 | 6" T Bracket | 24.00 | 3.31 | 5/8" A36 U-Bolt | N |

| | | | | SE | GMENT PI | KOPEKI | IES | | | | | | | |
|----------------------|--------------------------------------|---------------|------------------|---------------|--------------------------|--------------|--------------|--------------|------------|------------|-------------|---------------|--------------------------|----------------|
| | | | | | | | | | | | _ | | ional Reinfo | |
| Seg Top Elev (ft) | Description (Max Length: 5 ft) | Thick (in) | Flat Dia (in) | Area (in²) | lx (in ⁴) | W/t Ratio | D/t Ratio | F'y (ksi) | S (in³) | Z (in³) | Weight (lb) | Area (in²) | lx (in ⁴) | Weight (lb) |
| 0.00 | Than Zengin eny | 0.3125 | 42.000 | | 9,078.50 | 21.94 | 134.40 | 75.6 | 425.7 | 0.0 | 0.0 | () | () | (.2) |
| 5.00 | | 0.3125 | 40.500 | 39.860 | 8,133.30 | 21.09 | 129.60 | 76.6 | 395.5 | 0.0 | 690.8 | | | |
| 10.00 | | 0.3125 | 39.000 | 38.372 | 7,256.20 | 20.24 | 124.80 | 77.6 | 366.5 | 0.0 | 665.5 | | | |
| 15.00 | | 0.3125 | 37.500 | 36.884 | 6,444.40 | 19.40 | 120.00 | 78.6 | 338.5 | 0.0 | 640.2 | | | |
| 20.00 | | 0.3125 | 36.000 | 35.396 | 5,695.60 | 18.55 | 115.20 | 79.6 | 311.6 | 0.0 | 614.9 | | | |
| 25.00 | | 0.3125 | 34.500 | 33.909 | 5,007.20 | 17.70 | 110.40 | 80.6 | 285.9 | 0.0 | 589.6 | | | |
| 30.00 | | 0.3125 | 33.000 | 32.421 | 4,376.60 | 16.86 | 105.60 | 81.6 | 261.2 | 0.0 | 564.3 | | | |
| 35.00 | | 0.3125 | 31.500 | 30.933 | 3,801.30 | 16.01 | 100.80 | 82.6 | 237.7 | 0.0 | 538.9 | | | |
| 40.00 | | 0.3125 | 30.000 | 29.445 | 3,278.80 | 15.16 | 96.00 | 82.6 | 215.3 | 0.0 | 513.6 | | | |
| 45.00 | Reinf Bottom | 0.3125 | 28.500 | 27.957 | 2,806.50 | 14.32 | 91.20 | 82.6 | 194.0 | 0.0 | 488.3 | | | |
| 48.33 | Bot - Section 2 | 0.3125 | 27.500 | 26.966 | 2,518.30 | 13.75 | 88.00 | 82.6 | 180.4 | 0.0 | 311.5 | 18.000 | 1,855.40 | 204.2 |
| 50.00 | | 0.3125 | 27.000 | 26.470 | 2,381.90 | 13.47 | 86.40 | 82.6 | 173.8 | 0.0 | 259.7 | 18.000 | 1,847.40 | 102.1 |
| 52.50 | Top - Section 1 | 0.2188 | 26.688 | 18.381 | 1,627.00 | 19.74 | 121.97 | 78.2 | 120.1 | 0.0 | 380.6 | 18.000 | 1,752.70 | 153.1 |
| 55.00 | | 0.2188 | 25.938 | 17.860 | 1,492.60 | 19.14 | 118.54 | 78.9 | 113.3 | 0.0 | 154.2 | 18.000 | 1,660.50 | 153.1 |
| 60.00 | | 0.2188 | 24.438 | 16.819 | 1,246.40 | 17.93 | 111.69 | 80.3 | 100.5 | 0.0 | 295.0 | 18.000 | 1,483.70 | 306.3 |
| 62.00 | Reinf. Top Reinf Bottom | 0.2188 | 23.838 | 16.402 | 1,156.00 | 17.45 | 108.95 | 80.9 | 95.5 | 0.0 | 113.0 | 18.000 | 1,415.80 | 122.5 |
| 65.00 | | 0.2188 | 22.938 | 15.777 | 1,028.80 | 16.72 | 104.83 | 81.7 | 88.3 | 0.0 | 164.2 | 18.000 | 1,317.10 | 183.8 |
| 70.00 | | 0.2188 | 21.438 | 14.735 | 838.20 | 15.51 | 97.98 | 82.6 | 77.0 | 0.0 | 259.6 | 18.000 | 1,160.60 | 306.3 |
| 75.00 | | 0.2188 | 19.938 | 13.694 | 672.70 | 14.30 | 91.12 | 82.6 | 66.5 | 0.0 | 241.8 | 18.000 | 1,014.20 | 306.3 |
| 77.00 | | 0.2188 | 19.338 | 13.277 | 613.20 | 13.82 | 88.38 | 82.6 | 62.5 | 0.0 | 91.8 | 18.000 | 958.40 | 122.5 |
| 80.00 | | 0.2188 | 18.438 | 12.652 | 530.60 | 13.10 | 84.27 | 82.6 | 56.7 | 0.0 | 132.3 | 18.000 | 877.90 | 183.8 |
| 82.00 | Top - Section 2 Reinf. Top Reinf Bot | 0.2188 | 17.838 | 12.235 | 479.90 | 12.61 | 81.52 | 82.6 | 53.0 | 0.0 | 84.7 | 18.000 | 826.20 | 122.5 |
| 82.00 | Bot - Section 3 | 0.1875 | 17.838 | 10.504 | 413.40 | 15.01 | 95.13 | 82.6 | 45.6 | 0.0 | | 18.000 | 826.20 | |
| 85.00 | | 0.1875 | 16.938 | 9.968 | 353.30 | 14.16 | 90.33 | 82.6 | 41.1 | 0.0 | 104.5 | 18.000 | 751.70 | 183.8 |
| 90.00 | | 0.1875 | 15.438 | 9.075 | 266.70 | 12.75 | 82.33 | 82.6 | 34.0 | 0.0 | 162.0 | 18.000 | 635.70 | 306.3 |
| 90.13 | Reinf. Top Reinf Bottom | 0.1875 | 15.399 | 9.052 | 264.60 | 12.72 | 82.13 | 82.6 | 33.8 | 0.0 | 4.0 | 18.000 | 632.80 | 8.0 |
| 95.00 | | 0.1875 | 13.938 | 8.183 | 195.50 | 11.34 | 74.33 | 82.6 | 27.6 | 0.0 | 142.8 | 14.730 | 1,983.20 | 244.0 |
| 96.90 | | 0.1875 | 13.368 | 7.843 | 172.10 | 10.81 | 71.29 | 82.6 | 25.4 | 0.0 | 51.8 | 14.730 | 1,914.00 | 95.2 |
| 97.00 | | 0.1875 | 13.338 | 7.826 | 171.00 | 10.78 | 71.13 | 82.6 | 25.2 | 0.0 | 2.7 | 14.730 | 1,910.40 | 5.0 |
| 99.00 | Top - Section 3 Reinf. Top | 0.1875 | 12.738 | 7.469 | 148.60 | 10.22 | 67.93 | 82.6 | 23.0 | 0.0 | 52.0 | 14.730 | 1,838.90 | 100.2 |
| 99.00 | Bot - Section 4 | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | | | | |
| 100.00 | | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | 33.2 | | | |
| 105.00 | | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | 166.2 | | | |
| 107.00 | | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | 66.5 | | | |

| | | | | | SEC | SMENT PI | ROPERTI | ES | | | | | | | |
|----------------------|-------------|--------------------|------------|------------------|---------------|--------------------------|--------------|--------------|--------------|------------|------------|-------------|---------------|--------------------------|----------------|
| | | | | | | | | | | | | | Addition | nal Reinfo | rcing |
| Seg Top Elev (ft) | Description | (Max Length: 5 ft) | Thick (in) | Flat Dia (in) | Area (in²) | lx (in ⁴) | W/t Ratio | D/t Ratio | F'y (ksi) | S (in³) | Z (in³) | Weight (lb) | Area (in²) | lx (in ⁴) | Weight (lb) |
| 110.00 | | | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | 99.7 | | | |
| 115.00 | | | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | 166.2 | | | |
| 117.00 | | | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | 66.5 | | | |
| 119.00 | | | 0.2500 | 12.563 | 9.770 | 187.10 | 7.10 | 50.25 | 82.6 | 29.3 | 0.0 | 66.5 | | | |
| | | | | | | | | | | Total | ls: | 8,979.1 | | | 3,209.0 |

| | | | | | | | | | Tota | | 373.1 | | 3,203.0 |
|---------------------|-------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|------------------------|------------------------|--------------------------|-------------------|----------------|
| | | | | | | CALCULATE | D FORCES | | | | | | |
| Load Case: | 1.2D + 1.0W | | | 115.99 | mph Wind v | vith No Ice | | | | | | 27 | 7 Iterations |
| | onse Factor: Factor: | 1.10 1.20 1.00 | | | | | | | | | | | |
| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (ft-kips) | Phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 0.00 | -40.10 | -19.30 | 0.00 | -1,918.2 | 0.00 | 1,918.22 | 2,813.31 | 725.65 | 2,732.26 | 2,413.98 | 0 | 0 | 0.810 |
| 5.00 | -39.03 | -19.18 | 0.00 | -1,821.7 | 0.00 | 1,821.74 | 2,747.79 | 699.53 | 2,539.19 | 2,272.29 | 0.16 | -0.29 | 0.817 |
| 10.00 | -38.00 | -19.09 | 0.00 | -1,725.8 | 0.00 | 1,725.82 | 2,679.61 | 673.42 | 2,353.20 | 2,132.56 | 0.63 | -0.6 | 0.824 |
| 15.00 | -36.99 | -19.00 | 0.00 | -1,630.4 | 0.00 | 1,630.39 | 2,608.76 | 647.31 | 2,174.28 | 1,995.03 | 1.44 | -0.93 | 0.832 |
| 20.00 | -36.01 | -18.93 | 0.00 | -1,535.4 | 0.00 | 1,535.38 | 2,535.24 | 621.20 | 2,002.44 | 1,859.96 | 2.6 | -1.28 | 0.841 |
| 25.00 | -35.05 | -18.88 | 0.00 | -1,440.7 | 0.00 | 1,440.71 | 2,459.06 | 595.09 | 1,837.67 | 1,727.58 | 4.14 | -1.65 | 0.849 |
| 30.00 | -34.11 | -18.84 | 0.00 | -1,346.3 | 0.00 | 1,346.31 | 2,380.22 | 568.98 | 1,679.97 | 1,598.16 | 6.08 | -2.05 | 0.858 |
| 35.00 | -33.20 | -18.81 | 0.00 | -1,252.1 | 0.00 | 1,252.12 | 2,298.17 | 542.87 | 1,529.34 | 1,471.58 | 8.45 | -2.47 | 0.867 |
| 40.00 | -32.32 | -18.78 | 0.00 | -1,158.1 | 0.00 | 1,158.08 | 2,187.63 | 516.76 | 1,385.79 | 1,332.77 | 11.28 | -2.92 | 0.885 |
| 45.00 | -31.15 | -18.74 | 0.00 | -1,064.2 | 0.00 | 1,064.17 | 2,077.10 | 490.65 | 1,249.31 | 1,200.82 | 14.6 | -3.4 | 0.903 |
| 48.33 | -30.01 | -18.67 | 0.00 | -1,001.7 | 0.00 | 1,001.69 | 2,003.41 | 473.25 | 1,162.25 | 1,116.68 | 17.1 | -3.75 | 0.527 |
| 50.00 | -29.31 | -18.59 | 0.00 | -970.6 | 0.00 | 970.57 | 1,966.57 | 464.54 | 1,119.91 | 1,075.76 | 18.43 | -3.86 | 0.519 |
| 52.50 | -28.29 | -18.49 | 0.00 | -924.1 | 0.00 | 924.08 | 1,293.31 | 322.59 | 771.23 | 704.07 | 20.49 | -4.02 | 0.646 |
| 55.00 | -27.51 | -18.39 | 0.00 | -877.9 | 0.00 | 877.87 | 1,268.09 | 313.45 | 728.15 | 670.62 | 22.64 | -4.18 | 0.634 |
| 60.00 | -26.04 | -18.24 | 0.00 | -785.9 | 0.00 | 785.93 | 1,215.65 | 295.17 | 645.70 | 605.07 | 27.22 | -4.56 | 0.607 |
| 62.00 | -25.43 | -18.17 | 0.00 | -749.4 | 0.00 | 749.45 | 1,193.93 | 287.85 | 614.11 | 579.41 | 29.16 | -4.72 | 0.596 |
| 65.00 | -24.52 | -18.06 | 0.00 | -694.9 | 0.00 | 694.94 | 1,160.55 | 276.89 | 568.21 | 541.55 | 32.2 | -4.96 | 0.577 |
| 70.00 | -23.07 | -17.89 | 0.00 | -604.6 | 0.00 | 604.63 | 1,094.76 | 258.60 | 495.66 | 476.80 | 37.6 | -5.35 | 0.546 |
| 75.00 | -21.66 | -17.72 | 0.00 | -515.2 | 0.00 | 515.19 | 1,017.37 | 240.32 | 428.07 | 411.45 | 43.42 | -5.75 | 0.514 |
| 77.00 | -18.64 | -15.52 | 0.00 | -479.8 | 0.00 | 479.75 | 986.41 | 233.01 | 402.42 | 386.66 | 45.86 | -5.92 | 0.497 |
| 80.00 | -17.82 | -15.41 | 0.00 | -433.2 | 0.00 | 433.19 | 939.98 | 222.04 | 365.43 | 350.92 | 49.65 | -6.17 | 0.478 |
| 82.00 | -17.27 | -15.32 | 0.00 | -402.4 | 0.00 | 402.37 | 780.36 | 184.34 | 293.89 | 282.62 | 52.27 | -6.33 | 0.000 |
| 82.00 | -17.27 | -15.32 | 0.00 | -402.4 | 0.00 | 402.37 | 909.02 | 214.73 | 341.76 | 328.05 | 52.27 | -6.33 | 0.463 |
| 85.00 | -16.46 | -15.15 | 0.00 | -356.4 | 0.00 | 356.41 | 740.57 | 174.94 | 264.69 | 254.39 | 56.32 | -6.58 | 0.463 |
| 90.00 | -15.14 | -14.89 | 0.00 | -280.7 | 0.00 | 280.67 | 674.25 | 159.27 | 219.41 | 210.64 | 63.43 | -6.99 | 0.410 |
| 90.13 | -15.07 | -14.83 | 0.00 | -278.7 | 0.00 | 278.73 | 672.53 | 158.86 | 218.29 | 209.56 | 63.62 | -7 - | 0.162 |
| 90.13 | -15.07 | -14.83 | 0.00 | -278.7 | 0.00 | 278.73 | 672.53 | 158.86 | 218.29 | 209.56 | 63.62 | -7 7.20 | 0.408 |
| 95.00 | -14.20 | -14.63 | 0.00 | -206.5 | 0.00 | 206.49 178.70 | 607.93 | 143.61 | 178.38 | 171.01 | 70.95 | -7.38 7.43 | 0.127 |
| 96.90 97.00 | -13.81 -9.52 | -14.42 -10.52 | 0.00 0.00 | -178.7 -177.3 | 0.00 0.00 | 178.70 | 582.73 581.40 | 137.65 137.34 | 163.90 163.16 | 157.04 156.32 | 73.89 74.04 | -7.43 -7.43 | 0.113 0.105 |
| 99.00 | -9.52 -9.28 | -10.52 -10.44 | 0.00 | -177.3 -156.2 | 0.00 | 156.22 | 725.83 | 137.34 | 190.75 | 181.64 | 74.04 77.16 | -7.43 -7.47 | 0.105 |
| 99.00 | -9.28 | -10.44 | 0.00 | -156.2 -156.2 | 0.00 | 156.22 | 725.83 554.88 | 171.46 | 148.61 | 142.28 | 77.16 | -7.47 -7.47 | 0.000 |
| 100.00 | -9.26 -9.13 | -10.44 -10.42 | 0.00 | -156.2 -145.8 | 0.00 | 145.78 | 725.83 | 171.46 | 190.75 | 181.64 | 78.72 | -7.47 -7.5 | 0.094 |
| 105.00 | -9.13 -8.71 | -10.42 | 0.00 | -145.6 -93.7 | 0.00 | 93.67 | 725.83 | 171.46 | 190.75 | 181.64 | 87.06 | -7.5 -8.41 | 0.531 |
| 105.00 | -6.71 -5.21 | -7.38 | 0.00 | -93.7 -73.0 | 0.00 | 72.99 | 725.83 | 171.46 | 190.75 | 181.64 | 90.62 | -8.41 -8.66 | 0.331 |
| 110.00 | -5.21 -5.04 | -7.36 -7.27 | 0.00 | -73.0 -50.8 | 0.00 | 50.85 | 725.83 | 171.46 | 190.75 | 181.64 | 96.14 | -8.94 | 0.411 |
| 115.00 | -4.59 | -6.90 | 0.00 | -14.5 | 0.00 | 14.51 | 725.83 | 171.46 | 190.75 | 181.64 | 105.62 | -0.94 -9.19 | 0.289 |
| 117.00 | -0.33 | -0.30 | 0.00 | -0.6 | 0.00 | 0.60 | 725.83 | 171.46 | 190.75 | 181.64 | 109.46 | -9.13 | 0.004 |
| 119.00 | 0.00 | -0.24 | 0.00 | 0.0 | 0.00 | 0.00 | 725.83 | 171.46 | 190.75 | 181.64 | 113.3 | -9.21 | 0.004 |
| 113.00 | 0.00 | -0.24 | 0.00 | 0.0 | 0.00 | 0.00 | 120.00 | 171.40 | 130.13 | 101.04 | 113.3 | -J.Z I | 0.000 |

| | | | | | | CALCULATE | D FORCES | | | | | | |
|--|------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|------------------------|------------------------|--------------------------|----------------|--------------|
| Load Case: | 0.9D + 1.0W | | | 115.99 | mph Wind v | vith No Ice (Re | duced DL) | | | | | 26 | 3 Iterations |
| Gust Responded Formal Load For | actor: Factor: | 1.10 0.90 1.00 | | | | | | | | | | | |
| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (ft-kips) | Phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 0.00 | -30.06 | -19.27 | 0.00 | -1,869.0 | 0.00 | 1,868.96 | 2,813.31 | 725.65 | 2,732.26 | 2,413.98 | 0 | 0 | 0.786 |
| 5.00 | -29.24 | -19.10 | 0.00 | -1,772.6 | 0.00 | 1,772.63 | 2,747.79 | 699.53 | 2,539.19 | 2,272.29 | 0.15 | -0.29 | 0.791 |
| 10.00 | -28.44 | -18.95 | 0.00 | -1,677.1 | 0.00 | 1,677.13 | 2,679.61 | 673.42 | 2,353.20 | 2,132.56 | 0.61 | -0.59 | 0.798 |
| 15.00 | -27.67 | -18.81 | 0.00 | -1,582.4 | 0.00 | 1,582.40 | 2,608.76 | 647.31 | 2,174.28 | 1,995.03 | 1.4 | -0.91 | 0.805 |
| 20.00 | -26.90 | -18.68 | 0.00 | -1,488.4 | 0.00 | 1,488.37 | 2,535.24 | 621.20 | 2,002.44 | 1,859.96 | 2.53 | -1.25 | 0.812 |
| 25.00 | -26.16 | -18.57 | 0.00 | -1,395.0 | 0.00 | 1,394.97 | 2,459.06 | 595.09 | 1,837.67 | 1,727.58 | 4.03 | -1.61 | 0.819 |
| 30.00 | -25.44 | -18.46 | 0.00 | -1,302.1 | 0.00 | 1,302.14 | 2,380.22 | 568.98 | 1,679.97 | 1,598.16 | 5.91 | -1.99 | 0.827 |
| 35.00 | -24.73 | -18.37 | 0.00 | -1,209.8 | 0.00 | 1,209.82 | 2,298.17 | 542.87 | 1,529.34 | 1,471.58 | 8.21 | -2.4 | 0.834 |
| 40.00 | -24.03 | -18.28 | 0.00 | -1,118.0 | 0.00 | 1,117.97 | 2,187.63 | 516.76 | 1,385.79 | 1,332.77 | 10.95 | -2.83 | 0.851 |
| 45.00 | -23.13 | -18.19 | 0.00 | -1,026.6 | 0.00 | 1,026.57 | 2,077.10 | 490.65 | 1,249.31 | 1,200.82 | 14.17 | -3.3 | 0.867 |
| 48.33 | -22.27 | -18.11 | 0.00 | -965.9 | 0.00 | 965.92 | 2,003.41 | 473.25 | 1,162.25 | 1,116.68 | 16.59 | -3.63 | 0.506 |
| 50.00 | -21.74 | -18.02 | 0.00 | -935.7 | 0.00 | 935.74 | 1,966.57 | 464.54 | 1,119.91 | 1,075.76 | 17.88 | -3.74 | 0.498 |
| 52.50 | -20.97 | -17.91 | 0.00 | -890.7 | 0.00 | 890.69 | 1,293.31 | 322.59 | 771.23 | 704.07 | 19.87 | -3.89 | 0.620 |
| 55.00 | -20.37 | -17.79 | 0.00 | -845.9 | 0.00 | 845.92 | 1,268.09 | 313.45 | 728.15 | 670.62 | 21.95 | -4.05 | 0.608 |
| 60.00 | -19.25 | -17.63 | 0.00 | -757.0 | 0.00 | 756.98 | 1,215.65 | 295.17 | 645.70 | 605.07 | 26.38 | -4.41 | 0.582 |
| 62.00 | -18.79 | -17.55 | 0.00 | -721.7 | 0.00 | 721.72 | 1,193.93 | 287.85 | 614.11 | 579.41 | 28.26 | -4.56 | 0.571 |
| 65.00 | -18.09 | -17.42 | 0.00 | -669.1 | 0.00 | 669.07 | 1,160.55 | 276.89 | 568.21 | 541.55 | 31.2 | -4.79 | 0.553 |
| 70.00 | -16.98 | -17.24 | 0.00 | -582.0 | 0.00 | 581.96 | 1,094.76 | 258.60 | 495.66 | 476.80 | 36.42 | -5.17 | 0.523 |
| 75.00 | -15.91 | -17.07 | 0.00 | -495.8 | 0.00 | 495.79 | 1,017.37 | 240.32 | 428.07 | 411.45 | 42.04 | -5.56 | 0.492 |
| 77.00 | -13.68 | -14.94 | 0.00 | -461.6 | 0.00 | 461.64 | 986.41 | 233.01 | 402.42 | 386.66 | 44.4 | -5.72 | 0.476 |
| 80.00 | -13.06 | -14.83 | 0.00 | -416.8 | 0.00 | 416.83 | 939.98 | 222.04 | 365.43 | 350.92 | 48.07 | -5.96 | 0.458 |
| 82.00 | -12.63 | -14.74 | 0.00 | -387.2 | 0.00 | 387.17 | 780.36 | 184.34 | 293.89 | 282.62 | 50.6 | -6.12 | 0.000 |
| 82.00 | -12.63 | -14.74 | 0.00 | -387.2 | 0.00 | 387.17 | 909.02 | 214.73 | 341.76 | 328.05 | 50.6 | -6.12 | 0.444 |
| 85.00 | -12.02 | -14.56 | 0.00 | -342.9 | 0.00 | 342.94 | 740.57 | 174.94 | 264.69 | 254.39 | 54.51 | -6.36 | 0.444 |
| 90.00 | -11.02 | -14.33 | 0.00 | -270.1 | 0.00 | 270.13 | 674.25 | 159.27 | 219.41 | 210.64 | 61.38 | -6.75 | 0.393 |
| 90.13 | -10.96 | -14.26 | 0.00 | -268.3 | 0.00 | 268.27 | 672.53 | 158.86 | 218.29 | 209.56 | 61.56 | -6.76 | 0.154 |
| 90.13 | -10.96 | -14.26 | 0.00 | -268.3 | 0.00 | 268.27 | 672.53 | 158.86 | 218.29 | 209.56 | 61.56 | -6.76 | 0.391 |
| 95.00 | -10.30 | -14.07 | 0.00 | -198.8 | 0.00 | 198.82 | 607.93 | 143.61 | 178.38 | 171.01 | 68.64 | -7.12 | 0.120 |
| 96.90 | -10.02 | -13.87 | 0.00 | -172.1 | 0.00 | 172.10 | 582.73 | 137.65 | 163.90 | 157.04 | 71.48 | -7.17 | 0.107 |
| 97.00 | -6.89 | -10.13 | 0.00 | -170.7 | 0.00 | 170.71 | 581.40 | 137.34 | 163.16 | 156.32 | 71.63 | -7.17 | 0.099 |
| 99.00 | -6.71 | -10.07 | 0.00 | -150.4 | 0.00 | 150.44 | 725.83 | 171.46 | 190.75 | 181.64 | 74.64 | -7.22 | 0.000 |
| 99.00 | -6.71 | -10.07 | 0.00 | -150.4 | 0.00 | 150.44 | 554.88 | 131.07 | 148.61 | 142.28 | 74.64 | -7.22 | 0.089 |
| 100.00 | -6.58 | -10.03 | 0.00 | -140.4 | 0.00 | 140.38 | 725.83 | 171.46 | 190.75 | 181.64 | 76.15 | -7.24 | 0.785 |
| 105.00 | -6.25 | -9.93 | 0.00 | -90.2 | 0.00 | 90.24 | 725.83 | 171.46 | 190.75 | 181.64 | 84.2 | -8.11 | 0.509 |
| 107.00 | -3.70 | -7.12 | 0.00 | -70.4 | 0.00 | 70.38 | 725.83 | 171.46 | 190.75 | 181.64 | 87.64 | -8.36 | 0.394 |
| 110.00 | -3.57 | -7.01 | 0.00 | -49.0 | 0.00 | 49.03 | 725.83 | 171.46 | 190.75 | 181.64 | 92.97 | -8.63 | 0.276 |
| 115.00 | -3.24 | -6.66 | 0.00 | -14.0 | 0.00 | 13.99 | 725.83 | 171.46 | 190.75 | 181.64 | 102.12 | -8.87 | 0.083 |
| 117.00 | -0.24 | -0.28 | 0.00 | -0.6 | 0.00 | 0.57 | 725.83 | 171.46 | 190.75 | 181.64 | 105.83 | -8.89 | 0.003 |
| 119.00 | 0.00 | -0.24 | 0.00 | 0.0 | 0.00 | 0.00 | 725.83 | 171.46 | 190.75 | 181.64 | 109.54 | -8.89 | 0.000 |

| | | | | | | CALCULATE | D FORCES | | | | | | |
|--|------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|------------------------|------------------------|--------------------------|----------------------------|----------------|
| Load Case: | 1.2D + 1.0Di + | 1.0Wi | | 48.73 ı | mph Wind wi | th 0.85" Radial | Ice | | | | | 25 | Iterations |
| Gust Respo Dead load F Wind Load | | 1.10 1.20 1.00 | Ice D | ead Load Fa | ctor | 1.00 | | | | Ice Im | nportance Fa | actor | 1.00 |
| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (ft-kips) | Phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 0.00 | -50.77 | -4.83 | 0.00 | -477.1 | 0.00 | 477.06 | 2,813.31 | 725.65 | 2,732.26 | 2,413.98 | 0 | 0 | 0.216 |
| 5.00 | -49.61 | -4.80 | 0.00 | -452.9 | 0.00 | 452.93 | 2,747.79 | 699.53 | 2,539.19 | 2,272.29 | 0.04 | -0.07 | 0.217 |
| 10.00 | -48.46 | -4.77 | 0.00 | -429.0 | 0.00 | 428.95 | 2,679.61 | 673.42 | 2,353.20 | 2,132.56 | 0.16 | -0.15 | 0.219 |
| 15.00 | -47.34 | -4.75 | 0.00 | -405.1 | 0.00 | 405.10 | 2,608.76 | 647.31 | 2,174.28 | 1,995.03 | 0.36 | -0.23 | 0.221 |
| 20.00 | -46.25 | -4.73 | 0.00 | -381.4 | 0.00 | 381.36 | 2,535.24 | 621.20 | 2,002.44 | 1,859.96 | 0.65 | -0.32 | 0.223 |
| 25.00 | -45.20 | -4.72 | 0.00 | -357.7 | 0.00 | 357.71 | 2,459.06 | 595.09 | 1,837.67 | 1,727.58 | 1.03 | -0.41 | 0.225 |
| 30.00 | -44.17 | -4.71 | 0.00 | -334.1 | 0.00 | 334.12 | 2,380.22 | 568.98 | 1,679.97 | 1,598.16 | 1.51 | -0.51 | 0.228 |
| 35.00 | -43.18 | -4.70 | 0.00 | -310.6 | 0.00 | 310.57 | 2,298.17 | 542.87 | 1,529.34 | 1,471.58 | 2.1 | -0.61 | 0.230 |
| 40.00 | -42.23 | -4.70 | 0.00 | -287.1 | 0.00 | 287.06 | 2,187.63 | 516.76 | 1,385.79 | 1,332.77 | 2.8 | -0.73 | 0.235 |
| 45.00 | -40.98 | -4.69 | 0.00 | -263.6 | 0.00 | 263.56 | 2,077.10 | 490.65 | 1,249.31 | 1,200.82 | 3.63 | -0.85 | 0.239 |
| 48.33 | -39.77 | -4.67 | 0.00 | -247.9 | 0.00 | 247.92 | 2,003.41 | 473.25 | 1,162.25 | 1,116.68 | 4.25 | -0.93 | 0.140 |
| 50.00 | -39.04 | -4.65 | 0.00 | -240.1 | 0.00 | 240.13 | 1,966.57 | 464.54 | 1,119.91 | 1,075.76 | 4.58 | -0.96 | 0.138 |
| 52.50 | -37.96 | -4.62 | 0.00 | -228.5 | 0.00 | 228.49 | 1,293.31 | 322.59 | 771.23 | 704.07 | 5.09 | -1 | 0.171 |
| 55.00 | -37.15 | -4.60 | 0.00 | -216.9 | 0.00 | 216.93 | 1,268.09 | 313.45 | 728.15 | 670.62 | 5.62 | -1.04 | 0.168 |
| 60.00 | -35.56 | -4.56 | 0.00 | -194.0 | 0.00 | 193.95 | 1,215.65 | 295.17 | 645.70 | 605.07 | 6.76 | -1.13 | 0.161 |
| 62.00 | -34.93 | -4.54 | 0.00 | -184.8 | 0.00 | 184.83 | 1,193.93 | 287.85 | 614.11 | 579.41 | 7.24 | -1.17 | 0.158 |
| 65.00 | -33.99 | -4.51 | 0.00 | -171.2 | 0.00 | 171.21 | 1,160.55 | 276.89 | 568.21 | 541.55 | 8 | -1.23 | 0.153 |
| 70.00 | -32.45 | -4.47 | 0.00 | -148.6 | 0.00 | 148.65 | 1,094.76 | 258.60 | 495.66 | 476.80 | 9.34 | -1.33 | 0.144 |
| 75.00 | -30.95 | -4.42 | 0.00 | -126.3 | 0.00 | 126.32 | 1,017.37 | 240.32 | 428.07 | 411.45 | 10.78 | -1.42 | 0.136 |
| 77.00 | -26.64 | -3.89 | 0.00 | -117.5 | 0.00 | 117.48 | 986.41 | 233.01 | 402.42 | 386.66 | 11.39 | -1.46 | 0.130 |
| 80.00 | -25.76 | -3.86 | 0.00 | -105.8 | 0.00 | 105.79 | 939.98 | 222.04 | 365.43 | 350.92 | 12.33 | -1.53 | 0.125 |
| 82.00 | -25.19 | -3.84 | 0.00 | -98.1 | 0.00 | 98.07 | 780.36 | 184.34 | 293.89 | 282.62 | 12.97 | -1.57 | 0.000 |
| 82.00 | -25.19 | -3.84 | 0.00 | -98.1 | 0.00 | 98.07 | 909.02 | 214.73 | 341.76 | 328.05 | 12.97 | -1.57 | 0.121 |
| 85.00 | -24.35 | -3.81 | 0.00 | -86.6 | 0.00 | 86.55 | 740.57 | 174.94 | 264.69 | 254.39 | 13.98 | -1.63 | 0.121 |
| 90.00 | -22.81 | -3.69 | 0.00 | -67.5 | 0.00 | 67.51 | 674.25 | 159.27 | 219.41 | 210.64 | 15.74 | -1.73 | 0.107 |
| 90.13 | -22.77 | -3.68 | 0.00 | -67.0 | 0.00 | 67.03 | 672.53 | 158.86 | 218.29 | 209.56 | 15.78 | -1.73 | 0.048 |
| 90.13 | -22.77 | -3.68 | 0.00 | -67.0 | 0.00 | 67.03 | 672.53 | 158.86 | 218.29 | 209.56 | 15.78 | -1.73 | 0.106 |
| 95.00 96.90 | -21.71 -21.13 | -3.57 -3.49 | 0.00 0.00 | -49.1 -42.3 | 0.00 0.00 | 49.10 42.33 | 607.93 | 143.61 | 178.38 163.90 | 171.01 | 17.6 | -1.82 | 0.039 0.035 |
| | | | | | | | 582.73 | 137.65 | | 157.04 | 18.32 | -1.83 | |
| 97.00 | -14.73 | -2.58 | 0.00 | -42.0 -36.8 | 0.00 | 41.98 | 581.40 | 137.34 | 163.16 | 156.32 | 18.36 | -1.83 | 0.031 |
| 99.00 | -14.41 | -2.53 | 0.00 | | 0.00 | 36.82 | 725.83 | 171.46 | 190.75 | 181.64 | 19.13 | -1.84 | 0.000 |
| 99.00 | -14.41 | -2.53 | 0.00 | -36.8 | 0.00 | 36.82 | 554.88 | 131.07 | 148.61 | 142.28 | 19.13 | -1.84 1.85 | 0.028 |
| 100.00 105.00 | -14.30 -13.78 | -2.52 -2.43 | 0.00 0.00 | -34.3 -21.7 | 0.00 0.00 | 34.29 21.71 | 725.83 725.83 | 171.46 171.46 | 190.75 190.75 | 181.64 181.64 | 19.52 21.57 | -1.85 -2.06 | 0.209 0.139 |
| 105.00 | -13.78 -8.70 | -2.43 -1.71 | 0.00 | -21.7 -16.9 | 0.00 | 16.86 | 725.83 725.83 | 171.46 | 190.75 | 181.64 | 21.57 | -2.06 -2.12 | 0.139 |
| 107.00 | -8.49 | -1.71 | 0.00 | -16.9 -11.7 | 0.00 | 11.72 | 725.83 | 171.46 | 190.75 | 181.64 | 22.45 | -2.12 -2.18 | 0.105 |
| 115.00 | -6.49 -7.80 | -1.58 | 0.00 | -11.7 | 0.00 | 3.33 | 725.83 | 171.46 | 190.75 | 181.64 | 23.8 26.12 | -2.16 -2.24 | 0.076 |
| 117.00 | -7.80 -0.53 | -0.08 | 0.00 | -3.3 -0.2 | 0.00 | 3.33 0.15 | 725.83 | 171.46 | 190.75 | 181.64 | 27.06 | -2.2 4 -2.25 | 0.029 |
| 117.00 | 0.00 | -0.08 -0.05 | 0.00 | -0.2 0.0 | 0.00 | 0.15 | 725.83 | 171.46 171.46 | 190.75 | 181.64 | 27.06 | -2.25 -2.25 | 0.002 |
| 119.00 | 0.00 | -0.05 | 0.00 | 0.0 | 0.00 | 0.00 | 120.03 | 171.40 | 190.75 | 101.04 | 20 | -2.25 | 0.000 |

