

JULIE D. KOHLER

PLEASE REPLY TO: Bridgeport
WRITER'S DIRECT DIAL: (203) 337-4157
E-Mail Address: jkohler@cohenandwolf.com

November 18, 2014

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

Re:

Notice of Exempt Modification AT&T Towers/T-Mobile co-location T-Mobile Site ID CT11634C 35 Wildwood Street, New Britain CT

Dear Attorney Bachman:

This office represents T-Mobile Northeast LLC ("T-Mobile") and has been retained to file exempt modification filings with the Connecticut Siting Council on its behalf.

In this case, AT&T Towers owns the existing telecommunications tower and related facility at 35 Wildwood Street, New Britain Connecticut (latitude 41.668239, longitude - 72.754955). T-Mobile intends to add three (3) antennas add related equipment at this existing facility in New Britain ("New Britain Facility"). Please accept this letter as notification, pursuant to R.C.S.A. § 16-50j-73, of construction which 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 Mayor Erin E. Stewart. The City of New Britain is the property owner.

The existing New Britain Facility consists of a 110 foot monopole tower. T-Mobile plans to add three (3) antennas on proposed pipe and antenna mounts, and add three (3) proposed RRU (remote radio units), including spare fiber and power jumpers, mounted on the tower at a centerline of 100 feet. (See the plans revised to November 14, 2014 attached hereto as Exhibit A). The existing tower is structurally capable of supporting T-Mobile's proposed use, as indicated in the structural analysis dated October 14, 2014 and attached hereto as Exhibit B.

¹ The Council considered this proposed Facility in Petition 703 and made the determination that it did not have jurisdiction over the application. T-Mobile has since filed several notices of intent, the most recent captioned EM-T-MOBILE-089-120625.



November 18, 2014 Site ID CT11634C Page 2

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

- 1. The proposed modification will not increase the height of the tower. T-Mobile's proposed antennas will be installed at the 100 foot level. The enclosed tower drawing confirms that the proposed modification will not increase the height of the tower.
- 2. T-Mobile does not propose any changes within the compound area and therefore will not require an extension of the site boundaries.
- 3 . The proposed modification to the Facility will not increase the noise levels at the existing facility by six decibels or more.
- 4. The operation of the proposed antennas will not increase the total radio frequency (RF) power density, measured at the base of the tower, to a level at or above the applicable standard. According to a RF Exposure Analysis prepared by EBI dated November 17, 2014 T-Mobile's operations would add 13.66% of the FCC Standard. Therefore, the calculated "worst case" power density for the planned combined operation at the site including all of the proposed antennas would be 87.98% of the FCC Standard as calculated for a mixed frequency site as evidenced by the engineering exhibit attached hereto as Exhibit C.

For the foregoing reasons, T-Mobile respectfully submits that the proposed antennas and equipment at the New Britain Facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Upon acknowledgement by the Council of this proposed exempt modification, T-Mobile shall commence construction approximately sixty days from the date of the Council's notice of acknowledgement.

Sincerely,

Julie D. Kohler, Esq.

cc: Mayor Erin E. Stewart, City of New Britain AT&T Towers
Sheldon Freincle, Northeast Site Solutions

EXHIBIT A

SITE NAME: CT634/CING/CHESLEY PARK E 35 WILDWOOD STREET

NEW BRITAIN, CT 06051 HARTFORD COUNTY

L700 - 702CU CONFIGURATION SITE NUMBER: CT11634C

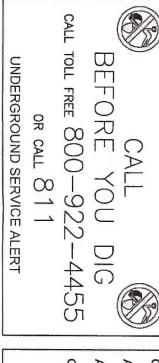
GENERAL NOTES

- 1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
- 2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
- 3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE T-MOBILE NORTHEAST, LLC REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SPECIAL STRUCTURAL NOTES

- STRUCTURAL DESIGNS AND DETAILS FOR ANTENNA MOUNTS COMPLETED BY HUDSON DESIGN ON BEHALF OF TI-MOBILE ARE INCLUSIVE OF THE ENTIRE ANTENNA SUPPORT STRUCTURE (GLOBAL STRUCTURAL STABILITY ANALYSIS BY OTHERS), EXISTING TOWER PLATFORM, EXISTING ANTENNA MOUNTS AND ALL OTHER ASPECTS OF THE STRUCTURE THAT WILL SUPPORT THE TI-MOBILE MODERNIZATION EQUIPMENT DEPLOYMENT AS DEPICTED HEREIN.
- HUDSON DESIGN ASSUMES THAT THE TOWER IS PROPERLY CONSTRUCTED AND MAINTAINED. ALL STRUCTURAL MEMBERS AND THEIR CONNECTION ARE ASSUMED TO BE IN GOOD CONDITION AND ARE FREE FROM DEFECTS WITH NO DETERIORATION TO ITS MEMBER CAPACITIES





SECTOR A:

ACCESS NOT PERMITTED ACCESS NOT PERMITTED

SPECIAL RESTRICTIONS

SECTOR C:

GPS/LMU:

PPC DISCONNECT:
MAIN CIRCUIT D/C: RADIO CABINETS:

UNRESTRICTED

JUNESTRICTED

UNRESTRICTED

JNRESTRICTED ACCESS NOT PERMITTED

NIU/T DEMARC:

T-MOBILE TECHNICIAN SITE SAFETY NOTES

PROJECT INFORMATION

SCOPE OF WORK:

UNMANNED TELECOMMUNICATIONS FACILITY T-MOBILE EQUIPMENT MODERNIZATION

ZONING JURISDICTION: BASED ON INFORMATION PROVIDED BY T-MOBILE, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS AN ELIGIBLE FACILITY UNDER THE TAX RELIEF ACT OF 2012, 47 USC 1455(A), AND IS SUBJECT TO AN EXPEDITED ELIGIBLE FACILITIES REQUEST/REVIEW AND ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW).

CONSTRUCTION

DATE

SITE ADDRESS:

35 WILDWOOD STREET NEW BRITAIN, CT 06051

JURISDICTION: LONGITUDE: 41' 40' 5.6" N

PROPOSED USE: CURRENT USE:

TELECOMMUNICATIONS FACILITY

NATIONAL, STATE & LOCAL CODES OR ORDINANCES -72° 45′ 17.8″ W TELECOMMUNICATIONS FACILITY

DRAWING INDEX

TITLE SHEET

GN-1 GENERAL NOTES

ANTENNA PLAN & DETAILS

COMPOUND PLAN & ELEVATION

GROUNDING DETAILS

-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 OFFICE: (860) 648-1116

Transcend Wireless

TEL: [201] 684-0055 FAX:[201] 684-0066



STAR OF CONNECTION OF CONNECTI APPROVALS

| RF ENGINEERING | DATE |
|------------------|----------|
| ZONING/SITE ACQ. | DATE |
| OPERATIONS | DATE |
| TOWER OWNER | DATE |
| PROJECT NO: | CT11634C |
| DRAWN BY: | KMS |
| CHECKED BY: | DR |
| | |

| | 0 | 1 | |
|-----------------------|----------------------------|----------------------------|--|
| DITE N | 08/19/14 ISSUED FOR REVIEW | 11/14/14 ISSUED FOR REVIEW | |
| MA | ISSUED | ISSUED | |
| Ī | FOR | FOR | |
| SITE NUMBER: CT11634C | REVIEW | REVIEW | |

CT634/CING/CHESLEY PARK_ET SITE NAME:

35 WILDWOOD STREET, NEW BRITAIN, CT 06051 HARTFORD COUNTY

HITLE SHEET

SHEET TITLE

SHEET NUMBER

<u>__1</u>

GROUNDING NOTES

- THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE—SPECIFIC (UL, LPI, OR NFPA) LIGHTING ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR PROTECTION CODE, AND GENERAL COMPLIANCE WITH EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE SUBCONTRACTOR SHALL PERFORM IEEE SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS. FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PEF 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. SUBCONTRACTOR SHALL FURNISH AND INSTALL RESISTANCE TO EARTH TESTING (PER A EEE
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE,
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- įω ICE BRIDGE BONDING CONDUCTORS SHALL THE TOWER GROUND BAR. EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND
- 9 ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING
- 10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- 1 METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

EG.

EQUIPMENT GROUND RING EQUIPMENT GROUND SIB BCW

BASE TRANSCEIVER STATION BARE COPPER WIRE AMERICAN WIRE GAUGE ABOVE GRADE LEVEL

AWG AGL.

EXISTING EXISTING

N.T.S. REF

TBRR

TO BE REMOVED AND REPLACED TO BE REMOVED TO BE DETERMINED

TYPICAL

TBR GEL

REFERENCE NOT TO SCALE

REQUIRED

PROPOSED K Z MGB 6,0,

NEW

MINIMUM

ABBREVIATIONS

GENERAL CONTRACTOR

꾸

RADIO FREQUENCY

MASTER GROUND BUS

GENERAL NOTES

1. FOR THE IE PURPOSE OF CONSTRUCTION DRAWING, SHALL APPLY: 井 FOLLOWING

SUBCONTRACTOR - OWNER - T-MOBILE CONTRACTOR - TRANSCEND WIRELESS SUBCONTRACTOR - GENERAL CONTRAC GENERAL CONTRACTOR (CONSTRUCTION)

- 2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILLARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- 3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK, ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING ERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
- 7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
- 9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND JOR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
- 10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF
- 11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- 13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
- 14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE ARR—ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.

16. CONSTRUCTION SHALL COMPLY WITH UMTS SPECIFICATIONS AND "GENERAL CONSTRUCTION OF T-MOBILE SITES."

17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK, ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

유표

OPERATIONS

DATE

ZONING/SITE ACQ.

DATE DATE

ENGINEERING

CONSTRUCTION

DATE

APPROVALS

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL STANDARDS.

CHECKED BY:

R

DRAWN BY:

ROJECT NO:

CT11634C SMX

DATE

OWER OWNER

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

I-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 OFFICE: (860) 648-1116

Transcend Wireless

TEL: [201] 684-0055 FAX:[201] 684-0066

Hudson Design Groupus

EL: [978] 557-5553 AX: [978] 336-5586

20. APPLICABLE BUILDING CODES:
SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE,
AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION
(AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND
STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE
DESIGN.

BUILDING CODE: IBC 2003 W/ 2005 CT SUPPLEMENT + 2009 AMENDMENT ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

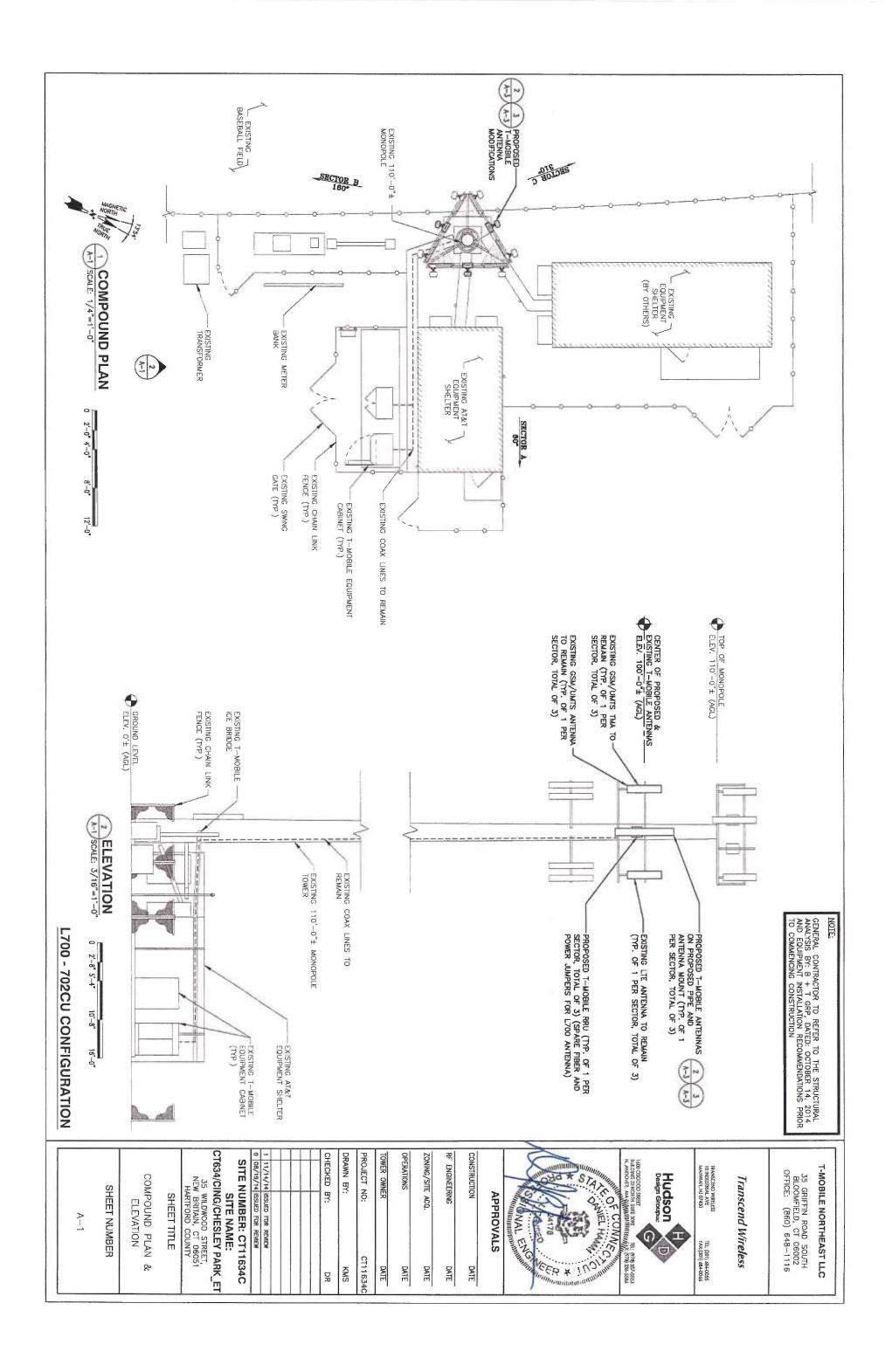
SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION FOLLOWING STANDARDS:

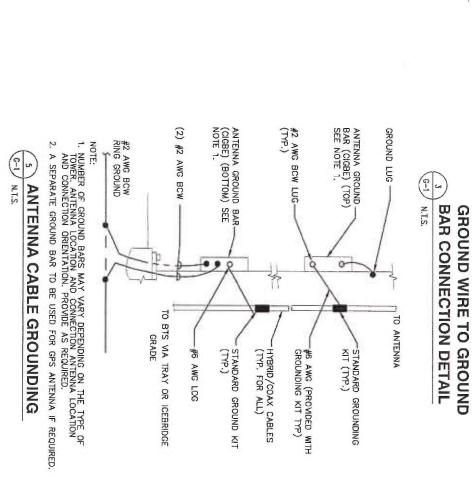
AMERICAN CONCRETE INSTITUTE (ACI) 31B; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL

CT634/CING/CHESLEY PARK_ET SITE NUMBER: CT11634C GENERAL NOTES SHEET NUMBER 5 WILDWOOD STREET, EW BRITAIN, CT 06051 HARTFORD COUNTY ISSUED FOR REVIEW SHEET TITLE SITE NAME: GN-1





CHECKED BY: DRAWN BY: PROJECT NO: OPERATIONS

DATE

TOWER OWNER

CT11634C

KMS

DR

DATE

ZONING/SITE ACQ.

