COHEN and WOLF P.C.
ATTORNEYS AT LAW

JULIE D. KOHLER

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

March 24, 2015

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

Re: Notice of Exempt Modification
Robert J. Kaufman, Seven T LLC/T-Mobile co-location
Site ID CT11923C
7 West View Drive, Danbury

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, Robert J. Kaufman, Seven T, LLC owns the existing lattice telecommunications tower and related facility at 7 West View Drive, Danbury Connecticut (coordinates 41.396/ -73.42380). T-Mobile intends to add three (3) antennas and related equipment at this existing telecommunications facility in Danbury ("Danbury 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 the Mayor, Mark D. Boughton. Robert J. Kaufman, Seven T, LLC is also the property owner.

The existing Danbury Facility consists of a 100 foot tall lattice structure.[1] T-Mobile plans to add three (3) antennas and three (3) RRUs (remote radio units) at a centerline of 50 feet. (See the plans dated March 10, 2015 attached hereto as Exhibit A). T-Mobile will also use the spare fiber cable for the proposed antennas. The existing Facility is structurally capable of supporting T-Mobile's proposed modifications, as indicated in the structural analysis dated March 6, 2015 and attached hereto as Exhibit B.

[1] While the online docket for the Connecticut Siting Council does not provide a docket or petition number for the approval of this structure, it does reference this structure in connection with notices of intent captioned EM-T-MOBILE-034-130726 and EM-T-MOBILE-034-090409.

The planned modifications to the Danbury 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 additional antennas and equipment will be installed at the 50 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 to the compound area so the modifications will not require an extension of the site boundaries. (See Sheet A-1

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 replacement 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 Radio Frequency Emissions Analysis Report prepared by EBI dated March 18, 2015 T-Mobile's operations would add 62.34% 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 65.94% 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 replacement antennas and equipment at the Danbury 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: City of Danbury, Mayor Mark D. Boughton
Robert J. Kaufman Seven T, LLC
Elizabeth Jamieson, Transcend Wireless

EXHIBIT A

SITE NAME: CT923/W. VIEW DR_GT

7 WEST VIEW DRIVE,
DANBURY, CT 06810

SITE NUMBER: CT11923C
L700 - 702CU CONFIGURATION

T-MOBILE TECHNICIAN SITE SAFETY NOTES	
LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS NOT PERMITTED
SECTOR B:	ACCESS NOT PERMITTED
SECTOR C:	ACCESS NOT PERMITTED
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NIU/T DEMARC:	UNRESTRICTED
OTHER/SPECIAL:	NONE

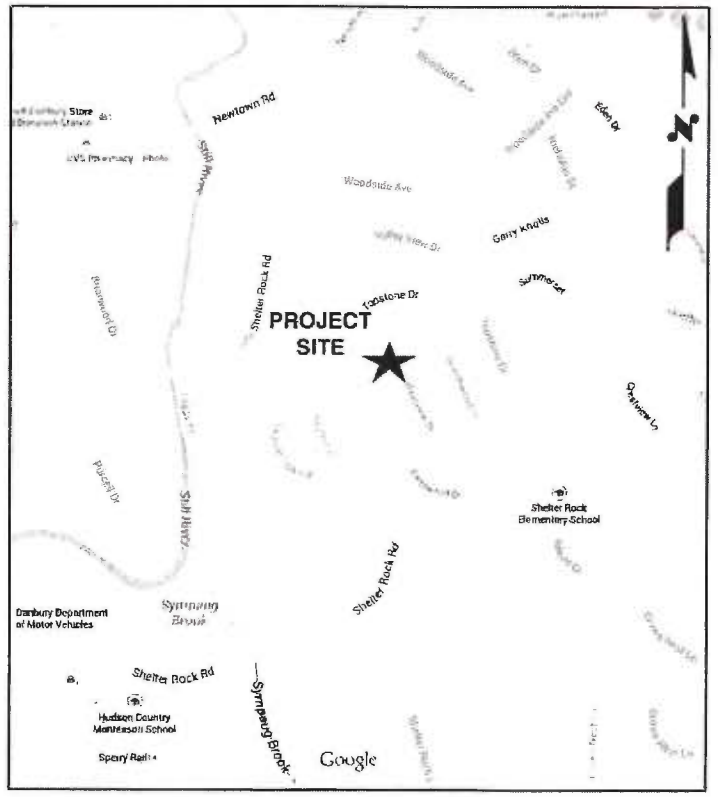
GENERAL NOTES

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

1. STRUCTURAL DESIGNS AND DETAILS FOR ANTENNA MOUNTS COMPLETED BY HUDSON DESIGN ON BEHALF OF T-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 T-MOBILE MODERNIZATION EQUIPMENT DEPLOYMENT AS DEPICTED HEREIN.
2. 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