| | | | | | | CALCULATE | D FORCES | | | | | | |
|--|------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|------------------------|------------------------|--------------------------|-------------------|----------------|
| Load Case: | 1.0D + 1.0W | | | 60 mpl | n Wind with I | No Ice | | | | | | 25 | 5 Iterations |
| Gust Respo Dead load F Wind Load I | actor: | 1.10 1.00 1.00 | | | | | | | | | | | |
| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (ft-kips) | Phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 0.00 | -33.45 | -4.64 | 0.00 | -455.7 | 0.00 | 455.69 | 2,813.31 | 725.65 | 2,732.26 | 2,413.98 | 0 | 0 | 0.201 |
| 5.00 | -32.65 | -4.61 | 0.00 | -432.5 | 0.00 | 432.49 | 2,747.79 | 699.53 | 2,539.19 | 2,272.29 | 0.04 | -0.07 | 0.202 |
| 10.00 | -31.86 | -4.57 | 0.00 | -409.5 | 0.00 | 409.46 | 2,679.61 | 673.42 | 2,353.20 | 2,132.56 | 0.15 | -0.14 | 0.204 |
| 15.00 | -31.11 | -4.55 | 0.00 | -386.6 | 0.00 | 386.59 | 2,608.76 | 647.31 | 2,174.28 | 1,995.03 | 0.34 | -0.22 | 0.206 |
| 20.00 | -30.38 | -4.52 | 0.00 | -363.9 | 0.00 | 363.86 | 2,535.24 | 621.20 | 2,002.44 | 1,859.96 | 0.62 | -0.3 | 0.208 |
| 25.00 | -29.67 | -4.50 | 0.00 | -341.3 | 0.00 | 341.26 | 2,459.06 | 595.09 | 1,837.67 | 1,727.58 | 0.98 | -0.39 | 0.210 |
| 30.00 | -28.99 | -4.48 | 0.00 | -318.8 | 0.00 | 318.76 | 2,380.22 | 568.98 | 1,679.97 | 1,598.16 | 1.44 | -0.49 | 0.212 |
| 35.00 | -28.33 | -4.47 | 0.00 | -296.4 | 0.00 | 296.35 | 2,298.17 | 542.87 | 1,529.34 | 1,471.58 | 2.01 | -0.59 | 0.214 |
| 40.00 | -27.70 | -4.45 | 0.00 | -274.0 | 0.00 | 274.02 | 2,187.63 | 516.76 | 1,385.79 | 1,332.77 | 2.68 | -0.69 | 0.218 |
| 45.00 | -26.82 | -4.44 | 0.00 | -251.8 | 0.00 | 251.77 | 2,077.10 | 490.65 | 1,249.31 | 1,200.82 | 3.46 | -0.81 | 0.223 |
| 48.33 | -25.92 | -4.42 | 0.00 | -237.0 | 0.00 | 236.98 | 2,003.41 | 473.25 | 1,162.25 | 1,116.68 | 4.06 | -0.89 | 0.130 |
| 50.00 | -25.37 | -4.40 | 0.00 | -229.6 | 0.00 | 229.62 | 1,966.57 | 464.54 | 1,119.91 | 1,075.76 | 4.37 | -0.91 | 0.128 |
| 52.50 | -24.55 | -4.37 | 0.00 | -218.6 | 0.00 | 218.62 | 1,293.31 | 322.59 | 771.23 | 704.07 | 4.86 | -0.95 | 0.159 |
| 55.00 | -23.95 | -4.35 | 0.00 | -207.7 | 0.00 | 207.69 | 1,268.09 | 313.45 | 728.15 | 670.62 | 5.37 | -0.99 | 0.156 |
| 60.00 | -22.78 | -4.31 | 0.00 | -186.0 | 0.00 | 185.96 | 1,215.65 | 295.17 | 645.70 | 605.07 | 6.45 | -1.08 | 0.150 |
| 62.00 | -22.32 | -4.29 | 0.00 | -177.3 | 0.00 | 177.34 | 1,193.93 | 287.85 | 614.11 | 579.41 | 6.91 | -1.12 | 0.147 |
| 65.00 | -21.62 | -4.27 | 0.00 | -164.5 | 0.00 | 164.46 | 1,160.55 | 276.89 | 568.21 | 541.55 | 7.64 | -1.17 | 0.142 |
| 70.00 | -20.48 | -4.23 | 0.00 | -143.1 | 0.00 | 143.12 | 1,094.76 | 258.60 | 495.66 | 476.80 | 8.92 | -1.27 | 0.135 |
| 75.00 | -19.37 | -4.19 | 0.00 | -122.0 | 0.00 | 122.00 | 1,017.37 | 240.32 | 428.07 | 411.45 | 10.29 | -1.36 | 0.127 |
| 77.00 | -16.73 | -3.67 | 0.00 | -113.6 | 0.00 | 113.62 | 986.41 | 233.01 | 402.42 | 386.66 | 10.87 | -1.4 | 0.122 |
| 80.00 | -16.08 | -3.64 | 0.00 | -102.6 | 0.00 | 102.62 | 939.98 | 222.04 | 365.43 | 350.92 | 11.77 | -1.46 | 0.117 |
| 82.00 | -15.64 | -3.62 | 0.00 | -95.3 | 0.00 | 95.33 | 780.36 | 184.34 | 293.89 | 282.62 | 12.39 | -1.5 | 0.000 |
| 82.00 | -15.64 | -3.62 | 0.00 | -95.3 | 0.00 | 95.33 | 909.02 | 214.73 | 341.76 | 328.05 | 12.39 | -1.5 | 0.114 |
| 85.00 | -15.02 | -3.58 | 0.00 | -84.4 | 0.00 | 84.45 | 740.57 | 174.94 | 264.69 | 254.39 | 13.36 | -1.56 | 0.114 |
| 90.00 | -13.94 | -3.53 | 0.00 | -66.5 | 0.00 | 66.54 | 674.25 | 159.27 | 219.41 | 210.64 | 15.04 | -1.66 | 0.101 |
| 90.13 | -13.91 | -3.51 | 0.00 | -66.1 | 0.00 | 66.08 | 672.53 | 158.86 | 218.29 | 209.56 | 15.09 | -1.66 | 0.043 |
| 90.13 95.00 | -13.91 -13.20 | -3.51 -3.46 | 0.00 0.00 | -66.1 -49.0 | 0.00 | 66.08 48.98 | 672.53 607.93 | 158.86 143.61 | 218.29 178.38 | 209.56 171.01 | 15.09 16.83 | -1.66 -1.75 | 0.100 0.034 |
| 96.90 | -13.20 -12.87 | -3.46 -3.41 | 0.00 | -49.0 -42.4 | 0.00 | 48.98 42.40 | 582.73 | 137.65 | 163.90 | 171.01 | 17.53 | -1.75 -1.76 | 0.034 |
| 97.00 | -8.93 | -2.50 | 0.00 | -42.4 -42.1 | 0.00 | 42.40 | 581.40 | 137.34 | 163.16 | 156.32 | 17.56 | -1.76 | 0.031 |
| 99.00 | -6.93 -8.73 | -2.30 -2.48 | 0.00 | -42.1 -37.1 | 0.00 | 37.06 | 725.83 | 171.46 | 190.75 | 181.64 | 18.3 | -1.76 -1.77 | 0.028 |
| 99.00 | -6.73 -8.73 | -2.48 -2.48 | 0.00 | -37.1 -37.1 | 0.00 | 37.06 | 554.88 | 131.07 | 148.61 | 142.28 | 18.3 | -1.77 -1.77 | 0.000 |
| 100.00 | -8.67 | -2.46 -2.47 | 0.00 | -34.6 | 0.00 | 34.58 | 725.83 | 171.46 | 190.75 | 181.64 | 18.67 | -1.77 -1.78 | 0.023 |
| 105.00 | -8.37 | -2.47 -2.45 | 0.00 | -34.6 | 0.00 | 22.22 | 725.83 | 171.46 | 190.75 | 181.64 | 20.66 | -1.76 | 0.203 |
| 107.00 | -5.17 | -1.75 | 0.00 | -17.3 | 0.00 | 17.33 | 725.83 | 171.46 | 190.75 | 181.64 | 21.5 | -2.05 | 0.103 |
| 110.00 | -5.04 | -1.73 | 0.00 | -12.1 | 0.00 | 12.06 | 725.83 | 171.46 | 190.75 | 181.64 | 22.81 | -2.12 | 0.103 |
| 115.00 | -4.63 | -1.64 | 0.00 | -3.4 | 0.00 | 3.44 | 725.83 | 171.46 | 190.75 | 181.64 | 25.07 | -2.12 | 0.075 |
| 117.00 | -0.31 | -0.07 | 0.00 | -0.1 | 0.00 | 0.14 | 725.83 | 171.46 | 190.75 | 181.64 | 25.98 | -2.18 | 0.023 |
| 117.00 | 0.00 | -0.07 | 0.00 | 0.0 | 0.00 | 0.14 | 725.83 | 171.46 | 190.75 | 181.64 | 26.9 | -2.18 | 0.000 |
| 113.00 | 0.00 | -0.00 | 0.00 | 0.0 | 0.00 | 0.00 | 120.00 | 171.40 | 130.13 | 101.04 | 20.5 | -2.10 | 0.000 |

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

(Based on ASCE7-16 Chapters 11, 12 and 15)

Spectral Response Acceleration for Short Period (S_S): 0.207 Spectral Response Acceleration at 1.0 Second Period (S₁): 0.054 Long-Period Transition Period (T_L – Seconds): 6 Importance Factor (I_e): 1.000 Site Coefficient Fa: 1.600 Site Coefficient F_v: 2.400 Response Modification Coefficient (R): 1.500 Design Spectral Response Acceleration at Short Period (S_{ds}): 0.221 Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}): 0.086 Seismic Response Coefficient (C_s): 0.030 Upper Limit Cs: 0.030 Lower Limit C_S: 0.030 Period based on Rayleigh Method (sec): 2.990 Redundancy Factor (p): 1.000 Seismic Force Distribution Exponent (k): 2.000 Total Unfactored Dead Load: 33.460 k Seismic Base Shear (E): 1.000 k

| | | | SEISMIC FORCE | ES . | | | |
|------------------------|---------|-------------------|---------------|---------|----------|------------------|----------------|
| 1.2D + 1.0Ev + 1.0Eh | Seismic | Height Above Base | Weight | W_z | | Horizontal Force | Vertical Force |
| Segment | | (ft) | (lb) | (lb-ft) | C_{vx} | (lb) | (lb) |
| 35 | | 118 | 66 | 926 | 0.004 | 4 | 83 |
| 34 | | 116 | 85 | 1,141 | 0.005 | 5 | 106 |
| 33 | | 112.5 | 212 | 2,683 | 0.012 | 12 | 264 |
| 32 | | 108.5 | 127 | 1,498 | 0.007 | 7 | 158 |
| 31 | | 106 | 90 | 1,014 | 0.004 | 4 | 112 |
| 30 | | 102.5 | 289 | 3,032 | 0.013 | 13 | 359 |
| 29 | | 99.5 | 58 | 571 | 0.002 | 3 | 72 |
| 28 | | 98 | 201 | 1,932 | 0.008 | 9 | 250 |
| 27 | | 96.95 | 11 | 100 | 0.000 | 0 | 13 |
| 26 | | 95.95 | 204 | 1,880 | 0.008 | 8 | 254 |
| 25 | | 92.565 | 704 | 6,034 | 0.027 | 27 | 876 |
| 24 | | 90.065 | 28 | 225 | 0.001 | 1 | 35 |
| 23 | | 87.5 | 1,080 | 8,265 | 0.036 | 37 | 1,343 |
| 22 | | 83.5 | 621 | 4,328 | 0.019 | 19 | 772 |
| 21 | | 81 | 429 | 2,814 | 0.012 | 12 | 534 |
| 20 | | 78.5 | 649 | 3,997 | 0.018 | 18 | 807 |
| 19 | | 76 | 441 | 2,548 | 0.011 | 11 | 549 |
| 18 | | 72.5 | 1,115 | 5,862 | 0.026 | 26 | 1,388 |
| 17 | | 67.5 | 1,133 | 5,162 | 0.023 | 23 | 1,410 |
| 16 | | 63.5 | 688 | 2,775 | 0.012 | 12 | 856 |
| 15 | | 61 | 462 | 1,721 | 0.008 | 8 | 575 |
| 14 | | 57.5 | 1,168 | 3,863 | 0.017 | 17 | 1,454 |
| 13 | | 53.75 | 591 | 1,707 | 0.008 | 8 | 735 |
| 12 | | 51.25 | 817 | 2,147 | 0.010 | 10 | 1,017 |
| 11 | | 49.1667 | 551 | 1,332 | 0.006 | 6 | 685 |
| 10 | | 46.6667 | 894 | 1,946 | 0.009 | 9 | 1,112 |
| 9 | | 42.5 | 873 | 1,577 | 0.007 | 7 | 1,086 |
| 8 | | 37.5 | 624 | 878 | 0.004 | 4 | 776 |
| 7 | | 32.5 | 649 | 686 | 0.003 | 3 | 808 |
| 6 | | 27.5 | 675 | 510 | 0.002 | 2 | 839 |
| 5 | | 22.5 | 700 | 354 | 0.002 | 2 | 871 |
| 4 | | 17.5 | 725 | 222 | 0.001 | 1 | 902 |
| 3 | | 12.5 | 751 | 117 | 0.000 | 1 | 934 |
| 2 | | 7.5 | 776 | 44 | 0.000 | 0 | 965 |
| 1 | | 2.5 | 801 | 5 | 0.000 | 0 | 997 |
| Ericsson Air 6449 B77D | | 119 | 245 | 3,467 | 0.015 | 15 | 305 |
| Commscope WCS-IMFQ-AM | MT | 117 | 30 | 404 | 0.002 | 2 | 37 |
| Ericsson RRUS 4426 B66 | | 117 | 145 | 1,988 | 0.009 | 9 | 181 |

| | | SEISMIC FORCES | | | | |
|--------------------------------------|---------------------------|----------------|---------------------------|-----------------|--------------------------|------------------------|
| 1.2D + 1.0Ev + 1.0Eh Seisn | | | | | | |
| Segment | Height Above Base (ft) | Weight (lb) | W _z (Ib-ft) | C _{vx} | Horizontal Force (lb) | Vertical Force (lb) |
| Ericsson RRUS 4478 B14 | 117 | 180 | 2,460 | 0.011 | 11 | 224 |
| Ericsson RRUS 4449 B5, B12 | 117 | 213 | 2,916 | 0.011 | 13 | 265 |
| Ericsson RRUS 32 B2 | 117 | 159 | 2,177 | 0.010 | 10 | 198 |
| Ericsson RRUS E2 B29 | 117 | 180 | 2.464 | 0.011 | 11 | 224 |
| Ericsson RRUS-32 B30 (77 lbs) | 117 | 231 | 3,162 | 0.014 | 14 | 287 |
| Raycap DC9-48-60-24-8C-EV | 117 | 16 | 219 | 0.001 | 1 | 20 |
| Raycap DC9-48-60-24-8C-EV | 117 | 16 | 219 | 0.001 | 1 | 20 |
| CCI DMP65R-BU6DA | 117 | 238 | 3,261 | 0.014 | 14 | 296 |
| Generic Flat Platform with Handrails | 117 | 2,500 | 34,222 | 0.151 | 152 | 3,110 |
| Generic Flat Platform with Handrails | 107 | 2,500 | 28,622 | 0.126 | 127 | 3,110 |
| Generic Flat Platform with Handrails | 97 | 2,500 | 23,522 | 0.104 | 104 | 3,110 |
| Quintel QD6616-7 | 117 | 390 | 5,339 | 0.024 | 24 | 485 |
| Ericsson AIR 6419 B77G | 115 | 198 | 2,623 | 0.012 | 12 | 247 |
| Raycap RDIDC-9181-PF-48 | 107 | 22 | 251 | 0.001 | 1 | 27 |
| Fujitsu TA08025-B605 | 107 | 225 | 2,576 | 0.011 | . 11 | 280 |
| Fujitsu TA08025-B604 | 107 | 192 | 2,195 | 0.010 | 10 | 239 |
| JMA Wireless MX08FRO665-21 | 107 | 194 | 2,215 | 0.010 | 10 | 241 |
| Ericsson Radio 4449 B71 B85A | 97 | 225 | 2,117 | 0.009 | 9 | 280 |
| Ericsson RRUS 4415 B25 | 97 | 138 | 1,298 | 0.006 | 6 | 172 |
| Ericsson Air6449 B41 | 97 | 312 | 2,936 | 0.013 | 13 | 388 |
| Ericsson AIR32 B66Aa/B2a | 97 | 397 | 3,732 | 0.016 | 17 | 493 |
| RFS APXVAARR24_43-U-NA20 | 97 | 384 | 3,610 | 0.016 | 16 | 477 |
| Ericsson RRUS 01 B2 w/ Solar Shield | 96.9 | 132 | 1,239 | 0.006 | 5 | 164 |
| Samsung B5/B13 RRH-BR04C | 77 | 211 | 1,250 | 0.006 | 6 | 262 |
| Samsung B2/B66A RRH-BR049 | 77 | 253 | 1,501 | 0.007 | 7 | 315 |
| RFS DB-C1-12C-24AB-0Z | 77 | 32 | 190 | 0.001 | 1 | 40 |
| Samsung MT6407-77A | 77 | 245 | 1,451 | 0.006 | 6 | 305 |
| Quintel QS6656-5D | 77 | 528 | 3,131 | 0.014 | 14 | 657 |
| Generic Round T-Arm | 77 | 938 | 5,558 | 0.025 | 25 | 1,166 |
| | Totals: | 33,455 | 226,214 | 1.000 | 1,004 | 41,624 |

| | S | EISMIC FORCES | | | | |
|----------------------|---------------------------|----------------|---------------------------|----------|-----------------------|------------------------|
| 0.9D - 1.0Ev + 1.0Eh | Seismic (Reduced DL) | | | | | |
| Segment | Height Above Base (ft) | Weight (lb) | W _z (Ib-ft) | C_{vx} | Horizontal Force (lb) | Vertical Force (lb) |
| 35 | 118 | 66 | 926 | 0.004 | 4 | 57 |
| 34 | 116 | 85 | 1,141 | 0.005 | 5 | 73 |
| 33 | 112.5 | 212 | 2,683 | 0.012 | 12 | 181 |
| 32 | 108.5 | 127 | 1,498 | 0.007 | 7 | 109 |
| 31 | 106 | 90 | 1,014 | 0.004 | 4 | 77 |
| 30 | 102.5 | 289 | 3,032 | 0.013 | 13 | 247 |
| 29 | 99.5 | 58 | 571 | 0.002 | 3 | 49 |
| 28 | 98 | 201 | 1,932 | 0.008 | 9 | 172 |
| 27 | 96.95 | 11 | 100 | 0.000 | 0 | 9 |
| 26 | 95.95 | 204 | 1,880 | 0.008 | 8 | 175 |
| 25 | 92.565 | 704 | 6,034 | 0.027 | 27 | 603 |
| 24 | 90.065 | 28 | 225 | 0.001 | 1 | 24 |
| 23 | 87.5 | 1,080 | 8,265 | 0.036 | 37 | 924 |
| 22 | 83.5 | 621 | 4,328 | 0.019 | 19 | 531 |
| 21 | 81 | 429 | 2,814 | 0.012 | 12 | 367 |
| 20 | 78.5 | 649 | 3,997 | 0.018 | 18 | 555 |
| 19 | 76 | 441 | 2,548 | 0.011 | 11 | 378 |
| 18 | 72.5 | 1,115 | 5,862 | 0.026 | 26 | 955 |
| 17 | 67.5 | 1,133 | 5,162 | 0.023 | 23 | 970 |
| 16 | 63.5 | 688 | 2,775 | 0.012 | 12 | 589 |
| 15 | 61 | 462 | 1,721 | 0.008 | 8 | 396 |
| 14 | 57.5 | 1,168 | 3,863 | 0.017 | 17 | 1,000 |
| 13 | 53.75 | 591 | 1,707 | 0.008 | 8 | 506 |
| 12 | 51.25 | 817 | 2,147 | 0.010 | 10 | 699 |
| 11 | 49.1667 | 551 | 1,332 | 0.006 | 6 | 471 |
| 10 | 46.6667 | 894 | 1,946 | 0.009 | 9 | 765 |

ASSET: 283420, STONEYBROOK RD CT CODE: ANSI/TIA-222-H

CUSTOMER: AT&T MOBILITY PROJECT: 13682835_C4_08

| | | SEISMIC FORCE | ES | | | |
|--------------------------------------|------------------------|----------------|---------------------------|----------|--------------------------|------------------------|
| 0.9D - 1.0Ev + 1.0Eh Seism | ic (Reduced DL) | | | | | |
| Segment | Height Above Base (ft) | Weight (lb) | W _z (Ib-ft) | C_{vx} | Horizontal Force (lb) | Vertical Force (lb) |
| 9 | 42.5 | 873 | 1,577 | 0.007 | 7 | 747 |
| 8 | 37.5 | 624 | 878 | 0.004 | 4 | 534 |
| 7 | 32.5 | 649 | 686 | 0.003 | 3 | 556 |
| 6 | 27.5 | 675 | 510 | 0.002 | 2 | 577 |
| 5 | 22.5 | 700 | 354 | 0.002 | 2 | 599 |
| 4 | 17.5 | 725 | 222 | 0.001 | 1 | 621 |
| 3 | 12.5 | 751 | 117 | 0.000 | 1 | 642 |
| 2 | 7.5 | 776 | 44 | 0.000 | 0 | 664 |
| 1 | 2.5 | 801 | 5 | 0.000 | 0 | 686 |
| Ericsson Air 6449 B77D | 119 | 245 | 3,467 | 0.015 | 15 | 210 |
| Commscope WCS-IMFQ-AMT | 117 | 30 | 404 | 0.002 | 2 | 25 |
| Ericsson RRUS 4426 B66 | 117 | 145 | 1,988 | 0.009 | 9 | 124 |
| Ericsson RRUS 4478 B14 | 117 | 180 | 2,460 | 0.011 | 11 | 154 |
| Ericsson RRUS 4449 B5, B12 | 117 | 213 | 2,916 | 0.013 | 13 | 182 |
| Ericsson RRUS 32 B2 | 117 | 159 | 2,177 | 0.010 | 10 | 136 |
| Ericsson RRUS E2 B29 | 117 | 180 | 2,464 | 0.011 | 11 | 154 |
| Ericsson RRUS-32 B30 (77 lbs) | 117 | 231 | 3,162 | 0.014 | 14 | 198 |
| Raycap DC9-48-60-24-8C-EV | 117 | 16 | 219 | 0.001 | 1 | 14 |
| Raycap DC9-48-60-24-8C-EV | 117 | 16 | 219 | 0.001 | 1 | 14 |
| CCI DMP65R-BU6DA | 117 | 238 | 3,261 | 0.014 | 14 | 204 |
| Generic Flat Platform with Handrails | 117 | 2,500 | 34,222 | 0.151 | 152 | 2,140 |
| Generic Flat Platform with Handrails | 107 | 2,500 | 28,622 | 0.126 | 127 | 2,140 |
| Generic Flat Platform with Handrails | 97 | 2,500 | 23,522 | 0.104 | 104 | 2,140 |
| Quintel QD6616-7 | 117 | 390 | 5,339 | 0.024 | 24 | 334 |
| Ericsson AIR 6419 B77G | 115 | 198 | 2,623 | 0.012 | 12 | 170 |
| Raycap RDIDC-9181-PF-48 | 107 | 22 | 251 | 0.001 | 1 | 19 |
| Fujitsu TA08025-B605 | 107 | 225 | 2,576 | 0.011 | 11 | 193 |
| Fujitsu TA08025-B604 | 107 | 192 | 2,195 | 0.010 | 10 | 164 |
| JMA Wireless MX08FRO665-21 | 107 | 194 | 2,215 | 0.010 | 10 | 166 |
| Ericsson Radio 4449 B71 B85A | 97 | 225 | 2,117 | 0.009 | 9 | 193 |
| Ericsson RRUS 4415 B25 | 97 | 138 | 1,298 | 0.006 | 6 | 118 |
| Ericsson Air6449 B41 | 97 | 312 | 2,936 | 0.013 | 13 | 267 |
| Ericsson AIR32 B66Aa/B2a | 97 | 397 | 3,732 | 0.016 | 17 | 339 |
| RFS APXVAARR24_43-U-NA20 | 97 | 384 | 3,610 | 0.016 | 16 | 328 |
| Ericsson RRUS 01 B2 w/ Solar Shield | 96.9 | 132 | 1,239 | 0.006 | 5 | 113 |
| Samsung B5/B13 RRH-BR04C | 77 | 211 | 1,250 | 0.006 | 6 | 180 |
| Samsung B2/B66A RRH-BR049 | 77 | 253 | 1,501 | 0.007 | 7 | 217 |
| RFS DB-C1-12C-24AB-0Z | 77 | 32 | 190 | 0.001 | 1 | 27 |
| Samsung MT6407-77A | 77 | 245 | 1,451 | 0.006 | 6 | 210 |
| Quintel QS6656-5D | 77 | 528 | 3,131 | 0.014 | 14 | 452 |
| Generic Round T-Arm | 77 | 938 | 5,558 | 0.025 | 25 | 802 |

| 1.2D + 1.0Ev + 1.0Eh | Seismic |
|----------------------|---------|

| | | | | | | CALCULAT | ED FORCES | | | | | | |
|------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|---------------------|---------------------|--------------------------|-------------------|-------|
| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (fr-kips) | Mu Mx (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (kips) | Phi Mn (kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 0.00 | -40.63 | -1.01 | 0.00 | -106.60 | 0.00 | 106.60 | 2,813.31 | 725.65 | 2,732 | 2,413.98 | 0.00 | 0.00 | 0.06 |
| 5.00 | -39.66 | -1.02 | 0.00 | -101.55 | 0.00 | 101.55 | 2,747.79 | 699.53 | 2,539 | 2,272.29 | 0.01 | -0.02 | 0.06 |
| 10.00 | -38.73 | -1.03 | 0.00 | -96.45 | 0.00 | 96.45 | 2,679.61 | 673.42 | 2,353 | 2,132.56 | 0.04 | -0.03 | 0.06 |
| 15.00 | -37.82 | -1.04 | 0.00 | -91.30 | 0.00 | 91.30 | 2,608.76 | 647.31 | 2,174 | 1,995.03 | 0.08 | -0.05 | 0.06 |
| 20.00 | -36.95 | -1.05 | 0.00 | -86.08 | 0.00 | 86.08 | 2,535.24 | 621.20 | 2,002 | 1,859.96 | 0.15 | -0.07 | 0.06 |
| 25.00 | -36.11 | -1.06 | 0.00 | -80.82 | 0.00 | 80.82 | 2,459.06 | 595.09 | 1,838 | 1,727.58 | 0.23 | -0.09 | 0.06 |
| 30.00 | -35.30 | -1.07 | 0.00 | -75.51 | 0.00 | 75.51 | 2,380.22 | 568.98 | 1,680 | 1,598.16 | 0.34 | -0.11 | 0.06 |
| 35.00 | -34.53 | -1.08 | 0.00 | -70.14 | 0.00 | 70.14 | 2,298.17 | 542.87 | 1,529 | 1,471.58 | 0.47 | -0.14 | 0.06 |
| 40.00 | -33.44 | -1.09 | 0.00 | -64.73 | 0.00 | 64.73 | 2,187.63 | 516.76 | 1,386 | 1,332.77 | 0.63 | -0.16 | 0.06 |
| 45.00 | -32.33 | -1.09 | 0.00 | -59.30 | 0.00 | 59.30 | 2,077.10 | 490.65 | 1,249 | 1,200.82 | 0.82 | -0.19 | 0.07 |
| 48.33 | -31.64 | -1.09 | 0.00 | -55.67 | 0.00 | 55.67 | 2,003.41 | 473.25 | 1,162 | 1,116.68 | 0.96 | -0.21 | 0.04 |
| 50.00 | -30.63 | -1.08 | 0.00 | -53.86 | 0.00 | 53.86 | 1,966.57 | 464.54 | 1,120 | 1,075.76 | 1.03 | -0.22 | 0.04 |

33,455

226,214

Totals:

1.000

1,004

28,632

| | | | | | | CALCULATI | ED FORCES | | | | | | |
|------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|---------------------|---------------------|--------------------------|-------------------|-------|
| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (fr-kips) | Mu Mx (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (kips) | Phi Mn (kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 52.50 | -29.89 | -1.07 | 0.00 | -51.17 | 0.00 | 51.17 | 1,293.31 | 322.59 | 771 | 704.07 | 1.15 | -0.22 | 0.05 |
| 55.00 | -28.44 | -1.06 | 0.00 | -48.49 | 0.00 | 48.49 | 1,268.09 | 313.45 | 728 | 670.62 | 1.27 | -0.23 | 0.05 |
| 60.00 | -27.86 | -1.05 | 0.00 | -43.21 | 0.00 | 43.21 | 1,215.65 | 295.17 | 646 | 605.07 | 1.52 | -0.25 | 0.04 |
| 62.00 | -27.00 | -1.04 | 0.00 | -41.10 | 0.00 | 41.10 | 1,193.93 | 287.85 | 614 | 579.41 | 1.63 | -0.26 | 0.04 |
| 62.00 | -27.00 | -1.04 | 0.00 | -41.10 | 0.00 | 41.10 | 1,193.93 | 287.85 | 614 | 579.41 | 1.63 | -0.26 | 0.04 |
| 65.00 | -25.59 | -1.02 | 0.00 | -37.97 | 0.00 | 37.97 | 1,160.55 | 276.89 | 568 | 541.55 | 1.80 | -0.28 | 0.04 |
| 70.00 | -24.21 | -1.00 | 0.00 | -32.87 | 0.00 | 32.87 | 1,094.76 | 258.60 | 496 | 476.80 | 2.10 | -0.30 | 0.04 |
| 75.00 | -23.66 | -0.99 | 0.00 | -27.89 | 0.00 | 27.89 | 1,017.37 | 240.32 | 428 | 411.45 | 2.43 | -0.32 | 0.04 |
| 77.00 | -20.11 | -0.90 | 0.00 | -25.91 | 0.00 | 25.91 | 986.41 | 233.01 | 402 | 386.66 | 2.56 | -0.33 | 0.04 |
| 80.00 | -19.57 | -0.88 | 0.00 | -23.22 | 0.00 | 23.22 | 939.98 | 222.04 | 365 | 350.92 | 2.77 | -0.34 | 0.03 |
| 82.00 | -18.80 | -0.86 | 0.00 | -21.45 | 0.00 | 21.45 | 909.02 | 214.73 | 342 | 328.05 | 2.92 | -0.35 | 0.03 |
| 82.00 | -18.80 | -0.86 | 0.00 | -21.45 | 0.00 | 21.45 | 780.36 | 184.34 | 294 | 282.62 | 2.92 | -0.35 | 0.00 |
| 85.00 | -17.46 | -0.83 | 0.00 | -18.86 | 0.00 | 18.86 | 740.57 | 174.94 | 265 | 254.39 | 3.14 | -0.36 | 0.03 |
| 90.00 | -17.42 | -0.83 | 0.00 | -14.73 | 0.00 | 14.73 | 674.25 | 159.27 | 219 | 210.64 | 3.54 | -0.39 | 0.03 |
| 90.13 | -16.55 | -0.80 | 0.00 | -14.62 | 0.00 | 14.62 | 672.53 | 158.86 | 218 | 209.56 | 3.55 | -0.39 | 0.03 |
| 90.13 | -16.55 | -0.80 | 0.00 | -14.62 | 0.00 | 14.62 | 672.53 | 158.86 | 218 | 209.56 | 3.55 | -0.39 | 0.02 |
| 95.00 | -16.29 | -0.79 | 0.00 | -10.74 | 0.00 | 10.74 | 607.93 | 143.61 | 178 | 171.01 | 3.95 | -0.41 | 0.02 |
| 96.90 | -16.11 | -0.78 | 0.00 | -9.24 | 0.00 | 9.24 | 582.73 | 137.65 | 164 | 157.04 | 4.11 | -0.41 | 0.01 |
| 97.00 | -10.94 | -0.57 | 0.00 | -9.16 | 0.00 | 9.16 | 581.40 | 137.34 | 163 | 156.32 | 4.12 | -0.41 | 0.01 |
| 99.00 | -10.87 | -0.57 | 0.00 | -8.01 | 0.00 | 8.01 | 554.88 | 131.07 | 149 | 142.28 | 4.29 | -0.41 | 0.01 |
| 99.00 | -10.87 | -0.57 | 0.00 | -8.01 | 0.00 | 8.01 | 725.83 | 171.46 | 191 | 181.64 | 4.29 | -0.41 | 0.00 |
| 100.00 | -10.51 | -0.56 | 0.00 | -7.44 | 0.00 | 7.44 | 725.83 | 171.46 | 191 | 181.64 | 4.38 | -0.41 | 0.06 |
| 105.00 | -10.40 | -0.56 | 0.00 | -4.65 | 0.00 | 4.65 | 725.83 | 171.46 | 191 | 181.64 | 4.84 | -0.46 | 0.04 |
| 107.00 | -6.35 | -0.36 | 0.00 | -3.53 | 0.00 | 3.53 | 725.83 | 171.46 | 191 | 181.64 | 5.03 | -0.47 | 0.03 |
| 110.00 | -6.08 | -0.35 | 0.00 | -2.44 | 0.00 | 2.44 | 725.83 | 171.46 | 191 | 181.64 | 5.33 | -0.48 | 0.02 |
| 115.00 | -5.73 | -0.33 | 0.00 | -0.70 | 0.00 | 0.70 | 725.83 | 171.46 | 191 | 181.64 | 5.85 | -0.50 | 0.01 |
| 117.00 | -0.30 | -0.02 | 0.00 | -0.04 | 0.00 | 0.04 | 725.83 | 171.46 | 191 | 181.64 | 6.05 | -0.50 | 0.00 |
| 119.00 | 0.00 | -0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 725.83 | 171.46 | 191 | 181.64 | 6.26 | -0.50 | 0.00 |

0.9D - 1.0Ev + 1.0Eh Seismic (Reduced DL)

| | | | | | | CALCULATE | ED FORCES | | | | | | |
|------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|---------------------|---------------------|--------------------------|-------------------|-------|
| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (fr-kips) | Mu Mx (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (kips) | Phi Mn (kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 0.00 | -27.95 | -1.01 | 0.00 | -103.12 | 0.00 | 103.12 | 2,813.31 | 725.65 | 2,732 | 2,413.98 | 0.00 | 0.00 | 0.05 |
| 5.00 | -27.28 | -1.01 | 0.00 | -98.09 | 0.00 | 98.09 | 2,747.79 | 699.53 | 2,539 | 2,272.29 | 0.01 | -0.02 | 0.05 |
| 10.00 | -26.64 | -1.02 | 0.00 | -93.02 | 0.00 | 93.02 | 2,679.61 | 673.42 | 2,353 | 2,132.56 | 0.03 | -0.03 | 0.05 |
| 15.00 | -26.02 | -1.03 | 0.00 | -87.91 | 0.00 | 87.91 | 2,608.76 | 647.31 | 2,174 | 1,995.03 | 0.08 | -0.05 | 0.05 |
| 20.00 | -25.42 | -1.03 | 0.00 | -82.78 | 0.00 | 82.78 | 2,535.24 | 621.20 | 2,002 | 1,859.96 | 0.14 | -0.07 | 0.06 |
| 25.00 | -24.84 | -1.04 | 0.00 | -77.60 | 0.00 | 77.60 | 2,459.06 | 595.09 | 1,838 | 1,727.58 | 0.22 | -0.09 | 0.06 |
| 30.00 | -24.28 | -1.05 | 0.00 | -72.40 | 0.00 | 72.40 | 2,380.22 | 568.98 | 1,680 | 1,598.16 | 0.33 | -0.11 | 0.06 |
| 35.00 | -23.75 | -1.05 | 0.00 | -67.18 | 0.00 | 67.18 | 2,298.17 | 542.87 | 1,529 | 1,471.58 | 0.46 | -0.13 | 0.06 |
| 40.00 | -23.00 | -1.05 | 0.00 | -61.92 | 0.00 | 61.92 | 2,187.63 | 516.76 | 1,386 | 1,332.77 | 0.61 | -0.16 | 0.06 |
| 45.00 | -22.24 | -1.05 | 0.00 | -56.67 | 0.00 | 56.67 | 2,077.10 | 490.65 | 1,249 | 1,200.82 | 0.79 | -0.18 | 0.06 |
| 48.33 | -21.77 | -1.05 | 0.00 | -53.17 | 0.00 | 53.17 | 2,003.41 | 473.25 | 1,162 | 1,116.68 | 0.92 | -0.20 | 0.03 |
| 50.00 | -21.07 | -1.04 | 0.00 | -51.43 | 0.00 | 51.43 | 1,966.57 | 464.54 | 1,120 | 1,075.76 | 0.99 | -0.21 | 0.03 |
| 52.50 | -20.56 | -1.03 | 0.00 | -48.84 | 0.00 | 48.84 | 1,293.31 | 322.59 | 771 | 704.07 | 1.10 | -0.22 | 0.04 |
| 55.00 | -19.56 | -1.01 | 0.00 | -46.26 | 0.00 | 46.26 | 1,268.09 | 313.45 | 728 | 670.62 | 1.22 | -0.22 | 0.04 |
| 60.00 | -19.16 | -1.01 | 0.00 | -41.19 | 0.00 | 41.19 | 1,215.65 | 295.17 | 646 | 605.07 | 1.46 | -0.24 | 0.04 |
| 62.00 | -18.58 | -1.00 | 0.00 | -39.17 | 0.00 | 39.17 | 1,193.93 | 287.85 | 614 | 579.41 | 1.57 | -0.25 | 0.04 |
| 62.00 | -18.58 | -1.00 | 0.00 | -39.17 | 0.00 | 39.17 | 1,193.93 | 287.85 | 614 | 579.41 | 1.57 | -0.25 | 0.04 |
| 65.00 | -17.61 | -0.98 | 0.00 | -36.17 | 0.00 | 36.17 | 1,160.55 | 276.89 | 568 | 541.55 | 1.73 | -0.26 | 0.04 |
| 70.00 | -16.65 | -0.95 | 0.00 | -31.29 | 0.00 | 31.29 | 1,094.76 | 258.60 | 496 | 476.80 | 2.02 | -0.29 | 0.03 |
| 75.00 | -16.27 | -0.94 | 0.00 | -26.54 | 0.00 | 26.54 | 1,017.37 | 240.32 | 428 | 411.45 | 2.33 | -0.31 | 0.03 |
| 77.00 | -13.83 | -0.86 | 0.00 | -24.65 | 0.00 | 24.65 | 986.41 | 233.01 | 402 | 386.66 | 2.46 | -0.31 | 0.03 |
| 80.00 | -13.46 | -0.84 | 0.00 | -22.08 | 0.00 | 22.08 | 939.98 | 222.04 | 365 | 350.92 | 2.66 | -0.33 | 0.03 |
| 82.00 | -12.93 | -0.82 | 0.00 | -20.39 | 0.00 | 20.39 | 909.02 | 214.73 | 342 | 328.05 | 2.80 | -0.34 | 0.03 |
| 82.00 | -12.93 | -0.82 | 0.00 | -20.39 | 0.00 | 20.39 | 780.36 | 184.34 | 294 | 282.62 | 2.80 | -0.34 | 0.00 |
| 85.00 | -12.01 | -0.79 | 0.00 | -17.92 | 0.00 | 17.92 | 740.57 | 174.94 | 265 | 254.39 | 3.01 | -0.35 | 0.03 |
| 90.00 | -11.98 | -0.79 | 0.00 | -13.99 | 0.00 | 13.99 | 674.25 | 159.27 | 219 | 210.64 | 3.39 | -0.37 | 0.03 |

| | | | | | | CALCULATE | D FORCES | | | | | | |
|----------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|----------------------------------|---------------------|---------------------|---------------------|---------------------|--------------------------|-------------------|-------|
| Seg Elev | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (fr-kips) | Mu Mx (ft-kips) | Resultant Moment (ft-kips) | Phi Pn (kips) | Phi Vn (kips) | Phi Tn (kips) | Phi Mn (kips) | Total Deflect (in) | Rotation (deg) | Ratio |
| 90.13 | -11.38 | -0.76 | 0.00 | -13.89 | 0.00 | 13.89 | 672.53 | 158.86 | 218 | 209.56 | 3.40 | -0.37 | 0.03 |
| 90.13 | -11.38 | -0.76 | 0.00 | -13.89 | 0.00 | 13.89 | 672.53 | 158.86 | 218 | 209.56 | 3.40 | -0.37 | 0.01 |
| 95.00 | -11.21 | -0.75 | 0.00 | -10.20 | 0.00 | 10.20 | 607.93 | 143.61 | 178 | 171.01 | 3.79 | -0.39 | 0.01 |
| 96.90 | -11.08 | -0.74 | 0.00 | -8.77 | 0.00 | 8.77 | 582.73 | 137.65 | 164 | 157.04 | 3.94 | -0.39 | 0.01 |
| 97.00 | -7.53 | -0.55 | 0.00 | -8.70 | 0.00 | 8.70 | 581.40 | 137.34 | 163 | 156.32 | 3.95 | -0.39 | 0.01 |
| 99.00 | -7.48 | -0.54 | 0.00 | -7.61 | 0.00 | 7.61 | 554.88 | 131.07 | 149 | 142.28 | 4.12 | -0.39 | 0.01 |
| 99.00 | -7.48 | -0.54 | 0.00 | -7.61 | 0.00 | 7.61 | 725.83 | 171.46 | 191 | 181.64 | 4.12 | -0.39 | 0.00 |
| 100.00 | -7.23 | -0.53 | 0.00 | -7.06 | 0.00 | 7.06 | 725.83 | 171.46 | 191 | 181.64 | 4.20 | -0.39 | 0.05 |
| 105.00 | -7.15 | -0.53 | 0.00 | -4.41 | 0.00 | 4.41 | 725.83 | 171.46 | 191 | 181.64 | 4.63 | -0.44 | 0.03 |
| 107.00 | -4.37 | -0.34 | 0.00 | -3.35 | 0.00 | 3.35 | 725.83 | 171.46 | 191 | 181.64 | 4.82 | -0.45 | 0.02 |
| 110.00 | -4.18 | -0.33 | 0.00 | -2.32 | 0.00 | 2.32 | 725.83 | 171.46 | 191 | 181.64 | 5.11 | -0.46 | 0.02 |
| 115.00 | -3.94 | -0.31 | 0.00 | -0.66 | 0.00 | 0.66 | 725.83 | 171.46 | 191 | 181.64 | 5.60 | -0.47 | 0.01 |
| 117.00 | -0.21 | -0.02 | 0.00 | -0.03 | 0.00 | 0.03 | 725.83 | 171.46 | 191 | 181.64 | 5.80 | -0.47 | 0.00 |
| 119.00 | 0.00 | -0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 725.83 | 171.46 | 191 | 181.64 | 6.00 | -0.47 | 0.00 |

| | | | | | ANALYSIS SU | MMARY | | | | | | |
|--------------|-------------|------------------------|------------------------------------|-------------------|-----------------------|-----------------|-------------|-------------|-------------|---------------|----------------|-------------|
| | | | | | Base Rea | actions | | | | | Max | Usage |
| Lood Co | | | Shear FX | Shear FZ | Axial FY | Moment MX | Momen M\ | / MZ | _ | | Elev | Interaction |
| Load Ca | se | | (kips) | (kips) | (kips) | (ft-kips) | (ft-kips |) (ft-kips) | | | (ft) | Ratio |
| 1.2D + 1 | .0W | | 19.30 | 0.00 | 40.10 | 0.00 | 0.00 | 1918.22 | | | 45.00 | 0.9 |
| 0.9D + 1 | .0W | | 19.27 | 0.00 | 30.06 | 0.00 | 0.00 | 1868.96 | | | 45.00 | 0.87 |
| 1.2D + 1 | .0Di + 1.0V | Vi | 4.83 | 0.00 | 50.77 | 0.00 | 0.00 | 477.06 | | | 45.00 | 0.24 |
| 1.2D + 1 | .0Ev + 1.0E | Ēh | 1.09 | 0.00 | 40.63 | 0.00 | 0.00 | 106.60 | | | 45.00 | 0.06 |
| 0.9D - 1. | 0Ev + 1.0E | h | 1.05 | 0.00 | 27.95 | 0.00 | 0.00 | 103.12 | | | 45.00 | 0.06 |
| 1.0D + 1 | .0W | | 4.64 | 0.00 | 33.45 | 0.00 | 0.00 | 455.69 | | | 45.00 | 0.22 |
| | | | | ADD | ITIONAL STEE | L SUMMARY | | | | | | |
| Elev | Elev | | Intermediate Connectors Max Member | | | | | | | | | |
| From (ft) | To (ft) | Member | | VQ/I Sh (k/in) | ear Applied (kips) | phiVn (kips) | | Ratio | Pu (kip) | ţ | ohiPn (kip) | Ratio |
| 45.00 | 62.00 | PL PL 6" x 1" | | 526.4 | 6.3 | 25.3 | | 0.25 | 274.6 | 2 | 285.4 | 0.9620 |
| 62.00 | 82.00 | PL PL 6" x 1" | | 663.0 | 8.0 | 25.3 | | 0.3148 | 265.0 | 2 | 285.4 | 0.9283 |
| 82.00 | 90.13 | PL PL 6" x 1" | | 813.6 | 9.8 | 25.3 | | 0.3864 | 212.3 | 2 | 285.4 | 0.7439 |
| 90.13 | 99.00 | SOL #20 All Thread Bar | | 546.2 | 13.1 | 16.8 | | 0.7799 | 118.8 | 3 | 338.6 | 0.3509 |
| Elev | Elev | | | Upp | er Termination | Connectors | | | Lower 7 | Fermination C | Connectors | |
| From | To | | M | Q/I phiVn | Number | Number | | MQ/I | phiVn | Number | Number | |
| (ft) | (ft) | Member | (ki | ps) (kips) | Required | Actual | Ratio | (kips) | · (kip) | Required | Actual | Ratio |
| 45.00 | 62.00 | PL PL 6" x 1" | 260.56 | 609 25.27 | 11 | 99 | 0.1042 | 235.8226 | 25.27 | 10 | 12 | 0.7777 |
| 52.00 | 82.00 | PL PL 6" x 1" | 208.92 | 229 25.27 | 9 | 10 | 0.8268 | 260.5609 | 25.27 | 11 | 99 | 0.1042 |
| 82.00 | 90.13 | PL PL 6" x 1" | 183.34 | 185 25.27 | 8 | 8 | 0.9069 | 220.1234 | 25.27 | 9 | 99 | 0.0880 |