DATE

ENGINEERING

DATE DATE

CONSTRUCTION

APPROVALS

NAL ENGIR

Managamannan

N.T.S. CONNECTION DETAIL

EQUIPMENT PAD

EC.B MG8

GROUNDING RISER DIAGRAM

TYPICAL GROUND BAR

NOTE:

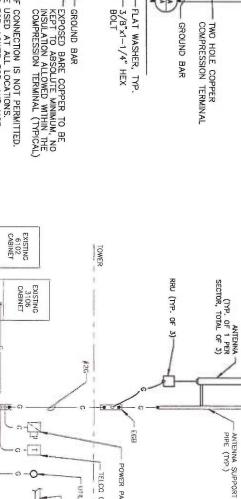
1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.

2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB. SECTION "A-A"

GROUNDING-CABLE

GROUND BAR



POWER PANEL - TELCO CABINET - UTILLY CONDUITS CABLE TRAYS

STAINLESS STEEL HARDWARE

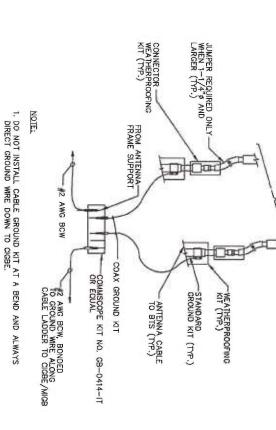
6

GROUNDING CABLE-

(TYP.)

ELEVATION

GROUND BAR



Hudson Design Group-k TEL: (978) 557-5553 FAX: (978) 336-5586

Transcend Wireless

FAX:(201) &84-0055

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 OFFICE: (860) 648-1116

T-MOBILE NORTHEAST LLC

FROM ANTENNA-7

G-1

SHEET NUMBER

GROUNDING DETAILS

SHEET TITLE

CT634/CING/CHESLEY PARK_ET 35 WILDWOOD STREET, NEW BRITAIN, CT 06051 HARTFORD COUNTY

SITE NUMBER: CT11634C SITE NAME:

11/14/14 ISSUED FOR REVIEW 08/19/14 ISSUED FOR REVIEW

EXHIBIT B



AT&T Towers

2300 Northlake Center Dr Ste 405 Tucker, GA 30084

October 14, 2014

STRUCTURAL ANALYSIS 110' Monopole Tower

Site ID:

Site FA:

88241

10050945

Site Name:

New Britain Wildwood Street

AT&T Project:

T-Mobile Modification 09.10.2014

B+T GRP

Tulsa, OK 74119

1717 S. Boulder, Suite 300

B+T No.: 84498.003.01

ANALYSIS CRITERIA:

AT&T DESIGNATION:

Codes:

TIA/EIA-222-F (80 mph fastest mile)

IBC 2003

SITE DATA:

Wildwood Street, New Britain, CT, Hartford County

Latitude 41.668186°, Longitude -72.755199°

Market MA/RI/VT/NH/ME/CT

Ms. Julie Overman,

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

Analysis Results

Tower Stress Level with Proposed Equipment:

99.5%

Pass

Foundation Ratio with Proposed Equipment:

76.5%

Pass

We at B+T Group appreciate the opportunity of providing our continuing professional services to you and AT&T Towers. If you have any questions or need further assistance on this or any other project please give us a call.

Respectfully Submitted by:

B+T Engineering, Inc.

Analysis Prepared by:

Raul Ortiz Jr., E.I.T.

Analysis Reviewed by:

Chad E. Tuttle, P.E.

AT&T Proprietary (Internal use Only)

Not for use or disclosure outside the AT&T companies except under written agreement

October 14, 2014 B+T Project No: 84498.003.01

Page 2

ANALYSIS RESULTS:

Table 1 - Section Capacity (Summary)

| Elevation (ft) | % Capacity | Pass / Fail |
|----------------|------------|-------------|
| 110 - 88.75 | 38.5 | Pass |
| 88.75 - 47 | 86.4 | Pass |
| 47 - 0 | 99.5 | Pass |

Table 2 - Tower Component Stresses vs. Capacity

| Notes | Component | Elevation (ft) | % Capacity | Pass / Fail |
|-------|-----------------|----------------|------------|-------------|
| 1 | Anchor Rods | Base | 61.4 | Pass |
| 1 | Base Plate | Base | 73.8 | Pass |
| 1 | Base Foundation | Base | 76.5 | Pass |

| The state of the s | |
|--|-------|
| Structure Rating (max from all components) = | 99.5% |
| | |

Notes:

Recommendations:

N/A

¹⁾ See additional documentation in "Appendix B - Calculations" for calculation supporting the % capacity consumed.

October 14, 2014 B+T Project No: 84498.003.01

Page 3

ANALYSIS PROCEDURE:

Table 3 - Documents Provided

| Document | Description | Date | Source |
|------------------------------|---|-----------|---------|
| Tower Data | SA Report by B+T Group, Project 85026.001.00 | 8/23/2012 | On File |
| Foundation Information | SA Report by B+T Group, Project 85026.001.00 | 8/23/2012 | On File |
| Geotech Report | Information Not Available | N/A | N/A |
| Looding | B+T Group, Project 85026.001.00; LTE MOD 071612 | 8/23/2012 | On File |
| Loading | Site Lease Application; T-Mobile Modification 09.10.2014 | 10/9/2014 | Siterra |
| | B+T Group, Project 85026.001.00; LTE MOD 071612 | 8/23/2012 | On File |
| Previous Structural Analysis | B+T Group, Project 84498.002.00; Verizon Tower- Only Modification 5-3-2012 | 6/18/2012 | On File |
| | B+T Project 84498.001.00; T-Mobile Modification 4-4-2012 | 5/30/2012 | On File |

ANALYSIS METHOD:

tnxTower, a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix B.

ASSUMPTIONS:

- 1. Tower and structures were built in accordance with the manufacturer's specifications.
- 2. The tower and structures have been maintained in accordance with the manufacturer's specifications.
- 3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Appendix A of this report.
- 4. Mount areas and weights are assumed based on photographs provided.
- 5. Refer to the base level drawing for transmission line distribution.
- 6. Soil properties were taken from the previous analysis.
- 7. T-Mobile's loading was taken from the Site Lease Application.
- 8. Existing/Reserved loading was taken from the previous analysis unless otherwise noted.
- 9. Future loading was not provided, generic future loading was considered in this analysis.
- 10. Site lease application appears to have a typo in the proposed antenna's model number. The application shows "SBNHSBNH-1D65C", we used "SBNH-1D65C", this was confirmed with the antenna dimensions.

If any of these assumptions have been made in error, B+T Group should be notified to determine the effect on the structural integrity of the tower.

APPENDIX A TOWER ANALYSIS LOADING

TOWER ANALYSIS LOADING:

Existing / Reserved Loading

| | | | Antenna | | | | Mount | Transn | Transmission Line |
|---------------|-----------------|---------------|----------|--------------|-------------------|----------|--------------------|----------|-------------------|
| Antenna Owner | Mount Height | Antenna CL | Quantity | Manufacturer | Model | Quantity | Туре | Quantity | Size (in) |
| AT&T | 110 | 114 | 9 | Powerwave | 0222 | - | I P Platform | 42 | 1-5/8" |
| AT&T | 110 | 114 | 9 | Powerwave | LGP21401 | | | | 25 |
| AT&T | 110 | 114 | m | | AM-X-CD-16-65-00T | | | m | 0.5 |
| AT&T | 110 | 112 | 9 | | RBS6601 | | | | } |
| AT&T | 110 | 112 | - | Raycap | DC6-48-60-18-8F | | | | |
| -Mobile | 100 | 100 | 9 | Ericsson | AIR21 | - | Platform w/ Rails | 12 | 1-5/8" |
| r-Mobile | 100 | 100 | 9 | RFS | ATMAA1412D-1A20 | | | 9 | 1-5/8" |
| F-Mobile | | | | | | | | | |
| Verizon | 06 | 06 | က | Antel | BXA-80063/4CF | က | T-Arms | 12 | 1-5/8" |
| Verizon | 06 | 06 | က | Antel | BXA-171063-8BF | | | 9 | 1-5/8" |
| Verizon | 06 | 06 | က | Antel | BXA-70063-6CF_2 | | | | |
| Town | 09 | 09 | 10 | | Stadium Lights | 1 | Stadium Light Rack | | |

Proposed Loading

| | | | Antenna | | | | Mount | Transn | Transmission Line |
|---------------|-------------------------|-----------------------|----------|--------------|------------|----------|-------|----------|-------------------|
| Antenna Owner | Mount Height (ft) | Antenna CL (ff) | Quantity | Manufacturer | Model | Quantity | Туре | Quantity | Size (in) |
| T-Mobile | 100 | 100 | 3 | Commscope | SBNH-1D65C | | | 3 | 3/8" |
| T-Mobile | 100 | 100 | က | Ericsson | RRUS11-B12 | | | - | 1/4" |
| | | | | | | | | | |
| | | | | | | | | | |

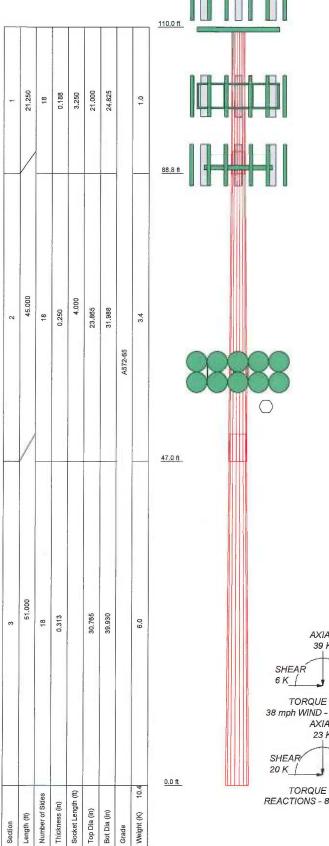
Note: See Base Level Drawing For Transmission Line Distribution

Future Loading

| | | | Antenna | | | | Mount | Transm | Fransmission Line |
|---------------|-------------------------|-----------------------|----------|--------------|-------------------|----------|-------|----------|-------------------|
| Antenna Owner | Mount Height (ft) | Antenna CL (ft) | Quantity | Manufacturer | Model | Quantity | Туре | Quantity | Size (in) |
| AT&T | 110 | 114 | 3 | | AM-X-CD-16-65-00T | | | 9 | 1 5/8" |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

APPENDIX B

CALCULATIONS



DESIGNED APPURTENANCE LOADING

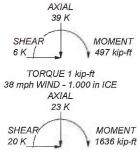
| TYPE | ELEVATION | TYPE | ELEVATION |
|---|-----------|---|-----------|
| (2) 7770.00 w/ Mount Pipe (ATI-E) | 110 | BXA-80063/4CF w/Mount Pipe | 90 |
| (2) 7770.00 w/ Mount Pipe (ATT-E) | 110 | (Verizon-E) | |
| (2) 7770.00 w/ Mount Pipe (ATI-E) | 110 | BXA-80063/4CF w/Mount Pipe | 90 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe (ATT-E) | 110 | (Verizon-E) BXA-80063/4CF w/Mount Pipe (Verizon-E) | 90 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe (ATI-E) | 110 | BXA-171063/8BF w/Mount Pipe | 90 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe (ATI-E) | 110 | (Verizon-E) BXA-171063/8BF w/Mount Pipe | 90 |
| (2) LGP21401 (ATI-E) | 110 | (Verizon-E) | |
| (2) LGP21401 (ATI-E) | 110 | BXA-171063/8BF w/Mount Pipe (Verizon-E) | 90 |
| (2) LGP21401 (ATI-E) | 110 | BXA-70063-6CF-2 w/ Mount Pipe | 90 |
| (2) RBS 6601 (ATI-E) | 110 | (Verizon-E) | 90 |
| (2) RBS 6601 (ATI-E) | 110 | BXA-70063-6CF-2 w/ Mount Pipe | 90 |
| (2) RBS 6601 (ATI-E) | 110 | (Verizon-E) | |
| DC6-48-60-18-8F (ATI-E) | 110 | BXA-70063-6CF-2 w/ Mount Pipe | 90 |
| AM-X-CD-16-65-00T-RET w/ Mount | 110 | (Verizon-E) | |
| Pipe (ATI-Future) | | T-Arm Mount [TA 601-3] (Verizon-E) | 90 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe (ATI-Future) | 110 | Stadium Light (E) | 61.5 |
| | | _ Stadium Light (E) | 61.5 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe (ATI-Future) | 110 | Stadium Light (E) | 61.5 |
| Platform Mount [LP 601-1] (ATI-E) | 110 | Stadium Light (E) | 61.5 |
| (3) AIR 21 w/ Pipe Mount (T-Mobile-E) | 100 | Stadium Light (E) | 61.5 |
| (3) AIR 21 W/ Pipe Mount (T-Mobile-E) | 100 | Stadium Light Mount (E) | 60 |
| | | Stadium Light (E) | 58.5 |
| (3) ATMAA1412D-1A20 (T-Mobile-E) | 100 | Stadium Light (E) | 58.5 |
| (3) ATMAA1412D-1A20 (T-Mobile-E) | 100 | Stadium Light (E) | 58.5 |
| (3) SBNHH-1D65C w/ Mount Pipe (T-Mobile-P) | 100 | Stadium Light (E) | 58.5 |
| (3) RRUS 11 B12 (T-Mobile-P) | 100 | Stadium Light (E) | 58,5 |
| Platform Mount [LP 303-1] (T-Mobile-E) | 100 | | |

MATERIAL STRENGTH

| GRADE | Fy | Fu | GRADE | Fy | Fu |
|---------|--------|--------|-------|----|----|
| A572-65 | 65 ksi | 80 ksi | | | |

TOWER DESIGN NOTES

- 1. Tower is located in Hartford County, Connecticut.
- Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
 Tower is also designed for a 38 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
- 4. Deflections are based upon a 50 mph wind.5. TOWER RATING: 99.5%