APPROVALS	
PROJECT MANAGER	DATE
CONSTRUCTION	DATE
RF ENGINEERING	DATE
ZONING / SITE ACQ.	DATE
OPERATIONS	DATE
TOWER OWNER	DATE



CALL
BEFORE YOU DIG
CALL TOLL FREE 800-922-4455
OR CALL 811
UNDERGROUND SERVICE ALERT

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).
SITE ADDRESS:	7 WEST VIEW DRIVE DANBURY, CT 06810
LATITUDE:	41° 00' 38.81" N
LONGITUDE:	73° 39' 31.50" W
JURISDICTION:	NATIONAL, STATE & LOCAL CODES OR ORDINANCES
CURRENT USE:	TELECOMMUNICATIONS FACILITY
PROPOSED USE:	TELECOMMUNICATIONS FACILITY

DRAWING INDEX

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

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10 INDUSTRIAL AVE
MAHWAH, NJ 07430
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TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT * DANIEL HAMM * LICENSED PROFESSIONAL ENGINEER

APPROVALS

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RF ENGINEERING	DATE
ZONING/SITE ACQ.	DATE
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CHECKED BY:	DR

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0	03/02/15	ISSUED FOR REVIEW

SITE NUMBER: CT11923C
SITE NAME:
CT923/W. VIEW DR_GT
7 WEST VIEW DRIVE
DANBURY, CT 06810

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

GROUNDING NOTES

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING 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 PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.

2. 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.

3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

4. 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.

5. 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.

6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER 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

GENERAL NOTES

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

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

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE 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 TO SHOW OUTLINE ONLY.

5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

6. "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/OR 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 OWNER.

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.

12. 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 AIR-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 SERVICES FOR 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.

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 OF THE FOLLOWING STANDARDS:

   AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

   AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

   MANUAL OF STEEL CONSTRUCTION, ASD, 14TH EDITION;

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

   ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

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.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	G.C.	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
AWG	AMERICAN WIRE GAUGE	MGB	MASTER GROUND BUS		
BCW	BARE COPPER WIRE	MIN	MINIMUM	TBD	TO BE DETERMINED
BTS	BASE TRANSCEIVER STATION	PROPOSED	NEW	TBR	TO BE REMOVED
EXISTING	EXISTING	N.T.S.	NOT TO SCALE	TBRR	TO BE REMOVED AND REPLACED
EG	EQUIPMENT GROUND	REF	REFERENCE	TYP	TYPICAL
EGR	EQUIPMENT GROUND RING	REQ	REQUIRED		

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

Transcend Wireless
TRANSCEND WIRELESS
10 INDUSTRIAL AVE
MAHWAH, NJ 07430
TEL: (201) 684-0055
FAX: (201) 684-0066