12

0.5074

115.7111

12

10

12

0.8035

90.13

99.00

SOL #20 All Thread Bar

73.0652

12

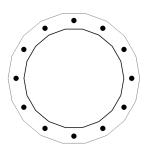
283420, STONEYBROOK RD CT ASSET:

CODE: ANSI/TIA-222-H CUSTOMER: AT&T MOBILITY 13682835 PROJECT:

BASE PLATE ANALYSIS @ 0 FT

| | APPLIED REACTIONS | |
|---------------|-------------------|-----------|
| Moment (k-ft) | Axial (k) | Shear (k) |
| 1918.22 | 40.1 | 19.3 |

| PLA | TE PARAMETERS (ID# 233 | 84) |
|---------------------|------------------------|-----|
| Width: | 55.15 | in |
| Shape: | 18 | |
| Thickness: | 2 | in |
| Grade: | A572-50 | |
| Yield Strength: | 50 | ksi |
| Tensile Strength: | 65 | ksi |
| Rod Detail Type: | d | |
| Clear Distance | 3.5 | in |
| Base Weld Size: | 0.125 | in |
| Orientation Offset: | - | o |
| Analysis Type: | Plastic | |
| Neutral Axis: | 15 | o |
| | | |



| | ANCHOR ROD PARAMETERS | | | | | | | | | |
|------------------------|-----------------------|----------|---------------|----------------|---------|-------------------------|-------------------------|--------------|---------------|--|
| Class | Arrangement | Quantity | Diameter (in) | Circle (in) | Grade | F _y (ksi) | F _u (ksi) | Spacing (in) | Offset (°) | |
| Original [ID#23998] | Radial | 12 | 2.25 | 49.15 | A615-75 | 75 | 100 | - | - | |

| | COMPONENT PROPERTIES | | | | | | | | | |
|------------|---------------------------|---------------------|-------------------|--|--------------------------------------|------------|--|--|--|--|
| Component | ID | Gross Area (in²) | Net Area (in²) | Individual Inertia (in ⁴) | Moment of Inertia (in ⁴) | Threads/in | | | | |
| Pole | 42"ø x 0.3125" (18 Sides) | 40.7191 | - | - | 8846.79 | - | | | | |
| Bolt Group | Original (12) 2.25"ø | 3.9761 | 3.2477 | 0.8393 | 10554.88 | 4.5 | | | | |

| REACTION DISTRIBUTION | | | | | | | | | |
|-----------------------|---------------------------|--|----------------------------------|-----------------------------|---------------|--|--|--|--|
| Component | ID | $\begin{array}{c} \text{Moment} \\ \text{M}_{\text{u}} \text{ (k-ft)} \end{array}$ | Axial Load P _u (k) | Shear V _u (k) | Moment Factor | | | | |
| Pole | 42"ø x 0.3125" (18 Sides) | 1918.2 | 40.10 | 19.30 | 1.000 | | | | |
| Bolt Group | Original (12) 2.25"ø | 1918.2 | - | 19.30 | 1.000 | | | | |

BASE PLATE BEND LINE ANALYSIS @ 0 FT

| POLE PROPERTIES | POLE PROPERTIES PLATE PROPERTIES | | | | | | | | | | |
|--------------------------|----------------------------------|----|------------------------|---------|----------------------|-----|---|--------------------------------|---------------|-------------------------------|--|
| Flat-to-Flat Diameter: | 42.12 | in | Flat V | Vidth: | 7.428 | in | ı | Neutral Axis: | 15 | o | |
| Point-to-Point Diameter: | 42.78 | in | Flat R | adians: | 0.349 | rad | I | Bend Line Limits: | 1.219 to 2.44 | 6 rad | |
| Orientation Offset: | - | 0 | | | | | | | | | |
| Bend Line | Chord Le (in) | 0 | Additional Length (in) | Sect | ion Modulus (in³) | | Applied Moment M _u (k-in) | Moment C ΦM _n (k | | Flexure Result $M_u/\Phi M_n$ | |
| Flats | 31.40 | 00 | 0.00 | | 31.400 | | 457.4 | 1413 | .0 | 32.4% | |
| Corners | 30.50 | 08 | 0.00 | | 30.508 | | 351.8 | 1372 | .9 | 25.6% | |
| Circumferential | 41.0 | 15 | 0.00 | | 41.015 | | 609.4 | 1845 | .7 | 33.0% | |

| | PLASTIC ANCHOR ROD ANALYSIS | | | | | | | | | | |
|----------|-----------------------------|----------------------------------|-------|------------------------------|-------------------------------------|--------------------|--|--|--|--|--|
| Class | Group Quantity | Group Quantity Rod Diameter (in) | | Applied Shear Load V_u (k) | Compressive Capacity ΦP_n (k) | Interaction Result | | | | | |
| Original | 12 | 2.25 | 134.7 | 2.4 | 243.6 | 57.3% | | | | | |

ASSET: 283420, STONEYBROOK RD CT

Moment (k-ft)

CUSTOMER: AT&T MOBILITY PROJECT: 13682835

UPPER FLANGE PLATE ANALYSIS @ 99 FT

APPLIED REACTIONS Axial (k)

9.28 10.44

PLATE PARAMETERS (ID# 23385)

| Width: | 18 | in |
|---------------------|---------|-----|
| Shape: | Round | |
| Thickness: | 1.25 | in |
| Grade: | A572-50 | |
| Yield Strength: | 50 | ksi |
| Tensile Strength: | 65 | ksi |
| Base Weld Size: | 0.125 | in |
| Orientation Offset: | - | 0 |
| Analysis Type: | Plastic | |
| Neutral Axis: | 23 | 0 |

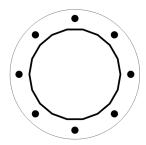


PLATE PROPERTIES

CODE:

ANSI/TIA-222-H

Shear (k)

| | FLANGE BOLT PARAMETERS | | | | | | | | | |
|------------------------|------------------------|----------|---------------|----------------|-------|-------------------------|-------------------------|--------------|---------------|--|
| Class | Arrangement | Quantity | Diameter (in) | Circle (in) | Grade | F _y (ksi) | F _u (ksi) | Spacing (in) | Offset (°) | |
| Original [ID#23997] | Radial | 8 | 1 | 15.5 | A490 | 130 | 150 | - | - | |

| | COMPONENT PROPERTIES | | | | | | | | | |
|------------|------------------------------|---------------------|-------------------|--|--------------------------------------|------------|--|--|--|--|
| Component | ID | Gross Area (in²) | Net Area (in²) | Individual Inertia (in ⁴) | Moment of Inertia (in ⁴) | Threads/in | | | | |
| Pole | 12.5625"ø x 0.25" (18 Sides) | 9.6212 | - | - | 182.52 | - | | | | |
| Bolt Group | Original (8) 1"ø | 0.7854 | 0.6057 | 0.0292 | 123.24 | 8.0 | | | | |

| | REACTION DISTRIBUTION | | | | | | | | | |
|------------|------------------------------|---------------------------------|----------------------------------|-----------------------------|---------------|--|--|--|--|--|
| Component | ID | Moment M _u (k-ft) | Axial Load P _u (k) | Shear V _u (k) | Moment Factor | | | | | |
| Pole | 12.5625"ø x 0.25" (18 Sides) | 156.2 | 9.28 | 10.44 | 1.000 | | | | | |
| Bolt Group | Original (8) 1"ø | 156.2 | - | 10.44 | 1.000 | | | | | |

UPPER FLANGE PLATE BEND LINE ANALYSIS @ 99 FT

Flat-to-Flat Diameter: 12.69 in Flat Width: 2.237 in Neutral Axis: 23 ° Point-to-Point Diameter: 12.88 in Flat Radians: 0.349 rad Bend Line Limits: 1.024 to 2.903 rad

Orientation Offset: - 0

POLE PROPERTIES

| Bend Line | Chord Length (in) | Additional Length (in) | Section Modulus (in³) | Applied Moment M_u (k-in) | Moment Capacity ΦM_n (k-in) | Flexure Result M _u /ΦM _n |
|-----------------|-------------------|------------------------|-----------------------|-----------------------------|-----------------------------------|---|
| Flats | 11.427 | 0.00 | 4.464 | 29.5 | 200.9 | 14.7% |
| Corners | 11.206 | 0.00 | 4.377 | 17.4 | 197.0 | 8.8% |
| Circumferential | 18.429 | 0.00 | 7.199 | 84.5 | 324.0 | 26.1% |

PLASTIC FLANGE BOLT ANALYSIS

| Class | Group Quantity | Bolt Diameter (in) | Applied Axial Load P_u (k) | Applied Shear Load V_u (k) | Compressive Capacity $\Phi P_n(k)$ | Interaction Result |
|----------|----------------|--------------------|------------------------------|------------------------------|------------------------------------|--------------------|
| Original | 8 | 1 | 52.6 | 1.9 | 68.1 | 81.2% |

ASSET: CUSTOMER: AT&T MOBILITY

1,313.05

PIER FOUNDATION ANALYSIS

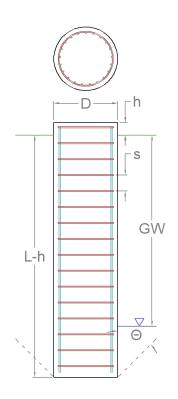
| | GLOBAL REACTIONS | |
|---------------|------------------|-----------|
| Moment (k-ft) | Axial (k) | Shear (k) |
| 1,918.22 | 40.10 | 19.30 |

| FOUNDATION PARAMETERS | | | | |
|--------------------------------|-----|------------------|----------------|--|
| Pier Diameter: | D | 6.50 | ft | |
| Pier Embedment Depth: | L-h | 31.0 | ft | |
| Pier Height above Grade: | h | 0.50 | ft | |
| Concrete Compressive Strength: | | 4,000 | psi | |
| Vertical Rebar: | | (24) #9 bars [60 |) ksi] | |
| Tie Rebar: | s | #4 bars @ 12.0 | " c/c [60 ksi] | |
| Rebar Clear Cover: | | 3.00 | in | |
| | | | | |

| Pier Embedment Depth: | L-h | 31.0 | ft | |
|--------------------------------|----------|------------------------|-----------------|---------------|
| Pier Height above Grade: | h | 0.50 | ft | |
| Concrete Compressive Strength: | | 4,000 | psi | |
| Vertical Rebar: | | (24) #9 bars [60 ksi] | | |
| Tie Rebar: | s | #4 bars @ 12.0" c/c [6 | 60 ksi] | |
| Rebar Clear Cover: | | 3.00 | in | |
| | | | | |
| | SOIL PAR | AMETERS | | |
| Water Table Depth [BGL]: | GW | 7 | ft | |
| | | | I Iltimata Ckin | Liltimata Not |

| Layer | Depth (ft) | Unit Weight | Cohesion | Friction Angle | Ultimate Skin Friction | Ultimate Net Bearing |
|-------|------------|-------------|----------|----------------|---------------------------|-------------------------|
| Top | Bottom | pcf | psf | ۰ | psf | psf |
| 0 | 4 | 105 | 0 | 0 | 0 | 0 |
| 4 | 7 | 123 | 0 | 32 | 691 | 0 |
| 7 | 10 | 127 | 0 | 37 | 1,051 | 0 |
| 10 | 15 | 122 | 0 | 34 | 1,258 | 0 |
| 15 | 20 | 121 | 0 | 33 | 1,420 | 0 |
| 20 | 25 | 118 | 0 | 32 | 1,544 | 0 |
| 25 | 30 | 114 | 0 | 30 | 1,149 | 0 |
| 30 | 35 | 127 | 0 | 34 | 1,706 | 39,570 |

79.04



5.3%

ANSI/TIA-222-H

13682835

CODE:

PROJECT:

| | \$ | SOIL STRENGTH ANALYS | SIS | |
|--|---|------------------------------|---|---|
| Volume of Concrete (ft³) | Buoyant Weight of C (k) | Concrete Ski | n Friction Resistance (k) | Inflection Point [BGL] (ft) |
| 1,045.27 | 107.10 | | 689.94 | 20.34 |
| | | SOIL MOMENT ANALYSIS | | |
| Fotal Lateral Resistance (k) | $\begin{array}{c} \text{Moment at Inflection Point, M}_{\text{u}} \\ \text{(k-ft)} \end{array}$ | Additional Resistance (k-ft) | Nominal Moment Capacity, ΦM_n (k-ft) | Soil Moment Usage, $\mathrm{M_u}/\mathrm{\Phi M_n}$ |
| 2,110.19 | 2,320.36 | 0.00 | 10,023.97 | 23.1% |
| | s | SOIL COMPRESSION ANALY | SIS | |
| Compressive Bearing Resistance (k) | Compressive Force, P _u (k) | Additional Resistance (k) | Nominal Compressive Capacity, ΦP _n (k) | Soil Compressive Usage, $P_u / \Phi P_n$ |

0.00

1,502.25

| | REINFO | RCING STEEL S | TRENGTH AN | IALYSIS | | |
|---|-----------------------------------|---------------------------------------|--------------|---|--|---------|
| Rebar Cage Diameter (in) | Steel Elastic Modulus, E (ksi) | Strength Bendi Reduction F | | Strength Shear Reduction Factor, Φ_v | Strength Compression Rec Factor, Φ_c | duction |
| 69.872 | 29,000 | 0.9 |) | 0.75 | 0.65 | |
| | PIEI | R REINFORCING M | MOMENT ANALY | /SIS | | |
| Design Moment, M _u (k-ft) | Nominal Moment Ca (k-ft) | pacity, Φ _b M _n | Bending F | Reinforcement Ratio | Pier Rebar Flexure Usage, $M_{\text{u}}/\Phi_{\text{b}}M_{\text{n}}$ | |
| 1,929.20 | 3,695.06 | i | | 0.01 | 52.2% | (|
| | PIER R | EINFORCING COM | IPRESSION AN | ALYSIS | | |
| Buoyant Weight of Concrete (k) | Design Compre (k) | ssion, P _u | Nominal Com | pressive Capacity, $\Phi_p P_n$ | Pier Rebar Compressive Usage $P_u / \Phi_p P_n$ | ∋, |
| 107.10 | 79.04 | | | 9,154.51 | 0.9% | (|
| | PIE | R REINFORCING | SHEAR ANALY | SIS | | |
| Design Shear, V ₍ (k) | 1 | Nominal Shear (k) | | | Pier Rebar Shear Usage, $V_u / \Phi_v V_n$ | |
| 147.62 | | 548. | .82 | | 26.9% | (|

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Flange Plate & Bolt Analysis at 82'

| Pole Dimensions | | | | | |
|--------------------|---------|----|--|--|--|
| Number of Sides | 18 | - | | | |
| Diameter | 17.8375 | in | | | |
| Thickness | 3/16 | in | | | |
| Base Weld Size | 3/16 | in | | | |
| Orientation Offset | | • | | | |

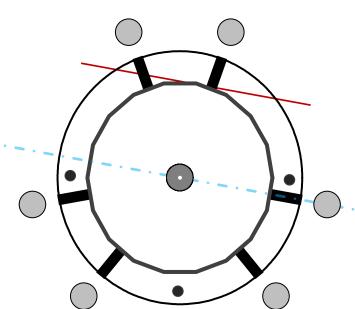
| Applied Reactions | | | | |
|-------------------|---------|------|--|--|
| Moment, Mu | 134.2 | k-ft | | |
| Axial, Pu | 17.3 | k | | |
| Shear, Vu | 15.3 | k | | |
| Analysis Type | Elastic | | | |
| Neutral Axis | 350 | 0 | | |

| Report Capacities | | | | |
|-------------------|----------|--------|--|--|
| Component | Capacity | Result | | |
| Flange Plate | 71% | Pass | | |
| Bolts | 16% | Pass | | |
| Dwyidag | - | - | | |

| Flange Plate | | | | | |
|----------------------|-------|-------|--|--|--|
| Shape | Round | - | | | |
| Diameter, ø | 24.2 | in | | | |
| Thickness | 1 1/2 | in | | | |
| Grade | A57 | 2-50 | | | |
| Yield Strength, Fy | 50 | ksi | | | |
| Tensile Strength, Fu | 65 | ksi | | | |
| Clip | N/A | in | | | |
| Orientation Offset | | o | | | |
| Anchor Rod Detail | d | η=0.5 | | | |
| Clear Distance | 3 | in | | | |
| Applied Moment, Mu | 317.3 | k | | | |
| Bending Stress, φMn | 449.9 | k | | | |

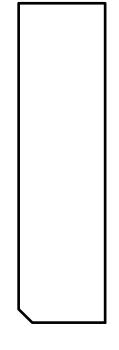
| Original Bolts | | | | |
|----------------------|-----------|-----|--|--|
| Arrangement | Cluster - | | | |
| Quantity | 3 | - | | |
| Diameter, ø | 1 | in | | |
| Bolt Circle | 21.7 | in | | |
| Grade | A325 | | | |
| Yield Strength, Fy | 92 | ksi | | |
| Tensile Strength, Fu | 120 | ksi | | |
| Spacing | 6.0 | in | | |
| Orientation Offset | 40 | 0 | | |
| Applied Force, Pu | 0.6 | k | | |
| Anchor Rods, φPn | 54.5 | k | | |

| Stiffeners | | | | |
|------------------------|---------|------|--|--|
| Arrangement | Radial | - | | |
| Quantity | 6 | - | | |
| Height | 12 | in | | |
| Width | 3.181 | in | | |
| Effective Width | 3.181 | in | | |
| Thickness | 1 | in | | |
| Effective Thickness | 1.000 | in | | |
| Notch | 0.5 | in | | |
| Flat Edge | 3.181 | in | | |
| Grade | A572-65 | - | | |
| Yield Strength, Fy | 65 | ksi | | |
| Tensile Strength, Fu | 80 | ksi | | |
| Horizontal Weld | Fillet | | | |
| Horizontal Fillet Size | 5/16 | in | | |
| Bevel Depth | in | | | |
| Vertical Weld | Fil | llet | | |
| Vertical Fillet Size | 5/16 | in | | |
| Weld Strength | 80 | ksi | | |
| Electrode Coefficient | 1.03 | - | | |
| Orientation Offset | | 0 | | |
| Vertical Weld, φRn | 156.2 | k | | |
| Horz. Weld, φRn | 51.6 | k | | |
| Ten. Capacity, φTn | 144.8 | k | | |
| Comp. Capacity, фРп | 973.6 | k | | |



| Additional Bolts | | | |
|----------------------|---------|-----|--|
| Quantity | 6 | - | |
| Diameter, ø | 2 1/2 | in | |
| Bolt Circle | 29.5875 | in | |
| Grade | A572-65 | | |
| Yield Strength, Fy | 65 | ksi | |
| Tensile Strength, Fu | 80 | ksi | |
| Bypass Plate? | No | | |
| Orientation Offset | | 0 | |
| Applied Force, Pu | 36.6 | k | |
| Additional Rod, φPn | 239.9 | k | |

| Stiffeners | | | |
|------------------------|---------|------|--|
| Arrangement | Radial | - | |
| Quantity | 6 | - | |
| Height | 12 | in | |
| Width | 3.181 | in | |
| Effective Width | 3.181 | in | |
| Thickness | 1 | in | |
| Effective Thickness | 1.000 | in | |
| Notch | 0.5 | in | |
| Flat Edge | 3.181 | in | |
| Grade | A572-65 | - | |
| Yield Strength, Fy | 65 | ksi | |
| Tensile Strength, Fu | 80 | ksi | |
| Horizontal Weld | Fi | llet | |
| Horizontal Fillet Size | 5/16 | in | |
| Bevel Depth | | in | |
| Vertical Weld | Fi | llet | |
| Vertical Fillet Size | 5/16 | in | |
| Weld Strength | 80 | ksi | |
| Electrode Coefficient | 1.03 | - | |
| Orientation Offset | | o | |
| Vertical Weld, φRn | 156.2 | k | |
| Horz. Weld, φRn | 51.6 | k | |
| Ten. Capacity, φTn | 144.8 | k | |
| Comp. Capacity, фРп | 973.6 | k | |



| Individual Capacity Summary | | | | |
|-----------------------------|-----|------|--|--|
| Component Capacity - | | | | |
| Flange Plate | 71% | Pass | | |
| Bolts | 7% | Pass | | |
| Plastic Rod Group | - | - | | |
| Dwyidag | - | - | | |
| Bolt Group 1 | 16% | Pass | | |
| Bolt Group 2 | - | - | | |
| Stiffener Weld (V) | 23% | Pass | | |
| Stiffener Weld (H) | 70% | Pass | | |
| Stiffener Tension | 9% | Pass | | |
| Stiffener Comp. | 2% | Pass | | |

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

| Reaction | Shear Vu | Moment Mu | Factor |
|-------------------------------|-------------|--------------|--------|
| - | k | k-ft | - |
| Base Forces | 15.3 | 134.2 | 1.00 |
| Anchor Rod Forces | 2.3 | 3.2 | 0.02 |
| Additional Bolt (Grp1) Forces | 13.0 | 131.0 | 0.98 |
| Additional Bolt (Grp2) Forces | 0.0 | 0.0 | 0.00 |
| Dywidag Forces | 0.0 | 0.0 | 0.00 |
| Stiffener Forces | 10.2 | 89.6 | 0.67 |

Geometric Properties

| Section | Gross Area | Net Area | Individual Inertia | Threads per Inch | Moment of Inertia |
|-----------|-----------------|-----------------|-----------------------|---------------------|----------------------|
| - | in ² | in ² | in ⁴ | # | in ⁴ |
| Pole | 10.3440 | 0.5747 | 0.0068 | | 402.92 |
| Bolt | 0.7854 | 0.6057 | 0.0292 | 8 | 64.96 |
| Bolt1 | 4.9087 | 3.9988 | 1.2725 | 4 | 2633.13 |
| Bolt2 | 0.0000 | 0.0000 | 0.0000 | 0 | 0.00 |
| Dywidag | 0.0000 | 0.0000 | 0.0000 | | 0.00 |
| Stiffener | 2.6810 | 2.4129 | 10.7293 | | 808.32 |

| Base Plate | | |
|----------------------|--------|-----|
| Shape | Round | - |
| Diameter, D | 24.2 | in |
| Thickness, t | 1.5 | in |
| Yield Strength, Fy | 50 | ksi |
| Tensile Strength, Fu | 65 | ksi |
| Base Plate Chord | 16.354 | in |
| Detail Type | d | - |
| Detail Factor | 0.50 | - |
| Clear Distance | 3 | - |

| Anchor Rods | | |
|---------------------------|------|-----|
| Anchor Rod Quantity, N | 3 | - |
| Rod Diameter, d | 1 | in |
| Bolt Circle, BC | 21.7 | in |
| Yield Strength, Fy | 92 | ksi |
| Tensile Strength, Fu | 120 | ksi |
| Applied Axial, Pu | 0.6 | k |
| Applied Shear, Vu | 1.8 | k |
| Compressive Capacity, φPn | 54.5 | k |
| Axial Result | 1.1% | Ok |
| Interaction Result | 7.3% | Ok |
| | | |

| Applied Horizontal Force, Vu | 0.48 | |
|--------------------------------------|-------|--|
| Vertical Weld | | |
| Vertto-Stiffener a=e _x /I | 0.088 | |
| Spacing Ratio, k | 0.083 | |
| Weld Coefficient, C | 3.371 | |
| Compressive Capacity, φPn | 156.2 | |
| Vertto-Plate a=e _x /l | 0.333 | |
| Spacing Ratio k | 0.083 | |

 $\begin{tabular}{lll} Weld Coefficient, C & 2.940 & - \\ Shear Capacity, $\varphi V n$ & 136.3 & k \\ & P_u/\varphi_P P_n + V_u/\varphi_V V_n & 22.8\% & OK \\ \end{tabular}$

Base Plate Stiffeners

Applied Axial Force, Pu 35.1

Applied Tensile Force, Tu 27.3

| External Base Pla | ate | |
|-----------------------|--------|-----------------|
| Chord Length AA | 14.725 | in |
| Additional AA | 4.852 | in |
| Section Modulus, Z | 11.012 | in ³ |
| Applied Moment, Mu | 326.9 | k-in |
| Bending Capacity, φMn | 495.5 | k-in |
| Capacity, Mu/фМn | 66.0% | ОК |
| Chord Length AB | 14.378 | in |
| Additional AB | 3.396 | in |
| Section Modulus, Z | 9.998 | in ³ |
| Applied Moment, Mu | 317.3 | k-in |
| Bending Capacity, φMn | 449.9 | k-in |
| Capacity, Mu/фМп | 70.5% | ОК |
| Bend Line Length | 0.000 | in |
| Additional Bend Line | #N/A | in |
| Section Modulus, Z | #N/A | in^3 |
| Applied Moment, Mu | 346.7 | k-in |
| Bending Capacity, φMn | #N/A | k-in |
| Capacity, Mu/фМп | | |

| Additional Bolt Group 1 | | | |
|---------------------------|---------|-----|--|
| Bolt Quantity, N | 6 | - | |
| Bolt Diameter, d | 2.5 | in | |
| Bolt Circle, BC | 29.5875 | in | |
| Yield Strength, Fy | 65 | ksi | |
| Tensile Strength, Fu | 80 | ksi | |
| Applied Axial, Pu | 36.6 | k | |
| Applied Shear, Vu | 0.6 | k | |
| Compressive Capacity, φPn | 239.9 | k | |
| Axial Result | 15.3% | ОК | |
| Interaction Result | 15.7% | ОК | |
| | | | |

| Horizontal Weld | | | | |
|--------------------------------------|-------|----|--|--|
| Horzto-Stiffener a=e _x /l | 0.167 | - | | |
| Spacing Ratio, k | 0.314 | - | | |
| Weld Coefficient, C | 4.200 | - | | |
| Effective Fillet | 0.313 | in | | |
| Compressive Capacity, φPn | 51.6 | k | | |
| Horzto-Pole a=e _x /I | 0.629 | - | | |
| Spacing Ratio, k | 0.314 | - | | |
| Weld Coefficient, C | 2.070 | - | | |
| Shear Capacity, φVn | 25.4 | k | | |
| $P_u/\phi_P P_n + V_u/\phi_V V_n$ | 69.9% | ОК | | |
| | | | | |

| Gross Cross Section | 2.681 | in² |
|--------------------------|-------|-----------------|
| Net Cross Section | 2.413 | in ² |
| Tensile Capacity, φTn | 144.8 | k |
| Capacity, Tu/φTn | 9.4% | ОК |
| | | |
| Plate Compression | | |
| Radius of Gyration | 0.289 | in ³ |

Plate Tension

| Radius of Gyration | 0.289 | in ³ |
|----------------------------|-------|-----------------|
| kl/r | 24.94 | - |
| 4.71 √(E/Fy) | 99.49 | - |
| Buckling Stress(Fe) | 460.1 | - |
| Crit. Buckling Stress(Fcr) | 403.5 | ksi |
| Compressive Capacity, фРп | 973.6 | k |
| Capacity, Pu/фРn | 1.8% | ОК |



This report was prepared for American Tower Corporation by



Antenna Mount Analysis Report

ATC Site Name : Stoneybrook Rd CT

ATC Asset Number : 283420

Engineering Number : 13682835_C8_05

Mount Elevation : 118.75 ft

Carrier : AT&T Mobility

Carrier Site Name : MRCTB051448

Carrier Site Number : CTL02381

Site Location : 23 Stonybrook Road

Stratford, CT 06614-3715

41.203278, -73.148625

County : Fairfield

Date : April 8, 2022

Max Usage : 95%

Result : Contingent Pass*

*See conclusion for requirements

Prepared By: Reviewed By:

Rohit Yadav David Chickering, P.E.

Telamon Tower Engineering, PLLC

Telamon Tower Engineering, PLLC



David Chickering Telamon Tower Engineering PLLC PE # 35683 Exp. 01/31/2023

Table of Contents

| Introduction | 2 |
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| Equipment Layout Plan View | 5 |
| Equipment Layout Front Elevation View | 6 |
| Standard Conditions | 7 |
| Calculations | Attached |

Introduction

The proposed equipment is to be mounted to the proposed Site Pro 1 RMQP-12-H5 Platform w/ Site Pro 1 HRK12-HD Support Rail Kit.. This proposed mounting configuration was analyzed using RISA-3D, a commercially available finite element analysis software package. A selection of input and output from our analysis is attached to the end of this report.

Supporting Documents

| Site Photos dated June 10, 2020 Spec Sheet for Site Pro 1, DWG. #RMQP-12-H5, dated November 01, 2017 Spec Sheet for Site Pro 1, DWG. #HRK12-HD, dated March 31, 2015 Site Pro 1 Part #SQCX4-K, dated November 12, 2018 Site Pro 1 Part #DCP12K, dated January 22, 2013 | |
|--|---|
| Previous Analyses | Structural Analysis by CLS Engineering for American Tower Corporation, Eng. #13712876_C3_04, dated October 19, 2021 Mount Analysis by CLS Engineering for American Tower Corporation, Eng. #13361423_C8_01, dated May 21, 2021 |
| Loading Data ATC Application, Project #13682835, dated January 07, 2022 AT&T RFDS, Site ID #4397242, Version 4.00, dated November 15, 2021 | |

Analysis

| Codes | TIA-222-H |
|-------------------------------|---|
| Basic Wind Speed | 119 mph, V _{ult} (3-Second Gust) |
| Basic Wind Speed w/ Ice | 50 mph (3-Second Gust) w/ 1" Radial Ice (Escalating) |
| Exposure Category | В |
| Topographic Factor Procedure: | Method 2 |
| Feature: | Flat |
| Crest Height (H): | 0 ft |
| Crest Length (L): | 0 ft |
| Risk Category | II |
| Maintenance Live Load | L _M : 500 lb |
| Spectral Response | S _s : 0.21; S ₁ : 0.05; Site Class: D |

Conclusion

Based on the analysis, the antenna mount meets the requirements per the applicable codes listed above. The mounting configuration considered in this analysis will be capable of supporting the referenced loading pursuant to referenced standards once the following scope is executed:

AT&T CONMAT does not have parts which connect HSS tube to pipe. Hence proposing additional parts not listed in conmat for mounting equipment on standoff.

- Replace existing T-Arms with (1) proposed Site Pro 1 RMQP-12-H5 (ANT.46132) Platform w/ HRK12-HD (ANT.51651) Support Rail Kit. Do not install work support platform below proposed platform mount.
- Install Site Pro 1 HRK12-HD (ANT.51651) Support Rail kit at 3'-6" above the existing platform horizontal pipe. Connect to all mount pipes using Site Pro 1 SCX2 crossover plate kits included in the Support Rail kit (12 total).
- Install (1) proposed 6 ft long pipe 2 STD, A53 Gr. B standoff mount pipe at each sector (3 total) as shown. Connect to existing standoff member using Site Pro 1 SQCX4-K crossover plate kits (3 total).
- Install proposed antennas such that they are vertically centered on platform base.
- All mount pipes are to be installed as shown in following sketches.
- Install (2) proposed secondary mount pipe 10 ft. long Pipe 2STD, A53 Gr. B at each sector for proposed panel configuration (6 total). Connect to primary mount pipe at position 2 and 4 using (1) Site Pro 1 DCP12K threaded rod kit (6 total).

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.

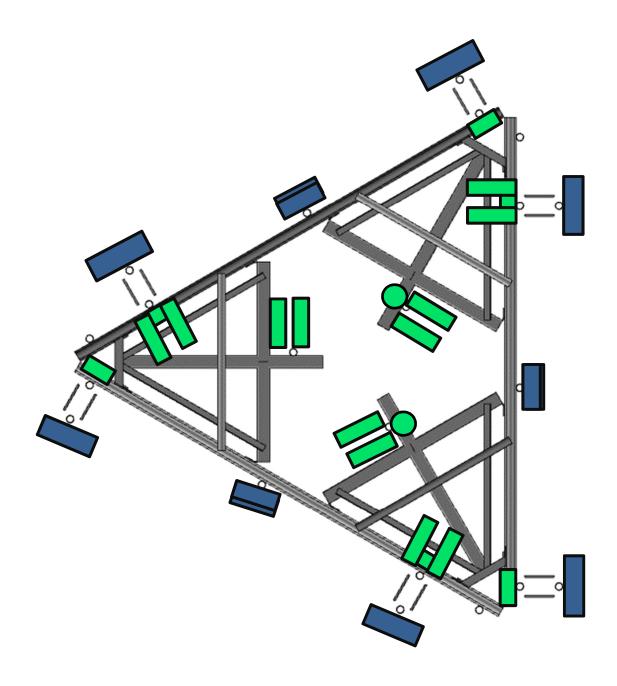
Antenna Loading

| Elevation (ft) | | Antennas | | |
|----------------|-------|------------------------|----------------------------|--|
| Mount | Rad. | # | Name | |
| 119.0 | 3 | Ericsson AIR 6449 B77D | | |
| | 3 | Quintel QD6616-7 | | |
| | | 3 | CCI DMP65R-BU6DA | |
| 118.8 117.0 | | 2 | Raycap DC9-48-60-24-8C-EV | |
| | 3 | Ericsson RRUS 32 B2 | | |
| | 3 | Ericsson RRUS 32 B30 | | |
| | 3 | Ericsson RRUS E2 B29 | | |
| | | 3 | Ericsson RRUS 4449 B5, B12 | |
| | | 3 | Ericsson RRUS 4478 B14 | |
| | | 3 | Ericsson RRUS 4426 B66 | |
| | | 1 | Commscope WCS-IMFQ-AMT | |
| | 115.0 | 3 | Ericsson AIR 6419 B77G | |

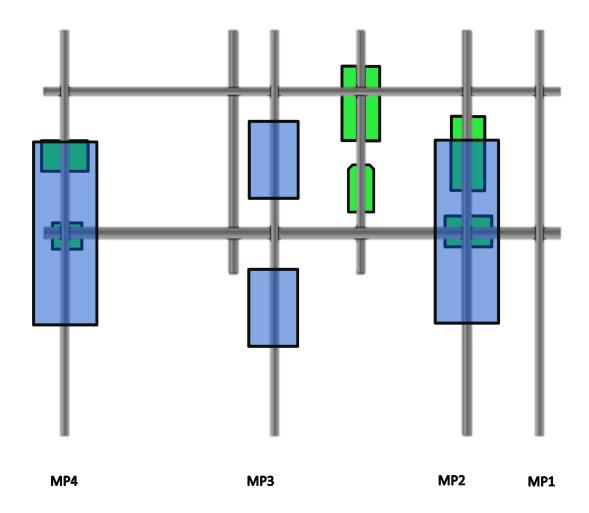
Structure Usages

| Structural Component | Controlling Usage | Pass/Fail |
|----------------------------------|-------------------|-----------|
| Corner Plates | 95% | Pass |
| Mount To Tower Plate Connections | 84% | Pass |
| Mount Pipes | 83% | Pass |
| Stand-Off Horizontals | 83% | Pass |
| Threaded Rods | 57% | Pass |
| Support Rail | 55% | Pass |
| Platform Base | 32% | Pass |

Equipment Layout Plan View



Equipment Layout Front Elevation View



| Total # | Equipment | Mount Pipe Position |
|---------|----------------------------|---------------------|
| 3 | Ericsson AIR 6449 B77D | P3 (Stacked) |
| 3 | Cci Antennas DMP65R-BU6DA | P4 |
| 3 | Quintel QD6616-7 | P2 |
| 2 | Raycap DC9-48-60-24-8C-EV | Standoff Pipe |
| 3 | Ericsson RRUS 4449 B5, B12 | Standoff Pipe |
| 3 | Ericsson RRUS E2 B29 | P2 |
| 3 | Ericsson RRUS 4426 B66 | P2 |
| 3 | Ericsson RRUS 32 B30 | P4 |
| 3 | Ericsson RRUS 32 B2 | P2 |
| 3 | Ericsson RRUS 4478 B14 | Standoff Pipe |
| 1 | Commscope WCS-IMFQ-AMT | P4 |
| 3 | Ericsson AIR 6419 B77G | P3 (Stacked) |

Standard Conditions

This analysis is inclusive of the antenna supporting frames/mounts and all recorded connections that will support the equipment listed in this report. It considers only the theoretical capacity of structural components and it is not a condition assessment. The validity of the analysis may be dependent on the accuracy of structural information supplied by others. The client is responsible for verifying this information. If any provided information is revised after completion of this analysis, Telamon Tower Engineering, PLLC should be notified immediately to revise results.