TORQUE 5 kip-ft REACTIONS - 80 mph WIND

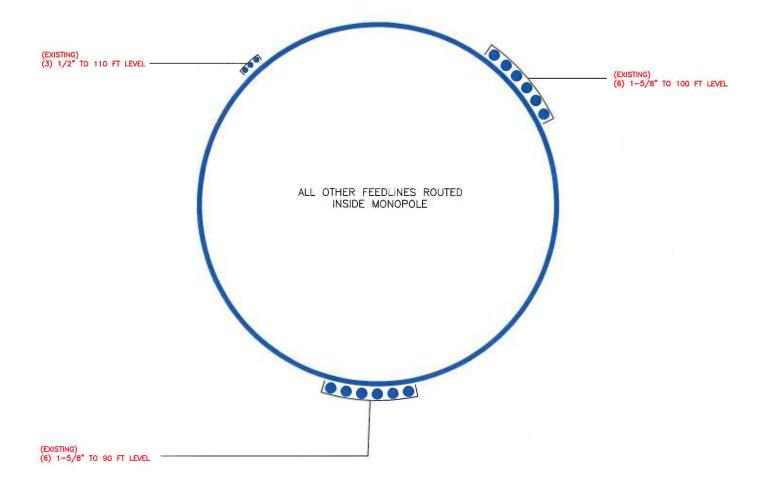
B+T GRP

B+T Group

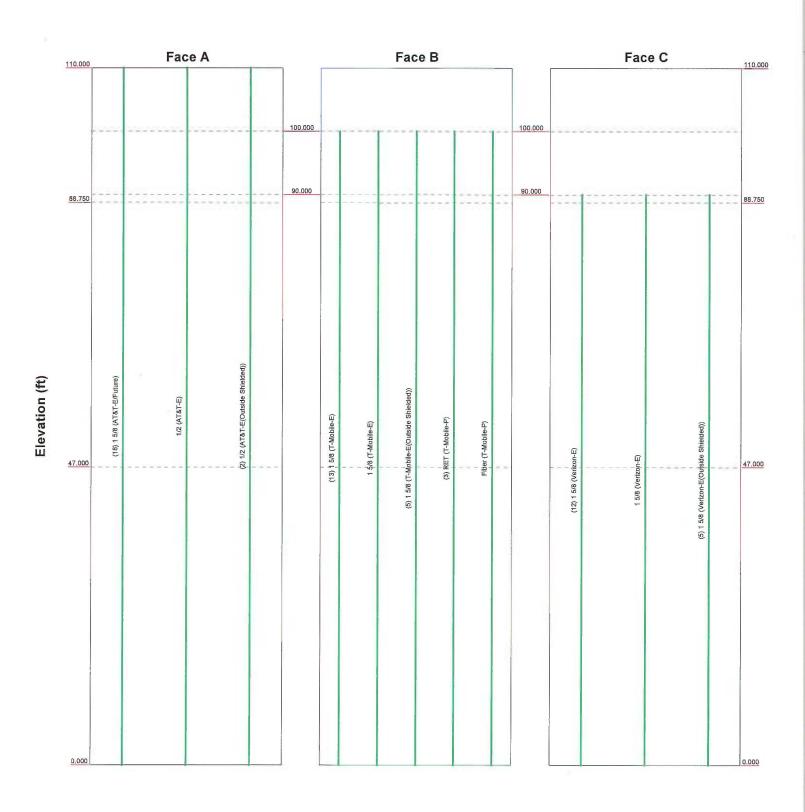
1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630

ob: 84498.003.01 - New Britain Wildwood Street, CT (USID 8824 Project: T-Mobile Modification 09.10.2014 Client: AT&T Towers Drawn by: Rortiz

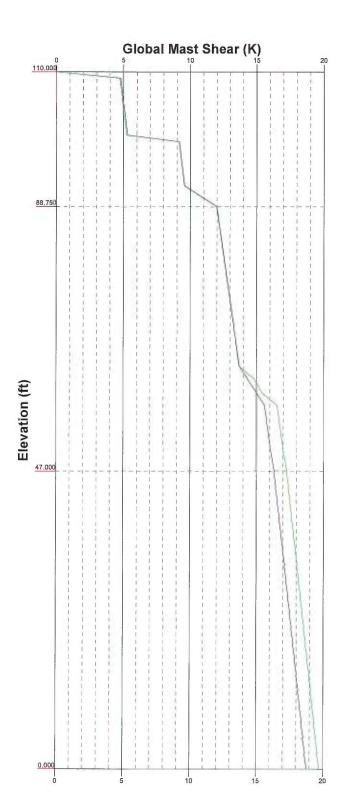
Code: TIA/EIA-222-F Scale: NTS Date: 10/14/14 FAX: (918) 295-0265 Path: Dwg No. E-1

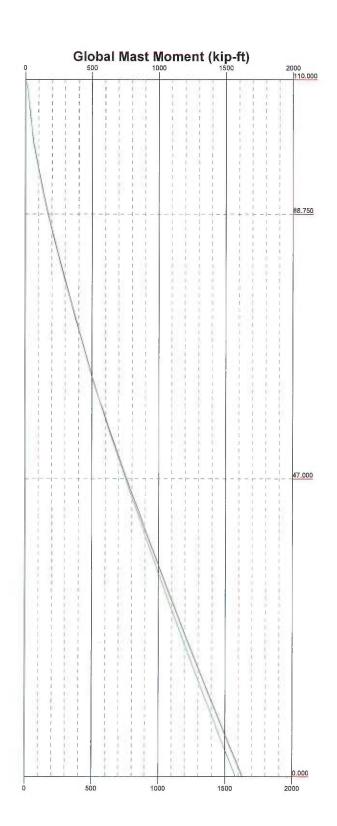


______ Round ______ Flat _____ App In Face ______ App Out Face _____ Truss L



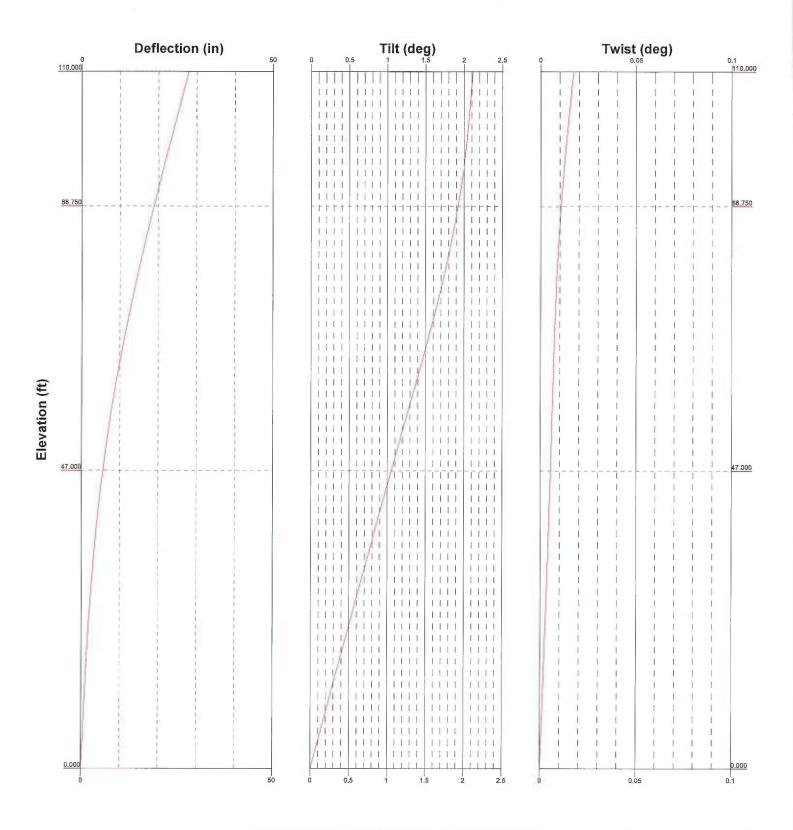
| Г | B+T Group | lob: 84498.003.01 - | New Britain | Wildwood Street, CT (USID 8824 |
|---------|----------------------------|----------------------------|--|--------------------------------|
| | 1717 S. Boulder, Suite 300 | Project: T-Mobile Modif | ication 09.10.20 | 14 |
| B+T GH: | Tulsa. OK 74119 | Client: AT&T Towers | Drawn by: Rortiz | App'd: |
| | | Code: TIA/EIA-222-F | Date: 10/14/14 | Scale: NTS |
| | FAX: (918) 295-0265 | Path: | туруу тайдартацуу рас m куулагар Wasses акын | Dwg No. E-7 |





B+T GHO

| Job: 84498.003.01 | - New Britain | Wildwood Street, CT (USID 8824 |
|------------------------|-------------------|--------------------------------|
| Project: T-Mobile Modi | fication 09.10.20 | 14 |
| Client: AT&T Towers | Drawn by: Rortiz | App'd: |
| Code: TIA/EIA-222-F | Date: 10/14/14 | Scale: NTS |
| D-4L- | · | D 11 |



| | B+T Group | lob: 84498.003.01 | - New Britain | Wildwood Street, CT (USID 8824 |
|---------|----------------------------|------------------------|--|--------------------------------|
| | 1717 S. Boulder, Suite 300 | Project: T-Mobile Modi | fication 09.10.20 | 14 |
| B+T GRE | Tulsa, OK 74119 | Client: AT&T Towers | Drawn by: Rortiz | App'd: |
| | | Code: TIA/EIA-222-F | Date: 10/14/14 | Scale: NTS |
| | FAX: (918) 295-0265 | Path: | Francisco Yang Matth ATD St. Dee Street Manager Street | Dwg No. E-5 |

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| Job 84498.003. | 01 - New Britain Wildwood Street, CT (USID 88241) | Page 1 of 14 |
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| Project | T-Mobile Modification 09.10.2014 | Date 06:51:13 10/14/14 |
| Client | AT&T Towers | Designed by Rortiz |

Tower Input Data

There is a pole section.

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

The following design criteria apply:

Tower is located in Hartford County, Connecticut.

Basic wind speed of 80 mph.

Nominal ice thickness of 1.000 in.

Ice thickness is considered to increase with height.

Ice density of 56.000 pcf.

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

Temperature drop of 50.000 °F.

Deflections calculated using a wind speed of 50 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.333.

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

Options

Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification

- √ Use Code Stress Ratios
- √ Use Code Safety Factors Guys
 - Use Special Wind Profile
 Include Bolts In Member Capacity
 Leg Bolts Are At Top Of Section
 Secondary Horizontal Braces Leg
 Use Diamond Inner Bracing (4 Sided)
 Add IBC .6D+W Combination

Distribute Leg Loads As Uniform Assume Legs Pinned

- ✓ Assume Rigid Index Plate
 ✓ Use Clear Spans For Wind
- √ Use Clear Spans For Wind Area
 Use Clear Spans For KL/r
 Retension Guys To Initial Tension
- √ Bypass Mast Stability Checks
 √ Use Azimuth Dish Coefficients
- √ Project Wind Area of Appurt. Autocalc Torque Arm Areas SR Members Have Cut Ends Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Use TIA-222-G Tension Splice Capacity Exemption

Treat Feedline Bundles As Cylinder Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation

- √ Consider Feedline Torque
 Include Angle Block Shear Check
 Poles
- √ Include Shear-Torsion Interaction
 Always Use Sub-Critical Flow
 Use Top Mounted Sockets

Tapered Pole Section Geometry

| Section | Elevation | Section Length | Splice Length | Number of | Top Diameter | Bottom Diameter | Wall Thickness | Bend Radius | Pole Grade |
|---------|----------------|-------------------|------------------|-----------|-----------------|--------------------|-------------------|----------------|------------|
| ft | ft | ft | Sides | in | in | in | in | | |
| L1 | 110.000-88.750 | 21.250 | 3.250 | 18 | 21.000 | 24.825 | 0.188 | 0.750 | A572-65 |
| | | | | | | | | | (65 ksi) |
| L2 | 88.750-47.000 | 45.000 | 4.000 | 18 | 23.865 | 31.988 | 0.250 | 1.000 | A572-65 |
| | | | | | | | | | (65 ksi) |
| L3 | 47.000-0.000 | 51.000 | | 18 | 30.765 | 39.930 | 0.313 | 1.250 | A572-65 |
| | | | | | | | | | (65 ksi) |

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| Project | | Date |
| | T-Mobile Modification 09.10.2014 | 06:51:13 10/14/14 |
| Client | AT&T Towers | Designed by |

Tapered Pole Properties

| Section | Tip Dia. in | Area in² | I in ⁴ | r in | C in | I/C in³ | J in^4 | It/Q in ² | w in | w/t |
|---------|----------------|-------------|----------------------|---------|---------|------------|------------|-------------------------|---------|--------|
| L1 | 21.324 | 12.386 | 677.826 | 7.388 | 10.668 | 63.538 | 1356.544 | 6.194 | 3.366 | 17.952 |
| | 25.208 | 14.662 | 1124.438 | 8.746 | 12.611 | 89.163 | 2250.356 | 7.333 | 4.039 | 21.542 |
| L2 | 24.829 | 18.739 | 1320.226 | 8.383 | 12.123 | 108.899 | 2642.189 | 9.371 | 3.760 | 15.041 |
| | 32.481 | 25.184 | 3204.812 | 11.267 | 16.250 | 197.223 | 6413.840 | 12,594 | 5.190 | 20.759 |
| L3 | 31.970 | 30,206 | 3539.033 | 10.811 | 15.629 | 226.442 | 7082,723 | 15.106 | 4.865 | 15.567 |
| | 40.546 | 39.296 | 7792.119 | 14.064 | 20.284 | 384.143 | 15594.492 | 19.652 | 6.478 | 20.729 |

| Tower Elevation | Gusset Area (per face) | Gusset Thickness | Gusset Grade | Adjust. Factor A _f | Adjust. Factor A _r | Weight Mult. | Double Angle Stitch Bolt Spacing Diagonals | Double Angle Stitch Bolt Spacing Horizontals |
|--------------------|------------------------------|---------------------|--|----------------------------------|-------------------------------------|--------------|---|---|
| ft | ft^2 | in | | | | | in | in |
| L1 | | | ······································ | 1 | 1 | 1 | ······································ | |
| 110.000-88.75 | | | | | | | | |
| 0 | | | | | | | | |
| L2 | | | | 1 | 1 | 1 | | |
| 88.750-47.000 | | | | | | | | |
| L3 47.000-0.000 | | | | 1 | 1 | 1 | | |

Feed Line/Linear Appurtenances - Entered As Round Or Flat

| Description | Face | Allow | Component | Placement | Total | Number | Clear | Width or | Perimeter | Weight |
|-------------|------|--------|-----------|-----------|--------|---------|---------|----------|-----------|--------|
| | or | Shield | Туре | | Number | Per Row | Spacing | Diameter | | |
| | Leg | | | ft | | | in | in | in | klf |