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT * DANIEL HAMM * 26178 LICENSED PROFESSIONAL ENGINEER

APPROVALS

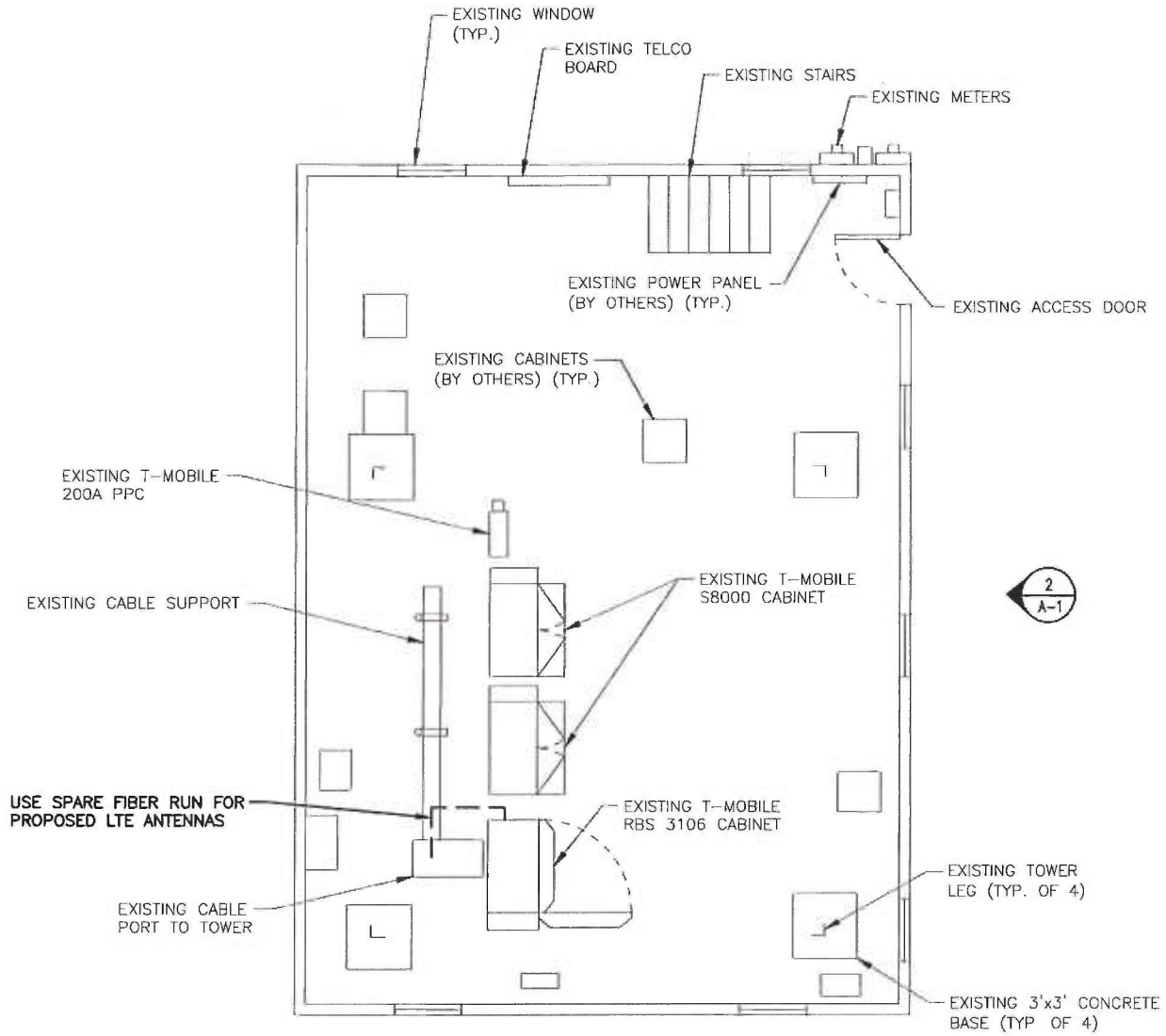
CONSTRUCTION	DATE
RF ENGINEERING	DATE
ZONING/SITE ACQ.	DATE
OPERATIONS	DATE
TOWER OWNER	DATE
PROJECT NO:	CT11923C
DRAWN BY:	MH
CHECKED BY:	DR

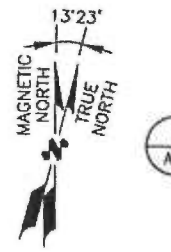
1	03/10/15	ISSUED FOR REVIEW
0	03/02/15	ISSUED FOR REVIEW