This analysis assumes the following:

- The tower or other superstructure and mounts (if existing) were properly constructed as per the original design and 1. have been properly maintained in accordance with applicable code standards.
- 2. Member sizes and strengths are accurate as supplied or are assumed as stated in the calculations.
- 3. In the absence of sufficient design information, all welds and connections are assumed to develop at least the capacity of the connected member, unless otherwise stated in this analysis.
- 4. All prior structural modifications, if any, are assumed to be correctly installed and fully effective.
- 5. The loading configuration is complete and accurate as supplied and/or as modeled in the previous analysis. All appurtenances are assumed to be properly installed and supported as per manufacturer requirements.
- 6. Some conservative assumptions may be used regarding appurtenances and their projected areas based on careful interpretation of data supplied, previous experience and standard industry practice.
- Installation of all equipment and steel should be confirmed not to cause tower conflicts nor impede the tower 7. climbing pegs.

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of the report. All opinions and conclusions contained herein are subject to revision based upon receipt of new or updated information. All services are provided exercising a level of care and diligence equivalent to the standard of our profession. No warranty or guarantee, either expressed or implied, is offered. All services are confidential in nature and this report will not be released to any other party without the client's consent. The use of this analysis is limited to the expressed purpose for which it was commissioned and it may not be reused, copied or disseminated for any other purpose without consent from Telamon Tower Engineering, PLLC.

All services were performed, results obtained and recommendations made in accordance with generally accepted engineering principles and practices. Telamon Tower Engineering, PLLC is not responsible for the conclusions, opinions or recommendations made by others based on the information supplied in this analysis.

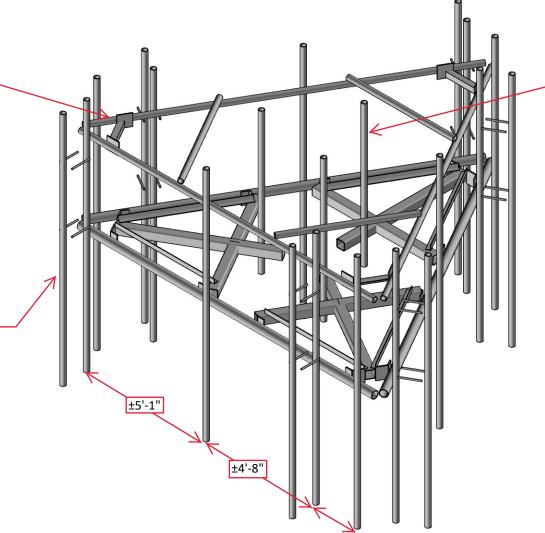
It is not possible to have the fully detailed information necessary to perform a complete and thorough analysis of every structural sub-component of an existing structure. The structural analysis by Telamon Tower Engineering, PLLC verifies the adequacy of the primary members of the structure. Telamon Tower Engineering, PLLC provides a limited scope of service in that we cannot verify the adequacy of every weld, bolt, gusset, etc.



Replace existing T-Arms with (1) proposed Site Pro 1 RMQP-12-H5 (ANT.46132) Platform w/ HRK12-HD (ANT.51651) Support Rail Kit. Do not install work support platform below proposed platform mount.

Install Site Pro 1 HRK12-HD (ANT.51651) Support Rail kit at 3'-6" above the existing platform horizontal pipe. Connect to all mount pipes using Site Pro 1 SCX2 crossover plate kits included in the Support Rail kit (12 total).

Install (2) proposed secondary mount pipe 10 ft. long Pipe 2STD, A53 Gr. B at each sector for proposed panel configuration (3 total). Connect to primary mount pipe at position 2 and 4 using (1) Site Pro 1 DCP12K threaded rod kit (6 total).



Install (1) proposed 6 ft long pipe 2 STD, A53 Gr. B standoff mount pipe at each sector (3 total) as shown. Connect to existing standoff member using Site Pro 1 SQCX4-K crossover plate kits (3 total).

*Note: All mount pipes are to be installed as shown in following sketches.

| Telamon CLS | |
|----------------------------|--|
| RY | |
| 41124-13682835_C8_05-02-MA | |
| | |

41124-13682835 C8 05-Stoneybrook Rd CT

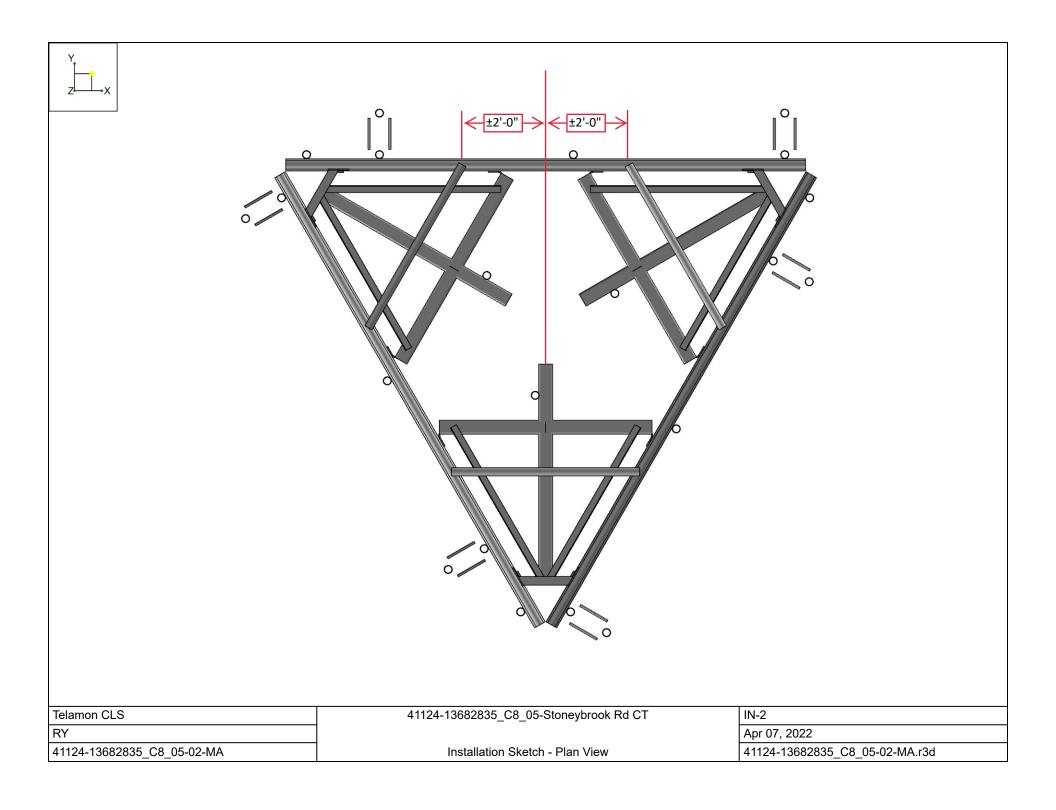
±1'-9"

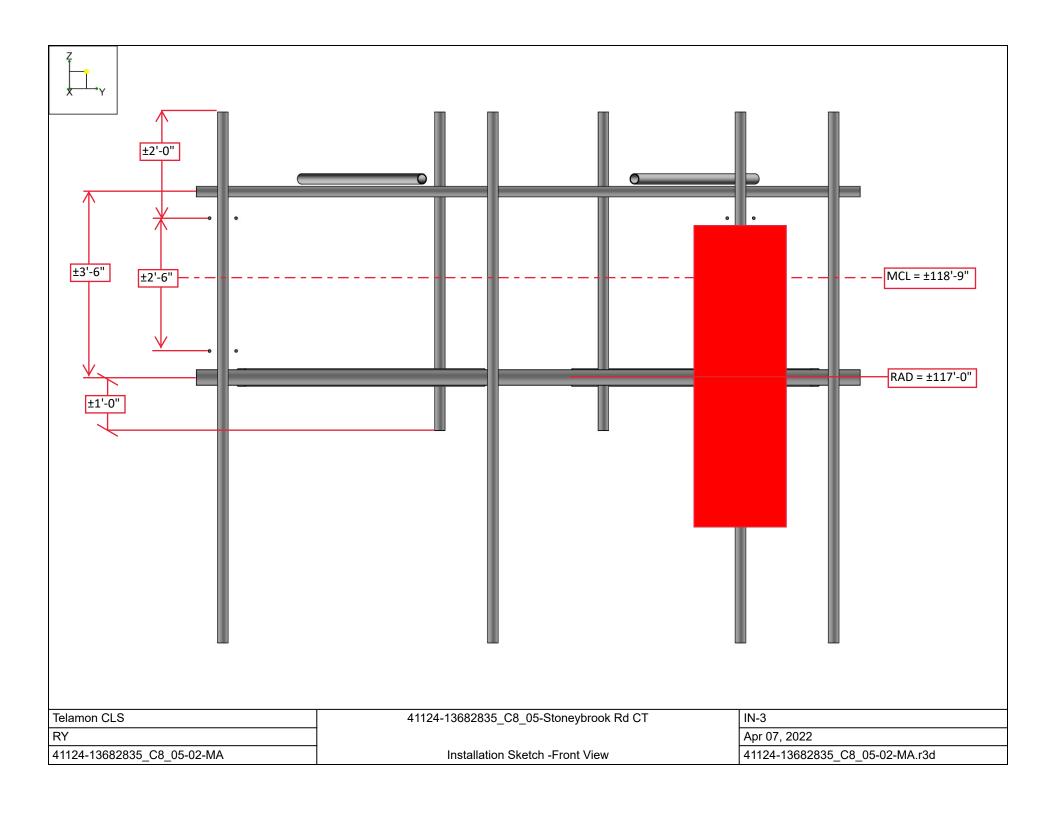
Installation Sketch - Iso View

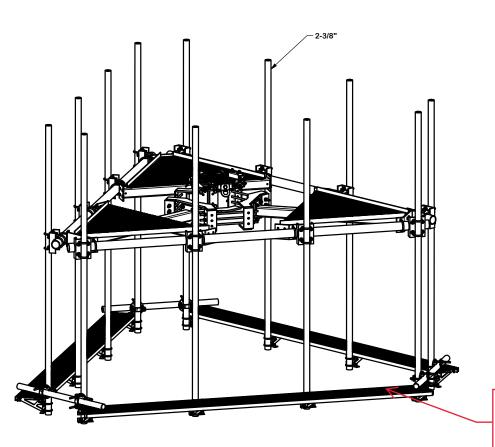
| IN-1 |
|------|
|------|

Apr 07, 2022

41124-13682835 C8 05-02-MA.r3d







| PARTS LIST | | | | | | | |
|---|--|-----|----------|---|----------|--------|--------|
| 1 3 X-SV196 LOW PROFILE PLATFORM CORNER 212.10 636.31 2 3 X-LWRM RING MOUNT WELDMENT 68.81 206.42 3 12 X-SP219 SMALL SUPPORT CROSS PLATE 8 1/4 in 8.61 103.33 4 12 X-WWSB WALKWAY SUPPORT BRACKET 6.73 80.75 5 6 X-127594 FLAT DISK CLAMP PLATE 4" CENTERS (GALV.) 2.51 15.04 6 12 X-100064 CLAMP (4" V-CLAMP) GALVANIZED 0.91 10.95 7 12 P2120 2-3/8" x 120" (2" SCH. 40) GALVANIZED PIPE 120 in 36.61 439.38 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 284.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 FLX BOLT 23/4 in < | | | | PARTS LIST | | | |
| 2 3 X-LWRM RING MOUNT WELDMENT 68.81 206.42 3 12 X-SP219 SMALL SUPPORT CROSS PLATE 8 1/4 in 8.61 103.33 4 12 X-WWSB WALKWAY SUPPORT BRACKET 6.73 80.75 5 6 X-127594 FLAT DISK CLAMP PLATE 4" CENTERS (GALV.) 2.51 15.04 6 12 X-100064 CLAMP (4" V-CLAMP) GALVANIZED 0 0.91 10.95 7 12 P2120 2-3/8" x 120" (2" SCH. 40) GALVANIZED PIPE 120 in 36.61 439.38 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 284.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 23/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 4-1/2" X 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 4-1/2" X 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" K 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" X 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 21 144 G12FW 1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 22 144 G12FW 1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.09 4.21 | | | | | LENGTH | | |
| 3 12 X-SP219 SMALL SUPPORT CROSS PLATE 8 1/4 in 8.61 103.33 4 12 X-WWSB WALKWAY SUPPORT BRACKET 6.73 80.75 5 6 X-127594 FLAT DISK CLAMP PLATE 4" CENTERS (GALV.) 2.51 15.04 6 12 X-100064 CLAMP (4" V-CLAMP) GALVANIZED 0.91 10.95 7 12 P2120 2-3/8" x 120" (2" SCH. 40) GALVANIZED PIPE 150 in 36.61 439.38 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 228.4.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-48 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 HEX NUT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG GA25 HEX | | | | LOW PROFILE PLATFORM CORNER | | 212.10 | |
| 4 12 X-WWSB WALKWAY SUPPORT BRACKET 6.73 80.75 5 6 X-127594 FLAT DISK CLAMP PLATE 4" CENTERS (GALV.) 2.51 15.04 6 12 X-100064 CLAMP (4" V-CLAMP) GALVANIZED DIPE 0.91 10.95 7 12 P2120 2-3/8" x 120" (2" SCH. 40) GALAVANIZED PIPE 120 in 36.61 439.38 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 284.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 23/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 FLATWASHER 0.03 0.78 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 22.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 61/2 in 0.41 4.91 20 144 G12FW 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 61/2 in 0.41 4.91 21 144 G12FW 1/2" HDG HEX BOLT GR5 FULL THREAD 61/2 in 0.41 4.91 22 144 G12FW 1/2" HDG HEX BOLT GR5 FULL THREAD 61/2 in 0.41 4.91 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 | 2 | 3 | X-LWRM | RING MOUNT WELDMENT | | 68.81 | 206.42 |
| 5 6 X-127594 FLAT DISK CLAMP PLATE 4" CENTERS (GALV.) 2.51 15.04 6 12 X-100064 CLAMP (4" V-CLAMP) GALVANIZED 0.91 10.95 7 12 P2120 2-3/8" x 120" (2" SCH. 40) GALVANIZED PIPE 120 in 36.61 439.38 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 284.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-48 5/8" x 24" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in | 3 | 12 | X-SP219 | SMALL SUPPORT CROSS PLATE | 8 1/4 in | 8.61 | 103.33 |
| 6 12 X-100064 CLAMP (4" V-CLAMP) GALVANIZED 0.91 10.95 7 12 P2120 2-3/8" x 120" (2" SCH. 40) GALVANIZED PIPE 120 in 36.61 439.38 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 284.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-48 5/8" x 48" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 FLATWASHER 0.03 0.78 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in <td< td=""><td>4</td><td>12</td><td>X-WWSB</td><td>WALKWAY SUPPORT BRACKET</td><td></td><td>6.73</td><td>80.75</td></td<> | 4 | 12 | X-WWSB | WALKWAY SUPPORT BRACKET | | 6.73 | 80.75 |
| 7 12 P2120 2-3/8" x 120" (2" SCH. 40) GALAVANIZED PIPE 120 in 36.61 439.38 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 284.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-48 5/8" x 24" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 HEX NUT 0.13 3.90 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) | 5 | 6 | X-127594 | FLAT DISK CLAMP PLATE 4" CENTERS (GALV.) | | 2.51 | 15.04 |
| 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 150 in 94.80 284.40 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-48 5/8" x 24" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 HEX BOLT 0.03 0.41 13 30 G58LW 5/8" HDG LOCKWASHER 0.03 0.78 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 | 6 | 12 | X-100064 | CLAMP (4" V-CLAMP) GALVANIZED | 0.91 | 10.95 | |
| 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 63 in 20.18 60.55 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-48 5/8" x 24" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG LOCKWASHER 0.03 0.78 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" X 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG HEX WIT 1/2" HDG HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 | 7 | 12 | P2120 | 2-3/8" x 120" (2" SCH. 40) GALAVANIZED PIPE | 120 in | 36.61 | 439.38 |
| 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 24 in 0.40 3.59 10 9 G58R-48 5/8" x 48" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 HEX NUT 0.13 3.90 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" X 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 <td>8</td> <td>3</td> <td>P3150</td> <td>3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE</td> <td>150 in</td> <td>94.80</td> <td>284.40</td> | 8 | 3 | P3150 | 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE | 150 in | 94.80 | 284.40 |
| 10 9 G58R-48 5/8" x 48" THREADED ROD (HDG.) 48 in 0.40 3.59 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 HEX NUT 0.13 3.90 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" X 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG HEX BOLT GR5 0.03 4.91 <td>9</td> <td>3</td> <td>P248</td> <td>2-3/8" X 63"SCH 40 GALVANIZED PIPE</td> <td>63 in</td> <td>20.18</td> <td>60.55</td> | 9 | 3 | P248 | 2-3/8" X 63"SCH 40 GALVANIZED PIPE | 63 in | 20.18 | 60.55 |
| 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 2 3/4 in 0.36 4.27 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 HEX NUT 0.13 3.90 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.63 15.00 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG HEX BOLT GR5 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG HEX WASHER 1/8 in 0.01 2. | 10 | 9 | G58R-24 | 5/8" x 24" THREADED ROD (HDG.) | 24 in | 0.40 | 3.59 |
| 12 12 A58FW 5/8" HDG A325 FLATWASHER 0.03 0.41 13 30 G58LW 5/8" HDG A325 FLATWASHER 0.03 0.78 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" X 4" HDG HEX BOLT GRS FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" X 6-1/2" HDG HEX BOLT GRS FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) <td< td=""><td>10</td><td>9</td><td>G58R-48</td><td>5/8" x 48" THREADED ROD (HDG.)</td><td>48 in</td><td>0.40</td><td>3.59</td></td<> | 10 | 9 | G58R-48 | 5/8" x 48" THREADED ROD (HDG.) | 48 in | 0.40 | 3.59 |
| 13 30 G58LW 5/8" HDG LOCKWASHER 0.03 0.78 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" X 4" HDG HEX BOLT GRS FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" X 6-1/2" HDG HEX BOLT GRS FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 <td>11</td> <td>12</td> <td>A58234</td> <td>5/8" x 2-3/4" HDG A325 HEX BOLT</td> <td>2 3/4 in</td> <td>0.36</td> <td>4.27</td> | 11 | 12 | A58234 | 5/8" x 2-3/4" HDG A325 HEX BOLT | 2 3/4 in | 0.36 | 4.27 |
| 14 30 A58NUT 5/8" HDG A325 HEX NUT 0.13 3.90 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4 | 12 | 12 | A58FW | 5/8" HDG A325 FLATWASHER | | 0.03 | 0.41 |
| 15 3 GRS12-12 12" WIDE GRIP STRUT 120 in 31.00 93.00 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 13 | 30 | G58LW | 5/8" HDG LOCKWASHER | | 0.03 | 0.78 |
| 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 0.83 29.82 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 14 | 30 | A58NUT | 5/8" HDG A325 HEX NUT | | 0.13 | 3.90 |
| 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 0.63 15.00 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 15 | 3 | GRS12-12 | 12" WIDE GRIP STRUT | 120 in | 31.00 | 93.00 |
| 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 4 in 0.27 3.24 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 16 | 36 | X-UB1306 | 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) | | 0.83 | 29.82 |
| 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 6 1/2 in 0.41 4.91 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 17 | 24 | X-UB1212 | 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) | | 0.63 | 15.00 |
| 20 144 G12FW 1/2" HDG USS FLATWASHER 3/32 in 0.03 4.91 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 18 | 12 | G1204 | 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD | 4 in | 0.27 | 3.24 |
| 21 144 G12LW 1/2" HDG LOCKWASHER 1/8 in 0.01 2.00 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 19 | 12 | G12065 | 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD | 6 1/2 in | 0.41 | 4.91 |
| 22 144 G12NUT 1/2" HDG HEAVY 2H HEX NUT 0.07 10.31 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 20 | 144 | G12FW | 1/2" HDG USS FLATWASHER | 3/32 in | 0.03 | 4.91 |
| 23 24 X-UB3212 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) 0.29 6.97 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 21 | 144 | G12LW | 1/2" HDG LOCKWASHER | 1/8 in | 0.01 | 2.00 |
| 24 48 G3802 3/8" x 2" HDG HEX BOLT GR5 0.09 4.21 | 22 | 144 | G12NUT | 1/2" HDG HEAVY 2H HEX NUT | | 0.07 | 10.31 |
| 27 12 20012 100 100 100 100 100 100 100 10 | 23 | 24 | X-UB3212 | 3/8" X 2-1/2" X 3-5/8" X 1-3/4" U-BOLT (HDG.) | | 0.29 | 6.97 |
| 25 48 SQW38 3/8" SQUARE WASHER 2 in 0.29 13.89 | 24 | 48 | G3802 | 3/8" x 2" HDG HEX BOLT GR5 | | 0.09 | 4.21 |
| | 25 | 48 | SQW38 | 3/8" SQUARE WASHER | 2 in | 0.29 | 13.89 |
| 26 96 G38FW 3/8" HDG USS FLATWASHER 0.01 1.13 | 26 | 96 | G38FW | 3/8" HDG USS FLATWASHER | | 0.01 | 1.13 |
| 27 96 G38LW 3/8" HDG LOCKWASHER 0.01 0.64 | 27 | 96 | G38LW | 3/8" HDG LOCKWASHER | | 0.01 | 0.64 |
| 28 96 G38NUT 3/8" HDG HEAVY 2H HEX NUT 0.03 3.25 | 28 | 96 | G38NUT | 3/8" HDG HEAVY 2H HEX NUT | | 0.03 | 3.25 |
| 29 1 HALO HALO 40.35 40.35 | 29 | 1 | HALO | HALO | | 40.35 | 40.35 |
| TOTAL WT. # 2136.59 | 8 3 P3150 3-1/2" X 150" (3" SCH 40) GALVANIZED PIPE 9 3 P248 2-3/8" X 63"SCH 40 GALVANIZED PIPE 10 9 G58R-24 5/8" x 24" THREADED ROD (HDG.) 10 9 G58R-48 5/8" x 24" THREADED ROD (HDG.) 11 12 A58234 5/8" x 2-3/4" HDG A325 HEX BOLT 12 12 A58FW 5/8" HDG A325 FLATWASHER 13 30 G58LW 5/8" HDG A325 HEX NUT 15 3 GRS12-12 12" WIDE GRIP STRUT 16 36 X-UB1306 1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.) 17 24 X-UB1212 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 18 12 G1204 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) 18 12 G1204 1/2" x 4" HDG HEX BOLT GR5 FULL THREAD 19 12 G12065 1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD 20 144 G12FW 1/2" HDG HEX BOLT GR5 FULL THREAD 21 144 G12LW 1/2" HDG HEX BOLT GR5 FULL THREAD 22 <td< td=""><td></td><td>TOTAL WT. #</td><td>2136.59</td></td<> | | | TOTAL WT. # | 2136.59 | | |

Do not install work support platform below proposed platform mount.

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030°) DRILLED AND GAS CUT HOLES (± 0.030°) - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010°) - NO CONING OF HOLES

BENDS ARE ± 1/2 DEGREE ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT
INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF
VALMONT INDUSTRIES IS STRUCTLY PROHIBITED.

DESCRIPTION

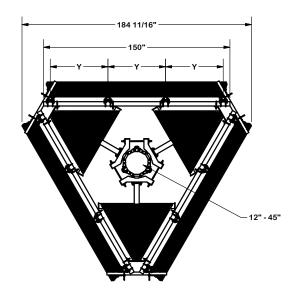
RMQP-12-H5

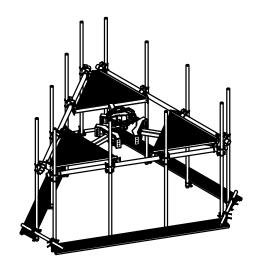


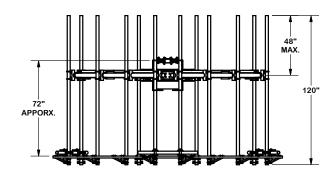
Engineering Support Team: 1-888-753-7446

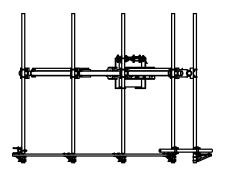
Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

| CPD N | ი | DRAWN BY | ENG. APPROVAL | PART NO. | |
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| CLASS | 306 | DRAWING GOAGE | CHECKED BT | DWG. NO. | ٦ ١ |
| | | OLIOTOMED | | DMOD 40 HE | ω |
| | | I CUSTOMER | | RMQP-12-H5 | |
| | | | | 71 | |
| | | | | | |

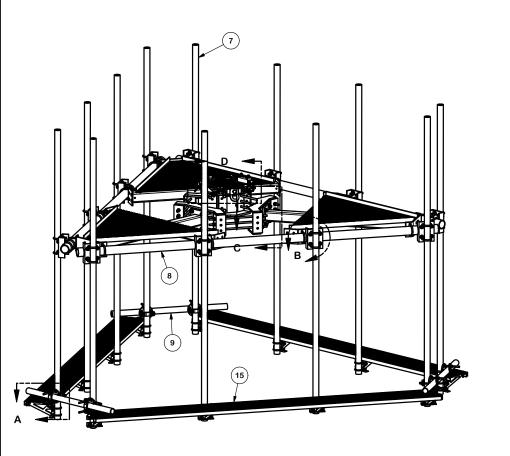


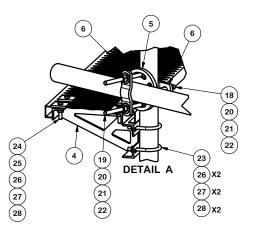


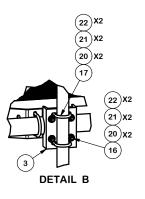


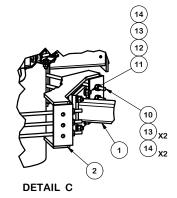


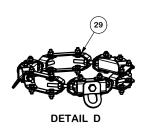
| TOLERANCE NOTES TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030") DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES BENDS ARE ± 1/2 DEGREE | DESCRIPTION RMQP-12-H5 | | | | SI. PR | Ont Y COMMAN | Engineering Support Team: 1-888-753-7446 | Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX | |
|--|------------------------|------------------------|---------------|-----|-----------|---------------------|--|---|-------------|
| ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060") | CPD NO. | DRAWN BY CEK 11/1/2017 | ENG. APPROVAL | PAR | T NO. | RMG | P-12-H5 | | PAG 2 OF |
| PROPRIETARY MOTE: THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRUCTLY POHISTIED. | CLASS SUB | DRAWING USAGE CUSTOMER | CHECKED BY | DWC | 3. NO. | RMC | P-12-H5 | | GE F3 |











| | то | LER | ANC | ENC | DTES |
|--|----|-----|-----|-----|------|
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TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (\$ 0.030") ORILLED AND GAS CUT HOLES (\$ 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (\$ 0.010") - NO CONING OF HOLES

BENDS ARE ± 1/2 DEGREE

ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

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VALMONT INDUSTRIES IS STRUCTLY PROHIBITED.

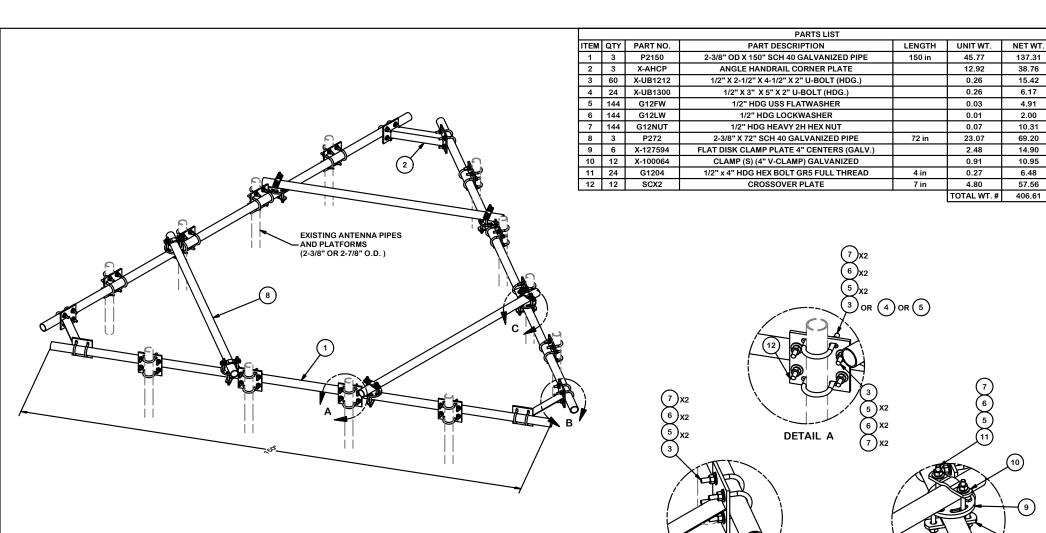
DESCRIPTION

RMQP-12-H5

Engineering Support Team: 1-888-753-7446

Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

| CPD NO. DRAWN BY ENG. APPROVAL PART NO. | | T |
|---|------------|-------|
| CEK 11/1/2017 | RMQP-12-H5 | 3 0 |
| CLASS SUB DRAWING USAGE CHECKED BY DWG. NO. | | ייין: |
| CUSTOMER | RMQP-12-H5 | 3 |



TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (\$ 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (\$ 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (\$ 0.010") - NO CONING OF HOLES

BENDS ARE ± 1/2 DEGREE

ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

| PROPRIETARY NOTE: |
|--|
| |
| THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT |
| |
| INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF |
| |
| VAL MONT INDIGEREE IS SERICTI V DROUIDITED |

DESCRIPTION

HEAY DUTY HANDRAIL KIT FOR 12' PLATFORMS WITH 2-3/8" OR 2-7/8" ANTENNA PIPES

DETAIL B



76511

Engineering Support Team: 1-888-753-7446

DETAIL C

Locations: New York, NY Atlanta, GA Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

(9)

137.31

38.76

15.42

6.17

4.91

2.00

10.31

69.20

14.90

10.95

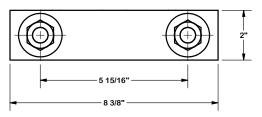
6.48

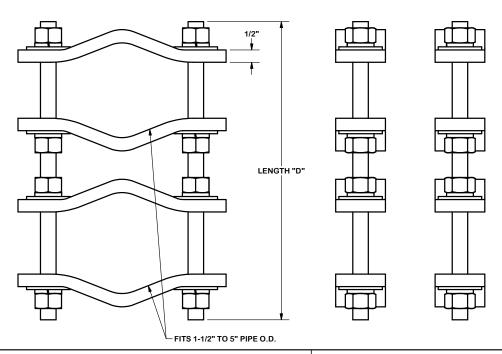
57.56

406.61

| , | | | | | | 1 - | |
|-------|------------------|------------|--------------------------|---------|-----------|----------|------|
| CPD N | CPD NO. DRAWN BY | | . DRAWN BY ENG. APPROVAL | | ROVAL | PART NO. | |
| | | CEK 3 | 3/31/2015 | | | HRK12-HD | 0 |
| CLASS | SUB | DRAWING US | SAGE | CHECKED | BY | DWG. NO. | ייין |
| 81 | 01 | CUST | OMER | вмс | 3/31/2015 | HRK12-HD | _ |
| | | | | | | | |

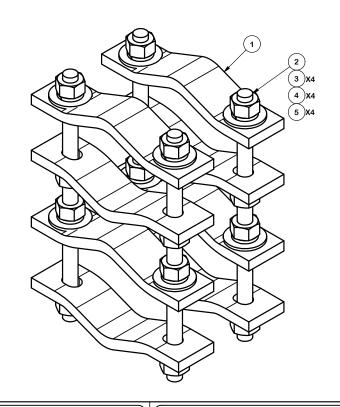






| | | | PARTS LIST | | | |
|-----------------------------------|------------------|----------------------------|---|---|--|--|
| TEM QTY PART NO. PART DESCRIPTION | | LENGTH | UNIT WT. | NET WT. | | |
| 1 | 8 | DCP | CLAMP HALF, 1/2" THICK, 8-3/8" | | 2.40 | 19.20 |
| 2 | В | С | 5/8" THREADED ROD | D | E | F |
| 3 | 16 | G58NUT | 5/8" HDG HEAVY 2H HEX NUT | | 0.13 | 2.08 |
| 4 | 16 | G58LW | 5/8" HDG LOCKWASHER | | 0.03 | 0.42 |
| 5 | 16 | G58FW | 5/8" HDG USS FLATWASHER | | 0.07 | 1.13 |
| | 1 2 3 4 | 1 8 2 B 3 16 4 16 | 1 8 DCP 2 B C 3 16 G58NUT 4 16 G58LW | TEM QTY PART NO. PART DESCRIPTION 1 8 DCP CLAMP HALF, 1/2" THICK, 8-3/8" 2 B C 5/8" THREADED ROD 3 16 G58NUT 5/8" HDG HEAVY 2H HEX NUT 4 16 G58LW 5/8" HDG LOCKWASHER | TEM QTY PART NO. PART DESCRIPTION LENGTH 1 8 DCP CLAMP HALF, 1/2" THICK, 8-3/8" 2 B C 5/8" THREADED ROD D 3 16 G58NUT 5/8" HDG HEAVY 2H HEX NUT 4 16 G58LW 5/8" HDG LOCKWASHER | TEM QTY PART NO. PART DESCRIPTION LENGTH UNIT WT. 1 8 DCP CLAMP HALF, 1/2" THICK, 8-3/8" 2.40 2 B C 5/8" THREADED ROD D E 3 16 G58NUT 5/8" HDG HEAVY 2H HEX NUT 0.13 4 16 G58LW 5/8" HDG LOCKWASHER 0.03 |

| VARIABLE PARTS TABLE | | | | | | | |
|----------------------|---------|----------|------------|--------------|-------------|--------------|--|
| ASSEMBLY "A" | QTY "B" | PART "C" | LENGTH "D" | UNIT WT. "E" | NET WT. "F" | TOTAL WEIGHT | |
| DCP12K | 4 | G58R-12 | 12" | 1.05 | 4.18 | 27.01 | |
| DCP18K | 4 | G58R-18 | 18" | 1.57 | 6.27 | 29.10 | |



TOLERANCE NOTES

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BENDS ARE ± 1/2 DEGREE

ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

PROPRIETARY NOTE:
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INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF
VALMONT INDUSTRIES IS STRUCTLY PROHIBITED.