Feed Line/Linear Appurtenances - Entered As Area

| Description | Face or | Allow Shield | Component Type | Placement | Total Number | | C_AA_A | Weight |
|-----------------|------------|-----------------|-------------------|-----------------|-----------------|----------|----------|--------|
| | Leg | | | ft | | | ft²/ft | klf |
| 1 5/8 | A | No | Inside Pole | 110.000 - 0.000 | 18 | No Ice | 0.000 | 0.001 |
| (AT&T-E/Future) | | | | | | 1/2" Ice | 0.000 | 0.001 |
| | | | | | | 1" Ice | 0.000 | 0.001 |
| | | | | | | 2" Ice | 0.000 | 0.001 |
| | | | | | | 4" Ice | 0.000 | 0.001 |
| 1/2 | A | No | CaAa (Out Of | 110.000 - 0.000 | 1 | No Ice | 0.058 | 0.000 |
| (AT&T-E) | | | Face) | | | 1/2" Ice | 0.158 | 0.001 |
| | | | | | | 1" Ice | 0.258 | 0.002 |
| | | | | | | 2" Ice | 0.458 | 0.007 |
| | | | | | | 4" Ice | 0.858 | 0.023 |
| 1/2 | A | No | CaAa (Out Of | 110.000 - 0.000 | 2 | No Ice | 0.000 | 0.000 |
| (AT&T-E(Outside | | | Face) | | | 1/2" Ice | 0.000 | 0.001 |
| Shielded)) | | | | | | 1" Ice | 0.000 | 0.002 |
| | | | | | | 2" Ice | 0.000 | 0.007 |
| **#** | | | | | | 4" Ice | 0.000 | 0.023 |
| 1 5/8 | В | No | Inside Pole | 100.000 - 0.000 | 13 | No Ice | 0.000 | 0.001 |
| (T-Mobile-E) | | | | | | 1/2" Ice | 0.000 | 0.001 |
| | | | | | | 1" Ice | 0.000 | 0.001 |

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| Јоь 84498.003. | 01 - New Britain Wildwood Street, CT (USID 88241) | Page 3 of 14 |
|-------------------|---|---------------------------|
| Project | T-Mobile Modification 09.10.2014 | Date 06:51:13 10/14/14 |
| Client | AT&T Towers | Designed by |

| Description | Face or | Allow Shield | Component Type | Placement | Total Number | | C_AA_A | Weight |
|--------------------|------------|-----------------|-------------------|-----------------|-----------------|----------|----------|--------|
| | Leg | | | ft | | | ft²/ft | klf |
| | | | | | | 2" Ice | 0.000 | 0.001 |
| | | | | | | 4" Ice | 0.000 | 0.001 |
| 1 5/8 | В | No | CaAa (Out Of | 100.000 - 0.000 | 1 | No Ice | 0.198 | 0.001 |
| (T-Mobile-E) | | | Face) | | | 1/2" Ice | 0.298 | 0.003 |
| | | | | | | 1" Ice | 0.398 | 0.005 |
| | | | | | | 2" Ice | 0.598 | 0.011 |
| | | | | | | 4" Ice | 0.998 | 0.030 |
| 1 5/8 | В | No | Inside Pole | 100.000 - 0.000 | 5 | No Ice | 0.000 | 0.001 |
| T-Mobile-E(Outside | | | | | | 1/2" Ice | 0.000 | 0.001 |
| Shielded)) | | | | | | 1" Ice | 0.000 | 0.001 |
| | | | | | | 2" Ice | 0.000 | 0.001 |
| | | | | | | 4" Ice | 0.000 | 0.001 |
| RET | В | No | Inside Pole | 100,000 - 0,000 | 3 | No Ice | 0.000 | 0.000 |
| (T-Mobile-P) | | | | | | 1/2" Ice | 0.000 | 0.000 |
| | | | | | | 1" Ice | 0.000 | 0.000 |
| | | | | | | 2" Ice | 0.000 | 0.000 |
| | | | | | | 4" Ice | 0.000 | 0.000 |
| Fiber | В | No | Inside Pole | 100.000 - 0.000 | 1 | No Ice | 0.000 | 0.000 |
| (T-Mobile-P) | | | | | | 1/2" Ice | 0.000 | 0.000 |
| | | | | | | 1" Ice | 0.000 | 0,000 |
| | | | | | | 2" Ice | 0.000 | 0.000 |
| **#** | | | | | | 4" Ice | 0.000 | 0.000 |
| 1 5/8 | C | No | Inside Pole | 90.000 - 0.000 | 12 | No Ice | 0.000 | 0.001 |
| (Verizon-E) | | 110 | 1110140 1 010 | 30.000 0.000 | 12 | 1/2" Ice | 0.000 | 0.001 |
| () | | | | | | 1" Ice | 0.000 | 0.001 |
| | | | | | | 2" Ice | 0.000 | 0.001 |
| | | | | | | 4" Ice | 0.000 | 0.001 |
| 1 5/8 | C | No | CaAa (Out Of | 90.000 - 0.000 | 1 | No Ice | 0.198 | 0.001 |
| (Verizon-E) | | | Face) | 30,000 0.000 | 1 | 1/2" Ice | 0.298 | 0.003 |
| (, — / | | | / | | | 1" Ice | 0.398 | 0.005 |
| | | | | | | 2" Ice | 0.598 | 0.011 |
| | | | | | | 4" Ice | 0.998 | 0.030 |
| 1 5/8 | C | No | CaAa (Out Of | 90.000 - 0.000 | 5 | No Ice | 0.000 | 0.001 |
| (Verizon-E(Outside | ~ | | Face) | | | 1/2" Ice | 0.000 | 0,003 |
| Shielded)) | | | 1 400) | | | 1" Ice | 0.000 | 0.005 |
| | | | | | | 2" Ice | 0.000 | 0.003 |
| | | | | | | 4" Ice | 0.000 | 0.030 |
| **#** | | | | | | . 100 | 0.000 | 0.050 |

Feed Line/Linear Appurtenances Section Areas

| Tower Section | Tower Elevation | Face | A_R | A_F | C_AA_A In Face | $C_A A_A$ Out Face | Weigh | |
|-------------------------------------|--------------------|------|--------|-----------------|------------------|-----------------------|-------|--|
| | ft | | ft^2 | ft ² | ft^2 | ft² | K | |
| L1 | 110.000-88.750 | A | 0.000 | 0.000 | 0.000 | 1.232 | 0.414 | |
| | | В | 0.000 | 0.000 | 0.000 | 2.228 | 0.228 | |
| | | C | 0.000 | 0.000 | 0.000 | 0.248 | 0.023 | |
| L2 | 88.750-47.000 | A | 0.000 | 0.000 | 0.000 | 2.421 | 0.813 | |
| | | В | 0.000 | 0.000 | 0.000 | 8.267 | 0.845 | |
| | | C | 0.000 | 0.000 | 0.000 | 8.267 | 0.782 | |
| L3 | 47.000-0.000 | A | 0.000 | 0.000 | 0.000 | 2.726 | 0.915 | |
| | | В | 0.000 | 0.000 | 0.000 | 9.306 | 0.952 | |
| Constitution of the constitution of | | C | 0.000 | 0.000 | 0.000 | 9.306 | 0.880 | |

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| Project | | Date |
| | T-Mobile Modification 09.10.2014 | 06:51:13 10/14/14 |
| Client | ATOTT | Designed by |
| | AT&T Towers | Rortiz |

Feed Line/Linear Appurtenances Section Areas - With Ice

| Tower Section | Tower Elevation | Face or | Ice Thickness | A_R | A_F | $C_A A_A$ In Face | C_AA_A Out Face | Weight | |
|------------------|--------------------|------------|------------------|-----------------|--------|-------------------|-------------------|--------|--|
| | ft L | Leg | in | ft ² | ft^2 | ft² | ft ² | K | |
| L1 | 110.000-88.750 | A | 1.141 | 0.000 | 0.000 | 0.000 | 6.082 | 0.576 | |
| | | В | | 0.000 | 0.000 | 0.000 | 4.795 | 0.278 | |
| | | C | | 0.000 | 0.000 | 0.000 | 0.533 | 0.057 | |
| L2 | 88.750-47.000 | A | 1.089 | 0.000 | 0.000 | 0.000 | 11.949 | 1.132 | |
| | | В | | 0.000 | 0.000 | 0.000 | 17.794 | 1.033 | |
| | | C | | 0.000 | 0.000 | 0.000 | 17.794 | 1.909 | |
| L3 | 47.000-0.000 | A | 1.000 | 0.000 | 0.000 | 0.000 | 12.967 | 1.242 | |
| | | В | | 0.000 | 0.000 | 0.000 | 19.547 | 1.148 | |
| | | C | | 0.000 | 0.000 | 0.000 | 19.547 | 2.060 | |

Feed Line Center of Pressure

| Section | Elevation | CP_X | CP_Z | CP_X | CP_Z |
|---------|----------------|--------|--------|--------|--------|
| | | | | Ice | Ice |
| | ft | in | in | in | in |
| L1 | 110.000-88.750 | 0.115 | 0.004 | 0.195 | -0.169 |
| L2 | 88.750-47.000 | 0.000 | 0.176 | 0.000 | 0.134 |
| L3 | 47.000-0.000 | 0.000 | 0.182 | 0.000 | 0.147 |

Discrete Tower Loads

| Description | Face or Leg | Offset Type | Offsets: Horz Lateral Vert | Azimuth Adjustment | Placement | | C_AA_A Front | C _A A _A Side | Weight |
|---------------------------------------|-------------------|----------------|-------------------------------------|-----------------------|-----------|--------------------|-------------------|---------------------------------------|----------------|
| | | | ft ft ft | o | ft | | ft^2 | ft^2 | K |
| (2) 7770.00 w/ Mount Pipe (AT&T-E) | A | From Leg | 4.000 0.000 | 0.000 | 110.000 | No Ice 1/2" Ice | 6.218 6.769 | 4.353 5.198 | 0.057 0.105 |
| | | | 4.000 | | | 1" Ice 2" Ice | 7.296 8.385 | 5.919 7.411 | 0.160 0.293 |
| | | | | | | 4" Ice | 10.691 | 10.763 | 0.680 |
| (2) 7770.00 w/ Mount Pipe | В | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 6.218 | 4.353 | 0.057 |
| (AT&T-E) | | | 0.000 | | | 1/2" Ice | 6.769 | 5.198 | 0.105 |
| | | | 4.000 | | | 1" Ice | 7.296 | 5.919 | 0.160 |
| | | | | | | 2" Ice | 8.385 | 7.411 | 0.293 |
| | | | | | | 4" Ice | 10.691 | 10.763 | 0.680 |
| (2) 7770.00 w/ Mount Pipe | C | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 6.218 | 4.353 | 0.057 |
| (AT&T-E) | | | 0.000 | | | 1/2" Ice | 6.769 | 5.198 | 0.105 |
| | | | 4.000 | | | 1" Ice | 7.296 | 5.919 | 0.160 |
| | | | | | | 2" Ice | 8.385 | 7.411 | 0.293 |
| | | | | | | 4" Ice | 10.691 | 10.763 | 0.680 |
| AM-X-CD-16-65-00T-RET | A | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 8.498 | 6.304 | 0.074 |
| w/ Mount Pipe | | | 0.000 | | | 1/2" Ice | 9.149 | 7.479 | 0.139 |
| (AT&T-E) | | | 4.000 | | | 1" Ice | 9.767 | 8.368 | 0.212 |
| | | | | | | 2" Ice | 11.031 | 10.179 | 0.385 |
| | | | | 17.00 | 772 52 | 4" Ice | 13.679 | 14.024 | 0.874 |
| AM-X-CD-16-65-00T-RET | В | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 8.498 | 6.304 | 0.074 |

| Job | 04 Nov Pritain Wildwood Street, CT (LICID 88244) | Page 5 of 14 |
|---------|--|------------------------|
| | .01 - New Britain Wildwood Street, CT (USID 88241) | |
| Project | T-Mobile Modification 09.10.2014 | Date 06:51:13 10/14/14 |
| Client | AT&T Towers | Designed by Rortiz |

| Description | Face or Leg | Offset Type | Offsets: Horz Lateral | Azimuth Adjustment | Placement | | C_AA_A Front | C _A A _A Side | Weight |
|-----------------------|-------------------|----------------|-----------------------------|-----------------------|-----------|--------------------|-------------------|---------------------------------------|--------|
| | | | Vert ft ft ft | 0 | ft | | ft^2 | ft² | K |
| w/ Mount Pipe | | | 0.000 | | | 1/2" Ice | 9.149 | 7.479 | 0.139 |
| (AT&T-E) | | | 4.000 | | | 1" Ice | 9.767 | 8.368 | 0.212 |
| | | | | | | 2" Ice | 11.031 | 10.179 | 0.385 |
| | | | | | | 4" Ice | 13.679 | 14.024 | 0.874 |
| AM-X-CD-16-65-00T-RET | C | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 8.498 | 6.304 | 0.074 |
| w/ Mount Pipe | | | 0.000 | | | 1/2" Ice | 9.149 | 7.479 | 0.139 |
| (AT&T-E) | | | 4.000 | | | 1" Ice | 9.767 | 8.368 | 0.212 |
| | | | | | | 2" Ice | 11.031 | 10.179 | 0.385 |
| | | | | | | 4" Ice | 13.679 | 14.024 | 0.874 |
| (2) LGP21401 | A | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 1.288 | 0.233 | 0.014 |
| (AT&T-E) | | | 0.000 | | | 1/2" Ice | 1.445 | 0.313 | 0.021 |
| | | | 4.000 | | | 1" Ice | 1.611 | 0.403 | 0.030 |
| | | | | | | 2" Ice | 1.969 | 0.608 | 0.055 |
| (A) Y (C) 74 161 | - | | 4.000 | | | 4" Ice | 2.788 | 1.121 | 0.135 |
| (2) LGP21401 | В | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 1.288 | 0.233 | 0.014 |
| (AT&T-E) | | | 0.000 | | | 1/2" Ice | 1.445 | 0.313 | 0.021 |
| | | | 4.000 | | | 1" Ice | 1.611 | 0.403 | 0.030 |
| | | | | | | 2" Ice | 1.969 | 0.608 | 0.055 |
| (2) I CD21401 | 0 | E I | 1.000 | 0.000 | 110.000 | 4" Ice | 2.788 | 1.121 | 0.135 |
| (2) LGP21401 | C | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 1.288 | 0.233 | 0.014 |
| (AT&T-E) | | | 0.000 | | | 1/2" Ice | 1.445 | 0.313 | 0.021 |
| | | | 4.000 | | | 1" Ice | 1.611 | 0.403 | 0.030 |
| | | | | | | 2" Ice | 1.969 | 0.608 | 0.055 |
| (2) RBS 6601 | A | From Loc | 4.000 | 0.000 | 110,000 | 4" Ice | 2.788 0.480 | 1.121 | 0.135 |
| (AT&T-E) | A | From Leg | 0.000 | 0.000 | 110.000 | No Ice | | 0.348 | 0.022 |
| (A1&1-E) | | | 2.000 | | | 1/2" Ice 1" Ice | 0.625 0.778 | 0.459 0.578 | 0.034 |
| | | | 2.000 | | | 2" Ice | 1.110 | 0.842 | 0.049 |
| | | | | | | 4" Ice | 1.878 | 1.474 | 0.087 |
| (2) RBS 6601 | В | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 0.480 | 0.348 | 0.202 |
| (AT&T-E) | D | 110m Leg | 0.000 | 0.000 | 110.000 | 1/2" Ice | 0.625 | 0.459 | 0.022 |
| (MICH L) | | | 2.000 | | | 1" Ice | 0.778 | 0.439 | 0.034 |
| | | | 2.000 | | | 2" Ice | 1.110 | 0.842 | 0.049 |
| | | | | | | 4" Ice | 1.878 | 1.474 | 0.202 |
| (2) RBS 6601 | C | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 0.480 | 0.348 | 0.022 |
| (AT&T-E) | | Trom beg | 0.000 | 0.000 | 110.000 | 1/2" Ice | 0.625 | 0.459 | 0.034 |
| (1116111) | | | 2.000 | | | 1" Ice | 0.778 | 0.578 | 0.049 |
| | | | 24.00.0 | | | 2" Ice | 1.110 | 0.842 | 0.087 |
| | | | | | | 4" Ice | 1.878 | 1.474 | 0.202 |
| DC6-48-60-18-8F | A | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 2.567 | 4.317 | 0.019 |
| (AT&T-E) | | J | 0.000 | | | 1/2" Ice | 2.798 | 4.596 | 0.050 |
| , | | | 4.000 | | | 1" Ice | 3.038 | 4.885 | 0.085 |
| | | | | | | 2" Ice | 3.543 | 5.488 | 0.167 |
| | | | | | | 4" Ice | 4.658 | 6.797 | 0.383 |
| AM-X-CD-16-65-00T-RET | A | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 8.498 | 6.304 | 0.074 |
| w/ Mount Pipe | | | 0.000 | | | 1/2" Ice | 9.149 | 7.479 | 0.139 |
| (AT&T-Future) | | | 4.000 | | | 1" Ice | 9.767 | 8.368 | 0.212 |
| | | | | | | 2" Ice | 11.031 | 10.179 | 0.385 |
| | | | | | | 4" Ice | 13.679 | 14.024 | 0.874 |
| AM-X-CD-16-65-00T-RET | В | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 8.498 | 6.304 | 0.074 |
| w/ Mount Pipe | | | 0.000 | | | 1/2" Ice | 9.149 | 7.479 | 0.139 |
| (AT&T-Future) | | | 4.000 | | | 1" Ice | 9.767 | 8.368 | 0.212 |
| | | | | | | 2" Ice | 11.031 | 10.179 | 0.385 |
| | | | | | | 4" Ice | 13.679 | 14.024 | 0.874 |
| AM-X-CD-16-65-00T-RET | C | From Leg | 4.000 | 0.000 | 110.000 | No Ice | 8.498 | 6.304 | 0.074 |
| w/ Mount Pipe | | | 0.000 | | | 1/2" Ice | 9.149 | 7.479 | 0.139 |
| (AT&T-Future) | | | 4.000 | | | 1" Ice | 9.767 | 8.368 | 0.212 |

| Job 84498.003.01 | - New Britain Wildwood Street, CT (USID 88241) | Page 6 of 14 |
|---------------------|--|---------------------------|
| Project | T-Mobile Modification 09.10.2014 | Date 06:51:13 10/14/14 |
| Client | AT&T Towers | Designed by Rortiz |

| Description | Face or Leg | Offset Type | Offsets: Horz Lateral | Azimuth Adjustment | Placement | | C_AA_A Front | C _A A _A Side | Weigh |
|-------------------------------------|-------------------|----------------|-----------------------------|-----------------------|---|--------------------|-------------------|---------------------------------------|----------------|
| | | | Vert ft ft ft | 0 | ft | | ft² | ft² | K |
| | | 4.00 | <u>J.</u> | | *************************************** | 2" Ice | 11.031 | 10.179 | 0,385 |
| | | | | | | 4" Ice | 13.679 | 14.024 | 0.874 |
| Platform Mount [LP 601-1] | C | None | | 0.000 | 110.000 | No Ice | 28.470 | 28.470 | 1.122 |
| (AT&T-E) | | | | | | 1/2" Ice | 33.590 | 33.590 | 1.514 |
| | | | | | | 1" Ice | 38.710 | 38.710 | 1.905 |
| | | | | | | 2" Ice | 48.950 | 48.950 | 2.689 |
| **#** | | | | | | 4" Ice | 69.430 | 69.430 | 4.255 |
| (3) AIR 21 w/ Pipe Mount | A | From Leg | 4.000 | 60.000 | 100.000 | No Ice | 6.850 | 5.781 | 0.105 |
| (T-Mobile-E) | 2.1 | I Tom Leg | 0.000 | 00.000 | 100.000 | 1/2" Ice | 7.406 | 6.700 | 0.163 |
| (1 1100110 12) | | | 0.000 | | | 1" Ice | 7.942 | 7.496 | 0.227 |
| | | | 0.000 | | | 2" Ice | 9.045 | 9.144 | 0.380 |
| | | | | | | 4" Ice | 11.381 | 12.653 | 0.811 |
| (3) AIR 21 w/ Pipe Mount | C | From Leg | 4.000 | 60.000 | 100.000 | No Ice | 6.850 | 5.781 | 0.105 |
| (T-Mobile-E) | | | 0.000 | | | 1/2" Ice | 7.406 | 6.700 | 0.163 |
| | | | 0.000 | | | 1" Ice | 7.942 | 7.496 | 0.227 |
| | | | | | | 2" Ice | 9.045 | 9.144 | 0.380 |
| | | | | | | 4" Ice | 11.381 | 12.653 | 0.811 |
| (3) ATMAA1412D-1A20 | A | From Leg | 4.000 | 0.000 | 100.000 | No Ice | 1.167 | 0.467 | 0.013 |
| (T-Mobile-E) | | | 0.000 | | | 1/2" Ice | 1.314 | 0.575 | 0.021 |
| | | | 0.000 | | | 1" Ice | 1.469 | 0.691 | 0.030 |
| | | | | | | 2" Ice | 1.806 | 0.951 | 0.056 |
| (2) ATMA A 1412D 1420 | 0 | E I | 4.000 | 0.000 | 100.000 | 4" Ice | 2.584 | 1.573 | 0.137 |
| (3) ATMAA1412D-1A20 (T-Mobile-E) | C | From Leg | 4.000 0.000 | 0.000 | 100.000 | No Ice 1/2" Ice | 1.167 | 0.467 | 0.013 |
| (1-Moone-E) | | | 0.000 | | | 1" Ice | 1.314 1.469 | 0.575 0.691 | 0.021 0.030 |
| | | | 0.000 | | | 2" Ice | 1.806 | 0.091 | 0.056 |
| | | | | | | 4" Ice | 2.584 | 1.573 | 0.030 |
| (3) SBNHH-1D65C w/ | В | From Leg | 4.000 | 60.000 | 100.000 | No Ice | 11.389 | 9.318 | 0.075 |
| Mount Pipe | | | 0.000 | | | 1/2" Ice | 12.005 | 10.636 | 0.159 |
| (T-Mobile-P) | | | 0.000 | | | 1" Ice | 12.629 | 11.669 | 0.253 |
| , | | | | | | 2" Ice | 13.973 | 13.767 | 0.472 |
| | | | | | | 4" Ice | 16.978 | 18.162 | 1.074 |
| (3) RRUS 11 B12 | В | From Leg | 4.000 | 0.000 | 100,000 | No Ice | 3.306 | 1.361 | 0.051 |
| (T-Mobile-P) | | | 0.000 | | | 1/2" Ice | 3.550 | 1.540 | 0.072 |
| | | | 0.000 | | | 1" Ice | 3.802 | 1.728 | 0.095 |
| | | | | | | 2" Ice | 4.334 | 2.130 | 0.153 |
| N-46 | | 3.7 | | 0.000 | 100.000 | 4" Ice | 5.501 | 3.038 | 0.314 |
| Platform Mount [LP 303-1] | C | None | | 0.000 | 100.000 | No Ice | 14.660 | 14.660 | 1.250 |
| (T-Mobile-E) | | | | | | 1/2" Ice | 18.870 | 18.870 | 1.481 |
| | | | | | | 1" Ice 2" Ice | 23.080 31.500 | 23.080 31.500 | 1.713 |
| | | | | | | 4" Ice | 48.340 | 48.340 | 2.175 3.101 |
| **#** | | | | | | 7 100 | 40.540 | 40.540 | 3.101 |
| BXA-80063/4CF w/Mount | A | From Leg | 4.000 | 60.000 | 90.000 | No Ice | 5.886 | 3.911 | 0.035 |
| Pipe | | Б | 0.000 | | , | 1/2" Ice | 6.587 | 4.937 | 0.082 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 7.169 | 5.678 | 0.134 |
| | | | | | | 2" Ice | 8.364 | 7.194 | 0.261 |
| | | | | | | 4" Ice | 10.907 | 10.619 | 0.638 |
| BXA-80063/4CF w/Mount | В | From Leg | 4.000 | 50.000 | 90.000 | No Ice | 5.886 | 3.911 | 0.035 |
| Pipe | | | 0.000 | | | 1/2" Ice | 6.587 | 4.937 | 0.082 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 7.169 | 5.678 | 0.134 |
| | | | | | | 2" Ice | 8.364 | 7.194 | 0.261 |
| DXX 00002/40E 04 | C | E Y | 4.000 | 60.000 | 00.000 | 4" Ice | 10.907 | 10.619 | 0.638 |
| BXA-80063/4CF w/Mount | C | From Leg | 4.000 | 60,000 | 90.000 | No Ice | 5.886 | 3.911 | 0.035 |
| Pipe (Verizon-E) | | | 0.000 | | | 1/2" Ice 1" Ice | 6.587 7.169 | 4.937 5.678 | 0.082 0.134 |
| | | | UURI | | | I Ce | / 109 | 2 D/X | 01144 |

| Job 84498.003 | 3.01 - New Britain Wildwood Street, CT (USID 88241) | Page 7 of 14 |
|------------------|---|------------------------|
| Project | T-Mobile Modification 09.10.2014 | Date 06:51:13 10/14/14 |
| Client | AT&T Towers | Designed by Rortiz |

| Description | Face or Leg | Offset Type | Offsets: Horz Lateral Vert | Azimuth Adjustment | Placement | | C_AA_A Front | C_AA_A Side | Weight |
|---|-------------------|----------------|-------------------------------------|-----------------------|-----------|----------|-------------------|------------------|--------|
| | | | ft ft ft | 0 | ft | | ft² | ft² | K |
| | | | | | | 2" Ice | 8.364 | 7.194 | 0.261 |
| | | | | | | 4" Ice | 10.907 | 10.619 | 0.638 |
| BXA-171063/8BF w/Mount | A | From Leg | 4.000 | 60,000 | 90.000 | No Ice | 3.367 | 3.738 | 0.032 |
| Pipe | | | 0.000 | | | 1/2" Ice | 3.843 | 4.543 | 0.068 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 4.302 | 5.224 | 0.109 |
| | | | | | | 2" Ice | 5.310 | 6.637 | 0.211 |
| | | | | | | 4" Ice | 7.466 | 9.849 | 0.527 |
| BXA-171063/8BF w/Mount | В | From Leg | 4.000 | 50.000 | 90,000 | No Ice | 3.367 | 3.738 | 0.032 |
| Pipe | | | 0.000 | | | 1/2" Ice | 3.843 | 4.543 | 0.068 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 4.302 | 5.224 | 0.109 |
| | | | | | | 2" Ice | 5.310 | 6.637 | 0.211 |
| | | | | | | 4" Ice | 7.466 | 9.849 | 0.527 |
| BXA-171063/8BF w/Mount | C | From Leg | 4.000 | 60.000 | 90.000 | No Ice | 3.367 | 3,738 | 0.032 |
| Pipe | | _ | 0.000 | | | 1/2" Ice | 3.843 | 4.543 | 0.068 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 4.302 | 5.224 | 0.109 |
| , | | | | | | 2" Ice | 5.310 | 6,637 | 0.211 |
| | | | | | | 4" Ice | 7.466 | 9.849 | 0.527 |
| 3XA-70063-6CF-2 w/ Mount | Α | From Leg | 4.000 | 60,000 | 90.000 | No Ice | 7.969 | 5.801 | 0.042 |
| Pipe | | | 0.000 | | , | 1/2" Ice | 8.609 | 6.953 | 0.103 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 9.216 | 7.819 | 0.171 |
| (, , , , , , , , , , , , , , , , , , , | | | 0.000 | | | 2" Ice | 10.459 | 9.601 | 0.335 |
| | | | | | | 4" Ice | 13.066 | 13,366 | 0.804 |
| 3XA-70063-6CF-2 w/ Mount | В | From Leg | 4.000 | 50,000 | 90,000 | No Ice | 7.969 | 5.801 | 0.042 |
| Pipe | D | Trom Bog | 0.000 | 50.000 | 70.000 | 1/2" Ice | 8.609 | 6.953 | 0.103 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 9.216 | 7.819 | 0.171 |
| (VOIZOII-E) | | | 0.000 | | | 2" Ice | 10.459 | 9.601 | 0.171 |
| | | | | | | 4" Ice | 13.066 | 13.366 | 0.804 |
| 3XA-70063-6CF-2 w/ Mount | C | From Leg | 4.000 | 60,000 | 90.000 | No Ice | 7.969 | 5.801 | 0.042 |
| Pipe | C | 110m Leg | 0.000 | 00.000 | 90.000 | 1/2" Ice | 8.609 | 6,953 | 0.103 |
| (Verizon-E) | | | 0.000 | | | 1" Ice | 9.216 | 7.819 | 0.103 |
| (VERIZOII-E) | | | 0.000 | | | 2" Ice | 10.459 | 9.601 | |
| | | | | | | 4" Ice | 13.066 | | 0.335 |
| T-Arm Mount [TA 601-3] | C | None | | 0.000 | 90.000 | | | 13.366 | 0.804 |
| (Verizon-E) | C | None | | 0.000 | 90.000 | No Ice | 10.900 | 10.900 | 0.726 |
| (Verizon-E) | | | | | | 1/2" Ice | 14.650 | 14.650 | 0.926 |
| | | | | | | 1" Ice | 18.400 | 18.400 | 1.125 |
| | | | | | | 2" Ice | 25.900 | 25.900 | 1.524 |
| **#** | | | | | | 4" Ice | 40.900 | 40.900 | 2.322 |
| 11 | C | EI | 0.500 | 0.000 | (0.000 | NT. T. | 16 400 | 10.000 | 0.010 |
| Stadium Light Mount | C | From Leg | 0.500 | 0.000 | 60.000 | No Ice | 16.400 | 10.280 | 0.318 |
| (E) | | | 0.000 | | | 1/2" Ice | 21.700 | 14.270 | 0.468 |
| | | | 0.000 | | | 1" Ice | 27.000 | 18.260 | 0.619 |
| | | | | | | 2" Ice | 37.600 | 26.240 | 0.920 |
| **#** | | | | | | 4" Ice | 58.800 | 42,200 | 1.523 |