DESCRIPTION

PIPE TO PIPE CLAMP SET 1-1/2" TO 5" PIPE 1/2" THICK CLAMP

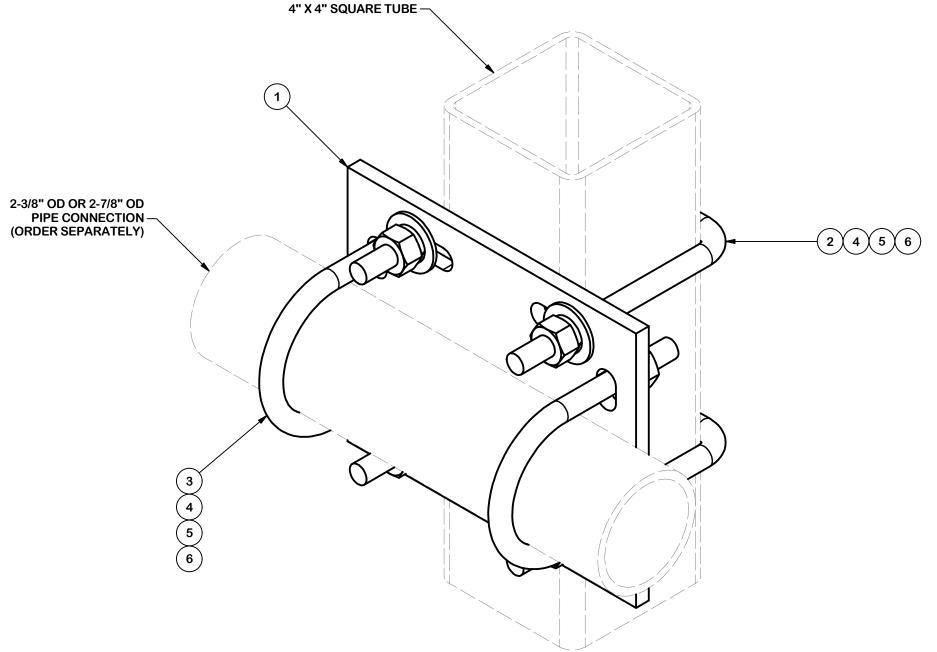


Engineering Support Team: 1-888-753-7446

Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

| CPD NO. | | DRAWN BY | ENG. APPROVAL | PART NO. | _ |
|---------|-----|---------------|---------------|------------------|----------|
| | | KC8 8/21/2012 | | SEE ASSEMBLY "A" | 0 3 |
| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. | Τ |
| 81 | 01 | CUSTOMER | CEK 1/22/2013 | DCPxxK | - |

| | | | PARTS LIST | | | |
|------|-----|-----------|---|----------|-------------|---------|
| ITEM | QTY | PART NO. | PART DESCRIPTION | LENGTH | UNIT WT. | NET WT. |
| 1 | 1 | SCX4 | CROSSOVER PLATE | 8 1/2 in | 6.02 | 6.02 |
| 2 | 2 | X-SUB1418 | SQUARE U-BOLT 0.5" DIA. X 4.125" IW X 6" IL X 3" TR | | 0.98 | 1.95 |
| 3 | 2 | X-UB1212 | 1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.) | | 0.60 | 1.19 |
| 3 | 2 | X-UB1300 | 1/2" X 3" X 5" X 2" U-BOLT (HDG.) | | 0.67 | 1.34 |
| 4 | 8 | G12FW | 1/2" HDG USS FLATWASHER | 3/32 in | 0.03 | 0.27 |
| 5 | 8 | G12LW | 1/2" HDG LOCKWASHER | 1/8 in | 0.01 | 0.11 |
| 6 | 8 | G12NUT | 1/2" HDG HEAVY 2H HEX NUT | | 0.07 | 0.57 |
| | | | | • | TOTAL WT. # | 11.35 |



TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES BENDS ARE ± 1/2 DEGREE

ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

PROPRIETARY NOTE:
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DESCRIPTION

CROSSOVER PLATE KIT W/ SQUARE U-BOLTS AND STD. U-BOLTS



Engineering Support Team: 1-888-753-7446 Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

| | | | | | <u> </u> |
|-------|-----|---------------|----------------|----------|----------|
| | | | | | |
| CPD N | 0. | DRAWN BY | ENG. APPROVAL | PART NO. | |
| | | CSL 9/18/2018 | 3RD PARTY | | SQCX4-K |
| CLASS | SUB | DRAWING USAGE | CHECKED BY | DWG. NO. | |
| 87 | 02 | CUSTOMER | BMC 11/12/2018 | | SQCX4-K |

| Wind & Ice Loading | | | | | | | |
|---|---------|-----------------------|----------|--|--|--|--|
| Nominal Mount Elevation (AGL), z _{mount} | 119 ft | Ka | 0.90 | | | | |
| Nominal Rad Elevation (AGL), z _{rad} | 117 ft | K _d | 0.95 | | | | |
| Elevation AMSL (ft) | 77 ft | K _e | 1.00 | | | | |
| TIA Standard | Н | K _z | 1.04 | | | | |
| Basic Wind Speed, V _{ult} (bare) | 119 mph | K _{zt} | 1.00 | | | | |
| Basic Wind Speed, V (ice) | 50 mph | Ks | 1.00 | | | | |
| Design Ice Thickness, t _i | 1 in | t _{iz} | 1.14 in | | | | |
| Exposure Category | В | G _h | 1.00 | | | | |
| Risk Category | II | q _z (bare) | 35.6 psf | | | | |
| Seismic Response Coeff., C _s | 0.11 | q _z (ice) | 6.3 psf | | | | |

| Live Loading | | | | | | | |
|--------------------------------|--------|--|--|--|--|--|--|
| At Mount Pipes, L _M | 500 lb | | | | | | |
| | 1_M1 | | | | | | |
| | 1_M2 | | | | | | |
| Joint Labels Considered | 1_M3 | | | | | | |
| | 1_M4 | | | | | | |
| | | | | | | | |

| Member Distributed Loading | | | | | | | | | | | |
|---|----------------|-------|---------|---------|--|--|--|--|--|--|--|
| Section Set Label | Shape Label | FA | Ice Wt. | | | | | | | | |
| 000000000000000000000000000000000000000 | Gilapo Zaso. | Bare | Ice | (lb/ft) | | | | | | | |
| Offset Tube | HSS4X4X4 | 21.39 | 1.57 | 8.65 | | | | | | | |
| Offset End Plate | 0.5 x 6 Plate | 32.08 | 4.70 | 7.32 | | | | | | | |
| Offset Side Plate | 0.38 X 6 Plate | 32.08 | 4.69 | 7.22 | | | | | | | |
| Grating Angle | L2x2x3 | 10.69 | 1.43 | 5.01 | | | | | | | |
| MOUNT_PIPE_2.0 | PIPE_2.0 | 7.62 | 2.63 | 4.88 | | | | | | | |
| Platform Horzontal Pipe | PIPE_3.0 | 11.23 | 3.27 | 6.44 | | | | | | | |
| MOD Support Rail | PIPE_2.0 | 7.62 | 2.63 | 4.88 | | | | | | | |
| MOD SR Conn Plate | PL6x0.375 | 32.08 | 4.69 | 7.21 | | | | | | | |
| MOD SR Conn Angle | L2.5x2.5x4 | 13.37 | 1.46 | 5.89 | | | | | | | |
| MOD SR Bracing | PIPE_2.0 | 7.62 | 2.63 | 4.88 | | | | | | | |
| MOD Threaded Rods | 5/8 SR | 2.01 | 1.64 | 2.45 | | | | | | | |
| | | | | | | | | | | | |

| | Appurtenances | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---------------|-------------------|------------------|-----------------|-------|--------|------|---------|------|------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|----------------|-------|--------|---|------|--|------|----------------------------|--------|--------------------|---------|
| Appurtenance | Status | Azimuth Offset | Rad Elev. | Swap Width & | Area | Factor | Qty. | per Azi | muth | Total | 0° | Joints | 110° | Joints | 240° | Joints | Height | Width | Depth | Depth Weight | Shape | | Veight EPA _A (Bare) (ft ² | | 2) EPA _A (Ice) (ft ²) | | F _A (Bare) (lb) | | F _A (Ic | e) (lb) |
| Model | Status | (°, ℃) | Override (ft) | Depth | Front | Side | 0° | 110° | 240° | Qty. Override | 1 | 2 | 1 | 2 | 1 | 2 | (in) | (in) | (in) | (Bare) (lb) | Snape | (lb) | N | T | N | Т | N | Т | N | Т |
| AIR 6449 B77D | | | 119 | | | | 1 | 1 | 1 | 3 | 1_A3T | 1_A3B | 2_A3T | 2_A3B | 3_A3T | 3_A3B | 30.4 | 15.9 | 10.6 | 81.6 | Flat | 76.05 | 4.03 | 2.72 | 4.95 | 3.51 | 129.31 | 87.38 | 28.04 | 19.89 |
| DMP65R-BU6DA | | | | | | | 1 | 1 | 1 | 3 | 1_A4T | 1_A4B | 2_A4T | 2_A4B | 3_A4T | 3_A4B | 71.2 | 20.7 | 7.7 | 89.3 | Flat | 177.48 | 12.71 | 5.62 | 14.43 | 7.18 | 406.03 | 179.39 | 81.37 | 40.52 |
| QD6616-7 | | | | | | | 1 | 1 | 1 | 3 | 1_A2T | 1_A2B | 2_A2T | 2_A2B | 3_A2T | 3_A2B | 72 | 22 | 9.6 | 130 | Flat | 200.58 | 13.58 | 6.80 | 15.33 | 8.37 | 433.77 | 217.24 | 86.48 | 47.20 |
| DC9-48-60-24-8C-EV | | | | | | | 1 | 1 | | 2 | RC1 | | RC2 | | | | 31.41 | 10.24 | 18.28 | 26.2 | Flat | 84.15 | 2.74 | 4.78 | 3.54 | 5.77 | 87.43 | 152.86 | 19.94 | 32.53 |
| RRUS 4449 B5, B12 | | | | V | | 0.5 | 1 | 1 | 1 | 3 | R1 | | R2 | | R3 | | 17.9 | 13.19 | 9.44 | 71 | Flat | 46.10 | 1.41 | 0.98 | 1.97 | 1.30 | 44.99 | 31.43 | 11.10 | 7.33 |
| RRUS E2 B29 | | | | | 0.5 | | 1 | 1 | 1 | 3 | 1_R2BN | | 2_R2BN | | 3_R2BN | | 20.4 | 18.5 | 7.5 | 60 | Flat | 52.71 | 1.57 | 1.29 | 1.96 | 1.85 | 50.24 | 41.06 | 11.06 | 10.41 |
| RRUS 4426 B66 | | | | V | 0.8 | 0.5 | 1 | 1 | 1 | 3 | 1_R2TT | | 2_R2TT | | 3_R2TT | | 14.96 | 13.19 | 5.8 | 48.4 | Flat | 29.10 | 0.58 | 0.82 | 0.93 | 1.11 | 18.53 | 26.27 | 5.23 | 6.26 |
| RRUS 32 B30 | | | | | 0.5 | | 1 | 1 | 1 | 3 | 1_R4TN | | 2_R4TN | | 3_R4TN | | 26.7 | 12.1 | 6.7 | 60 | Flat | 46.31 | 1.35 | 1.57 | 1.73 | 2.22 | 43.00 | 50.24 | 9.78 | 12.54 |
| RRUS 32 B2 | | | | V | 0.8 | 0.5 | 1 | 1 | 1 | 3 | 1_R2TT | | 2_R2TT | | 3_R2TT | | 27.2 | 12.05 | 7 | 52.9 | Flat | 47.80 | 1.33 | 1.37 | 1.87 | 1.76 | 42.63 | 43.63 | 10.53 | 9.92 |
| RRUS 4478 B14 | | | | V | | 0.5 | 1 | 1 | 1 | 3 | R1 | | R2 | | R3 | | 16.5 | 13.4 | 7.7 | 59.9 | Flat | 36.04 | 1.06 | 0.92 | 1.56 | 1.23 | 33.82 | 29.43 | 8.80 | 6.91 |
| WCS-IMFQ-AMT | | | | | 0 | | 1 | | | 1 | 1_T4BN | | | | | | 11.2 | 10.6 | 6.9 | 29.5 | Flat | 21.98 | 0.00 | 0.64 | 0.00 | 1.03 | 0.00 | 20.57 | 0.00 | 5.81 |
| AIR 6419 B77G | | | 115 | | | | 1 | 1 | 1 | 3 | 1_A5T | 1_A5B | 2_A5T | 2_A5B | 3_A5T | 3_A5B | 28.3 | 16.1 | 7.9 | 66.1 | Flat | 63.13 | 3.80 | 1.94 | 4.68 | 2.64 | 120.70 | 61.60 | 26.25 | 14.81 |

Standard Conditions

This analysis is inclusive of the antenna supporting frames/mounts and all recorded connections that will support the equipment listed in this report. It considers only the theoretical capacity of structural components and it is not a condition assessment. The validity of the analysis may be dependent on the accuracy of structural information supplied by others. The client is responsible for verifying this information. If any provided information is revised after completion of this analysis, Telamon Tower Engineering, PLLC should be notified immediately to revise results.

This analysis assumes the following:

- The tower or other superstructure and mounts (if existing) were properly constructed as per the original design and 1. have been properly maintained in accordance with applicable code standards.
- Member sizes and strengths are accurate as supplied or are assumed as stated in the calculations. 2.
- 3. In the absence of sufficient design information, all welds and connections are assumed to develop at least the capacity of the connected member, unless otherwise stated in this analysis.
- 4. All prior structural modifications, if any, are assumed to be correctly installed and fully effective.
- 5. The loading configuration is complete and accurate as supplied and/or as modeled in the previous analysis. All appurtenances are assumed to be properly installed and supported as per manufacturer requirements.
- 6. Some conservative assumptions may be used regarding appurtenances and their projected areas based on careful interpretation of data supplied, previous experience and standard industry practice.
- Installation of all equipment and steel should be confirmed not to cause tower conflicts nor impede the tower 7. climbing pegs.

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of the report. All opinions and conclusions contained herein are subject to revision based upon receipt of new or updated information. All services are provided exercising a level of care and diligence equivalent to the standard of our profession. No warranty or guarantee, either expressed or implied, is offered. All services are confidential in nature and this report will not be released to any other party without the client's consent. The use of this analysis is limited to the expressed purpose for which it was commissioned and it may not be reused, copied or disseminated for any other purpose without consent from Telamon Tower Engineering, PLLC.

All services were performed, results obtained and recommendations made in accordance with generally accepted engineering principles and practices. Telamon Tower Engineering, PLLC is not responsible for the conclusions, opinions or recommendations made by others based on the information supplied in this analysis.

It is not possible to have the fully detailed information necessary to perform a complete and thorough analysis of every structural sub-component of an existing structure. The structural analysis by Telamon Tower Engineering, PLLC verifies the adequacy of the primary members of the structure. Telamon Tower Engineering, PLLC provides a limited scope of service in that we cannot verify the adequacy of every weld, bolt, gusset, etc.



Address:

55 Stonybrook Rd Stratford, Connecticut 06614

ASCE 7 Hazards Report

Standard: ASCE/SEI 7-16

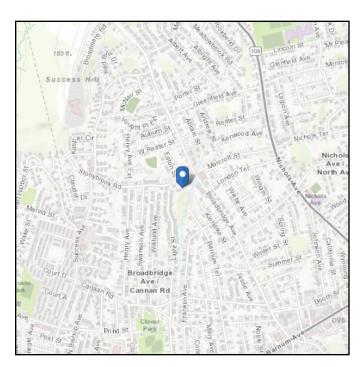
Risk Category: ||

Soil Class: D - Default (see

Section 11.4.3)

Elevation: 76.8 ft (NAVD 88)

Latitude: 41.203275 **Longitude:** -73.149012





Wind

Results:

Wind Speed 119 Vmph
10-year MRI 75 Vmph
25-year MRI 85 Vmph
50-year MRI 90 Vmph
100-year MRI 98 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed: Tue Jan 11 2022

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

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



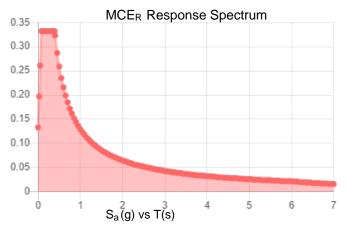
Seismic

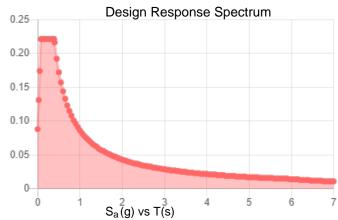
Site Soil Class: D - Default (see Section 11.4.3)

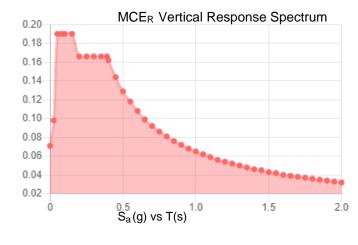
Results:

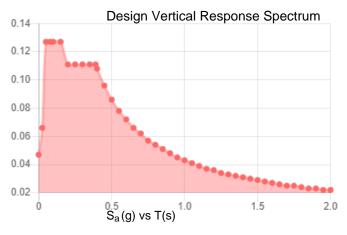
| S _s : | 0.207 | S _{D1} : | 0.086 |
|-------------------|-------|--------------------|-------|
| S ₁ : | 0.054 | T _L : | 6 |
| F _a : | 1.6 | PGA: | 0.118 |
| F _v : | 2.4 | PGA _M : | 0.184 |
| S _{MS} : | 0.332 | F _{PGA} : | 1.565 |
| S _{M1} : | 0.129 | l _e : | 1 |
| S _{DS} : | 0.221 | C _v : | 0.715 |

Seismic Design Category B









Data Accessed: Tue Jan 11 2022

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.



Ice

Results:

Ice Thickness: 1.00 in.

Concurrent Temperature: 15 F

Gust Speed 50 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

Date Accessed: Tue Jan 11 2022

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

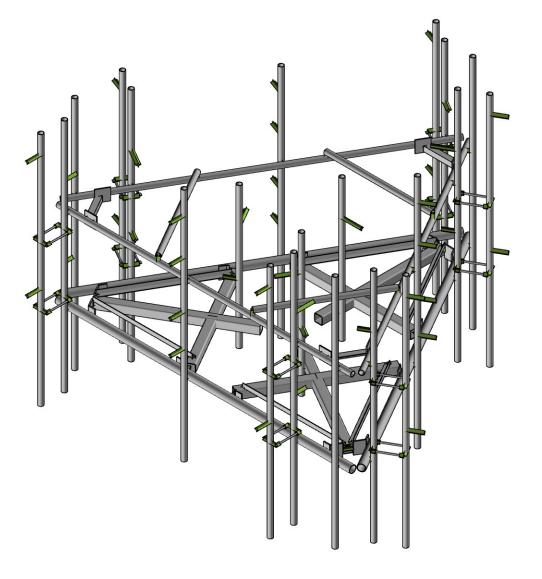
Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from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

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

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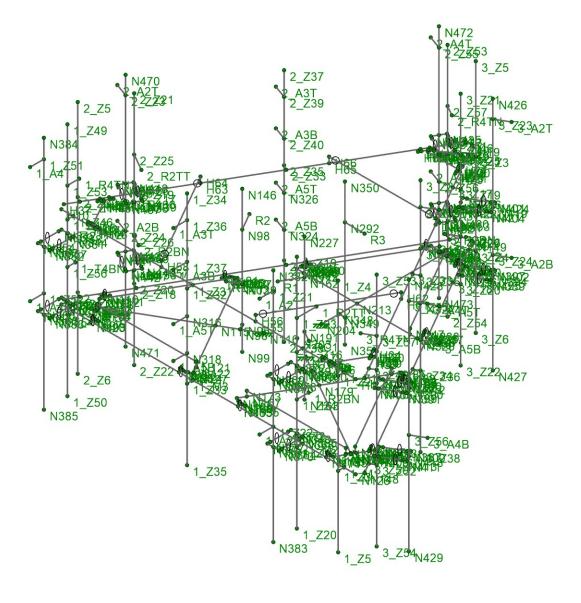
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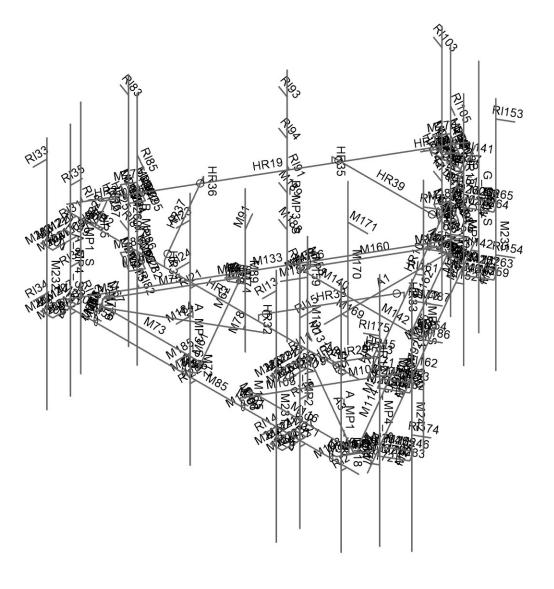
| Telamon CLS | 41124-13682835_C8_05-Stoneybrook Rd CT | SK-1 |
|----------------------------|--|--------------------------------|
| RY | | Apr 07, 2022 |
| 41124-13682835_C8_05-02-MA | Rendered | 41124-13682835_C8_05-02-MA.r3d |





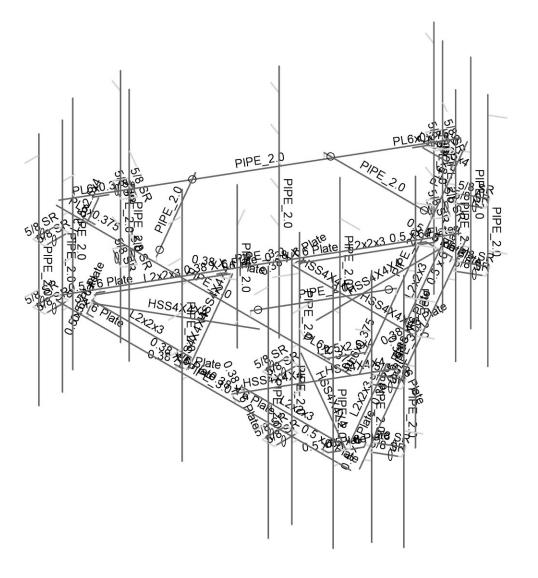
| Telamon CLS | 41124-13682835_C8_05-Stoneybrook Rd CT | SK-2 |
|----------------------------|--|--------------------------------|
| RY | | Apr 07, 2022 |
| 41124-13682835_C8_05-02-MA | Joint Labels | 41124-13682835_C8_05-02-MA.r3d |



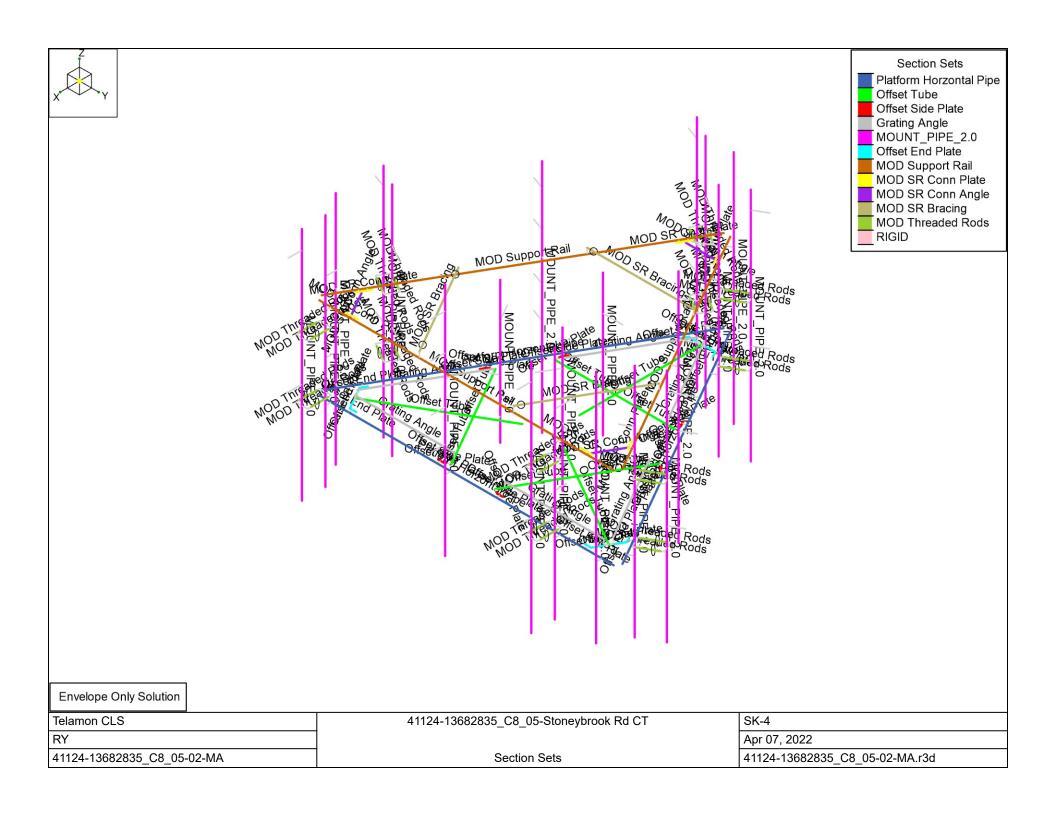


| Telamon CLS | 41124-13682835_C8_05-Stoneybrook Rd CT | SK-3 |
|----------------------------|--|--------------------------------|
| RY | | Apr 07, 2022 |
| 41124-13682835_C8_05-02-MA | Member Labels | 41124-13682835_C8_05-02-MA.r3d |

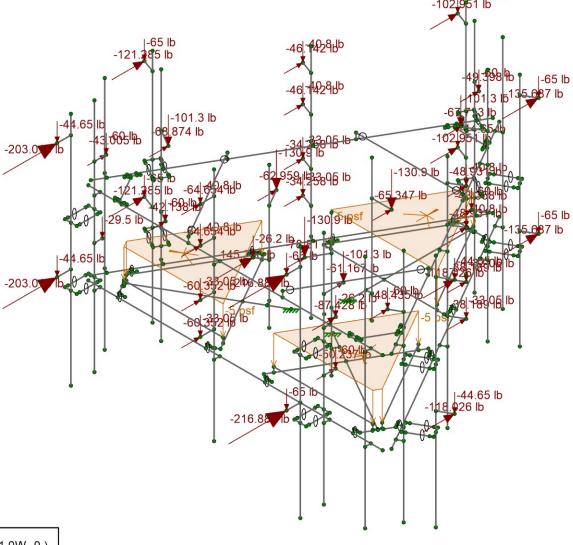




| Telamon CLS | 41124-13682835_C8_05-Stoneybrook Rd CT | SK-3.1 | | | | |
|----------------------------|--|--------------------------------|--|--|--|--|
| RY | | Apr 07, 2022 | | | | |
| 41124-13682835_C8_05-02-MA | Member Shapes | 41124-13682835_C8_05-02-MA.r3d | | | | |



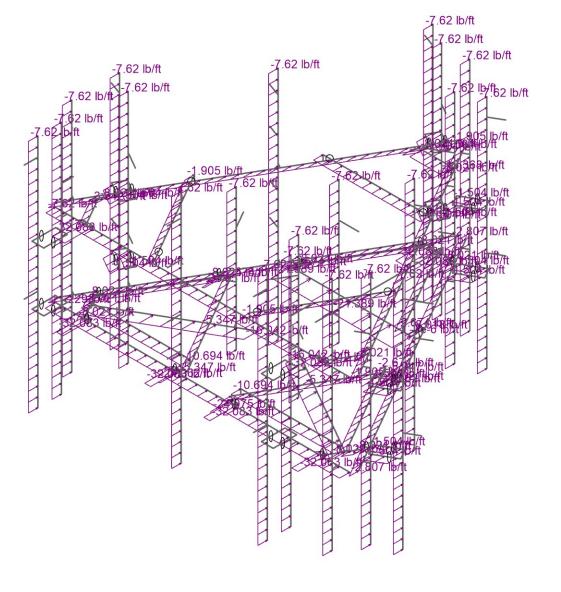




Loads: LC 1, DISPLAY (1.0D + 1.0W_0)

| Telamon CLS | 41124-13682835_C8_05-Stoneybrook Rd CT | SK-5 | | | | |
|----------------------------|--|--------------------------------|--|--|--|--|
| RY | | Apr 07, 2022 | | | | |
| 41124-13682835_C8_05-02-MA | Joint Loads – Dead and Normal Wind | 41124-13682835_C8_05-02-MA.r3d | | | | |

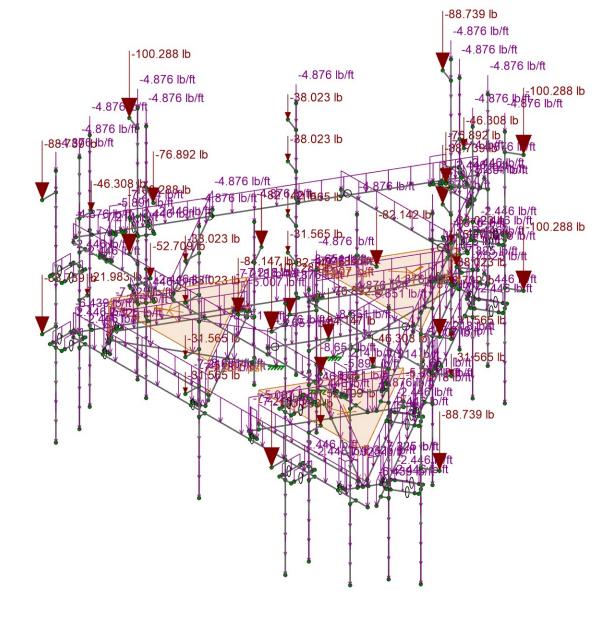




Loads: BLC 5, Structure Wind 0
Envelope Only Solution

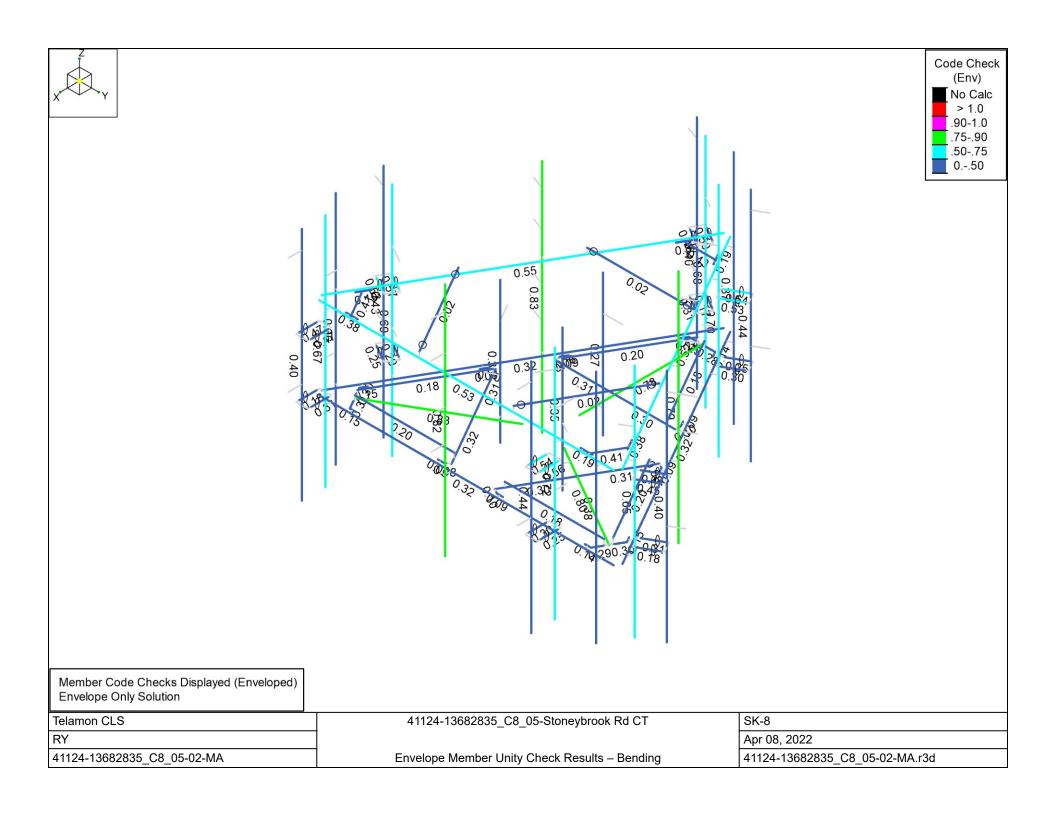
| Telamon CLS | 41124-13682835_C8_05-Stoneybrook Rd CT | SK-6 |
|----------------------------|--|--------------------------------|
| RY | | Apr 07, 2022 |
| 41124-13682835_C8_05-02-MA | Distributed Load – Normal Wind | 41124-13682835_C8_05-02-MA.r3d |

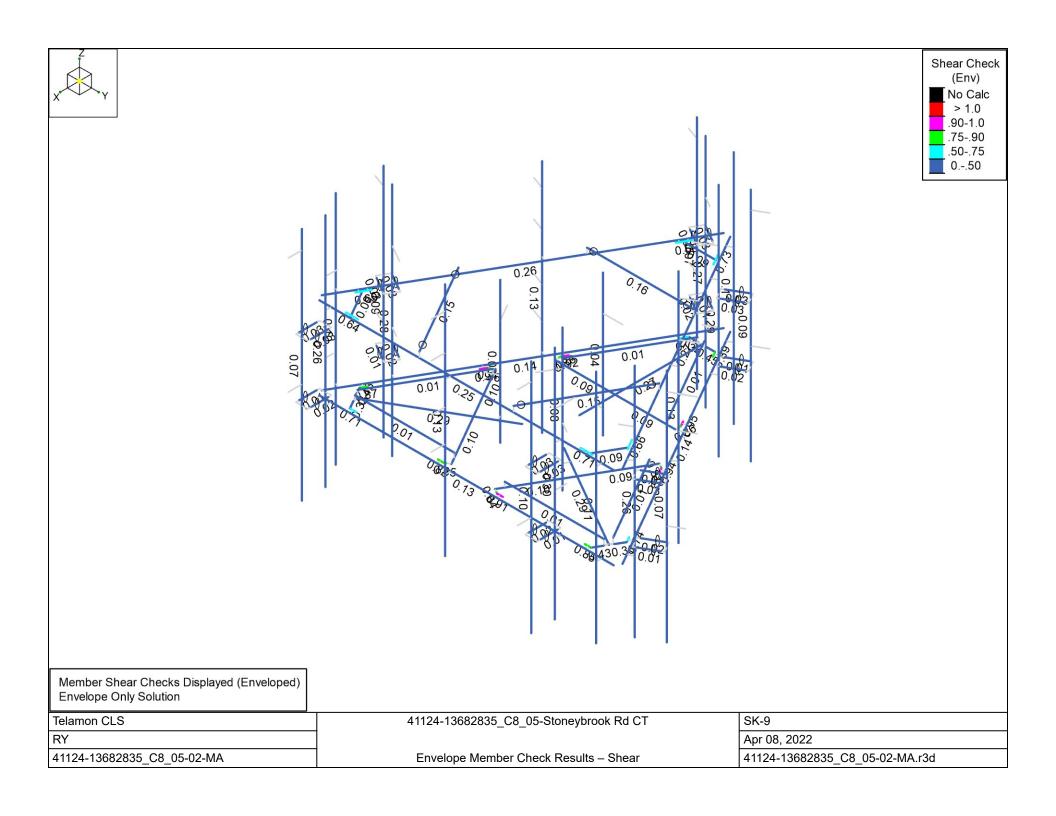




Loads: BLC 2, Ice Dead Envelope Only Solution

| Telamon CLS | 41124-13682835_C8_05-Stoneybrook Rd CT | SK-7 |
|----------------------------|--|--------------------------------|
| RY | | Apr 07, 2022 |
| 41124-13682835_C8_05-02-MA | Ice Dead Loads | 41124-13682835_C8_05-02-MA.r3d |





:Telamon CLS

Company Designer :RY

Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

4/8/2022 9:54:23 AM

Checked By: JLS

Basic Load Cases

| | BLC Description | Category | Z Gravity | Nodal | Distributed | Area(Member) |
|----|---|----------|-----------|-------|-------------|--------------|
| 1 | Dead | DL | -1 | 45 | | 3 |
| 2 | Ice Dead | RL | | 45 | 102 | 3 |
| 3 | BLC 1 Transient Area Loads | None | | | 30 | |
| 4 | BLC 2 Transient Area Loads | None | | | 30 | |
| 5 | Structure Wind 0° | None | | | 92 | |
| 6 | Structure Wind 30° | None | | | 172 | |
| 7 | Structure Wind 45° | None | | | 204 | |
| 8 | Structure Wind 60° | None | | | 184 | |
| 9 | Structure Wind 90° | None | | | 86 | |
| 10 | Structure Wind 120° | None | | | 184 | |
| | Structure Wind 135° | | | | 204 | |
| 11 | | None | | | | |
| 12 | Structure Wind 150° | None | | | 172 | |
| 13 | Structure Wind 180° | None | | | 92 | |
| 14 | Structure Wind 210° | None | | | 172 | |
| 15 | Structure Wind 225° | None | | | 204 | |
| 16 | Structure Wind 240° | None | | | 184 | |
| 17 | Structure Wind 270° | None | | | 86 | |
| 18 | Structure Wind 300° | None | | | 184 | |
| 19 | Structure Wind 315° | None | | | 204 | |
| 20 | Structure Wind 330° | None | | | 172 | |
| 21 | Structure Wind w/ Ice 0° | None | | | 92 | |
| 22 | Structure Wind w/ Ice 30° | None | | | 176 | |
| 23 | Structure Wind w/ Ice 45° | None | | | 204 | |
| 24 | Structure Wind w/ Ice 60° | None | | | 184 | |
| 25 | Structure Wind w/ Ice 90° Structure Wind w/ Ice 90° | None | | | 88 | |
| | | None | | | | |
| 26 | Structure Wind w/ Ice 120° | | | | 184 | |
| 27 | Structure Wind w/ Ice 135° | None | | | 204 | |
| 28 | Structure Wind w/ Ice 150° | None | | | 176 | |
| 29 | Structure Wind w/ Ice 180° | None | | | 92 | |
| 30 | Structure Wind w/ Ice 210° | None | | | 176 | |
| 31 | Structure Wind w/ Ice 225° | None | | | 204 | |
| 32 | Structure Wind w/ Ice 240° | None | | | 184 | |
| 33 | Structure Wind w/ Ice 270° | None | | | 88 | |
| 34 | Structure Wind w/ Ice 300° | None | | | 184 | |
| 35 | Structure Wind w/ Ice 315° | None | | | 204 | |
| 36 | Structure Wind w/ Ice 330° | None | | | 176 | |
| 37 | Antenna Wind 0° | None | | 44 | | |
| 38 | Antenna Wind 30° | None | | 90 | | |
| 39 | Antenna Wind 45° | None | | 90 | | |
| 40 | Antenna Wind 60° | None | | 90 | | |
| 41 | Antenna Wind 90° | None | | 45 | | |
| 42 | Antenna Wind 120° | None | | 90 | | |
| 43 | Antenna Wind 135° | | | 90 | | |
| | | None | | | | |
| 44 | Antenna Wind 150° | None | | 90 | | |
| 45 | Antenna Wind 180° | None | | 44 | | |
| 46 | Antenna Wind 210° | None | | 90 | | |
| 47 | Antenna Wind 225° | None | | 90 | | |
| 48 | Antenna Wind 240° | None | | 90 | | |
| 49 | Antenna Wind 270° | None | | 45 | | |
| 50 | Antenna Wind 300° | None | | 90 | | |
| 51 | Antenna Wind 315° | None | | 90 | | |
| 52 | Antenna Wind 330° | None | | 90 | | |
| 53 | Antenna Wind w/ Ice 0° | None | | 44 | | |
| 54 | Antenna Wind w/ Ice 30° | None | | 90 | | |
| 55 | Antenna Wind w/ Ice 45° | None | | 90 | | |
| 56 | Antenna Wind w/ Ice 60° | None | | 90 | | |
| 57 | Antenna Wind w/ Ice 90° | None | | 45 | | |
| 58 | Antenna Wind w/ Ice 30° | None | | 90 | | |
| JU | AIRCINIA VVIIIA W/ ICE 120 | INOILE | 1 | 90 | | |