| Job 84498.003 | .01 - New Britain Wildwood Street, CT (USID 88241) | Page 8 of 14 |
|------------------|--|------------------------|
| Project | T-Mobile Modification 09.10.2014 | Date 06:51:13 10/14/14 |
| Client | AT&T Towers | Designed by Rortiz |

| | | | | | Dis | shes | | | | | |
|----------------------|-------------------|------------------------|----------------|-------------------------------------|-----------------------|-----------------------|-----------|---------------------|--------------------|------------------|----------------|
| Description | Face or Leg | Dish Type | Offset Type | Offsets: Horz Lateral Vert | Azimuth Adjustment | 3 dB Beam Width | Elevation | Outside Diameter | | Aperture Area | Weigh |
| | | | | ft | 0 | 0 | ft | ft | | ft^2 | K |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 61.500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | | w/Radome | Face | -6.000 | | | | | 1/2" Ice | 7.467 | 0.138 |
| | | | | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice | 8.661 | 0.253 |
| O4- 45 T 1-1-4 | | D 1 1 1 1 | - | 1 000 | 0.000 | | 61. 500 | 2 222 | 4" Ice | 10.254 | 0.407 |
| Stadium Light (E) | C | Paraboloid w/Radome | From | 1.000 | 0.000 | | 61.500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | | w/Radome | Face | -3.000 0.000 | | | | | 1/2" Ice 1" Ice | 7.467 7.865 | 0.138 |
| | | | | 0.000 | | | | | 2" Ice | 7.863 8.661 | 0.177 0.253 |
| | | | | | | | | | 4" Ice | 10.254 | 0.233 |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 61,500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | 0 | w/Radome | Face | 0.000 | 0.000 | | 01,500 | 2,000 | 1/2" Ice | 7.467 | 0.138 |
| (~) | | 1112 2000 2000 | 1 400 | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice | 8.661 | 0.253 |
| | | | | | | | | | 4" Ice | 10.254 | 0.407 |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 61.500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | | w/Radome | Face | 3.000 | | | | | 1/2" Ice | 7.467 | 0.138 |
| | | | | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice | 8.661 | 0.253 |
| | | | | | | | | | 4" Ice | 10.254 | 0.407 |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 61.500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | | w/Radome | Face | 6.000 | | | | | 1/2" Ice | 7.467 | 0.138 |
| | | | | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice | 8.661 | 0.253 |
| Stadium Light | С | Paraboloid | From | 1.000 | 0.000 | | 59 500 | 2.000 | 4" Ice | 10.254 | 0.407 |
| (E) | C | w/Radome | Face | -6.000 | 0.000 | | 58.500 | 3.000 | No Ice 1/2" Ice | 7.069 7.467 | 0.100 0.138 |
| (L) | | W/Radoffic | racc | 0.000 | | | | | 1" Ice | 7.865 | 0.138 |
| | | | | 0.000 | | | | | 2" Ice | 8.661 | 0.177 |
| | | | | | | | | | 4" Ice | 10.254 | 0.407 |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 58,500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | | w/Radome | Face | -3.000 | | | | | 1/2" Ice | 7.467 | 0.138 |
| | | | | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice | 8.661 | 0.253 |
| | | | | | | | | | 4" Ice | 10.254 | 0.407 |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 58.500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | | w/Radome | Face | 0.000 | | | | | 1/2" Ice | 7.467 | 0.138 |
| | | | | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice | 8.661 | 0.253 |
| O. 1. Y. 1. | ~ | D 1 1 1 1 | ~ | 1.000 | 2.222 | | | | 4" Ice | 10.254 | 0.407 |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 58.500 | 3.000 | No Ice | 7.069 | 0.100 |
| (E) | | w/Radome | Face | 3.000 0.000 | | | | | 1/2" Ice | 7.467 | 0.138 |
| | | | | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice 4" Ice | 8.661 10.254 | 0.253 |
| Stadium Light | C | Paraboloid | From | 1.000 | 0.000 | | 58.500 | 3.000 | No Ice | 7.069 | 0.407 |
| (E) | _ | w/Radome | Face | 6.000 | 0.000 | | 50.500 | 5.000 | 1/2" Ice | 7.467 | 0.100 |
| \/ | | | | 0.000 | | | | | 1" Ice | 7.865 | 0.177 |
| | | | | | | | | | 2" Ice | 8.661 | 0.253 |
| | | | | | | | | | 4" Ice | 10.254 | 0.407 |

B+T Group 1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265

| Job | | Page |
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| Project | T-Mobile Modification 09.10.2014 | Date 06:51:13 10/14/14 |
| Client | | Designed by |
| | AT&T Towers | Rortiz |

Load Combinations

| Comb. | | Description |
|-------|-----------------------------|-------------|
| No. | | |
| 1 | Dead Only | |
| 2 | Dead+Wind 0 deg - No Ice | |
| 3 | Dead+Wind 30 deg - No Ice | |
| 4 | Dead+Wind 60 deg - No Ice | |
| 5 | Dead+Wind 90 deg - No Ice | |
| 6 | Dead+Wind 120 deg - No Ice | |
| 7 | Dead+Wind 150 deg - No Ice | |
| 8 | Dead+Wind 180 deg - No Ice | |
| 9 | Dead+Wind 210 deg - No Ice | |
| 10 | Dead+Wind 240 deg - No Ice | |
| 11 | Dead+Wind 270 deg - No Ice | |
| 12 | Dead+Wind 300 deg - No Ice | |
| 13 | Dead+Wind 330 deg - No Ice | |
| 14 | Dead+Ice+Temp | |
| 15 | Dead+Wind 0 deg+Ice+Temp | |
| 16 | Dead+Wind 30 deg+Ice+Temp | |
| 17 | Dead+Wind 60 deg+Ice+Temp | |
| 18 | Dead+Wind 90 deg+Ice+Temp | |
| 19 | Dead+Wind 120 deg+Ice+Temp | |
| 20 | Dead+Wind 150 deg+Ice+Temp | |
| 21 | Dead+Wind 180 deg+Ice+Temp | |
| 22 | Dead+Wind 210 deg+Ice+Temp | |
| 23 | Dead+Wind 240 deg+Ice+Temp | |
| 24 | Dead+Wind 270 deg+Ice+Temp | |
| 25 | Dead+Wind 300 deg+Ice+Temp | |
| 26 | Dead+Wind 330 deg+Ice+Temp | |
| 27 | Dead+Wind 0 deg - Service | |
| 28 | Dead+Wind 30 deg - Service | |
| 29 | Dead+Wind 60 deg - Service | |
| 30 | Dead+Wind 90 deg - Service | |
| 31 | Dead+Wind 120 deg - Service | |
| 32 | Dead+Wind 150 deg - Service | |
| 33 | Dead+Wind 180 deg - Service | |
| 34 | Dead+Wind 210 deg - Service | |
| 35 | Dead+Wind 240 deg - Service | |
| 36 | Dead+Wind 270 deg - Service | |
| 37 | Dead+Wind 300 deg - Service | |
| 38 | Dead+Wind 330 deg - Service | |

Maximum Member Forces

| Section No. | Elevation ft | Component Type | Condition | Gov. Load | Force | Major Axis Moment | Minor Axis Moment |
|-------------|-----------------|--------------------|------------------|--------------|---------|----------------------|----------------------|
| | | manara (februaria) | | Comb. | K | kip-ft | kip-ft |
| L1 | 110 - 88.75 | Pole | Max Tension | 14 | 0.000 | -0.000 | 0.000 |
| | | | Max. Compression | 14 | -12.019 | -1.372 | -0.266 |
| | | | Max. Mx | 5 | -5.048 | -138.849 | -0.461 |
| | | | Max. My | 2 | -5.040 | 0.587 | 137.674 |
| | | | Max. Vy | 11 | -9.599 | 138.643 | 0.567 |
| | | | Max. Vx | 2 | -9.578 | 0.587 | 137.674 |
| | | | Max. Torque | 2 | | | -2.669 |
| L2 | 88.75 - 47 | Pole | Max Tension | 1 | 0.000 | 0.000 | 0.000 |
| | | | Max. Compression | 14 | -25.789 | 0.697 | -5.673 |
| | | | Max. Mx | 11 | -12.918 | 688.525 | 3.654 |
| | | | Max. My | 8 | -12.878 | -2.651 | -693.385 |
| | | | Max. Vy | 11 | -16.043 | 688,525 | 3.654 |

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| Client AT&T Towers | Designed by Rortiz |

| Section No. | Elevation ft | Component Type | Condition | Gov. Load Comb. | Force K | Major Axis Moment kip-ft | Minor Axis Moment kip-ft |
|----------------|-----------------|-------------------|------------------|-----------------------|------------|--------------------------------|--------------------------------|
| | | | Max. Vx | 2 | -16.983 | 3.897 | 691,916 |
| | | | Max. Torque | 10 | | | 4.518 |
| L3 | 47 - 0 | Pole | Max Tension | 1 | 0.000 | 0.000 | 0.000 |
| | | | Max. Compression | 14 | -39.469 | 2.440 | -6.637 |
| | | | Max. Mx | 11 | -23.048 | 1579.234 | 19.284 |
| | | | Max. My | 2 | -23.046 | 4.195 | 1629.883 |
| | | | Max. Vy | 11 | -18.807 | 1579.234 | 19.284 |
| | | | Max. Vx | 2 | -19.734 | 4.195 | 1629,883 |
| | | | Max. Torque | 10 | | | 4.550 |

Maximum Reactions

| Location | Condition | Gov. | Vertical | Horizontal, X | Horizontal, 2 |
|----------|---------------------|-------|-----------|---------------|---------------|
| | | Load | K | K | K |
| | | Comb. | | | |
| Pole | Max. Vert | 21 | 39.469 | 0.011 | -5.677 |
| | Max. H _x | 11 | 23.072 | 18.778 | 0.307 |
| | Max. Hz | 2 | 23.072 | -0.002 | 19.704 |
| | $Max. M_x$ | 2 | 1629.883 | -0.002 | 19.704 |
| | Max. M _z | 5 | 1577.360 | -18.778 | 0.310 |
| | Max. Torsion | 10 | 4.550 | 16.253 | -9.232 |
| | Min. Vert | 1 | 23.072 | 0.000 | 0.000 |
| | Min. H _x | 5 | 23.072 | -18.778 | 0.310 |
| | Min. Hz | 8 | 23.072 | 0.002 | -19.305 |
| | $Min. M_x$ | 8 | -1611.242 | 0.002 | -19.305 |
| | $Min. M_z$ | 11 | -1579.234 | 18.778 | 0.307 |
| | Min. Torsion | 4 | -4.253 | -16.607 | 9.822 |

Tower Mast Reaction Summary

| Load Combination | Vertical | $Shear_x$ | Shear _z Overturning Moment, M. | | Overturning Moment, M ₂ | Torque |
|----------------------------|----------|-----------|--|-----------|---------------------------------------|--------|
| | K | K | K | kip-ft | kip-ft | kip-ft |
| Dead Only | 23.072 | 0.000 | 0.000 | 2.915 | 0.932 | -0.000 |
| Dead+Wind 0 deg - No Ice | 23.072 | 0.002 | -19.704 | -1629.883 | 4.196 | 2.079 |
| Dead+Wind 30 deg - No Ice | 23.072 | 9.871 | -17.098 | -1411.538 | -814.918 | 3.539 |
| Dead+Wind 60 deg - No Ice | 23.072 | 16.607 | -9.822 | -808.758 | -1385.412 | 4.253 |
| Dead+Wind 90 deg - No Ice | 23.072 | 18.778 | -0.310 | -12.808 | -1577.360 | 3.881 |
| Dead+Wind 120 deg - No Ice | 23.072 | 16.252 | 9.229 | 783.971 | -1366.931 | 2.470 |
| Dead+Wind 150 deg - No Ice | 23.072 | 9.551 | 16.534 | 1386,081 | -801.030 | 0.328 |
| Dead+Wind 180 deg - No Ice | 23.072 | -0.002 | 19.305 | 1611.242 | -2,282 | -2.068 |
| Dead+Wind 210 deg - No Ice | 23.072 | -9.554 | 16.536 | 1382.850 | 797,339 | -3.915 |
| Dead+Wind 240 deg - No Ice | 23.072 | -16.253 | 9.232 | 778.358 | 1365.601 | -4.550 |
| Dead+Wind 270 deg - No Ice | 23.072 | -18.778 | -0.307 | -19.286 | 1579.234 | -3.891 |
| Dead+Wind 300 deg - No Ice | 23.072 | -16.605 | -9.819 | -814.336 | 1390.509 | -2.184 |
| Dead+Wind 330 deg - No Ice | 23.072 | -9.868 | -17.096 | -1414.733 | 822.417 | 0.058 |
| Dead+Ice+Temp | 39.469 | -0.000 | 0.000 | 6.637 | 2.440 | -0.001 |
| Dead+Wind 0 deg+Ice+Temp | 39.469 | 0.011 | -5.776 | -489.796 | 2.461 | 0.457 |
| Dead+Wind 30 deg+Ice+Temp | 39.469 | 2.912 | -5.016 | -423.791 | -247.291 | 0.870 |
| Dead+Wind 60 deg+Ice+Temp | 39.469 | 4.912 | -2.890 | -241.064 | -422.496 | 1.101 |
| Dead+Wind 90 deg+Ice+Temp | 39.469 | 5.567 | -0.088 | 1.858 | -482.039 | 1.051 |
| Dead+Wind 120 deg+Ice+Temp | 39.469 | 4.813 | 2.724 | 245.205 | -416.982 | 0.720 |
| Dead+Wind 150 deg+Ice+Temp | 39.469 | 2.814 | 4.865 | 428.352 | -242.349 | 0.177 |
| | | | | | | |

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| Load | Vertical | Shear _x | Shear _z | Overturning | Overturning | Torque |
|-----------------------------|----------|--------------------|--------------------|-------------|-------------|--------|
| Combination | | | | Moment, Mx | Moment, Mz | - |
| | K | K | K | kip-ft | kip-ft | kìp-ft |
| Dead+Wind 180 deg+Ice+Temp | 39.469 | -0.011 | 5.677 | 496.899 | 2.445 | -0.458 |
| Dead+Wind 210 deg+Ice+Temp | 39.469 | -2.834 | 4.877 | 428.342 | 247.240 | -0.970 |
| Dead+Wind 240 deg+Ice+Temp | 39.469 | -4.824 | 2.744 | 245.189 | 421.877 | -1.179 |
| Dead+Wind 270 deg+Ice+Temp | 39.469 | -5.567 | -0.065 | 1.843 | 486.939 | -1.053 |
| Dead+Wind 300 deg+Ice+Temp | 39.469 | -4.901 | -2.870 | -241.075 | 427.405 | -0.645 |
| Dead+Wind 330 deg+Ice+Temp | 39.469 | -2.893 | -5.004 | -423.796 | 252,208 | -0.079 |
| Dead+Wind 0 deg - Service | 23.072 | 0.001 | -7.697 | -635.672 | 2.212 | 0.819 |
| Dead+Wind 30 deg - Service | 23.072 | 3.856 | -6.679 | -550.268 | -318.154 | 1.390 |
| Dead+Wind 60 deg - Service | 23.072 | 6.487 | -3.837 | -314.506 | -541.275 | 1.670 |
| Dead+Wind 90 deg - Service | 23.072 | 7.335 | -0.121 | -3.202 | -616.339 | 1.524 |
| Dead+Wind 120 deg - Service | 23.072 | 6.348 | 3.605 | 308.417 | -534.043 | 0.971 |
| Dead+Wind 150 deg - Service | 23,072 | 3.731 | 6.459 | 543.908 | -312.721 | 0.128 |
| Dead+Wind 180 deg - Service | 23.072 | -0.001 | 7.541 | 631.970 | -0.325 | -0.817 |
| Dead+Wind 210 deg - Service | 23.072 | -3.732 | 6.459 | 542.638 | 312.411 | -1.544 |
| Dead+Wind 240 deg - Service | 23.072 | -6.349 | 3.606 | 306.218 | 534.659 | -1.790 |
| Dead+Wind 270 deg - Service | 23.072 | -7.335 | -0.120 | -5.739 | 618.221 | -1.526 |
| Dead+Wind 300 deg - Service | 23.072 | -6.486 | -3.835 | -316.699 | 544.425 | -0.852 |
| Dead+Wind 330 deg - Service | 23,072 | -3.855 | -6.678 | -551.533 | 322,236 | 0.028 |

Solution Summary

| | Sur | m of Applied Force. | | | | | |
|-------|---------|---------------------|---------|---------|--------|---------|---------|
| Load | PX | PY PZ | | PX | PY | PZ | % Error |
| Comb. | K | K | K | K | K | K | |
| 1 | 0.000 | -23.072 | 0.000 | 0.000 | 23.072 | 0.000 | 0.000% |
| 2 | 0.002 | -23.072 | -19.704 | -0.002 | 23.072 | 19.704 | 0.000% |
| 3 | 9.871 | -23.072 | -17.098 | -9.871 | 23,072 | 17.098 | 0.000% |
| 4 | 16.607 | -23.072 | -9.822 | -16.607 | 23,072 | 9.822 | 0.000% |
| 5 | 18.778 | -23.072 | -0.310 | -18.778 | 23,072 | 0.310 | 0.000% |
| 6 | 16.252 | -23.072 | 9.229 | -16.252 | 23.072 | -9.229 | 0.000% |
| 7 | 9.551 | -23.072 | 16.534 | -9.551 | 23.072 | -16.534 | 0.000% |
| 8 | -0.002 | -23.072 | 19.305 | 0.002 | 23.072 | -19.305 | 0.000% |
| 9 | -9.554 | -23.072 | 16.536 | 9.554 | 23.072 | -16.536 | 0.000% |
| 10 | -16.253 | -23.072 | 9.232 | 16.253 | 23.072 | -9.232 | 0.000% |
| 11 | -18.778 | -23.072 | -0.307 | 18.778 | 23.072 | 0.307 | 0.000% |
| 12 | -16.605 | -23.072 | -9.819 | 16.605 | 23.072 | 9.819 | 0.000% |
| 13 | -9.868 | -23.072 | -17.096 | 9.868 | 23.072 | 17.096 | 0.000% |
| 14 | 0.000 | -39.469 | 0.000 | 0.000 | 39.469 | -0.000 | 0.000% |
| 15 | 0.011 | -39.469 | -5.776 | -0.011 | 39.469 | 5.776 | 0.000% |
| 16 | 2.912 | -39.469 | -5.016 | -2.912 | 39.469 | 5.016 | 0.000% |
| 17 | 4.912 | -39.469 | -2.890 | -4.912 | 39.469 | 2.890 | 0.000% |
| 18 | 5.567 | -39.469 | -0.088 | -5.567 | 39.469 | 0.088 | 0.000% |
| 19 | 4.813 | -39.469 | 2,724 | -4.813 | 39,469 | -2.724 | 0.000% |
| 20 | 2.814 | -39.469 | 4.865 | -2.814 | 39,469 | -4.865 | 0.000% |
| 21 | -0.011 | -39.469 | 5.677 | 0.011 | 39.469 | -5.677 | 0.000% |
| 22 | -2.834 | -39.469 | 4.877 | 2.834 | 39.469 | -4.877 | 0.000% |
| 23 | -4.824 | -39.469 | 2.744 | 4.824 | 39.469 | -2,744 | 0.000% |
| 24 | -5.567 | -39.469 | -0.065 | 5.567 | 39.469 | 0.065 | 0.000% |
| 25 | -4.901 | -39.469 | -2.870 | 4.901 | 39,469 | 2.870 | 0.000% |
| 26 | -2.893 | -39.469 | -5.004 | 2.893 | 39.469 | 5.004 | 0.000% |
| 27 | 0.001 | -23.072 | -7.697 | -0.001 | 23.072 | 7.697 | 0.000% |
| 28 | 3.856 | -23.072 | -6.679 | -3.856 | 23.072 | 6.679 | 0.000% |
| 29 | 6.487 | -23.072 | -3.837 | -6.487 | 23.072 | 3.837 | 0.000% |
| 30 | 7.335 | -23.072 | -0.121 | -7.335 | 23.072 | 0.121 | 0.000% |
| 31 | 6.348 | -23.072 | 3.605 | -6.348 | 23.072 | -3.605 | 0.000% |
| 32 | 3.731 | -23.072 | 6.459 | -3.731 | 23.072 | -6.459 | 0.000% |
| 33 | -0.001 | -23.072 | 7.541 | 0.001 | 23.072 | -7.541 | 0.000% |
| 34 | -3.732 | -23.072 | 6.459 | 3.732 | 23.072 | -6.459 | 0.000% |

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| | Sum of Applied Forces | | | | S | | |
|-------|-----------------------|---------|--------|-------|--------|--------|---------|
| Load | PX | PY | PZ | PX | PY | PZ | % Error |
| Comb. | K | K | K | K | K | K | |
| 35 | -6.349 | -23.072 | 3.606 | 6.349 | 23.072 | -3.606 | 0.000% |
| 36 | -7.335 | -23.072 | -0.120 | 7.335 | 23.072 | 0.120 | 0.000% |
| 37 | -6.486 | -23.072 | -3.835 | 6.486 | 23.072 | 3.835 | 0.000% |
| 38 | -3.855 | -23.072 | -6.678 | 3.855 | 23.072 | 6.678 | 0.000% |

Non-Linear Convergence Results

| Load | Converged? | Number | Displacement | Force |
|-------------|------------|-----------|--------------|------------|
| Combination | | of Cycles | Tolerance | Tolerance |
| 1 | Yes | 4 | 0.00000001 | 0.00000001 |
| 2 | Yes | 5 | 0.00000001 | 0.00020238 |
| 3 | Yes | 6 | 0.00000001 | 0.00005574 |
| 4 | Yes | 6 | 0.00000001 | 0.00004394 |
| 5 | Yes | 5 | 0.00000001 | 0.00013656 |
| 6 | Yes | 6 | 0.00000001 | 0.00004905 |
| 7 | Yes | 6 | 0.00000001 | 0.00005166 |
| 8 | Yes | 5 | 0.00000001 | 0.00022433 |
| 9 | Yes | 6 | 0.00000001 | 0.00004325 |
| 10 | Yes | 6 | 0.00000001 | 0.00005459 |
| 11 | Yes | 5 | 0.00000001 | 0.00011604 |
| 12 | Yes | 6 | 0.00000001 | 0.00004887 |
| 13 | Yes | 6 | 0.00000001 | 0.00004678 |
| 14 | Yes | 4 | 0.00000001 | 0.00006295 |
| 15 | Yes | 5 | 0.00000001 | 0.00033240 |
| 16 | Yes | 5 | 0.00000001 | 0.00062503 |
| 17 | Yes | 5 | 0.00000001 | 0.00055046 |
| 18 | Yes | 5 | 0.00000001 | 0.00032877 |
| 19 | Yes | 5 | 0.00000001 | 0.00059527 |
| 20 | Yes | 5 | 0.00000001 | 0.00060877 |
| 21 | Yes | 5 | 0.00000001 | 0.00034157 |
| 22 | Yes | 5 5 | 0.00000001 | 0.00057107 |
| 23 | Yes | 5 | 0.00000001 | 0.00063146 |
| 24 | Yes | 5 | 0.00000001 | 0.00032945 |
| 25 | Yes | 5 | 0.00000001 | 0.00056982 |
| 26 | Yes | 5 | 0.00000001 | 0.00057290 |
| 27 | Yes | 5 | 0.00000001 | 0.00005277 |
| 28 | Yes | 5 | 0.00000001 | 0.00017980 |
| 29 | Yes | 5 | 0.00000001 | 0.00011909 |
| 30 | Yes | 4 | 0.00000001 | 0.00082738 |
| 31 | Yes | 5 | 0.00000001 | 0.00014047 |
| 32 | Yes | 5 | 0.00000001 | 0.00015593 |
| 33 | Yes | 5 | 0.00000001 | 0.00005505 |
| 34 | Yes | 5 | 0.00000001 | 0.00012008 |
| 35 | Yes | 5 | 0.00000001 | 0.00012330 |
| 36 | Yes | 4 | 0.00000001 | 0.00078445 |
| 37 | Yes | 5 | 0.00000001 | 0.00013902 |
| 38 | Yes | 5 | 0.00000001 | 0.00013109 |

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| Client | AT&T Towers | Designed by Rortiz |

| Maximum | Tower | Deflections | - Service | Wind |
|-------------|-------|--------------------|-----------|-------|
| IVICALITUTI | LOVE | Dellections | - OCIVICE | VVIII |

| Section No. | Elevation | Horz. Deflection | Gov. Load | Tilt | Twist |
|----------------|-------------|---------------------|--------------|-------|-------|
| 110. | ft | in | Comb. | o | 0 |
| L1 | 110 - 88.75 | 27.989 | 38 | 2.113 | 0.014 |
| L2 | 92 - 47 | 20.231 | 38 | 1.967 | 0.012 |
| L3 | 51 - 0 | 6.391 | 38 | 1.149 | 0.006 |

Critical Deflections and Radius of Curvature - Service Wind

| Elevation | Appurtenance | Gov. Load | Deflection | Tilt | Twist | Radius of Curvature |
|-----------|----------------------------|--------------|------------|-------|-------|------------------------|
| ft | | Comb. | in | ٥ | o | ft |
| 110.000 | (2) 7770.00 w/ Mount Pipe | 38 | 27.989 | 2.113 | 0.015 | 16731 |
| 100.000 | (3) AIR 21 w/ Pipe Mount | 38 | 23.626 | 2.045 | 0.014 | 8365 |
| 90.000 | BXA-80063/4CF w/Mount Pipe | 38 | 19.405 | 1.942 | 0.013 | 4362 |
| 61.500 | Stadium Light | 38 | 9.174 | 1.395 | 0.008 | 2233 |
| 60.000 | Stadium Light Mount | 38 | 8.738 | 1.360 | 0.008 | 2177 |
| 58.500 | Stadium Light | 38 | 8.314 | 1.325 | 0.007 | 2123 |

Maximum Tower Deflections - Design Wind

| Section No. | Elevation | Horz. Deflection | Gov. Load | Tilt | Twist |
|----------------|-------------|---------------------|--------------|-------|-------|
| | ft | in | Comb. | 0 | · · |
| L1 | 110 - 88.75 | 71.593 | 13 | 5.409 | 0.037 |
| L2 | 92 - 47 | 51.776 | 13 | 5.035 | 0.031 |
| L3 | 51 - 0 | 16.372 | 13 | 2.944 | 0.014 |

Critical Deflections and Radius of Curvature - Design Wind

| Elevation | Appurtenance | Gov. Load | Deflection | Tilt | Twist | Radius of Curvature |
|-----------|----------------------------|--------------|------------|-------|-------|------------------------|
| ft | | Comb. | in | 0 | o | ft |
| 110.000 | (2) 7770.00 w/ Mount Pipe | 13 | 71.593 | 5.409 | 0.038 | 6667 |
| 100.000 | (3) AIR 21 w/ Pipe Mount | 13 | 60.451 | 5.234 | 0.035 | 3333 |
| 90.000 | BXA-80063/4CF w/Mount Pipe | 13 | 49.665 | 4.972 | 0.032 | 1734 |
| 61.500 | Stadium Light | 13 | 23.495 | 3.573 | 0.020 | 879 |
| 60.000 | Stadium Light Mount | 13 | 22.378 | 3.484 | 0.019 | 856 |
| 58.500 | Stadium Light | 13 | 21.293 | 3.395 | 0.019 | 834 |

Compression Checks

Pole Design Data

| Section No. | Elevation | Size | L | L_u | Kl/r | F_a | A | Actual P | Allow. Pa | Ratio P |
|----------------|-----------------|----------------------|--------|-------|------|--------|--------|-------------|--------------|------------|
| | ft | | ft | ft | | ksi | in^2 | K | K | P_a |
| L1 | 110 - 88.75 (1) | TP24.825x21x0.188 | 21,250 | 0.000 | 0.0 | 39.000 | 14.314 | -5.043 | 558.256 | 0.009 |
| L2 | 88.75 - 47 (2) | TP31.988x23.865x0.25 | 45,000 | 0.000 | 0.0 | 39.000 | 24.611 | -12.845 | 959.821 | 0.013 |
| L3 | 47 - 0 (3) | TP39.93x30.766x0.313 | 51.000 | 0.000 | 0.0 | 39.000 | 39.296 | -23.046 | 1532.530 | 0.015 |

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Section No.