Designer :RY

Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

4/8/2022 9:54:23 AM

Checked By: JLS

Basic Load Cases (Continued)

| | BLC Description | Category | Z Gravity | Nodal | Distributed | Area(Member) |
|----|--------------------------|----------|-----------|-------|-------------|--------------|
| 59 | Antenna Wind w/ Ice 135° | None | | 90 | | |
| 60 | Antenna Wind w/ Ice 150° | None | | 90 | | |
| 61 | Antenna Wind w/ Ice 180° | None | | 44 | | |
| 62 | Antenna Wind w/ Ice 210° | None | | 90 | | |
| 63 | Antenna Wind w/ Ice 225° | None | | 90 | | |
| 64 | Antenna Wind w/ Ice 240° | None | | 90 | | |
| 65 | Antenna Wind w/ Ice 270° | None | | 45 | | |
| 66 | Antenna Wind w/ Ice 300° | None | | 90 | | |
| 67 | Antenna Wind w/ Ice 315° | None | | 90 | | |
| 68 | Antenna Wind w/ Ice 330° | None | | 90 | | |
| 69 | Seismic X | ELX | | 45 | 102 | |
| 70 | Seismic Y | ELY | | 45 | 102 | |
| 71 | Seismic Z | ELZ | | 45 | 102 | |
| 72 | Maintenance Live 500 (1) | OL1 | | 1 | | |
| 73 | Maintenance Live 500 (2) | OL2 | | 1 | | |
| 74 | Maintenance Live 500 (3) | OL3 | | 1 | | |
| 75 | Maintenance Live 500 (4) | OL4 | | 1 | | |

Load Combinations

| DISPLAY (1.0D + 1.0W 0°) Yes Y DL 1 37 1 37 1 37 1 37 1 37 1 37 1 37 1 37 1 37 1 38 1 | | Load Combinations | | | | | | | | | | | | |
|---|----|--------------------------|-------|--------|-----|--------|-----|--------|-----|--------|-----|--------|--|--|
| 1.4D | | Description | Solve | PDelta | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | | |
| 3 | 1 | DISPLAY (1.0D + 1.0W_0°) | Yes | | DL | 1 | 37 | 1 | | | | | | |
| 4 | 2 | 1.4D | Yes | Υ | DL | 1.4 | | | | | | | | |
| 5 1.2D + 1.0W 46° Yes Y DL 1.2 7 1 39 1 6 1.2D + 1.0W 60° Yes Y DL 1.2 8 1 40 1 7 1.2D + 1.0W 90° Yes Y DL 1.2 9 1 41 1 8 1.2D + 1.0W 135° Yes Y DL 1.2 10 1 42 1 9 1.2D + 1.0W 150° Yes Y DL 1.2 11 1 43 1 10 1.2D + 1.0W 180° Yes Y DL 1.2 11 44 1 11 1.2D + 1.0W 210° Yes Y DL 1.2 13 -1 44 1 12 1.2D + 1.0W 210° Yes Y DL 1.2 15 -1 47 -1 13 1.2D + 1.0W 240° Yes Y DL 1.2 15 -1 47 <th< td=""><td>3</td><td>1.2D + 1.0W_0°</td><td>Yes</td><td>Y</td><td></td><td>1.2</td><td>5</td><td>1</td><td></td><td>1</td><td></td><td></td></th<> | 3 | 1.2D + 1.0W_0° | Yes | Y | | 1.2 | 5 | 1 | | 1 | | | | |
| 6 | | | | | | | | 1 | | 1 | | | | |
| The following the following is a second of | 5 | 1.2D + 1.0W_45° | Yes | Υ | DL | 1.2 | 7 | 1 | 39 | 1 | | | | |
| 8 | | 1.2D + 1.0W_60° | | | | | | 1 | | 1 | | | | |
| 9 | | | Yes | | | | | 1 | | 1 | | | | |
| 10 | 8 | | | | | | | 1 | | 1 | | | | |
| 11 | 9 | 1.2D + 1.0W_135° | Yes | Υ | DL | 1.2 | | 1 | 43 | 1 | | | | |
| 12 | 10 | | | | | | | 1 | | | | | | |
| 13 | | | | | | | | -1 | | -1 | | | | |
| 14 1.2D + 1.0W 240° Yes Y DL 1.2 16 -1 48 -1 15 1.2D + 1.0W 270° Yes Y DL 1.2 17 -1 49 -1 16 1.2D + 1.0W 300° Yes Y DL 1.2 18 -1 50 -1 17 1.2D + 1.0W 315° Yes Y DL 1.2 19 -1 51 -1 18 1.2D + 1.0W 330° Yes Y DL 1.2 20 -1 52 -1 19 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 20 -1 52 -1 19 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 20 -1 52 -1 19 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 20 -1 52 -1 20 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 </td <td></td> | | | | | | | | | | | | | | |
| 15 1.2D + 1.0W 270° Yes Y DL 1.2 17 -1 49 -1 16 1.2D + 1.0W 300° Yes Y DL 1.2 18 -1 50 -1 17 1.2D + 1.0W 315° Yes Y DL 1.2 19 -1 51 -1 18 1.2D + 1.0W 330° Yes Y DL 1.2 20 -1 52 -1 19 1.2D + 1.0Di + 1.0Wi 0° Yes Y DL 1.2 20 -1 52 -1 19 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 22 1 54 1 RL 1 20 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 23 1 55 1 RL 1 21 1.2D + 1.0Di + 1.0Wi 60° Yes Y DL 1.2 24 1 56 1 RL 1 22 | | | | | | | | - | | | | | | |
| 16 1.2D + 1.0W 300° Yes Y DL 1.2 18 -1 50 -1 17 1.2D + 1.0W 315° Yes Y DL 1.2 19 -1 51 -1 18 1.2D + 1.0W 30° Yes Y DL 1.2 20 -1 51 -1 19 1.2D + 1.0Di + 1.0Wi 0° Yes Y DL 1.2 20 -1 52 -1 20 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 21 1 53 1 RL 1 20 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 22 1 54 1 RL 1 21 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 23 1 55 1 RL 1 22 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 </td <td></td> | | | | | | | | | | | | | | |
| 17 1.2D + 1.0W 315° Yes Y DL 1.2 19 -1 51 -1 18 1.2D + 1.0Di + 1.0Wi 0° Yes Y DL 1.2 20 -1 52 -1 19 1.2D + 1.0Di + 1.0Wi 0° Yes Y DL 1.2 21 1 53 1 RL 1 20 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 21 1 54 1 RL 1 21 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 23 1 55 1 RL 1 22 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 24 1 56 1 RL 1 23 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 24 1.2D + 1.0Di + 1.0Wi 135° Yes Y DL 1.2 26 | | | | | | | | | | | | | | |
| 18 1.2D + 1.0W 330° Yes Y DL 1.2 20 -1 52 -1 19 1.2D + 1.0Di + 1.0Wi 0° Yes Y DL 1.2 21 1 53 1 RL 1 20 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 22 1 54 1 RL 1 21 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 23 1 55 1 RL 1 22 1.2D + 1.0Di + 1.0Wi 60° Yes Y DL 1.2 24 1 56 1 RL 1 23 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 24 1.2D + 1.0Di + 1.0Wi 120° Yes Y DL 1.2 26 1 58 1 RL 1 25 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL | | | | | | | | | | | | | | |
| 19 1.2D + 1.0Di + 1.0Wi 0° Yes Y DL 1.2 21 1 53 1 RL 1 20 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 22 1 54 1 RL 1 21 1.2D + 1.0Di + 1.0Wi 60° Yes Y DL 1.2 23 1 55 1 RL 1 22 1.2D + 1.0Di + 1.0Wi 60° Yes Y DL 1.2 24 1 56 1 RL 1 23 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 24 1.2D + 1.0Di + 1.0Wi 120° Yes Y DL 1.2 26 1 58 1 RL 1 25 1.2D + 1.0Di + 1.0Wi 135° Yes Y DL 1.2 28 1 60 1 RL 1 26 1.2D + 1.0Di + 1.0Wi 180° Yes <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-1</td> <td></td> <td></td> <td></td> <td></td> | | | | | | | | -1 | | | | | | |
| 20 1.2D + 1.0Di + 1.0Wi 30° Yes Y DL 1.2 22 1 54 1 RL 1 21 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 23 1 55 1 RL 1 22 1.2D + 1.0Di + 1.0Wi 60° Yes Y DL 1.2 24 1 56 1 RL 1 23 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 24 1.2D + 1.0Di + 1.0Wi 120° Yes Y DL 1.2 26 1 58 1 RL 1 25 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 27 1 59 1 RL 1 26 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 28 1 60 1 RL 1 27 1.2D + 1.0Di + 1.0Wi 210° Yes< | | | | | | | | | | -1 | | | | |
| 21 1.2D + 1.0Di + 1.0Wi 45° Yes Y DL 1.2 23 1 55 1 RL 1 22 1.2D + 1.0Di + 1.0Wi 60° Yes Y DL 1.2 24 1 56 1 RL 1 23 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 24 1.2D + 1.0Di + 1.0Wi 120° Yes Y DL 1.2 26 1 58 1 RL 1 25 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 27 1 59 1 RL 1 26 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 28 1 60 1 RL 1 27 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 29 -1 61 -1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Y | | | | | | | | 1 | | - | | 1 | | |
| 22 1.2D + 1.0Di + 1.0Wi 60° Yes Y DL 1.2 24 1 56 1 RL 1 23 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 24 1.2D + 1.0Di + 1.0Wi 120° Yes Y DL 1.2 26 1 58 1 RL 1 25 1.2D + 1.0Di + 1.0Wi 135° Yes Y DL 1.2 27 1 59 1 RL 1 26 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 28 1 60 1 RL 1 27 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 29 -1 61 -1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 30 -1 62 -1 RL 1 29 1.2D + 1.0Di + 1.0Wi 220° Yes Y DL 1.2 31 -1 63 -1 RL <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td></td<> | | | | | | | | | | • | | | | |
| 23 1.2D + 1.0Di + 1.0Wi 90° Yes Y DL 1.2 25 1 57 1 RL 1 24 1.2D + 1.0Di + 1.0Wi 120° Yes Y DL 1.2 26 1 58 1 RL 1 25 1.2D + 1.0Di + 1.0Wi 135° Yes Y DL 1.2 27 1 59 1 RL 1 26 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 28 1 60 1 RL 1 27 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 28 1 60 1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 29 -1 61 -1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 30 -1 62 -1 RL 1 29 1.2D + 1.0Di + 1.0Wi 220° < | | | | | | | | - | | • | | - | | |
| 24 1.2D + 1.0Di + 1.0Wi 120° Yes Y DL 1.2 26 1 58 1 RL 1 25 1.2D + 1.0Di + 1.0Wi 135° Yes Y DL 1.2 27 1 59 1 RL 1 26 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 28 1 60 1 RL 1 27 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 29 -1 61 -1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 30 -1 62 -1 RL 1 29 1.2D + 1.0Di + 1.0Wi 225° Yes Y DL 1.2 31 -1 63 -1 RL 1 30 1.2D + 1.0Di + 1.0Wi 240° Yes Y DL 1.2 32 -1 64 -1 RL 1 31 1.2D + 1.0Di + 1.0Wi 300° Yes Y DL 1.2 33 -1 65 -1 RL | | 1.2D + 1.0Di + 1.0Wi_60° | | | | | | 1 | | 1 | | 1 | | |
| 25 1.2D + 1.0Di + 1.0Wi 135° Yes Y DL 1.2 27 1 59 1 RL 1 26 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 28 1 60 1 RL 1 27 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 29 -1 61 -1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 30 -1 62 -1 RL 1 29 1.2D + 1.0Di + 1.0Wi 225° Yes Y DL 1.2 31 -1 63 -1 RL 1 30 1.2D + 1.0Di + 1.0Wi 240° Yes Y DL 1.2 32 -1 64 -1 RL 1 31 1.2D + 1.0Di + 1.0Wi 270° Yes Y DL 1.2 33 -1 65 -1 | | | | | | | | | | 1 | | | | |
| 26 1.2D + 1.0Di + 1.0Wi 150° Yes Y DL 1.2 28 1 60 1 RL 1 27 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 29 -1 61 -1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 30 -1 62 -1 RL 1 29 1.2D + 1.0Di + 1.0Wi 225° Yes Y DL 1.2 31 -1 63 -1 RL 1 30 1.2D + 1.0Di + 1.0Wi 240° Yes Y DL 1.2 32 -1 64 -1 RL 1 31 1.2D + 1.0Di + 1.0Wi 270° Yes Y DL 1.2 33 -1 65 -1 RL 1 32 1.2D + 1.0Di + 1.0Wi 315° Yes Y DL 1.2 34 -1 66 -1 RL 1 34 1.2D + 1.0Di + 1.0Wi 330° | | | | | | | | | | | | | | |
| 27 1.2D + 1.0Di + 1.0Wi 180° Yes Y DL 1.2 29 -1 61 -1 RL 1 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 30 -1 62 -1 RL 1 29 1.2D + 1.0Di + 1.0Wi 225° Yes Y DL 1.2 31 -1 63 -1 RL 1 30 1.2D + 1.0Di + 1.0Wi 240° Yes Y DL 1.2 32 -1 64 -1 RL 1 31 1.2D + 1.0Di + 1.0Wi 270° Yes Y DL 1.2 33 -1 65 -1 RL 1 32 1.2D + 1.0Di + 1.0Wi 300° Yes Y DL 1.2 34 -1 66 -1 RL 1 33 1.2D + 1.0Di + 1.0Wi 315° Yes Y DL 1.2 35 -1 67 -1 RL 1 34 1.2D + 1.0Ev + 1.0Eh 0° | | | | | | | | | | • | | | | |
| 28 1.2D + 1.0Di + 1.0Wi 210° Yes Y DL 1.2 30 -1 62 -1 RL 1 29 1.2D + 1.0Di + 1.0Wi 225° Yes Y DL 1.2 31 -1 63 -1 RL 1 30 1.2D + 1.0Di + 1.0Wi 240° Yes Y DL 1.2 32 -1 64 -1 RL 1 31 1.2D + 1.0Di + 1.0Wi 270° Yes Y DL 1.2 33 -1 65 -1 RL 1 32 1.2D + 1.0Di + 1.0Wi 300° Yes Y DL 1.2 34 -1 66 -1 RL 1 33 1.2D + 1.0Di + 1.0Wi 315° Yes Y DL 1.2 35 -1 67 -1 RL 1 34 1.2D + 1.0Ei + 1.0Eh 0° Yes Y DL 1.244 ELX -1 68 -1 RL 1 35 1.2D + 1.0Ev + 1.0Eh 30° Yes Y | | | | | | | | | | • | | | | |
| 29 1.2D + 1.0Di + 1.0Wi 225° Yes Y DL 1.2 31 -1 63 -1 RL 1 30 1.2D + 1.0Di + 1.0Wi 240° Yes Y DL 1.2 32 -1 64 -1 RL 1 31 1.2D + 1.0Di + 1.0Wi 270° Yes Y DL 1.2 33 -1 65 -1 RL 1 32 1.2D + 1.0Di + 1.0Wi 300° Yes Y DL 1.2 34 -1 66 -1 RL 1 33 1.2D + 1.0Di + 1.0Wi 315° Yes Y DL 1.2 35 -1 67 -1 RL 1 34 1.2D + 1.0Di + 1.0Wi 330° Yes Y DL 1.2 36 -1 68 -1 RL 1 35 1.2D + 1.0Ev + 1.0Eh 0° Yes Y DL 1.244 ELX -1 ELY 0.5 37 1.2D + 1.0Ev + 1.0Eh 45° Yes Y DL 1.244 ELX -0.707 ELY 0.707 | | | | | | | | -1 | | | | 1 | | |
| 30 | | | | | | | | | | | | | | |
| 31 1.2D + 1.0Di + 1.0Wi 270° Yes Y DL 1.2 33 -1 65 -1 RL 1 32 1.2D + 1.0Di + 1.0Wi 300° Yes Y DL 1.2 34 -1 66 -1 RL 1 33 1.2D + 1.0Di + 1.0Wi 315° Yes Y DL 1.2 35 -1 67 -1 RL 1 34 1.2D + 1.0Di + 1.0Wi 330° Yes Y DL 1.2 36 -1 68 -1 RL 1 35 1.2D + 1.0Ev + 1.0Eh O° Yes Y DL 1.244 ELX -1 ELY 36 1.2D + 1.0Ev + 1.0Eh O Yes Y DL 1.244 ELX -0.866 ELY 0.5 37 1.2D + 1.0Ev + 1.0Eh Yes Y DL 1.244 ELX -0.707 ELY 0.707 | | | | | | | | | | - | | | | |
| 32 1.2D + 1.0Di + 1.0Wi 300° Yes Y DL 1.2 34 -1 66 -1 RL 1 33 1.2D + 1.0Di + 1.0Wi 315° Yes Y DL 1.2 35 -1 67 -1 RL 1 34 1.2D + 1.0Di + 1.0Wi 330° Yes Y DL 1.2 36 -1 68 -1 RL 1 35 1.2D + 1.0Ev + 1.0Eh 0° Yes Y DL 1.244 ELX -1 ELY 36 1.2D + 1.0Ev + 1.0Eh 30° Yes Y DL 1.244 ELX -0.866 ELY 0.5 37 1.2D + 1.0Ev + 1.0Eh 45° Yes Y DL 1.244 ELX -0.707 ELY 0.707 | - | | | | | | | | | - | | | | |
| 33 1.2D + 1.0Di + 1.0Wi 315° Yes Y DL 1.2 35 -1 67 -1 RL 1 34 1.2D + 1.0Di + 1.0Wi 330° Yes Y DL 1.2 36 -1 68 -1 RL 1 35 1.2D + 1.0Ev + 1.0Eh 0° Yes Y DL 1.244 ELX -1 ELY 36 1.2D + 1.0Ev + 1.0Eh 30° Yes Y DL 1.244 ELX -0.866 ELY 0.5 37 1.2D + 1.0Ev + 1.0Eh 45° Yes Y DL 1.244 ELX -0.707 ELY 0.707 | | | | | | | | | | | | | | |
| 34 1.2D + 1.0Di + 1.0Wi 330° Yes Y DL 1.2 36 -1 68 -1 RL 1 35 1.2D + 1.0Ev + 1.0Eh 0° Yes Y DL 1.244 ELX -1 ELY 36 1.2D + 1.0Ev + 1.0Eh 30° Yes Y DL 1.244 ELX -0.866 ELY 0.5 37 1.2D + 1.0Ev + 1.0Eh 45° Yes Y DL 1.244 ELX -0.707 ELY 0.707 | | | | | | | | | | | | | | |
| 35 1.2D + 1.0Ev + 1.0Eh_0° Yes Y DL 1.244 ELX -1 ELY 36 1.2D + 1.0Ev + 1.0Eh_30° Yes Y DL 1.244 ELX -0.866 ELY 0.5 37 1.2D + 1.0Ev + 1.0Eh_45° Yes Y DL 1.244 ELX -0.707 ELY 0.707 | | | | | | | | | | | | - | | |
| 36 | | | | | | | | | | -1 | RL | 1 | | |
| 37 1.2D + 1.0Ev + 1.0Eh_45° Yes Y DL 1.244 ELX -0.707 ELY 0.707 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 38 1.2D + 1.0Ev + 1.0Eh_60° Yes Y DL 1.244 ELX -0.5 ELY 0.866 | | | | | | | | | | | | | | |
| | 38 | 1.2D + 1.0Ev + 1.0Eh_60° | Yes | Υ | DL | 1.244 | ELX | -0.5 | ELY | 0.866 | | | | |

Company Designer :Telamon CLS

:RY

Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

4/8/2022 9:54:23 AM

Checked By: JLS

Load Combinations (Continued)

| | .oad Combinations (Continued) | | | | | | | | | | |
|----|---|-------|--------|----------|--------|-----|--------|-----|--------|------|--------|
| | Description | Solve | PDelta | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor |
| 39 | 1.2D + 1.0Ev + 1.0Eh 90° | Yes | Υ | DL | 1.244 | ELX | | ELY | 1 | | |
| 40 | 1.2D + 1.0Ev + 1.0Eh 120° | Yes | Y | DL | 1.244 | ELX | 0.5 | ELY | 0.866 | | |
| 41 | 1.2D + 1.0Ev + 1.0Eh 135° | Yes | Y | DL | 1.244 | ELX | 0.707 | ELY | 0.707 | | |
| 42 | 1.2D + 1.0Ev + 1.0Eh 150° | Yes | Y | DL | 1.244 | ELX | 0.866 | ELY | 0.5 | | |
| 43 | 1.2D + 1.0Ev + 1.0Eh 180° | Yes | Y | DL | 1.244 | ELX | 1 | ELY | 0.5 | | |
| 44 | 1.2D + 1.0Ev + 1.0Eh 210° | Yes | Y | DL | 1.244 | ELX | 0.866 | ELY | -0.5 | | |
| 45 | | | Y | DL | 1.244 | ELX | | ELY | -0.707 | | |
| | 1.2D + 1.0Ev + 1.0Eh_225° | Yes | | | | | 0.707 | | | | |
| 46 | 1.2D + 1.0Ev + 1.0Eh_240° | Yes | Y | DL | 1.244 | ELX | 0.5 | ELY | -0.866 | | |
| 47 | 1.2D + 1.0Ev + 1.0Eh 270° | Yes | Y | DL | 1.244 | ELX | 0.5 | ELY | -1 | | |
| 48 | 1.2D + 1.0Ev + 1.0Eh_300° | Yes | Y | DL | 1.244 | ELX | -0.5 | ELY | -0.866 | | |
| 49 | 1.2D + 1.0Ev + 1.0Eh_315° | Yes | Υ | DL | 1.244 | ELX | -0.707 | ELY | -0.707 | | |
| 50 | 1.2D + 1.0Ev + 1.0Eh_330° | Yes | Y | DL | 1.244 | ELX | -0.866 | ELY | -0.5 | | |
| 51 | 0.9D - 1.0Ev + 1.0Eh_0° | Yes | Υ | DL | 0.856 | ELX | -1 | ELY | | | |
| 52 | 0.9D - 1.0Ev + 1.0Eh_30° | Yes | Υ | DL | 0.856 | ELX | -0.866 | ELY | 0.5 | | |
| 53 | 0.9D - 1.0Ev + 1.0Eh_45° | Yes | Υ | DL | 0.856 | ELX | -0.707 | ELY | 0.707 | | |
| 54 | 0.9D - 1.0Ev + 1.0Eh 60° | Yes | Υ | DL | 0.856 | ELX | -0.5 | ELY | 0.866 | | |
| 55 | 0.9D - 1.0Ev + 1.0Eh_90° | Yes | Υ | DL | 0.856 | ELX | | ELY | 1 | | |
| 56 | 0.9D - 1.0Ev + 1.0Eh 120° | Yes | Y | DL | 0.856 | ELX | 0.5 | ELY | 0.866 | | |
| 57 | 0.9D - 1.0Ev + 1.0Eh 135° | Yes | Y | DL | 0.856 | ELX | 0.707 | ELY | 0.707 | | |
| 58 | 0.9D - 1.0Ev + 1.0Eh 150° | Yes | Ý | DL | 0.856 | ELX | 0.866 | ELY | 0.5 | | |
| 59 | 0.9D - 1.0Ev + 1.0Eh 180° | Yes | Y | DL | 0.856 | ELX | 1 | ELY | 3.0 | | |
| 60 | 0.9D - 1.0Ev + 1.0Eh 210° | Yes | Y | DL | 0.856 | ELX | 0.866 | ELY | -0.5 | | |
| 61 | 0.9D - 1.0Ev + 1.0Eh 225° | Yes | Y | DL | 0.856 | ELX | 0.707 | ELY | -0.707 | | |
| 62 | 0.9D - 1.0Ev + 1.0Eh 240° | Yes | Y | DL | 0.856 | ELX | 0.707 | ELY | -0.866 | | |
| 63 | 0.9D - 1.0EV + 1.0EH 240 0.9D - 1.0Ev + 1.0Eh 270° | Yes | Y | DL | 0.856 | ELX | 0.5 | ELY | -0.800 | | |
| 64 | | | Y | | | ELX | 0.5 | | | | |
| 65 | 0.9D - 1.0Ev + 1.0Eh_300° | Yes | Y | DL DL | 0.856 | | -0.5 | ELY | -0.866 | | |
| | 0.9D - 1.0Ev + 1.0Eh_315° | Yes | | | 0.856 | ELX | -0.707 | ELY | -0.707 | | |
| 66 | 0.9D - 1.0Ev + 1.0Eh_330° | Yes | Y | DL | 0.856 | ELX | -0.866 | ELY | -0.5 | 01.4 | 4.5 |
| 67 | 1.2D + 1.5Lm 1 + 1.0Wm 0° | Yes | Y | DL | 1.2 | 5 | 0.067 | 37 | 0.067 | OL1 | 1.5 |
| 68 | 1.2D + 1.5Lm_1 + 1.0Wm_30° | Yes | Υ | DL | 1.2 | 6 | 0.067 | 38 | 0.067 | OL1 | 1.5 |
| 69 | 1.2D + 1.5Lm_1 + 1.0Wm_45° | Yes | Υ | DL | 1.2 | 7 | 0.067 | 39 | 0.067 | OL1 | 1.5 |
| 70 | 1.2D + 1.5Lm_1 + 1.0Wm_60° | Yes | Y | DL | 1.2 | 8 | 0.067 | 40 | 0.067 | OL1 | 1.5 |
| 71 | 1.2D + 1.5Lm_1 + 1.0Wm_90° | Yes | Υ | DL | 1.2 | 9 | 0.067 | 41 | 0.067 | OL1 | 1.5 |
| 72 | 1.2D + 1.5Lm_1 + 1.0Wm_120° | Yes | Y | DL | 1.2 | 10 | 0.067 | 42 | 0.067 | OL1 | 1.5 |
| 73 | 1.2D + 1.5Lm_1 + 1.0Wm_135° | Yes | Υ | DL | 1.2 | 11 | 0.067 | 43 | 0.067 | OL1 | 1.5 |
| 74 | 1.2D + 1.5Lm 1 + 1.0Wm 150° | Yes | Υ | DL | 1.2 | 12 | 0.067 | 44 | 0.067 | OL1 | 1.5 |
| 75 | 1.2D + 1.5Lm 1 + 1.0Wm 180° | Yes | Y | DL | 1.2 | 13 | -0.067 | 45 | -0.067 | OL1 | 1.5 |
| 76 | 1.2D + 1.5Lm 1 + 1.0Wm 210° | Yes | Y | DL | 1.2 | 14 | -0.067 | 46 | -0.067 | OL1 | 1.5 |
| 77 | 1.2D + 1.5Lm 1 + 1.0Wm 225° | Yes | Υ | DL | 1.2 | 15 | -0.067 | 47 | -0.067 | OL1 | 1.5 |
| 78 | 1.2D + 1.5Lm 1 + 1.0Wm 240° | Yes | Y | DL | 1.2 | 16 | -0.067 | 48 | -0.067 | OL1 | 1.5 |
| 79 | 1.2D + 1.5Lm 1 + 1.0Wm 270° | Yes | Y | DL | 1.2 | 17 | -0.067 | 49 | -0.067 | OL1 | 1.5 |
| 80 | 1.2D + 1.5Lm 1 + 1.0Wm 300° | Yes | Y | DL | 1.2 | 18 | -0.067 | 50 | -0.067 | OL1 | 1.5 |
| 81 | 1.2D + 1.5Lm 1 + 1.0Wm 315° | Yes | Y | DL | 1.2 | 19 | -0.067 | 51 | -0.067 | OL1 | 1.5 |
| 82 | 1.2D + 1.5Lm 1 + 1.0Wm 330° | Yes | Y | DL | 1.2 | 20 | -0.067 | 52 | -0.067 | OL1 | 1.5 |
| 83 | 1.2D + 1.5Lm 1 + 1.0Wm 0° | Yes | Y | DL | 1.2 | 5 | 0.067 | 37 | 0.067 | OL2 | 1.5 |
| 84 | 1.2D + 1.5Lm_2 + 1.0Wm_30° | Yes | Y | DL | 1.2 | 6 | 0.067 | 38 | 0.067 | OL2 | 1.5 |
| _ | 1.2D + 1.5Lm 2 + 1.0Wm 30 1.2D + 1.5Lm 2 + 1.0Wm 45° | | Y | DL | 1.2 | 7 | | | | OL2 | |
| 85 | | Yes | | | | | 0.067 | 39 | 0.067 | | 1.5 |
| 86 | 1.2D + 1.5Lm_2 + 1.0Wm_60° | Yes | Y | DL | 1.2 | 8 | 0.067 | 40 | 0.067 | OL2 | 1.5 |
| 87 | 1.2D + 1.5Lm 2 + 1.0Wm 90° | Yes | Y | DL | 1.2 | 9 | 0.067 | 41 | 0.067 | OL2 | 1.5 |
| 88 | 1.2D + 1.5Lm_2 + 1.0Wm_120° | Yes | Y | DL | 1.2 | 10 | 0.067 | 42 | 0.067 | OL2 | 1.5 |
| 89 | 1.2D + 1.5Lm_2 + 1.0Wm_135° | Yes | Y | DL | 1.2 | 11 | 0.067 | 43 | 0.067 | OL2 | 1.5 |
| 90 | 1.2D + 1.5Lm_2 + 1.0Wm_150° | Yes | Y | DL | 1.2 | 12 | 0.067 | 44 | 0.067 | OL2 | 1.5 |
| 91 | 1.2D + 1.5Lm_2 + 1.0Wm_180° | Yes | Υ | DL | 1.2 | 13 | -0.067 | 45 | -0.067 | OL2 | 1.5 |
| 92 | 1.2D + 1.5Lm_2 + 1.0Wm_210° | Yes | Y | DL | 1.2 | 14 | -0.067 | 46 | -0.067 | OL2 | 1.5 |
| 93 | 1.2D + 1.5Lm_2 + 1.0Wm_225° | Yes | Υ | DL | 1.2 | 15 | -0.067 | 47 | -0.067 | OL2 | 1.5 |
| 94 | 1.2D + 1.5Lm_2 + 1.0Wm_240° | Yes | Υ | DL | 1.2 | 16 | -0.067 | 48 | -0.067 | OL2 | 1.5 |
| 95 | 1.2D + 1.5Lm_2 + 1.0Wm_270° | Yes | Υ | DL | 1.2 | 17 | -0.067 | 49 | -0.067 | OL2 | 1.5 |
| 96 | 1.2D + 1.5Lm 2 + 1.0Wm 300° | Yes | Y | DL | 1.2 | 18 | -0.067 | 50 | -0.067 | OL2 | 1.5 |
| | | - | 1 | · | | | | | | | - |

Designer :RY

Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

4/8/2022 9:54:23 AM

Checked By: JLS

Load Combinations (Continued)

| | Description | Solve | PDelta | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor |
|-----|-----------------------------|-------|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 97 | 1.2D + 1.5Lm_2 + 1.0Wm_315° | Yes | Y | DL | 1.2 | 19 | -0.067 | 51 | -0.067 | OL2 | 1.5 |
| 98 | 1.2D + 1.5Lm_2 + 1.0Wm_330° | Yes | Υ | DL | 1.2 | 20 | -0.067 | 52 | -0.067 | OL2 | 1.5 |
| 99 | 1.2D + 1.5Lm_3 + 1.0Wm_0° | Yes | Y | DL | 1.2 | 5 | 0.067 | 37 | 0.067 | OL3 | 1.5 |
| 100 | 1.2D + 1.5Lm_3 + 1.0Wm_30° | Yes | Y | DL | 1.2 | 6 | 0.067 | 38 | 0.067 | OL3 | 1.5 |
| 101 | 1.2D + 1.5Lm_3 + 1.0Wm_45° | Yes | Υ | DL | 1.2 | 7 | 0.067 | 39 | 0.067 | OL3 | 1.5 |
| 102 | 1.2D + 1.5Lm 3 + 1.0Wm 60° | Yes | Y | DL | 1.2 | 8 | 0.067 | 40 | 0.067 | OL3 | 1.5 |
| 103 | 1.2D + 1.5Lm_3 + 1.0Wm_90° | Yes | Y | DL | 1.2 | 9 | 0.067 | 41 | 0.067 | OL3 | 1.5 |
| 104 | 1.2D + 1.5Lm 3 + 1.0Wm 120° | Yes | Y | DL | 1.2 | 10 | 0.067 | 42 | 0.067 | OL3 | 1.5 |
| 105 | 1.2D + 1.5Lm 3 + 1.0Wm 135° | Yes | Υ | DL | 1.2 | 11 | 0.067 | 43 | 0.067 | OL3 | 1.5 |
| 106 | 1.2D + 1.5Lm 3 + 1.0Wm 150° | Yes | Y | DL | 1.2 | 12 | 0.067 | 44 | 0.067 | OL3 | 1.5 |
| 107 | 1.2D + 1.5Lm 3 + 1.0Wm 180° | Yes | Υ | DL | 1.2 | 13 | -0.067 | 45 | -0.067 | OL3 | 1.5 |
| 108 | 1.2D + 1.5Lm 3 + 1.0Wm 210° | Yes | Y | DL | 1.2 | 14 | -0.067 | 46 | -0.067 | OL3 | 1.5 |
| 109 | 1.2D + 1.5Lm 3 + 1.0Wm 225° | Yes | Υ | DL | 1.2 | 15 | -0.067 | 47 | -0.067 | OL3 | 1.5 |
| 110 | 1.2D + 1.5Lm 3 + 1.0Wm 240° | Yes | Υ | DL | 1.2 | 16 | -0.067 | 48 | -0.067 | OL3 | 1.5 |
| 111 | 1.2D + 1.5Lm 3 + 1.0Wm 270° | Yes | Υ | DL | 1.2 | 17 | -0.067 | 49 | -0.067 | OL3 | 1.5 |
| 112 | 1.2D + 1.5Lm 3 + 1.0Wm 300° | Yes | Υ | DL | 1.2 | 18 | -0.067 | 50 | -0.067 | OL3 | 1.5 |
| 113 | 1.2D + 1.5Lm 3 + 1.0Wm 315° | Yes | Y | DL | 1.2 | 19 | -0.067 | 51 | -0.067 | OL3 | 1.5 |
| 114 | 1.2D + 1.5Lm 3 + 1.0Wm 330° | Yes | Y | DL | 1.2 | 20 | -0.067 | 52 | -0.067 | OL3 | 1.5 |
| 115 | 1.2D + 1.5Lm 4 + 1.0Wm 0° | Yes | Υ | DL | 1.2 | 5 | 0.067 | 37 | 0.067 | OL4 | 1.5 |
| 116 | 1.2D + 1.5Lm 4 + 1.0Wm 30° | Yes | Y | DL | 1.2 | 6 | 0.067 | 38 | 0.067 | OL4 | 1.5 |
| 117 | 1.2D + 1.5Lm 4 + 1.0Wm 45° | Yes | Υ | DL | 1.2 | 7 | 0.067 | 39 | 0.067 | OL4 | 1.5 |
| 118 | 1.2D + 1.5Lm 4 + 1.0Wm 60° | Yes | Y | DL | 1.2 | 8 | 0.067 | 40 | 0.067 | OL4 | 1.5 |
| 119 | 1.2D + 1.5Lm 4 + 1.0Wm 90° | Yes | Υ | DL | 1.2 | 9 | 0.067 | 41 | 0.067 | OL4 | 1.5 |
| 120 | 1.2D + 1.5Lm 4 + 1.0Wm 120° | Yes | Υ | DL | 1.2 | 10 | 0.067 | 42 | 0.067 | OL4 | 1.5 |
| 121 | 1.2D + 1.5Lm 4 + 1.0Wm 135° | Yes | Υ | DL | 1.2 | 11 | 0.067 | 43 | 0.067 | OL4 | 1.5 |
| 122 | 1.2D + 1.5Lm 4 + 1.0Wm 150° | Yes | Υ | DL | 1.2 | 12 | 0.067 | 44 | 0.067 | OL4 | 1.5 |
| 123 | 1.2D + 1.5Lm 4 + 1.0Wm 180° | Yes | Υ | DL | 1.2 | 13 | -0.067 | 45 | -0.067 | OL4 | 1.5 |
| 124 | 1.2D + 1.5Lm 4 + 1.0Wm 210° | Yes | Υ | DL | 1.2 | 14 | -0.067 | 46 | -0.067 | OL4 | 1.5 |
| 125 | 1.2D + 1.5Lm 4 + 1.0Wm 225° | Yes | Υ | DL | 1.2 | 15 | -0.067 | 47 | -0.067 | OL4 | 1.5 |
| 126 | 1.2D + 1.5Lm 4 + 1.0Wm 240° | Yes | Y | DL | 1.2 | 16 | -0.067 | 48 | -0.067 | OL4 | 1.5 |
| 127 | 1.2D + 1.5Lm 4 + 1.0Wm 270° | Yes | Υ | DL | 1.2 | 17 | -0.067 | 49 | -0.067 | OL4 | 1.5 |
| 128 | 1.2D + 1.5Lm 4 + 1.0Wm 300° | Yes | Y | DL | 1.2 | 18 | -0.067 | 50 | -0.067 | OL4 | 1.5 |
| 129 | 1.2D + 1.5Lm 4 + 1.0Wm 315° | Yes | Υ | DL | 1.2 | 19 | -0.067 | 51 | -0.067 | OL4 | 1.5 |
| 130 | 1.2D + 1.5Lm 4 + 1.0Wm 330° | Yes | Υ | DL | 1.2 | 20 | -0.067 | 52 | -0.067 | OL4 | 1.5 |

Hot Rolled Steel Properties

| | Label | E [ksi] | G [ksi] | Nu | Therm. Coeff. [1e⁵°F⁻¹] | Density [k/ft³] | Yield [ksi] | Ry | Fu [ksi] | Rt |
|---|------------------|---------|---------|-----|-------------------------|-----------------|-------------|-----|----------|-----|
| 1 | A36 Gr.36 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 36 | 1.5 | 58 | 1.2 |
| 2 | A572 Gr.50 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 50 | 1.1 | 65 | 1.1 |
| 3 | A992 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 50 | 1.1 | 65 | 1.1 |
| 4 | A500 Gr.B RND | 29000 | 11154 | 0.3 | 0.65 | 0.527 | 42 | 1.4 | 58 | 1.3 |
| 5 | A500 Gr.B Rect | 29000 | 11154 | 0.3 | 0.65 | 0.527 | 46 | 1.4 | 58 | 1.3 |
| 6 | A53 Gr.B | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 35 | 1.6 | 60 | 1.2 |
| 7 | A1085 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 50 | 1.4 | 65 | 1.3 |
| 8 | SAE J429 Grade 2 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 57 | 1.5 | 74 | 1.2 |