L1

L2

L3

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| Pole Bending Design Data | | | | | | | | | |
|------------------------------|--|------------------------------------|----------------------------------|----------------------------------|---------------------------------------|------------------------------------|----------------------------------|-----------------------------|--------------------------|
| Elevation | Size | Actual M _x kip-ft | Actual f _{bx} ksi | Allow. F _{bx} ksi | $\frac{Ratio}{\frac{f_{bx}}{F_{bx}}}$ | Actual M _y kip-ft | Actual f _{by} ksi | Allow. F _{by} ksi | Ratio f _{by} |
| 110 - 88.75 (1) | TP24.825x21x0.188 | 138.958 | 19.626 | 39.000 | 0.503 | 0.000 | 0.000 | 39.000 | $\frac{F_{bv}}{0.000}$ |
| 88.75 - 47 (2) 47 - 0 (3) | TP31.988x23.865x0.25 TP39.93x30.766x0.313 | 696.344 1636.408 | 44.373 51.119 | 39.000 39.000 | 1.138 1.311 | 0.000 | 0.000 | 39.000 39.000 | 0.000 |

| | Pole Shear Design Data | | | | | | | | | |
|----------------|------------------------|----------------------|-------------|--------------------------|--------------------------|----------------------------|-------------|---------------|--------|--------------------------|
| Section No. | Elevation | Size | Actual V | Actual f _v | Allow. F _v | Ratio f _v | Actual T | Actual fvt | Allow. | Ratio f _{vi} |
| | ft | | K | ksi | ksi | $\frac{-F_{\nu}}{F_{\nu}}$ | kip-ft | ksi | ksi | F_{vt} |
| L1 | 110 - 88.75 (1) | TP24.825x21x0.188 | 9.646 | 0.674 | 26.000 | 0.052 | 0.982 | 0.068 | 26.000 | 0.003 |
| L2 | 88.75 - 47 (2) | TP31.988x23.865x0.25 | 17.022 | 0.692 | 26.000 | 0.053 | 0.086 | 0.003 | 26.000 | 0.000 |
| L3 | 47 - 0 (3) | TP39.93x30.766x0.313 | 19.770 | 0.503 | 26,000 | 0.039 | 0.060 | 0.001 | 26.000 | 0.000 |

| Section Eleva No. ft | Elevation | Ratio P | Ratio f_{bx} | $Ratio$ f_{by} | Ratio f_v | Ratio f _{vi} | Comb. Stress Ratio | Allow. Stress | Criteria |
|----------------------------|-----------------|------------|-------------------|------------------|---------------------|--------------------------|-----------------------|------------------|-----------|
| | ft | ft | ft P_a F_{bx} | F_{bx} | $\overline{F_{bv}}$ | F_{ν} | $F_{\nu t}$ | | Ratio |
| L1 | 110 - 88.75 (1) | 0.009 | 0.503 | 0.000 | 0.052 | 0,003 | 0.513 | 1.333 | H1-3+VT |
| L2 | 88.75 - 47 (2) | 0.013 | 1.138 | 0.000 | 0.053 | 0.000 | 1.152 | 1.333 | H1-3+VT |
| L3 | 47 - 0 (3) | 0.015 | 1.311 | 0.000 | 0.039 | 0.000 | 1,326 | 1.333 | H1-3+VT ✔ |

Pole Interaction Design Data

Section Capacity Table

| Section No. | Elevation ft | Component Type | Size | Critical Element | $P \ K$ | $SF^*P_{allow} \ K$ | % Capacity | Pass Fail |
|----------------|-----------------|-------------------|----------------------|---------------------|---------|---------------------|---------------|--------------|
| L1 | 110 - 88.75 | Pole | TP24.825x21x0.188 | 1 | -5.043 | 744.155 | 38.5 | Pass |
| L2 | 88.75 - 47 | Pole | TP31.988x23.865x0.25 | 2 | -12.845 | 1279.441 | 86.4 | Pass |
| L3 | 47 - 0 | Pole | TP39.93x30.766x0.313 | 3 | -23.046 | 2042.862 | 99.5 | Pass |
| | | | | | | | Summary | |
| | | | | | | Pole (L3) | 99.5 | Pass |
| | | | | | | RATING= | 99.5 | Pass |

Square, Stiffened / Unstiffened Base Plate, Any Rod Material - Rev. F /G

Assumptions: 1) Rod groups at corners. Total # rods divisible by 4. Maximum total # of rods = 48 (12 per Corner).

2) Rod Spacing = Straight Center-to-Center distance between any (2) adjacent rods (same corner)

3) Clear space between bottom of leveling nut and top of concrete **not** exceeding (1)*(Rod Diameter)

Site Data

USID#: 88241

Site Name: New Britain Wildwoods Str. County #: Hartford

| Anchor Rod Data | | | | |
|-----------------|--------|------------------|--|--|
| Eta Factor, η | 0.5 | TIA G (Fig. 4-4) | | |
| Qty: | 12 | | | |
| Diam: | 2.25 | in | | |
| Rod Material: | A615-J | 60 | | |
| Yield, Fy: | 75 | ksi | | |
| Strength, Fu: | 100 | ksi | | |
| Bolt Circle | 46 | lin | | |

| Plate Data | | | | |
|----------------|-----|------|--|--|
| W=Side: | 45 | in | | |
| Thick: | 2.5 | in - | | |
| Grade: | 50 | ksi | | |
| Clip Distance: | 6 | in | | |

| Stiffener Da | Stiffener Data (Welding at both sides) | | | | | |
|-----------------|--|-------------|--|--|--|--|
| Configuration: | Unstiffened | | | | | |
| Weld Type: | | ** | | | | |
| Groove Depth: | | in ** | | | | |
| Groove Angle: | | degrees | | | | |
| Fillet H. Weld: | | < Disregard | | | | |
| Fillet V. Weld: | | in | | | | |
| Width: | | in | | | | |
| Height: | | in | | | | |
| Thick: | | in | | | | |
| Notch: | | in | | | | |
| Grade: | | ksi | | | | |
| Weld str.: | | ksi | | | | |
| Clear Space | | | | | | |
| between | | in | | | | |
| Stiffeners at | | 111 | | | | |
| B.C. | | | | | | |

| Pole Data | | |
|-------------|--------|--------------|
| Diam: | 39.93 | in |
| Thick: | 0.3125 | in |
| Grade: | 65 | ksi |
| # of Sides: | 18 | "0" IF Round |

| Base | Reactions | |
|-----------------------|-----------|---------|
| TIA Revision: | F | |
| Unfactored Moment, M: | 1636 | ft-kips |
| Unfactored Axial, P: | 23 | kips |
| Unfactored Shear, V: | 20 | kips |

Anchor Rod Results

| TIA F> Maximum Rod Tension | 140.3 Kips |
|----------------------------|------------|
| Allowable Tension: | 195.0 Kips |
| Anchor Rod Stress Ratio: | 72.0% Pass |

| Base Plate Results | Flexural Check |
|------------------------------|----------------|
| Base Plate Stress: | 43.1 ksi |
| Allowable PL Bending Stress: | 50.0 ksi |
| Base Plate Stress Ratio: | 86.3% Pass |

| PL Ref. Data |
|-------------------------|
| Yield Line (in): 23.71 |
| Max PL Length: 23.71 |

N/A - Unstiffened

Stiffener Results

| Horizontal Weld: | N/A |
|---------------------------------------|-----|
| Vertical Weld: | N/A |
| Plate Flex+Shear, fb/Fb+(fv/Fv)^2: | N/A |
| Plate Tension+Shear, ft/Ft+(fv/Fv)^2: | N/A |
| Plate Comp. (AISC Bracket): | N/A |
| Pole Results | |
| | |

Pole Punching Shear Check:

May PL Length

May PL Length

Thickness

Q Anchor, Typ.

STIFFENED CONFIGURATION
ASSUMED IN TOOL

B.C.

Pole

Anchor Space of B.C. for Single
Anchor Cose

Anchor Spacing Some As

Stifferer Spacing Corner
Anchor (Input Clear Space)

^{**} Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes

| PROJECT | 88241 - New Britain Wildwood Street, CT | | | | |
|---------|---|------|---|----|---|
| SUBJECT | Foundation Analysis | | | | |
| DATE | 10/14/14 | PAGE | 1 | OF | 1 |



Rev. Type:

Monopole Pad & Pier Foundation Analysis

Design Loads:

Input unfactored loads

 Shear:
 20.0 kips

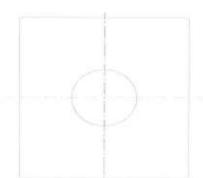
 Moment:
 1,636.0 ft-kips

 Tower Height:
 110.0 ft

 Tower Weight:
 23.0 kips

Pad & Pier Dimensions / Properties:

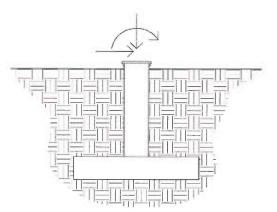
| Pole Diameter at Base: | 39.93 | in |
|--------------------------|-------|---------|
| Bearing Depth: | 6.0 | ft |
| Pad Width: | 21.5 | ft |
| Neglected Depth: | 3.3 | ft |
| Thickness: | 3.0 | ft |
| Pier Diameter: | 6.0 | ft |
| Pier Height Above Grade: | 0.5 | _ ft |
| BP Dist. Above Pier: | 6.0 | in |
| Clear Cover: | 3.0 | in |



21.5 FT

Rebar Yield Strength:60000 psiConcrete Strength:3000 psiConcrete Unit Weight:0.15 kcf

Elevation Overview



Soil Data:

| | Allowable Values | | |
|------------------------|------------------|------|--|
| Soil Unit Weight: | 0.100 | _kcf | |
| Ult. Bearing Capacity: | 6.000 | _ksf | |
| Angle of Friction: | 0.000 | deg | |
| Cohesion: | 0.000 | ksf | |
| Passive Pressure: | 0.000 | ksf | |
| Base Friction: | 0.300 | | |
| | | | |

** Notes:

Summary of Results

| Req'd Pier Diam. | ОК |
|------------------|-------|
| Overturning | 76.5% |
| Shear Capacity | 35.5% |
| Bearing | 50.6% |
| | |

EXHIBIT C



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

T-Mobile Existing Facility

Site ID: CT11634C

CT634 / Cing / Chelsey Park_ET 35 Wildwood Street New Britain, CT 06051

November 17, 2014

EBI Project Number: 62146242

| Site Compliance Summary | |
|-------------------------|-----------|
| Compliance Status: | COMPLIANT |
| Site total MPE% of | |
| FCC general public | 87.98 % |
| allowable limit: | |



November 17, 2014

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

Emissions Analysis for Site: CT11634C - CT634 / Cing / Chelsey Park ET

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **35 Wildwood Street**, **New Britain**, **CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and 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.

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (μ W/cm²). The general population exposure limit for the 700 MHz Band is 467 μ W/cm², and the general population exposure limit for the PCS and AWS bands is 1000 μ W/cm². Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **35 Wildwood Street, New Britain, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

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

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

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- 6) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 7) The antennas used in this modeling are the Ericsson AIR21 B4A/B2P for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the Commscope LNX-6515DS-VTM for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The Ericsson AIR21 B4A/B2P has a maximum gain of 15.9 dBd at its main lobe. The Commscope LNX-6515DS-VTM has a maximum gain of 14.6 dBd at its main lobe. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antenna mounting height centerline of the proposed antennas is **100 feet** above ground level (AGL).
- 9) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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

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T-Mobile Site Inventory and Power Data

| Sector: | A | Sector: | В | Sector: | C |
|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|
| Antenna #: | 1 | Antenna #: | 1 | Antenna #: | 1 |
| Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P |
| Gain: | 15.9 dBd | Gain: | 15.9 dBd | Gain: | 15.9 dBd |
| Height (AGL): | 100 | Height (AGL): | 100 | Height (AGL): | 100 |
| Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) | Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) | Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) |
| Channel Count | 2 | Channel Count | 2 | # PCS Channels: | 2 |
| Total TX Power: | 120 | Total TX Power: | 120 | # AWS Channels: | 120 |
| ERP (W): | 1,906.06 | ERP (W): | 1,906.06 | ERP (W): | 1,906.06 |
| Antenna A1 MPE% | 1.90 | Antenna B1 MPE% | 1.90 | Antenna C1 MPE% | 1.90 |
| Antenna #: | 2 | Antenna #: | 2 | Antenna #: | 2 |
| Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P |
| Gain: | 15.9 dBd | Gain: | 15.9 dBd | Gain: | 15.9 dBd |
| Height (AGL): | 100 | Height (AGL): | 100 | Height (AGL): | 100 |
| Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) | Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) | Frequency Bands | 1900 MHz(PCS) / 2100 MHz (AWS) |
| Channel Count | 4 | Channel Count | 4 | Channel Count | 4 |
| Total TX Power: | 120 | Total TX Power: | 120 | Total TX Power: | 120 |
| ERP (W): | 1,906.06 | ERP (W): | 1,906.06 | ERP (W): | 1,906.06 |
| Antenna A2 MPE% | 1.90 | Antenna B2 MPE% | 1.90 | Antenna C2 MPE% | 1.90 |
| Antenna #: | 3 | Antenna #: | 3 | Antenna #: | 3 |
| Make / Model: | Commscope LNX- 6515DS-VTM | Make / Model: | Commscope LNX- 6515DS-VTM | Make / Model: | Commscope LNX- 6515DS-VTM |
| Gain: | 14.6 dBd | Gain: | 14.6 dBd | Gain: | 14.6 dBd |
| Height (AGL): | 100 | Height (AGL): | 100 | Height (AGL): | 100 |
| Frequency Bands | 700 Mhz | Frequency Bands | 700 Mhz | Frequency Bands | 700 Mhz |
| Channel Count | 1 | Channel Count | 1 | Channel Count | 1 |
| Total TX Power: | 30 | Total TX Power: | 30 | Total TX Power: | 30 |
| ERP (W): | 445.37 | ERP (W): | 445.37 | ERP (W): | 445.37 |
| Antenna A3 MPE% | 0.75 | Antenna B3 MPE% | 0.75 | Antenna C3 MPE% | 0.75 |

| Site Composite MPE% | |
|---------------------|---------|
| Carrier | MPE% |
| T-Mobile | 13.66 |
| AT&T | 24.87 % |
| Clearwire | 1.90 % |
| Clearwire MW | 3.94 % |
| Verizon Wireless | 43,61 % |
| Site Total MPE %: | 87.98 % |

| 4.55 % |
|---------|
| 4.55 % |
| 4.55 % |
| |
| 87.98 % |
| |

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Summary

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

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

| T-Mobile Sector | Power Density Value (%) |
|-------------------------|-------------------------|
| Sector 1: | 4.55 % |
| Sector 2: | 4.55 % |
| Sector 3: | 4.55 % |
| T-Mobile Total: | 13.66 % |
| Site Total: | 87.98 % |
| Site Compliance Status: | COMPLIANT |

The anticipated composite MPE value for this site assuming all carriers present is 87.98% of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

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