Hot Rolled Steel Section Sets

| | Label | Shape | Type | Design List | Material | Design Rule | Area [in²] | lyy [in⁴] | Izz [in⁴] | J [in⁴] |
|---|-------------------------|----------------|------|--------------|-----------|-------------|------------|-----------|-----------|---------|
| 1 | Platform Horzontal Pipe | PIPE_3.0 | Beam | None | A53 Gr.B | Typical | 2.07 | 2.85 | 2.85 | 5.69 |
| 2 | Offset Tube | HSS4X4X4 | Beam | None | A36 Gr.36 | Typical | 3.37 | 7.8 | 7.8 | 12.8 |
| 3 | Offset Side Plate | 0.38 X 6 Plate | Beam | None | A36 Gr.36 | Typical | 2.28 | 0.027 | 6.84 | 0.105 |
| 4 | Grating Angle | L2x2x3 | Beam | Single Angle | A36 Gr.36 | Typical | 0.722 | 0.271 | 0.271 | 0.009 |
| 5 | MOUNT_PIPE_2.0 | PIPE_2.0 | None | None | A53 Gr.B | Typical | 1.02 | 0.627 | 0.627 | 1.25 |
| 6 | Offset End Plate | 0.5 x 6 Plate | Beam | None | A36 Gr.36 | Typical | 3 | 0.063 | 9 | 0.237 |
| 7 | MOD Support Rail | PIPE_2.0 | Beam | None | A53 Gr.B | Typical | 1.02 | 0.627 | 0.627 | 1.25 |
| 8 | MOD SR Conn Plate | PL6x0.375 | Beam | Wide Flange | A36 Gr.36 | Typical | 2.25 | 0.026 | 6.75 | 0.101 |
| 9 | MOD SR Conn Angle | L2.5x2.5x4 | Beam | Wide Flange | A36 Gr.36 | Typical | 1.19 | 0.692 | 0.692 | 0.026 |

Designer :RY

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Hot Rolled Steel Section Sets (Continued)

| | Label | Shape | Type | Design List | Material | Design Rule | Area [in²] | lyy [in⁴] | Izz [in⁴] | J [in⁴] |
|----|-------------------|----------|------|-------------|------------------|-------------|------------|-----------|-----------|---------|
| 10 | MOD SR Bracing | PIPE_2.0 | Beam | Wide Flange | A36 Gr.36 | Typical | 1.02 | 0.627 | 0.627 | 1.25 |
| 11 | MOD Threaded Rods | 5/8 SR | None | None | SAE J429 Grade 2 | Typical | 0.307 | 0.007 | 0.007 | 0.015 |

Hot Rolled Steel Design Parameters

| | | el Design Parameters | | | | |
|----|-----------|-------------------------|-------------|-------------|-------------|----------|
| | Label | Shape | Length [in] | Lb y-y [in] | Lb z-z [in] | Function |
| 1 | A1 | Offset Tube | 62.5 | | | Lateral |
| 2 | M135 | Offset End Plate | 3.122 | | | Lateral |
| 3 | M136 | Offset End Plate | 4.688 | | | Lateral |
| 4 | M137 | Offset End Plate | 3.122 | | | Lateral |
| 5 | M138 | Offset Side Plate | 0.875 | | | Lateral |
| 6 | M139 | Offset Side Plate | 0.875 | | | Lateral |
| 7 | M140 | Offset Tube | 30.688 | | | Lateral |
| 8 | M142 | Offset Tube | 30.687 | | | Lateral |
| 9 | M145 | Offset End Plate | 4.688 | | | Lateral |
| 10 | M155 | Offset Side Plate | 3 | | | Lateral |
| 11 | M156 | Offset Side Plate | 3 | | | Lateral |
| 12 | M160 | Grating Angle | 50.542 | | | Lateral |
| 13 | M162 | Grating Angle | 50.542 | | | Lateral |
| 14 | M170 | MOUNT_PIPE_2.0 | 72 | | | Lateral |
| 15 | M85 | Platform Horzontal Pipe | 150 | 44.894 | 61 | Lateral |
| 16 | A2 | Offset Tube | 62.5 | | | Lateral |
| 17 | M55 | Offset Side Plate | 0.875 | | | Lateral |
| 18 | M56 | Offset End Plate | 3.122 | | | Lateral |
| 19 | M57 | Offset End Plate | 3.122 | | | Lateral |
| 20 | M58 | Offset End Plate | 4.688 | | | Lateral |
| 21 | M59 | Offset Side Plate | 0.875 | | | Lateral |
| 22 | M60 | Offset Side Plate | 3 | | | Lateral |
| 23 | M61 | Offset Tube | 30.688 | | | Lateral |
| 24 | M62 | Offset Tube | 30.687 | | | Lateral |
| 25 | M63 | Offset End Plate | 4.688 | | | Lateral |
| 26 | M69 | Offset Side Plate | 3 | | | Lateral |
| 27 | M73 | Grating Angle | 50.542 | | | Lateral |
| 28 | M75 | Grating Angle | 50.542 | | | Lateral |
| 29 | M89 | MOUNT PIPE 2.0 | 72 | | | Lateral |
| 30 | M92 | Platform Horzontal Pipe | 150 | 44.894 | 61 | Lateral |
| 31 | A3 | Offset Tube | 62.5 | 1,1,00 | | Lateral |
| 32 | M96 | Offset Side Plate | 0.875 | | | Lateral |
| 33 | M97 | Offset End Plate | 3.122 | | | Lateral |
| 34 | M98 | Offset End Plate | 3.122 | | | Lateral |
| 35 | M99 | Offset End Plate | 4.688 | | | Lateral |
| 36 | M100 | Offset Side Plate | 0.875 | | | Lateral |
| 37 | M101 | Offset Side Plate | 3 | | | Lateral |
| 38 | M102 | Offset Tube | 30.688 | | | Lateral |
| 39 | M103 | Offset Tube | 30.687 | | | Lateral |
| 40 | M104 | Offset End Plate | 4.688 | | | Lateral |
| 41 | M110 | Offset Side Plate | 3 | | | Lateral |
| 42 | M114 | Grating Angle | 50.542 | | | Lateral |
| 43 | M116 | Grating Angle | 50.542 | | | Lateral |
| 44 | M130 | MOUNT PIPE 2.0 | 72 | | | Lateral |
| 45 | M133 | Platform Horzontal Pipe | 150 | 44.894 | 61 | Lateral |
| 46 | A_MP1_S | MOUNT PIPE 2.0 | 120 | דד.03יד | UI | Lateral |
| 47 | A MP2 S | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 48 | A MP3 S | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 49 | A MP4 S | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 50 | B MP1 S | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 51 | B MP2 S | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 52 | B MP3 S | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 53 | B MP4 S | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 55 | D_IVIP4_3 | IVIOUNI_PIPE_2.U | 120 | | | Lateral |

Designer :RY

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Hot Rolled Steel Design Parameters (Continued)

| | Label | Shape | Length [in] | Lb y-y [in] | Lb z-z [in] | Function |
|-----|---------|-------------------|-------------|-------------|-------------|----------|
| 54 | G_MP1_S | MOUNT_PIPE_2.0 | 120 | | | Lateral |
| 55 | G_MP2_S | MOUNT_PIPE_2.0 | 120 | | | Lateral |
| 56 | G_MP3_S | MOUNT_PIPE_2.0 | 120 | | | Lateral |
| 57 | G_MP4_S | MOUNT_PIPE_2.0 | 120 | | | Lateral |
| 58 | HR1 | MOD Support Rail | 150 | 48 | 55.95 | Lateral |
| 59 | HR2 | MOD SR Conn Plate | 6 | | | Lateral |
| 60 | HR3 | MOD SR Conn Plate | 6 | | | Lateral |
| 61 | HR10 | MOD Support Rail | 150 | 48 | 55.95 | Lateral |
| 62 | HR11 | MOD SR Conn Plate | 6 | | | Lateral |
| 63 | HR12 | MOD SR Conn Plate | 6 | | | Lateral |
| 64 | HR19 | MOD Support Rail | 150 | 48 | 55.95 | Lateral |
| 65 | HR20 | MOD SR Conn Plate | 6 | | | Lateral |
| 66 | HR21 | MOD SR Conn Plate | 6 | | | Lateral |
| 67 | HR28 | MOD SR Conn Angle | 15.408 | | | Lateral |
| 68 | HR29 | MOD SR Conn Angle | 15.408 | | | Lateral |
| 69 | HR30 | MOD SR Conn Angle | 15.408 | | | Lateral |
| 70 | HR37 | MOD SR Bracing | 54.296 | | | Lateral |
| 71 | HR38 | MOD SR Bracing | 54.296 | | | Lateral |
| 72 | HR39 | MOD SR Bracing | 54.296 | | | Lateral |
| 73 | M211 | MOD Threaded Rods | 9 | | | Lateral |
| 74 | M212 | MOD Threaded Rods | 9 | | | Lateral |
| 75 | M213 | MOD Threaded Rods | 9 | | | Lateral |
| 76 | M214 | MOD Threaded Rods | 9 | | | Lateral |
| 77 | M224 | MOD Threaded Rods | 9 | | | Lateral |
| 78 | M228 | MOD Threaded Rods | 9 | | | Lateral |
| 79 | M229 | MOD Threaded Rods | 9 | | | Lateral |
| 80 | M230 | MOD Threaded Rods | 9 | | | Lateral |
| 81 | M231 | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 82 | M232 | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 83 | M235 | MOUNT PIPE 2.0 | 120 | | | Lateral |
| 84 | M238 | MOD Threaded Rods | 9 | | | Lateral |
| 85 | M242 | MOUNT_PIPE_2.0 | 120 | | | Lateral |
| 86 | M243 | MOD Threaded Rods | 9 | | | Lateral |
| 87 | M250 | MOD Threaded Rods | 9 | | | Lateral |
| 88 | M255 | MOD Threaded Rods | 9 | | | Lateral |
| 89 | M256 | MOD Threaded Rods | 9 | | | Lateral |
| 90 | M257 | MOD Threaded Rods | 9 | | | Lateral |
| 91 | M258 | MOD Threaded Rods | 9 | | | Lateral |
| 92 | M266 | MOD Threaded Rods | 9 | | | Lateral |
| 93 | M269 | MOUNT_PIPE_2.0 | 120 | | | Lateral |
| 94 | M272 | MOD Threaded Rods | 9 | | | Lateral |
| 95 | M276 | MOUNT_PIPE_2.0 | 120 | | | Lateral |
| 96 | M277 | MOD Threaded Rods | 9 | | | Lateral |
| 97 | M284 | MOD Threaded Rods | 9 | | | Lateral |
| 98 | M289 | MOD Threaded Rods | 9 | | | Lateral |
| 99 | M290 | MOD Threaded Rods | 9 | | | Lateral |
| 100 | M291 | MOD Threaded Rods | 9 | | | Lateral |
| 101 | M292 | MOD Threaded Rods | 9 | | | Lateral |
| 102 | M300 | MOD Threaded Rods | 9 | | | Lateral |

Member Advanced Data

| | Label | I Release | J Release | Physical | Deflection Ratio Options | Seismic DR |
|---|-------|-----------|-----------|----------|--------------------------|------------|
| 1 | A1 | | | Yes | Default | None |
| 2 | M135 | | | Yes | | None |
| 3 | M136 | | | Yes | | None |
| 4 | M137 | | | Yes | | None |
| 5 | M138 | | | Yes | | None |
| 6 | M139 | | | Yes | | None |

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Company Designer :RY

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Model Name:41124-13682835_C8_05-Stoneybrook R...

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|----|---------|----------------|-----------|-------------|--------------------------|------------|
| 7 | Label | I Release | J Release | Physical | Deflection Ratio Options | Seismic DR |
| 7 | M140 | | | Yes | ** NA ** | None |
| 8 | M141 | | | Yes | INA | None |
| 9 | M142 | | | Yes | | None |
| 10 | M145 | | | Yes | ++ NIA ++ | None |
| 11 | M146 | | | Yes | ** NA ** | None |
| 12 | M147 | | | Yes | ** NA ** | None |
| 13 | M148 | | | Yes | ** NA ** | None |
| 14 | M153 | | 000X00 | Yes | ** NA ** | None |
| 15 | M154 | | 000X00 | Yes | ** NA ** | None |
| 16 | M155 | | | Yes | | None |
| 17 | M156 | | | Yes | | None |
| 18 | M157 | | 000X00 | Yes | ** NA ** | None |
| 19 | M158 | | 000X00 | Yes | ** NA ** | None |
| 20 | M159 | | | Yes | ** NA ** | None |
| 21 | M160 | | | Yes | | None |
| 22 | M161 | | | Yes | ** NA ** | None |
| 23 | M162 | | | Yes | | None |
| 24 | M163 | | | Yes | ** NA ** | None |
| 25 | M164 | | | Yes | ** NA ** | None |
| 26 | M169 | | | Yes | ** NA ** | None |
| 27 | M170 | | | Yes | ** NA ** | None |
| 28 | M85 | | | Yes | Default | None |
| 29 | M171 | | | Yes | ** NA ** | None |
| 30 | M53 | | | Yes | ** NA ** | None |
| 31 | A2 | | | Yes | Default | None |
| 32 | M55 | | | Yes | | None |
| 33 | M56 | | | Yes | | None |
| 34 | M57 | | | Yes | | None |
| 35 | M58 | | | Yes | | None |
| 36 | M59 | | | Yes | | None |
| 37 | M60 | | | Yes | | None |
| 38 | M61 | | | Yes | | None |
| 39 | M62 | | | Yes | | None |
| 40 | M63 | | | Yes | | None |
| 41 | M64 | | | Yes | ** NA ** | None |
| 42 | M65 | | | Yes | ** NA ** | None |
| 43 | M66 | | | Yes | ** NA ** | None |
| 44 | M67 | | 000000 | Yes | ** NA ** | None |
| 45 | M68 | | 000X00 | Yes | ** NA ** | |
| 46 | M69 | | 000000 | Yes | INA | None |
| | | | 00000 | | ** NIA ** | None |
| 47 | M70 | | 000X00 | Yes | ** NA ** | None |
| 48 | M71 | | 000X00 | Yes | ** NA ** | None |
| 49 | M72 | | | Yes | ** NA ** | None |
| 50 | M73 | | | Yes | 44 81 8 44 | None |
| 51 | M74 | | | Yes | ** NA ** | None |
| 52 | M75 | | | Yes | 44.5 | None |
| 53 | M76 | | | Yes | ** NA ** | None |
| 54 | M77 | | | Yes | ** NA ** | None |
| 55 | M78 | | | Yes | ** NA ** | None |
| 56 | M89 | | | Yes | ** NA ** | None |
| 57 | M90 | | | Yes | ** NA ** | None |
| 58 | M91 | | | Yes | ** NA ** | None |
| 59 | M92 | | | Yes | Default | None |
| 60 | M94 | | | Yes | ** NA ** | None |
| 61 | A3 | | | Yes | Default | None |
| 62 | M96 | | | Yes | | None |
| 63 | M97 | | | Yes | | None |
| | M98 | | | Yes | | None |

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Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

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|-----|-------------------|-----------|-----------|----------|--------------------------|------------|
| 0.5 | Label | I Release | J Release | Physical | Deflection Ratio Options | Seismic DR |
| 65 | M99 | | | Yes | | None |
| 66 | M100 | | | Yes | | None |
| 67 | M101 | | | Yes | | None |
| 68 | M102 | | | Yes | | None |
| 69 | M103 | | | Yes | | None |
| 70 | M104 | | | Yes | | None |
| 71 | M105 | | | Yes | ** NA ** | None |
| 72 | M106 | | | Yes | ** NA ** | None |
| 73 | M107 | | | Yes | ** NA ** | None |
| 74 | M108 | | 000X00 | Yes | ** NA ** | None |
| 75 | M109 | | 000X00 | Yes | ** NA ** | None |
| 76 | M110 | | | Yes | | None |
| 77 | M111 | | 000X00 | Yes | ** NA ** | None |
| 78 | M112 | | 000X00 | Yes | ** NA ** | None |
| 79 | M113 | | | Yes | ** NA ** | None |
| 80 | M114 | | | Yes | | None |
| 81 | M115 | | | Yes | ** NA ** | None |
| 82 | M116 | | | Yes | | None |
| 83 | M117 | | | Yes | ** NA ** | None |
| 84 | M118 | | | Yes | ** NA ** | None |
| 85 | M119 | | | Yes | ** NA ** | None |
| 86 | M130 | | | Yes | ** NA ** | None |
| 87 | M131 | | | Yes | ** NA ** | None |
| 88 | M132 | | | Yes | ** NA ** | None |
| 89 | M133 | | | Yes | Default | None |
| 90 | RI2 | | | Yes | ** NA ** | None |
| 91 | RI1 | | | Yes | ** NA ** | None |
| 92 | A MP1 S | | | Yes | ** NA ** | None |
| 93 | RI12 | | | Yes | ** NA ** | None |
| 94 | RI11 | | | Yes | ** NA ** | None |
| 95 | A MP2 S | | | Yes | ** NA ** | None |
| 96 | RI13 | | | Yes | ** NA ** | None |
| 97 | RI14 | | | Yes | ** NA ** | None |
| 98 | RI15 | | | Yes | ** NA ** | None |
| 99 | RI16 | | | Yes | ** NA ** | None |
| 100 | RI22 | | | Yes | ** NA ** | None |
| 101 | RI21 | | | Yes | ** NA ** | None |
| 102 | A MP3 S | | | Yes | ** NA ** | None |
| 103 | RI23 | | | Yes | ** NA ** | None |
| 104 | RI24 | | | Yes | ** NA ** | None |
| 105 | RI32 | | | Yes | ** NA ** | None |
| 106 | RI31 | | | Yes | ** NA ** | None |
| 107 | A MP4 S | | | Yes | ** NA ** | None |
| 108 | RI33 | | | Yes | ** NA ** | None |
| 109 | RI34 | | | Yes | ** NA ** | None |
| 110 | RI35 | | | Yes | ** NA ** | None |
| 111 | RI38 | | | Yes | ** NA ** | None |
| 112 | RI72 | | | Yes | ** NA ** | None |
| 113 | RI71 | | | Yes | ** NA ** | None |
| 114 | B MP1 S | | | Yes | ** NA ** | None |
| 115 | RI82 | | | Yes | ** NA ** | None |
| 116 | RI81 | | | Yes | ** NA ** | None |
| 117 | B MP2 S | | | Yes | ** NA ** | |
| 118 | RI83 | | | Yes | ** NA ** | None |
| | R183 | | | | ** NA ** | None |
| 119 | | | | Yes | | None |
| 120 | RI85 | | | Yes | ** NA ** | None |
| 121 | RI86 | | | Yes | ** NA ** | None |
| 122 | RI92 | | | Yes | ** NA ** | None |

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Company Designer :RY

Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

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|------------|-------------------|---------------|-----------|----------|--------------------------|------------|
| | Label | I Release | J Release | Physical | Deflection Ratio Options | Seismic DR |
| 123 | RI91 | | | Yes | ** NA ** | None |
| 124 | B_MP3_S | | | Yes | ** NA ** | None |
| 125 | RI93 | | | Yes | ** NA ** | None |
| 126 | RI94 | | | Yes | ** NA ** | None |
| 127 | RI102 | | | Yes | ** NA ** | None |
| 128 | RI101 | | | Yes | ** NA ** | None |
| 129 | B_MP4_S | | | Yes | ** NA ** | None |
| 130 | RI103 | | | Yes | ** NA ** | None |
| 131 | RI104 | | | Yes | ** NA ** | None |
| 132 | RI105 | | | Yes | ** NA ** | None |
| 133 | RI142 | | | Yes | ** NA ** | None |
| 134 | RI141 | | | Yes | ** NA ** | None |
| 135 | G MP1 S | | | Yes | ** NA ** | None |
| 136 | RI152 | | | Yes | ** NA ** | None |
| 137 | RI151 | | | Yes | ** NA ** | None |
| 138 | G MP2 S | | | Yes | ** NA ** | None |
| 139 | RI153 | | | Yes | ** NA ** | None |
| 140 | RI154 | | | Yes | ** NA ** | None |
| 141 | RI155 | | | Yes | ** NA ** | None |
| 142 | RI156 | | | Yes | ** NA ** | None |
| 143 | RI162 | | | Yes | ** NA ** | None |
| 144 | RI161 | | | Yes | ** NA ** | None |
| 145 | G MP3 S | | | Yes | ** NA ** | None |
| 146 | RI163 | | | Yes | ** NA ** | None |
| 147 | RI164 | | | Yes | ** NA ** | None |
| 148 | RI172 | | | Yes | ** NA ** | None |
| 149 | RI171 | | | Yes | ** NA ** | None |
| 150 | G MP4 S | | | Yes | ** NA ** | None |
| 151 | RI173 | | | Yes | ** NA ** | None |
| 152 | RI174 | | | Yes | ** NA ** | None |
| 153 | RI175 | | | Yes | ** NA ** | None |
| 154 | M184 | | | Yes | ** NA ** | None |
| 155 | M185 | | | Yes | ** NA ** | None |
| 156 | M186 | | | Yes | ** NA ** | None |
| 157 | M187 | | | Yes | ** NA ** | None |
| 158 | M188 | | | Yes | ** NA ** | None |
| 159 | M189 | | | Yes | ** NA ** | None |
| 160 | HR1 | | | Yes | Default | None |
| 161 | HR2 | | | Yes | Boldan | None |
| 162 | HR3 | | | Yes | | None |
| 163 | HR4 | | | Yes | ** NA ** | None |
| 164 | HR5 | | | Yes | ** NA ** | None |
| 165 | HR6 | | | Yes | ** NA ** | None |
| 166 | HR7 | | | Yes | ** NA ** | None |
| 167 | HR8 | | | Yes | ** NA ** | None |
| 168 | HR9 | | | Yes | ** NA ** | None |
| 169 | HR10 | | | Yes | Default | None |
| 170 | HR11 | | | Yes | Dordan | None |
| 171 | HR12 | | | Yes | | None |
| 172 | HR13 | | | Yes | ** NA ** | None |
| 173 | HR14 | | | Yes | ** NA ** | None |
| 174 | HR15 | | | Yes | ** NA ** | None |
| 175 | HR16 | | | Yes | ** NA ** | None |
| 176 | HR17 | | | Yes | ** NA ** | None |
| 177 | HR18 | | | Yes | ** NA ** | |
| | | | | | | None |
| 178 | HR19 | | | Yes | Default | None |
| 179 180 | HR20 | | | Yes | | None |
| IQU | HR21 | | | Yes | | None |

Company Designer :Telamon CLS

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Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

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| | Label | I Release | J Release | Physical | Deflection Ratio Options | Seismic DR |
|------------|--------------|-----------|-----------|------------|--------------------------|--------------|
| 181 | HR22 | | | Yes | ** NA ** | None |
| 182 | HR23 | | | Yes | ** NA ** | None |
| 183 | HR24 | | | Yes | ** NA ** | None |
| 184 | HR25 | | | Yes | ** NA ** | None |
| 185 | HR26 | | | Yes | ** NA ** | None |
| 186 | HR27 | | | Yes | ** NA ** | None |
| 187 | HR28 | | | Yes | | None |
| 188 | HR29 | | | Yes | | None |
| 189 | HR30 | | | Yes | | None |
| 190 | HR31 | | | Yes | ** NA ** | None |
| 191 | HR32 | | | Yes | ** NA ** | None |
| 192 | HR33 | | | Yes | ** NA ** | None |
| 193 | HR34 | | | Yes | ** NA ** | None |
| 194 | HR35 | | | Yes | ** NA ** | None |
| 195 | HR36 | | | Yes | ** NA ** | None |
| 196 | HR37 | BenPIN | BenPIN | Yes | 101 | None |
| 197 | HR38 | BenPIN | BenPIN | Yes | | None |
| 198 | HR39 | BenPIN | BenPIN | Yes | | None |
| 199 | M199 | DCIII IIN | DOIN IN | Yes | ** NA ** | None |
| 200 | M200 | | | Yes | ** NA ** | None |
| 201 | M201 | | | Yes | ** NA ** | None |
| 202 | M202 | | | Yes | ** NA ** | None |
| 203 | M203 | | | Yes | ** NA ** | None |
| 204 | M204 | | | Yes | ** NA ** | None |
| 205 | M205 | | | Yes | ** NA ** | None |
| 206 | M206 | | | Yes | ** NA ** | None |
| 207 | M207 | | | Yes | ** NA ** | None |
| 208 | M208 | | | Yes | ** NA ** | None |
| 209 | M209 | | | Yes | ** NA ** | |
| 210 | | | | Yes | ** NA ** | None |
| 211 | M210 M211 | | 000X00 | Yes | ** NA ** | None |
| 212 | M212 | | 000X00 | Yes | ** NA ** | None |
| 213 | | | 000X00 | | ** NA ** | None |
| | M213 M214 | | | Yes | | None |
| 214 215 | M215 | | 000X00 | Yes | ** NA ** ** NA ** | None |
| 216 | M216 | | | Yes | ** NA ** | None |
| 217 | M217 | | | Yes Yes | ** NA ** | None |
| 218 | M218 | | | Yes | ** NA ** | None |
| 219 | M219 | | | Yes | ** NA ** | None |
| 220 | M220 | | | | ** NA ** | None |
| 221 | M221 | | | Yes Yes | ** NA ** | None |
| 222 | M222 | | | Yes | ** NA ** | None None |
| | | | | | | |
| 223 | M223 | | 000000 | Yes | ** NA ** ** NA ** | None |
| 224 225 | M224 M225 | | 000X00 | Yes Yes | ** NA ** | None |
| | | | | | ** NA ** | None |
| 226 | M226 | | | Yes | ** NA ** | None |
| 227 | M227 | | 000000 | Yes | ** NA ** | None |
| 228 | M228 | | 000X00 | Yes | ** NA ** | None |
| 229 | M229 | | 000X00 | Yes | ** NA ** | None |
| 230 | M230 | | 000X00 | Yes | ** NA ** | None |
| 231 | M231 | | | Yes | ** NA ** | None |
| 232 | M232 | | | Yes | ** NA ** | None |
| 233 | M233 | | | Yes | ** NA ** | None |
| 234 | M234 | | | Yes | ** NA ** | None |
| 235 | M235 | | | Yes | ** NA ** | None |
| 236 | M236 | | | Yes | ** NA ** | None |
| 237 | M237 | | | Yes | ** NA ** | None |
| 238 | M238 | | 000X00 | Yes | ** NA ** | None |

Company Designer :Telamon CLS

:RY

Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

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Checked By: JLS

| | Label | I Release | J Release | Physical | Deflection Ratio Options | Seismic DR |
|-----|-------|-----------|-----------|----------|--------------------------|------------|
| 239 | M239 | | | Yes | ** NA ** | None |
| 240 | M240 | | | Yes | ** NA ** | None |
| 241 | M241 | | | Yes | ** NA ** | None |
| 242 | M242 | | | Yes | ** NA ** | None |
| 243 | M243 | | 000X00 | Yes | ** NA ** | None |
| 244 | M244 | | | Yes | ** NA ** | None |
| 245 | M245 | | | Yes | ** NA ** | None |
| 246 | M246 | | | Yes | ** NA ** | None |
| 247 | M247 | | | Yes | ** NA ** | None |
| 248 | M248 | | | Yes | ** NA ** | None |
| 249 | M249 | | | Yes | ** NA ** | None |
| 250 | M250 | | 000X00 | Yes | ** NA ** | None |
| 251 | M251 | | | Yes | ** NA ** | None |
| 252 | M252 | | | Yes | ** NA ** | None |
| 253 | M253 | | | Yes | ** NA ** | None |
| 254 | M254 | | | Yes | ** NA ** | None |
| 255 | M255 | | 000X00 | Yes | ** NA ** | None |
| 256 | M256 | | 000X00 | Yes | ** NA ** | None |
| 257 | M257 | | 000X00 | Yes | ** NA ** | None |
| 258 | M258 | | 000X00 | Yes | ** NA ** | None |
| 259 | M259 | | | Yes | ** NA ** | None |
| 260 | M260 | | | Yes | ** NA ** | None |
| 261 | M261 | | | Yes | ** NA ** | None |
| 262 | M262 | | | Yes | ** NA ** | None |
| 263 | M263 | | | Yes | ** NA ** | None |
| 264 | M264 | | | Yes | ** NA ** | None |
| 265 | M265 | | | Yes | ** NA ** | None |
| 266 | M266 | | 000X00 | Yes | ** NA ** | None |
| 267 | M267 | | | Yes | ** NA ** | None |
| 268 | M268 | | | Yes | ** NA ** | None |
| 269 | M269 | | | Yes | ** NA ** | None |
| 270 | M270 | | | Yes | ** NA ** | None |
| 271 | M271 | | | Yes | ** NA ** | None |
| 272 | M272 | | 000X00 | Yes | ** NA ** | None |
| 273 | M273 | | | Yes | ** NA ** | None |
| 274 | M274 | | | Yes | ** NA ** | None |
| 275 | M275 | | | Yes | ** NA ** | None |
| 276 | M276 | | | Yes | ** NA ** | None |
| 277 | M277 | | 000X00 | Yes | ** NA ** | None |
| 278 | M278 | | | Yes | ** NA ** | None |
| 279 | M279 | | | Yes | ** NA ** | None |
| 280 | M280 | | | Yes | ** NA ** | None |
| 281 | M281 | | | Yes | ** NA ** | None |
| 282 | M282 | | | Yes | ** NA ** | None |
| 283 | M283 | | | Yes | ** NA ** | None |
| 284 | M284 | | 000X00 | Yes | ** NA ** | None |
| 285 | M285 | | | Yes | ** NA ** | None |
| 286 | M286 | | | Yes | ** NA ** | None |
| 287 | M287 | | | Yes | ** NA ** | None |
| 288 | M288 | | | Yes | ** NA ** | None |
| 289 | M289 | | 000X00 | Yes | ** NA ** | None |
| 290 | M290 | | 000X00 | Yes | ** NA ** | None |
| 291 | M291 | | 000X00 | Yes | ** NA ** | None |
| 292 | M292 | | 000X00 | Yes | ** NA ** | None |
| 293 | M293 | | | Yes | ** NA ** | None |
| 294 | M294 | | | Yes | ** NA ** | None |
| 295 | M295 | | | Yes | ** NA ** | None |
| 296 | M296 | | | Yes | ** NA ** | None |

Company :Telamon CLS

Designer :RY

Job Number :41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

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Checked By: JLS

Member Advanced Data (Continued)

| | Label | I Release | J Release | Physical | Deflection Ratio Options | Seismic DR |
|-----|-------|-----------|-----------|----------|--------------------------|------------|
| 297 | M297 | | | Yes | ** NA ** | None |
| 298 | M298 | | | Yes | ** NA ** | None |
| 299 | M299 | | | Yes | ** NA ** | None |
| 300 | M300 | | 000X00 | Yes | ** NA ** | None |

Node Boundary Conditions

| | Node Label | X [k/in] | Y [k/in] | Z [k/in] | X Rot [k-ft/rad] | Y Rot [k-ft/rad] | Z Rot [k-ft/rad] |
|---|------------|----------|----------|----------|------------------|------------------|------------------|
| 1 | N204 | Reaction | Reaction | Reaction | Reaction | Reaction | Reaction |
| 2 | N116 | Reaction | Reaction | Reaction | Reaction | Reaction | Reaction |
| 3 | N180 | Reaction | Reaction | Reaction | Reaction | Reaction | Reaction |

Envelope Node Reactions

| | Node Label | | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [lb-ft] | LC | MY [lb-ft] | LC | MZ [lb-ft] | LC |
|---|------------|-----|------------|----|------------|----|-----------|----|------------|----|------------|----|------------|----|
| 1 | N204 | max | 2528.234 | 3 | 1180.7076 | 15 | 3537.9951 | 19 | 2348.2808 | 7 | 9706.0079 | 3 | 1546.068 | 7 |
| 2 | | min | -3362.2831 | 11 | -1172.4628 | 7 | -362.877 | 11 | -1961.7669 | 15 | -3141.5301 | 11 | -1539.7037 | 15 |
| 3 | N116 | max | 1743.0348 | 6 | 2426.926 | 14 | 3774.3058 | 30 | 2711.702 | 6 | 2439.7739 | 4 | 1604.9663 | 18 |
| 4 | | min | -1330.2221 | 14 | -3154.0609 | 6 | -341.4787 | 6 | -9008.6176 | 14 | -5591.7854 | 12 | -1594.2785 | 10 |
| 5 | N180 | max | 1827.8004 | 16 | 3033.4275 | 16 | 3673.1688 | 24 | 8633.0822 | 8 | 1763.3286 | 18 | 1596.4246 | 12 |
| 6 | | min | -1406.0856 | 8 | -2315.5124 | 8 | -343.7967 | 16 | -3081.2327 | 16 | -5487.4379 | 10 | -1582.5085 | 4 |
| 7 | Totals: | max | 5860.2153 | 3 | 6044.0516 | 15 | 9474.6583 | 23 | | | | | | |
| 8 | | min | -5860.2252 | 11 | -6044.0556 | 7 | 3447.9471 | 63 | | | | | | |

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

| | Member | Shape | Code Check | | | Shear Check | Loc[in] | Dir | LCphi*Pnc [lb] | phi*Pnt [lb] | phi*Mn y-y [lb-ft] | phi*Mn z-z [lb-ft] | Cb | Eqn |
|----|---------|----------------|------------|--------|----|-------------|---------|-----|----------------|--------------|--------------------|--------------------|--------|-------|
| 1 | M155 | 0.38 X 6 Plate | 0.0885 | 1.4999 | 15 | 0.953 | 2.9998 | у | 1471020.2581 | 73872 | 584.82 | 9234 | 3 | H1-1b |
| 2 | M110 | 0.38 X 6 Plate | 0.0868 | 1.5 | 12 | 0.9394 | 3 | у | 1371019.8853 | 73872 | 584.82 | 9234 | 3 | H1-1b |
| 3 | M60 | 0.38 X 6 Plate | 0.0852 | 1.4999 | 10 | 0.9376 | 2.9998 | у | 9 71020.2581 | 73872 | 584.82 | 9234 | 3 | H1-1b |
| 4 | M156 | 0.38 X 6 Plate | 0.0903 | 1.5 | 7 | 0.9192 | 3 | у | 7 71019.8853 | 73872 | 584.82 | 9234 | 3 | H1-1b |
| 5 | M101 | 0.38 X 6 Plate | 0.0856 | 1.4999 | 4 | 0.9114 | 2.9998 | У | 3 71020.2581 | 73872 | 584.82 | 9234 | 3 | H1-1b |
| 6 | M135 | 0.5 x 6 Plate | 0.136 | 0 | 3 | 0.8924 | 1.4955 | у | 1494834.571 | 97200 | 1012.5 | 12150 | 3 | H1-1b |
| 7 | M69 | 0.38 X 6 Plate | 0.0877 | 1.5 | 18 | 0.881 | 3 | У | 1871019.8853 | 73872 | 584.82 | 9234 | 3 | H1-1b |
| 8 | M139 | 0.38 X 6 Plate | 0.0819 | 0.875 | 4 | 0.8808 | 0.875 | у | 7 73624.9782 | 73872 | 584.82 | 9234 | 1.2883 | H1-1b |
| 9 | M100 | 0.38 X 6 Plate | 0.0829 | 0.875 | 9 | 0.8737 | 0.875 | У | 1273624.9782 | 73872 | 584.82 | 9234 | 1.2049 | H1-1b |
| 10 | M57 | 0.5 x 6 Plate | 0.1472 | 0 | 13 | 0.8673 | 0 | У | 9 94834.571 | 97200 | 1012.5 | 12150 | 3 | H1-1b |
| 11 | M138 | 0.38 X 6 Plate | 0.0994 | 0 | 12 | 0.8598 | 0.875 | У | 1573624.9781 | 73872 | 584.82 | 9234 | 1.0078 | H1-1b |
| 12 | M55 | 0.38 X 6 Plate | 0.1007 | 0 | 7 | 0.8557 | 0.875 | У | 9 73624.9781 | 73872 | 584.82 | 9234 | 1.0039 | H1-1b |
| 13 | M59 | 0.38 X 6 Plate | 0.0834 | 0.875 | 15 | 0.8503 | 0.875 | У | 1873624.9782 | 73872 | 584.82 | 9234 | 1.2903 | H1-1b |
| 14 | M98 | 0.5 x 6 Plate | 0.1392 | 0 | 8 | 0.8495 | 1.4955 | У | 3 94834.571 | 97200 | 1012.5 | 12150 | 3 | H1-1b |
| 15 | M96 | 0.38 X 6 Plate | 0.0982 | 0 | 18 | 0.8394 | 0.875 | У | 4 73624.9781 | 73872 | 584.82 | 9234 | 1.0034 | H1-1b |
| 16 | M97 | 0.5 x 6 Plate | 0.1484 | 1.4955 | 15 | 0.7406 | 0 | У | 5 94834.571 | 97200 | 1012.5 | 12150 | 3 | H1-1b |
| 17 | HR12 | PL6x0.375 | 0.1917 | 3.7263 | 15 | 0.7285 | 3.7263 | У | 1561872.8194 | 72900 | 569.7 | 9112.5 | 1.723 | H1-1b |
| 18 | M137 | 0.5 x 6 Plate | 0.1441 | 1.4955 | 10 | 0.7275 | 0 | У | 1694834.571 | 97200 | 1012.5 | 12150 | 3 | H1-1b |
| 19 | M56 | 0.5 x 6 Plate | 0.1511 | 0 | 14 | 0.7138 | 0 | У | 11 94834.571 | 97200 | 1012.5 | 12150 | 3 | H1-1b |
| 20 | HR3 | PL6x0.375 | 0.1949 | 3.7263 | 5 | 0.7051 | 3.7263 | У | 4 61872.8194 | 72900 | 569.7 | 9112.5 | 1.6315 | H1-1b |
| 21 | HR21 | PL6x0.375 | 0.1905 | 3.6947 | 11 | 0.6934 | 3.7263 | У | 1061872.8194 | 72900 | 569.7 | 9112.5 | 1.5841 | H1-1b |
| 22 | HR20 | PL6x0.375 | 0.3905 | 2.2737 | 15 | 0.6589 | 2.2737 | У | 7 61872.8194 | 72900 | 569.7 | 9112.5 | 1.1628 | H1-1b |
| 23 | HR11 | PL6x0.375 | 0.382 | 2.2737 | 4 | 0.6561 | 2.2737 | у | 1261872.8194 | 72900 | 569.7 | 9112.5 | 1.1626 | H1-1b |
| 24 | HR2 | PL6x0.375 | 0.375 | 2.2737 | 10 | 0.6428 | 2.2737 | У | 1861872.8194 | 72900 | 569.7 | 9112.5 | 1.1579 | H1-1b |
| 25 | M145 | 0.5 x 6 Plate | 0.2808 | 0 | 3 | 0.4498 | 0 | У | 1591950.0929 | 97200 | 1012.5 | 12150 | 1.2599 | H1-1b |
| 26 | M104 | 0.5 x 6 Plate | 0.2862 | 0 | 8 | 0.4348 | 0 | У | 4 91950.0929 | 97200 | 1012.5 | 12150 | 1.254 | H1-1b |
| 27 | M63 | 0.5 x 6 Plate | 0.295 | 0 | 14 | 0.434 | 0 | У | 9 91950.0929 | 97200 | 1012.5 | 12150 | 1.2567 | H1-1b |
| 28 | M99 | 0.5 x 6 Plate | 0.2953 | 4.6876 | 8 | 0.3503 | 0 | у | 1391950.0929 | 97200 | 1012.5 | 12150 | 1.1885 | H1-1b |
| 29 | M136 | 0.5 x 6 Plate | 0.294 | 4.6876 | 3 | 0.3412 | 4.6876 | у | 1591950.0929 | 97200 | 1012.5 | 12150 | 1.1843 | H1-1b |
| 30 | M58 | 0.5 x 6 Plate | 0.3087 | 4.6876 | 14 | 0.3264 | 0 | У | 3 91950.0929 | 97200 | 1012.5 | 12150 | 1.1927 | H1-1b |
| 31 | A_MP2_S | PIPE_2.0 | 0.7167 | 84 | 14 | 0.2962 | 48 | | 14 9836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 32 | G_MP2_S | PIPE_2.0 | 0.7034 | 84 | 8 | 0.2948 | 48 | | 8 9836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 33 | A2 | HSS4X4X4 | 0.8324 | 0 | 14 | 0.2862 | 0 | у | 1799905.4289 | 109188 | 12663 | 12663 | 2.3886 | H1-1b |

Company :Telamon CLS

Designer :RY

Job Number:41124-13682835_C8_05-02-MA

Model Name:41124-13682835_C8_05-Stoneybrook R...

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Checked By: JLS

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

| | Member | Shape | Code Check | Loclini | 10 | Shear Check | Locfinl | Di | rl (| C nhi*Pnc [lh] | nhi*Pnt [lh] | nhi*Mn v-v [lh-ft] | phi*Mn z-z [lb-ft | ı Cb | Eqn |
|----|---------|------------------|------------------|----------|----------|-------------|---------|----|------|----------------|--------------|--------------------|-------------------|--------|---------------|
| 34 | | HSS4X4X4 | 0.8045 | 0 | 8 | 0.2854 | 0 | | | 299905.4289 | | 12663 | 12663 | 2.4012 | |
| | B MP2 S | PIPE 2.0 | 0.691 | 84 | 3 | 0.2797 | 48 | | 3 | 3 9836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 36 | A1 | HSS4X4X4 | 0.78 | 0 | 3 | 0.2735 | 0 | ٧ | 7 | 7 99905.4289 | 109188 | 12663 | 12663 | 2.3711 | H1-1b |
| 37 | B_MP4_S | PIPE 2.0 | 0.6821 | 84 | 14 | 0.2701 | 48 | | _ | 9836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 38 | HR10 | PIPE 2.0 | 0.5199 | 13.4211 | 3 | 0.2655 | 13.4211 | | 1 | 324757.8923 | 32130 | 1871.625 | 1871.625 | 2.7813 | H1-1b |
| 39 | HR19 | PIPE 2.0 | 0.5465 | 13.4211 | - | 0.2615 | 13.4211 | | 7 | 7 24757.8923 | 32130 | 1871.625 | 1871.625 | 2.767 | H1-1b |
| 40 | G MP4 S | PIPE 2.0 | 0.647 | 84 | 3 | 0.2583 | 48 | | | 19836.5974 | 32130 | 1871.625 | 1871.625 | | H1-1b |
| 41 | A MP4 S | PIPE 2.0 | 0.6698 | 84 | 9 | 0.2551 | 48 | | 1 | 69836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 42 | HR1 | PIPE 2.0 | 0.5339 | 13.4211 | | 0.2547 | 13.4211 | | _ | 824757.8923 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 43 | HR39 | PIPE 2.0 | | 27.1478 | | | 54.2955 | | 1 | 525674.266 | 33048 | 1925.1 | 1925.1 | 1.1364 | H1-1b |
| 44 | HR38 | PIPE 2.0 | 0.0187 | 27.1478 | | | 54.2955 | | 4 | 1 25674.266 | 33048 | 1925.1 | 1925.1 | 1.1364 | |
| 45 | HR37 | PIPE 2.0 | | 27.1478 | | | 54.2955 | | 1 | 025674.266 | 33048 | 1925.1 | 1925.1 | 1.1364 | H1-1b |
| 46 | M92 | PIPE 3.0 | 0.319 | 122.3684 | | 0.143 | 15 | | _ | 356781.4883 | 65205 | 5748.75 | 5748.75 | 1.6224 | H1-1b |
| 47 | M133 | PIPE 3.0 | 0.3182 | 122.3684 | 4 | 0.14 | 15 | | 7 | 7 56781.4883 | 65205 | 5748.75 | 5748.75 | 1.6525 | H1-1b |
| 48 | A MP3 S | PIPE 2.0 | 0.8189 | 84 | 7 | 0.1341 | 84 | | 1 | 59836.5974 | 32130 | 1871.625 | 1871.625 | | H1-1b |
| 49 | M85 | PIPE 3.0 | 0.3226 | 122.3684 | 14 | 0.1334 | 15 | | | 856781.4883 | 65205 | 5748.75 | 5748.75 | 1.5883 | H1-1b |
| 50 | B MP3 S | PIPE_2.0 | 0.8333 | 84 | 13 | 0.1329 | 84 | | | 1 9836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 51 | G MP3 S | PIPE 2.0 | 0.7883 | 84 | 18 | 0.1293 | 84 | | | 09836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 52 | A MP1 S | PIPE 2.0 | 0.3769 | 84 | 14 | | 84 | | | 39836.5974 | 32130 | 1871.625 | 1871.625 | _ | H1-1b |
| 53 | G MP1 S | PIPE 2.0 | 0.3689 | 84 | 8 | 0.1085 | 84 | | 7 | 7 9836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 54 | B MP1 S | PIPE 2.0 | 0.362 | 84 | 3 | 0.1046 | 84 | | 1 | 3 9836.5974 | 32130 | 1871.625 | 1871.625 | _ | H1-1b |
| 55 | M62 | HSS4X4X4 | 0.3052 | 0 | 15 | 0.0979 | 0 | V | | 0106874.1659 | | 12663 | 12663 | 1.6067 | |
| 56 | M61 | HSS4X4X4 | | 30.6875 | 1 - 1 | | • | | | 0106874.1062 | 109188 | 12663 | 12663 | 1.6594 | |
| 57 | M231 | PIPE 2.0 | 0.4409 | | 11 | | 69.4737 | y | | 9 9836.5974 | 32130 | 1871.625 | 1871.625 | 3 | H1-1b |
| 58 | M103 | HSS4X4X4 | 0.2998 | 0 | 9 | 0.0956 | 0 | V | | 4106874.1659 | | 12663 | 12663 | 1.6388 | |
| 59 | M235 | PIPE 2.0 | 0.4409 | 48 | 6 | | 69.4737 | | | 4 9836.5974 | 32130 | 1871.625 | 1871.625 | | H1-1b |
| 60 | M142 | HSS4X4X4 | 0.2991 | 0 | 4 | 0.0943 | 0 | | _ | 9106874.1659 | | 12663 | 12663 | 1.6066 | |
| 61 | M102 | HSS4X4X4 | 0.2331 | 30.6875 | - | | _ | _ | - | 4106874.1062 | | 12663 | 12663 | 1.6967 | |
| 62 | M140 | HSS4X4X4 | 0.3103 | 30.6875 | | | | | | 9106874.1062 | | 12663 | 12663 | 1.6964 | |
| 63 | M269 | PIPE 2.0 | 0.3078 | 48 | 16 | | 69.4737 | у | | 59836.5974 | 32130 | 1871.625 | 1871.625 | 2.2447 | $\overline{}$ |
| 64 | HR30 | L2.5x2.5x4 | 0.4286 | 0 | 15 | 0.0893 | | 7 | _ | 536536.5295 | 38556 | 1113.5545 | 2537.3882 | | H2-1 |
| 65 | HR28 | L2.5x2.5x4 | 0.4280 | 0 | 9 | | | | | 36536.5295 | 38556 | 1113.5545 | 2537.3882 | | H2-1 |
| 66 | HR29 | L2.5x2.5x4 | 0.4002 | 0 | 4 | 0.0073 | | _ | _ | 4 36536.5295 | 38556 | 1113.5545 | 2537.3882 | 1.5 | H2-1 |
| 67 | M89 | PIPE 2.0 | | 59.8737 | | | 59.8737 | _ | | 120866.7334 | 32130 | 1871.625 | 1871.625 | 1.8637 | |
| 68 | M130 | PIPE 2.0 | | 59.8737 | | | 59.8737 | | _ | 20866.7334 | 32130 | 1871.625 | 1871.625 | 1.8664 | |
| 69 | M232 | PIPE 2.0 | 0.4028 | | 11 | | 68.8421 | | | 5 9836.5974 | 32130 | 1871.625 | 1871.625 | | H1-1b |
| 70 | M276 | PIPE 2.0 | 0.3969 | 48 | 16 | 0.0667 | 48 | | | 89836.5974 | 32130 | 1871.625 | 1871.625 | 2.3052 | |
| 71 | M242 | PIPE 2.0 | 0.403 | 48 | 6 | | 68.8421 | | _ | 59836.5974 | 32130 | 1871.625 | 1871.625 | 2.9941 | $\overline{}$ |
| 72 | M170 | PIPE 2.0 | | 59.8737 | | | 59.8737 | | - | 1 20866.7334 | 32130 | 1871.625 | 1871.625 | 1.6588 | |
| 73 | M272 | 5/8 SR | 0.5722 | 9 | 6 | 0.0338 | 0 | | - | 11936.0821 | | | 163.9411 | 2.2592 | |
| 74 | M230 | 5/8 SR | 0.5722 | 9 | 5 | 0.0330 | 0 | | _ | 5 11936.0821 | | | 163.9411 | 2.2408 | |
| 75 | | 5/8 SR | 0.5401 | _ | 16 | | 0 | | _ | 611936.0821 | | | 163.9411 | 2.2544 | |
| 76 | | 5/8 SR | 0.5437 | | 17 | 0.0317 | 0 | | | 711936.0821 | | | 163.9411 | 2.2344 | |
| 77 | M238 | 5/8 SR | 0.5299 | | 11 | 0.0314 | 0 | | - | 111936.0821 | | | 163.9411 | 2.2430 | |
| 78 | | 5/8 SR | 0.5299 | 0 | 14 | | 0 | | _ | 411936.0821 | | | 163.9411 | 2.2272 | |
| 79 | | 5/8 SR | 0.3339 | 9 | 6 | 0.0311 | 0 | | _ | 11936.0821 | | | 163.9411 | 2.239 | |
| 80 | | 5/8 SR | 0.4594 | 0 | 14 | 0.0265 | 0 | | | 411936.0821 | | | 163.9411 | 2.239 | |
| 81 | | 5/8 SR | 0.4594 | 9 | 5 | 0.0265 | 0 | | | 5 11936.0821 | | | 163.9411 | 2.2173 | |
| 82 | | 5/8 SR | 0.4689 | | 17 | 0.0263 | 0 | | | 7 11936.0821 | | | 163.9411 | 2.2277 | |
| 83 | | 5/8 SR | 0.4448 | | 16 | | 0 | | _ | 611936.0821 | | | 163.9411 | 2.2251 | |
| 84 | | 5/8 SR | 0.4482 | | 11 | 0.0259 | 0 | | | 111936.0821 | | | 163.9411 | 2.2451 | |
| 85 | | 5/8 SR 5/8 SR | 0.4482 | | 31 | 0.0259 | 0 | | | 111936.0821 | | | 163.9411 | 2.2406 | - |
| _ | + | 5/8 SR | | | ઝા 26 | | 0 | | | 611936.0821 | | | 163.9411 | 2.2476 | |
| 86 | M255 | 5/8 SR 5/8 SR | 0.3108 0.3081 | | 20 20 | 0.0182 | 0 | | - | 011936.0821 | | | 163.9411 | 2.2465 | |
| 88 | | | 0.3081 | | 20 28 | | 0 | | | 811936.0821 | | | | 2.247 | |
| - | | 5/8 SR | | | 20 23 | | | | _ | | | | 163.9411 | 2.2376 | |
| 89 | | 5/8 SR | 0.2972 | | 23 33 | 0.0172 | 0 | | | 311936.0821 | | | 163.9411 | | |
| 90 | | 5/8 SR | 0.2924 | 9 | პპ 15 | | 0 | | _ | 411936.0821 | | | 163.9411 | 2.2359 | |
| 91 | M291 | 5/8 SR | 0.2548 | 9 | 15 | 0.014 | 0 | | 3 | 1 11936.0821 | 13/38.6348 | 163.9411 | 163.9411 | 2.2387 | r11-10 |

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Job Number:41124-13682835_C8_05-02-MA Checked By: JLS Model Name:41124-13682835_C8_05-Stoneybrook R...

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

| | Member | Shape | Code Check | Loc[in] | LC S | Shear Check | Loc[in] | DirL | _C | phi*Pnc [lb] | phi*Pnt [lb] | phi*Mn y-y [lb-ft] | phi*Mn z-z [lb-ft] | Cb | Eqn |
|-----|--------|--------|------------|---------|------|-------------|---------|------|----|--------------|--------------|--------------------|--------------------|--------|-------|
| 92 | M257 | 5/8 SR | 0.2476 | 9 | 20 | 0.0137 | 0 | 2 | 20 | 11936.0821 | 15738.6348 | 163.9411 | 163.9411 | 2.2269 | H1-1b |
| 93 | M228 | 5/8 SR | 0.2462 | 9 | 26 | 0.0136 | 0 | 2 | 26 | 11936.0821 | 15738.6348 | 163.9411 | 163.9411 | 2.2268 | H1-1b |
| 94 | M160 | L2x2x3 | 0.2033 | 50.5418 | 6 | 0.0123 | 50.5418 | у | 7 | 9618.8883 | 23392.8 | 557.7166 | 1137.5872 | 1.5 | H2-1 |
| 95 | M114 | L2x2x3 | 0.2007 | 50.5418 | 11 | 0.0122 | 50.5418 | y 1 | 12 | 9618.8883 | 23392.8 | 557.7166 | 1137.5872 | 1.5 | H2-1 |
| 96 | M73 | L2x2x3 | 0.2008 | 50.5418 | 16 | 0.0119 | 50.5418 | y 1 | 17 | 9618.8883 | 23392.8 | 557.7166 | 1137.5872 | 1.5 | H2-1 |
| 97 | M75 | L2x2x3 | 0.1796 | 50.5416 | 11 | 0.0115 | 50.5416 | Z | 25 | 9618.9559 | 23392.8 | 557.7166 | 1137.5881 | 1.5 | H2-1 |
| 98 | M162 | L2x2x3 | 0.1768 | 50.5416 | 16 | 0.0113 | 50.5416 | z 3 | 30 | 9618.9559 | 23392.8 | 557.7166 | 1137.5881 | 1.5 | H2-1 |
| 99 | M116 | L2x2x3 | 0.1791 | 50.5416 | 5 | 0.0113 | 50.5416 | Z | 20 | 9618.9559 | 23392.8 | 557.7166 | 1137.5881 | 1.5 | H2-1 |
| 100 | M250 | 5/8 SR | 0.181 | 9 | 23 | 0.0103 | 0 | 2 | 23 | 11936.0821 | 15738.6348 | 163.9411 | 163.9411 | 2.2261 | H1-1b |
| 101 | M214 | 5/8 SR | 0.1784 | 9 | 28 | 0.0101 | 0 | 2 | 28 | 11936.0821 | 15738.6348 | 163.9411 | 163.9411 | 2.2244 | H1-1b |
| 102 | M284 | 5/8 SR | 0.174 | 9 | 34 | 0.0099 | 0 | 3 | 34 | 11936.0821 | 15738.6348 | 163.9411 | 163.9411 | 2.2253 | H1-1b |

TOWER-MOUNT CONNECTION ANALYSIS

v.1.0.0

| SITE INFO | SITE INFORMATION | | | | | |
|------------|----------------------------|--|--|--|--|--|
| Site ID | 283420 | | | | | |
| Site Name | Stoneybrook Rd CT | | | | | |
| Project ID | 41124-13682835_C8_05-02-MA | | | | | |

| ANALYSIS PARAMETERS | |
|---------------------|---|
| TIA Revision | Н |

| APPLIED FORC | APPLIED FORCES FROM R3D | | | | | | | | |
|--------------|-------------------------|---------|--|--|--|--|--|--|--|
| Member | r Label | A2 LC14 | | | | | | | |
| Member E | nd Label | 1 | | | | | | | |
| Force-X | Fx, lbs | -2766.9 | | | | | | | |
| Force-Y | Fy, lbs | 3677.7 | | | | | | | |
| Force-Z | Fz, Ibs | -61.5 | | | | | | | |
| Moment X-X | Mx, Ibs-ft | -61.3 | | | | | | | |
| Moment Y-Y | My, Ibs-ft | -13.6 | | | | | | | |
| Moment Z-Z | Mz, Ibs-ft | 10366.9 | | | | | | | |

| STANDOFF MEMBER PROPERTIES | |
|-------------------------------|------------------|
| Standoff Member Type | Square/Rect. HSS |
| Standoff Member Shape | HSS4X4X1/4 |
| Standoff Member Grade | A36 |
| Member to Plate Weld Size, in | 3/16 |

| BOLT & PLATE PROPERTIES | |
|---------------------------------|-------|
| Bolt Quantity | 4 |
| Bolt Edge Distance (e), in | 1.00 |
| Nominal Bolt Diameter (ØDb), in | 0.625 |
| Bolt Grade | A325 |
| Plate Height (H), in | 8.00 |
| Plate Width (W), in | 8.00 |
| Plate Thickness (T), in | 0.75 |
| Plate Grade | A36 |

| BOLT ANALYSIS | |
|----------------------------|-------|
| Shear Demand (Vu), k | 0.93 |
| Shear Capacity (ΦRnv), k | 13.81 |
| Tension Demand (Tu), k | 15.35 |
| Tension Capacity (ΦRnt), k | 20.34 |
| Shear Utilization | 6.7% |
| Tension Utilization | 75.5% |
| Interaction Utilization | 57.4% |

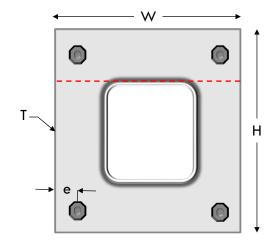
PASS

PASS

| PLATE ANALYSIS | | |
|----------------|--|--|
| 21.71 | | |
| 25.77 | | |
| 84.2% | | |
| | | |



319 Chapanoke Road, Suite 118 Raleigh, NC 27603 Office: (405) 348-5460 Fax: (405) 341-6334



| MATERIAL PROPERTIES | |
|---|-----|
| Standoff Member - Yield Strength (Fy), ksi | 36 |
| Standoff Member - Ultimate Strength (Fu), ksi | 58 |
| Bolt - Yield Strength (Fy), ksi | 92 |
| Bolt - Tensile Strength (Fu), ksi | 120 |
| Plate - Yield Strength (Fy), ksi | 36 |
| Plate - Ultimate Strength (Fu), ksi | 58 |



STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov Web Site: www.ct.gov/csc

VIA ELECTRONIC MAIL

October 26, 2020

Allison Hebel Site Acquisition Consultant Centerline Communications, LLC 750 West Center Street, Ste 301 West Bridgewater, MA 02379

RE: **EM-CING-138-200909** – New Cingular Wireless PCS, LLC (AT&T) notice of intent to modify an existing telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut.

Dear Ms. Hebel:

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

- 1. Install Yellow Caution 2B sign(s), if none already exist, consistent with the Radio Frequency Safety Survey Report Prediction prepared by Centerline Communications, LLC dated July 13, 2020;
- 2. Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- 3. Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- 4. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- 5. Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by AT&T shall be removed within 60 days of the date the antenna ceased to function;
- 6. The validity of this action shall expire one year from the date of this letter; and
- 7. The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated September 8, 2020. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site by any dimension, increase noise levels at the tower site boundary by six decibels or more, and increase the total radio frequencies electromagnetic radiation

power density measured at the tower site boundary to or above the standards adopted by the Federal Communications Commission pursuant to Section 704 of the Telecommunications Act of 1996 and by the state Department of Energy and Environmental Protection pursuant to Connecticut General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below state and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Sincerely,

s/Melanie A. Bachman

Melanie A. Bachman Executive Director

MAB/IN/emr

c: The Honorable Laura R. Hoydick, Mayor, Town of Stratford (mayor@townofstratford.com)

STATE OF CONNECTICUT



CONNECTICUT SITING COUNCIL

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July 19, 2019

Kristen Motel, Esq. Lucia Chiocchio, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14th floor White Plains, NY 10601

DOCKET NO. 385 - American Towers LLC Certificate of Environmental Compatibility RE: and Public Need for the construction, maintenance and operation of a telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut.

Dear Attorney Motel and Attorney Chiocchio:

During a public meeting held on July 18, 2019, the Connecticut Siting Council (Council) by its Decision and Order dated July 18, 2019, modified the Decision and Order in Docket 385 rendered on February 25, 2010 for the construction, maintenance and operation of a telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut and reissued the Certificate of Environmental Compatibility and Public Need (Certificate), thereby eliminating the requirement that panel antennas on this telecommunications facility shall be installed in an exterior, flush mount configuration.

Therefore, the Council hereby approves the installation of three new standoff T-Arm antenna mounts with braces at the 117-foot level of the the tower consistent with EM-CING-138-190403 -New Cingular Wireless PCS, LLC (AT&T) notice of intent to modify an existing telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut, with the following conditions:

- 1. Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by AT&T shall be removed within 60 days of the date the antenna ceased to function;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

Enclosed are the Council's Staff report, Modified Decision and Order, and reissued Certificate.

Sincerely,

Melanie A. Bachman Executive Director

MAB/RDM/laf

Enclosures

c: Gregory Mercier, Supervising Attorney, US Tower Division, American Tower Corporation Patricia Nowak, Site Acquisition Consultant, Centerline Communications, LLC Parties & Intervenors
State Documents Librarian
The Honorable Laura R. Hoydick, Mayor, Town of Stratford
John Rusatsky, Zoning Enforcement Officer, Town of Stratford
Jay Habansky, Planning & Zoning Administrator, Town of Stratford



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Docket No. 385

23 Stonybrook Road, Stratford AT&T Request to Reopen and Modify the Decision and Order

Staff Report July 18, 2019

Introduction

On February 25, 2010, the Connecticut Siting Council (Council) issued a Certificate of Environmental Compatibility and Public Need (Certificate) to T-Mobile Northeast, LLC for the construction, maintenance and operation of a telecommunications facility at 23 Stonybrook Road, Stratford, Connecticut.

The Council's Docket 385 Decision and Order (D&O), Condition 1, specified that "panel antennas shall be installed in an exterior, flush mount configuration and such panel antennas shall not exceed a height of 100 feet above ground level".

The Council approved a transfer of Certificate to Florida Tower Partners on January 6, 2011. The Council approved a second transfer of Certificate from Florida Tower Partners to American Tower Corporation (ATC) on March 5, 2016.

On June 10, 2019, AT&T submitted a Request to Reopen and Modify D&O Condition No. 1 to allow for other types of antenna mounts to be used at this facility including, but not limited to, T-Arm mount systems. AT&T's request has been authorized by ATC.

Background Site Information

Development and Management Plan

On October 21, 2010, the Council approved a Development and Management (D&M) Plan for this facility, except for the utility route, which was approved by the Council on March 17, 2011. The D&M Plan included a 100-foot monopole with a white finish. T-Mobile installed three flush-mounted panel antennas at the 98-foot level of the tower and reserved space at the 88-foot level for future antenna/network expansion.

Subsequent to the D&M approval, in 2013, the Council approved a tower share request from Verizon to install flush mount antennas at the 77-foot level of the tower.

Petition No. 1100 - Tower Extension

On July 10, 2014, the Council approved a Petition submitted by AT&T for a 20-foot extension of the monopole to support three flush mounted antennas and associated remote radio units at both the 117-foot and 107-foot levels of the tower. The extension was constructed and AT&T installed antennas at the 117-foot level of the tower.

AT&T Exempt Modification Request

On April 1, 2019, AT&T submitted a Notice of Exempt Modification to install new T-Arm mounts at the 117-foot level of the 120-foot tower to support six antennas and associated remote radio units (RRUs). On April 5, 2019, the Council submitted correspondence to AT&T's consultant stating the filing is incomplete as it does not conform to Condition 1 of the Council's D&O for this facility that limited panel antennas to a flush mount configuration.

Specifically, AT&T proposed to replace its existing flush mount antenna configuration at the 117-foot level of the tower with a new T-Arm antenna configuration using three new 24-inch long standoff T-Arm antenna mounts with interconnecting arm braces. AT&T would install six panel antennas (3 relocated and 3 new) and install nine RRUs (3 relocated, 6 new) on the new T-Arm mounts.

A Professional Engineer duly licensed in the State of Connecticut certified that the structure is adequate to support the proposed loading.

The facility would have a cumulative worst-case power density of 25.7 percent of the applicable limit using a -10 dB off-beam adjustment.

The Notice of Exempt Modification and a copy of the Council's notice of the incomplete Exempt Modification filing was sent to the Town, property owner, and tower owner.

Request to Reopen and Modify

In response to the Council's April 5, 2019 correspondence regarding the incomplete Exempt Modification filing, AT&T's Request to Reopen and Modify the D&O seeks to allow the use of other antenna mounting designs, including but not limited to T-Arm mounts, to promote tower sharing and enhance existing wireless service, as detailed below:

- Restricting antenna installations on the tower to flush mounts has the potential to deter wireless
 carriers and other entities that do not use this type of antenna mounting equipment from co-locating
 on the facility;
- The flush mount antenna configuration cannot meet AT&T's current state-of-the art network coverage and capacity demands; and
- The visual effect of AT&T's proposed T-Arm antenna configuration compared to the existing flush mount configuration is not significant, as demonstrated in a visual assessment included within the Request.

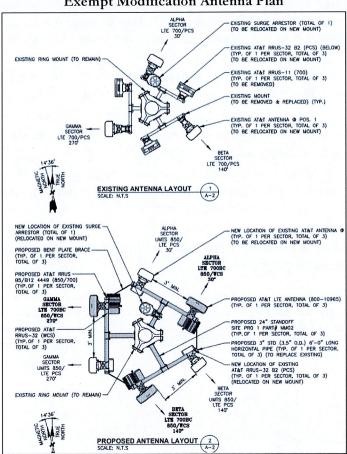
On June 7, 2019, AT&T sent notification of the Request to Reopen and Modify the D&O to the Town of Stratford (Town) and abutting property owners.

On June 10, 2019, the Council notified Parties and Intervenors of the Request to Reopen and Modify the D&O and requested that any submission of comments or statements with respect to whether the Request to Reopen and Modify the D&O should be granted or denied including any request for a hearing be submitted to the Council by close of business on July 11, 2019. The Council has not received any comment to date.

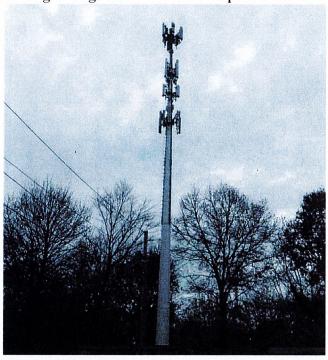
Site Location



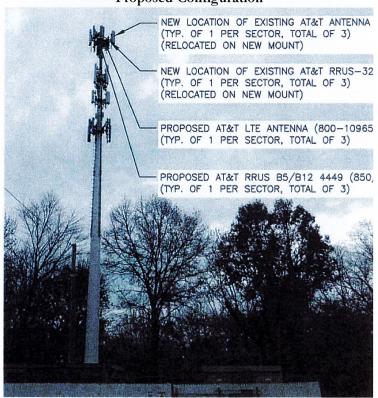
Exempt Modification Antenna Plan



Existing Configuration – AT&T at top mount location



Proposed Configuration



| DOCKET NO. 385 – American Towers LLC Certificate of | } | Connecticut |
|--|---|---------------|
| Environmental Compatibility and Public Need for the construction, | | |
| maintenance and operation of a telecommunications facility located | } | Siting |
| at 23 Stonybrook Road, Stratford, Connecticut. | | |
| | } | Council |
| | | |
| | | July 18, 2019 |

Decision and Order

In response to the Connecticut Siting Council's (Council) reopening of the record in this docket on July 18, 2019 to consider whether changed conditions exist that would warrant a modification to the original Decision and Order's Condition 1 eliminating the requirement that panel antennas on this telecommunications facility be installed in an exterior, flush mount configuration, the Council hereby rescinds the Decision and Order in Docket 385 rendered on February 25, 2010 and issues this new Decision and Order for the construction, maintenance and operation of a telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut.

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

- 1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of T-Mobile Northeast LLC and other entities, both public and private. The height of the tower may be extended after the date of this Decision and Order pursuant to regulations of the Federal Communications Commission.
- 2. The tower compound shall be oriented in an east-west configuration along the south property line. The tower shall be located to the maximum feasible distance from the west property line.
- 3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Stratford for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping;
 - b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
 - c) details for the installation of architecturally-treated fencing around the compound and the installation of evergreen plantings along the west property boundary, where necessary to provide visual screening to the adjacent residences.
- 4. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

- 5. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
- 7. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Stratford public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
- 8. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.
- 9. At least one wireless telecommunications carrier shall install their equipment and shall become operational not later than 120 days after the tower is erected. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.
- 10. Any request for extension of the time period referred to in Condition 8 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Stratford. Any proposed modifications to this Decision and Order shall likewise be so served.
- 11. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 12. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.
- 13. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.

We hereby direct that a copy of the staff report and modified Decision and Order be served on each person listed in the Service List, dated March 5, 2015, and notice of issuance published in <u>The Connecticut Post.</u>

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



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

CERTIFICATE

OF

ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED DOCKET NO. 385

Pursuant to General Statutes § 4-181a(b), the Connecticut Siting Council hereby reissues a Certificate of Environmental Compatibility and Public Need to American Towers LLC for the construction, maintenance and operation of a telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on July 18, 2019.

By order of the Council,

Melanie A. Bachman, Executive Director

July 18, 2019



| STATE OF CONNECTICUT |) | |
|------------------------------|---|---------------|
| ss. New Britain, Connecticut | : | July 19, 2019 |
| COUNTY OF HARTFORD |) | |

I hereby certify that the foregoing is a true and correct copy of the Modified Decision and Order and reissued Certificate of Environmental Compatibility and Public Need by the Connecticut Siting Council, State of Connecticut.

ATTEST:

Melanie A. Bachman Executive Director Connecticut Siting Council

I certify that a copy of the Modified Decision and Order and reissued Certificate of Environmental Compatibility and Public Need in Docket No. 385 have been forwarded by Certified First Class Return Receipt Requested mail on July 19, 2019, to all parties and intervenors of record as listed on the attached service list, dated March 5, 2015.

ATTEST:

Lisa Fontaine
Fiscal Administrative Officer
Connecticut Siting Council

LIST OF PARTIES AND INTERVENORS $\underline{SERVICE\ LIST}$

| | Document | Status Holder | Representative |
|---|----------|--------------------------------|---|
| Status Granted | Service | (name, address & phone number) | (name, address & phone number) |
| Certificate Holder (as of 03/05/15) | | American Towers LLC | Gregory Mercier Supervising Attorney, US Tower Division American Tower Corporation 10 Presidential Way Woburn, MA 01801 (781) 926-4500 (781) 926-4555 fax Greg.mercier@americantower.com |
| Applicant | ⊠ E-mail | T-Mobile Northeast LLC | Julie Kohler, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203) 368-0211 (203) 394-9901 jkohler@cohenandwolf.com Monte E. Frank, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203) 368-0211 (203) 394-9901 mfrank@cohenandwolf.com |
| | | | |



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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July 19, 2019

Classified/Legal Supervisor

385190718

CSC Account No. 237047

Connecticut Post 410 State Street

Bridgeport, CT 06604 legals@hearstmediact.com

FROM:

Lisa Fontaine, Fiscal Administrative Officer

RE:

DOCKET NO. 385 - American Towers LLC Certificate of Environmental

Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut.

Please publish the attached legal notice for one day on the first day possible from receipt of this notice.

Please send an affidavit of publication and invoice to my attention.

Thank you.

RDM/laf





STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

NOTICE

Pursuant to General Statutes § 4-181a(b), the Connecticut Siting Council (Council) announces that, on July 18, 2019, the Council modified the Decision and Order in Docket 385, dated February 25, 2010 and reissued the Certificate of Environmental Compatibility and Public Need, thereby eliminating the requirement that panel antennas on this telecommunications facility be installed in an exterior, flush mount configuration in DOCKET NO. 385 - American Towers LLC Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut. This record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.

DOCKET NO. 385 – T-Mobile Northeast LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut.

Siting

Council

February 25, 2010

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, maintenance, and management of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to T-Mobile Northeast LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility at 23 Stonybrook Road, Stratford, Connecticut.

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

- 1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of T-Mobile Northeast LLC and other entities, both public and private, but such tower shall not exceed a height of 100 feet above ground level. Panel antennas shall be installed in an exterior, flush mount configuration and such panel antennas shall not exceed a height of 100 feet above ground level.
- 2. The tower compound shall be re-located in an east-west orientation along the south property line. The tower shall be re-located appropriately to increase the distance from the tower to the west property line.
- 3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Stratford for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and
 - b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
 - c) details for the installation of architecturally-treated fencing around the compound and the installation of evergreen plantings along the west property boundary, where necessary to provide visual screening to the adjacent residences.

- 4. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
- 5. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
- 7. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Stratford public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
- 8. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.
- 9. At least one wireless telecommunications carrier shall install their equipment and shall become operational not later than 120 days after the tower is erected. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.
- 10. Any request for extension of the time period referred to in Condition 8 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Stratford. Any proposed modifications to this Decision and Order shall likewise be so served.
- 10. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 11. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.

Docket No. 385 Decision and Order Page 3

12. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in the Connecticut Post.

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

The parties and intervenors to this proceeding are:

Applicant

T-Mobile Northeast LLC

Its Representative

Julie D. Kohler, Esq. Monte E. Frank, Esq. Jesse A. Langer, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604



STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

October 25, 2021

Jennille Smith Site Acquisition Consultant Centerline Communications LLC 750 West Center Street, Suite 301 West Bridgewater, MA 02379

RE: **EM-CING-138-210805** – New Cingular Wireless PCS, LLC (AT&T) notice of intent to modify an existing telecommunications facility located at 23 Stonybrook Road, Stratford, Connecticut.

Dear Ms. Smith:

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

- 1. Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- 2. Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- 3. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities:
- 4. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- 5. Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by AT&T shall be removed within 60 days of the date the antenna ceased to function;
- 6. The validity of this action shall expire one year from the date of this letter; and
- 7. The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated August 3, 2021, and additional information received October 4, 2021 and October 7, 2021. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site by any dimension, increase noise levels at the tower site boundary by six decibels or more, and increase the total radio frequencies electromagnetic radiation power density

measured at the tower site boundary to or above the standards adopted by the Federal Communications Commission pursuant to Section 704 of the Telecommunications Act of 1996 and by the state Department of Energy and Environmental Protection pursuant to Connecticut General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below state and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman Executive Director

Milikestal

MAB/CMW/emr

c: The Honorable Laura R. Hoydick, Mayor, Town of Stratford (mayor@townofstratford.com)



Stoneybrook Management LLC 124 Knapp Street Easton, CT 06612

Re: Notice of Exempt Modification – AT&T Mobility Site 13682835

EM-CING-138-200909; EM-CING-138-210805; EM-CING-138-190403

AT&T Wireless Telecommunications Facility @ 23 Stonybrook Road, Stratford, CT 06614

Dear Property Owner:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred and nineteen (119) foot tall monopole tower at 23 Stonybrook Road, Stratford, CT 06614 (Latitude: 41.20327777, Longitude: -73.148625). The property is also identified as being on "Ruth Street" on the Stratford GIS webpage. The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Stoneybrook Management LLC.

AT&T proposes to remove nine (9) existing antennas and one (1) squid and replace them with twelve (12) new panel antennas with four (4) RRHs and two (2) squids at the existing centerline of one hundred seventeen (117) feet on the existing one hundred nineteen (119) foot tall monopole, as more particularly detailed on the enclosed Construction Drawings dated 1/14/2022. The proposal involves minimal groundwork: installing a Fronthaul Gateway and one (1) IDLE ECEDE.

This letter is intended to serve as the required notice to the owner of the property. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Zoning Manager, Centerline Communications 10130 Donleigh Drive



The Honorable Laura R. Hoydick Stratford Town Hall 2725 Main Street Stratford, CT 06615

Re:

Notice of Exempt Modification – AT&T Mobility Site 13682835

EM-CING-138-200909; EM-CING-138-210805; EM-CING-138-190403

AT&T Wireless Telecommunications Facility @ 23 Stonybrook Road, Stratford, CT 06614

Dear Mayor Hoydick:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred and nineteen (119) foot tall monopole tower at 23 Stonybrook Road, Stratford, CT 06614 (Latitude: 41.20327777, Longitude: -73.148625). The property is also identified as being on "Ruth Street" on the Stratford GIS webpage. The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Stoneybrook Management LLC.

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This letter is intended to serve as the required notice to the Municipality's Chief Elected Official. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Zoning Manager, Centerline Communications 10130 Donleigh Drive



Daniel Brennan, Zoning Enforcement Officer Stratford Town Hall 2725 Main Street Stratford, CT 06615

Re: Notice of Exempt Modification – AT&T Mobility Site 13682835

EM-CING-138-200909; EM-CING-138-210805; EM-CING-138-190403

AT&T Wireless Telecommunications Facility @ 23 Stonybrook Road, Stratford, CT 06614

Dear Mr. Brennan:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred and nineteen (119) foot tall monopole tower at 23 Stonybrook Road, Stratford, CT 06614 (Latitude: 41.20327777, Longitude: -73.148625). The property is also identified as being on "Ruth Street" on the Stratford GIS webpage. The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Stoneybrook Management LLC.

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This letter is intended to serve as the required notice to the Municipal Planning and Zoning Officer. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Jack Andrews Zoning Manager, Centerline Communications

10130 Donleigh Drive



Blake Paynter
Project Manager, Site Development
American Tower Corporation
10 Presidential Way
Woburn, MA 01801

Re:

Notice of Exempt Modification – AT&T Mobility Site 13682835

EM-CING-138-200909; EM-CING-138-210805; EM-CING-138-190403

AT&T Wireless Telecommunications Facility @ 23 Stonybrook Road, Stratford, CT 06614

Dear Mr. Paynter:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred and nineteen (119) foot tall monopole tower at 23 Stonybrook Road, Stratford, CT 06614 (Latitude: 41.20327777, Longitude: -73.148625). The property is also identified as being on "Ruth Street" on the Stratford GIS webpage. The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Stoneybrook Management LLC.

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This letter is intended to serve as the required notice to the tower owner. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Jack Andrews

Zoning Manager, Centerline Communications

10130 Donleigh Drive

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