SITE NUMBER: CT11923C
SITE NAME:
CT923/W. VIEW DR_GT
7 WEST VIEW DRIVE
DANBURY, CT 06810

SHEET TITLE
GENERAL NOTES

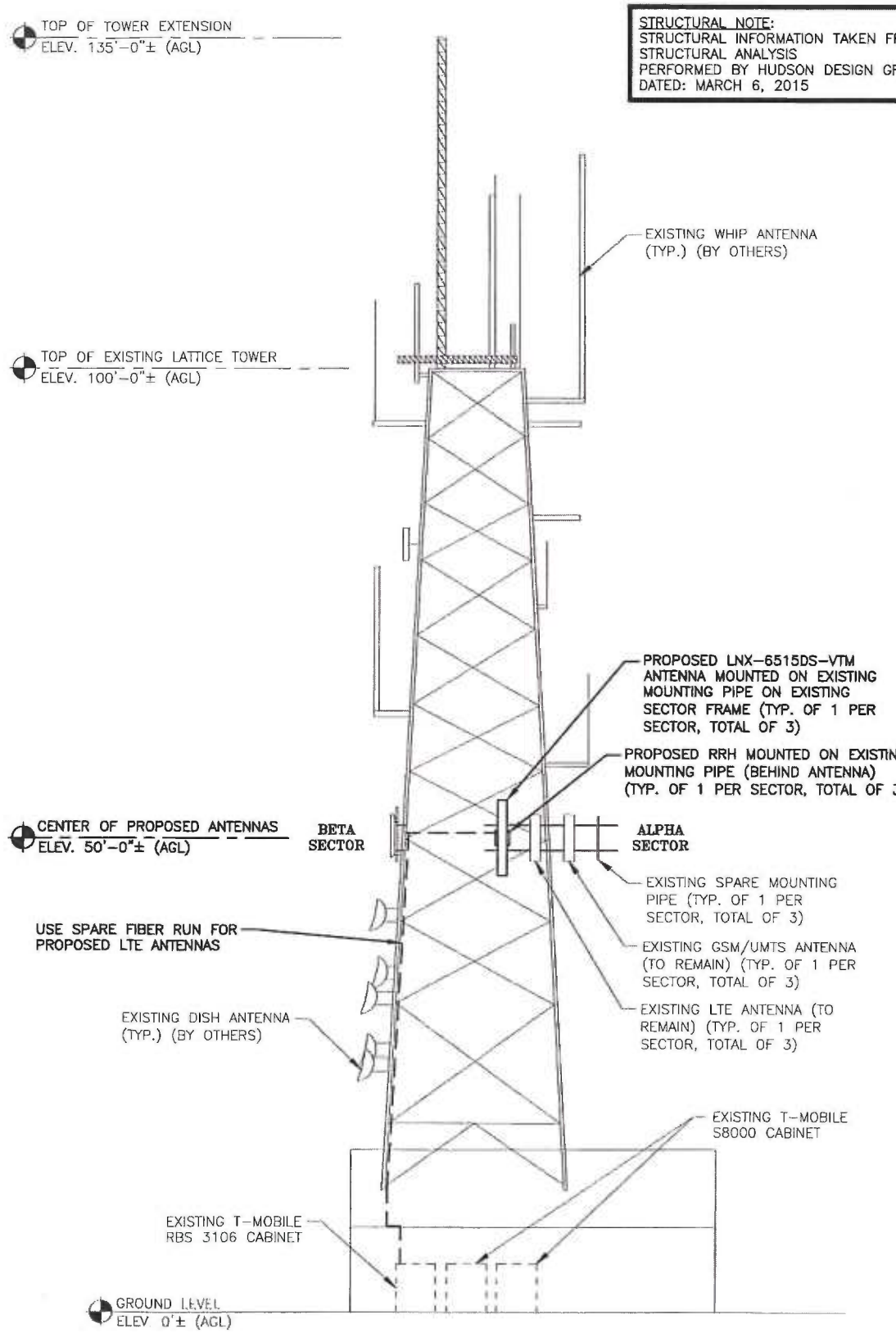
SHEET NUMBER
GN-1





1 A-1 **SITE PLAN**
SCALE: 1/4"=1'-0"

0 2'-0" 4'-0" 8'-0" 12'-0"



2 A-1 **WEST ELEVATION**
SCALE: 1/8"=1'-0"

0 4'-0" 8'-0" 16'-0" 24'-0"

L700 - 702CU CONFIGURATION

STRUCTURAL NOTE:
STRUCTURAL INFORMATION TAKEN FROM STRUCTURAL ANALYSIS PERFORMED BY HUDSON DESIGN GROUP LLC DATED: MARCH 6, 2015

T-MOBILE NORTHEAST LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002
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Transcend Wireless
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10 INDUSTRIAL AVE
MAHWAH, NJ 07430
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N. ANDOVER, MA 01845
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FAX: (978) 336-5586

STATE OF CONNECTICUT
DANIEL HAMM
21178
LICENSED
PROFESSIONAL ENGINEER

APPROVALS

CONSTRUCTION	DATE
RF ENGINEERING	DATE
ZONING/SITE ACQ.	DATE
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7 WEST VIEW DRIVE
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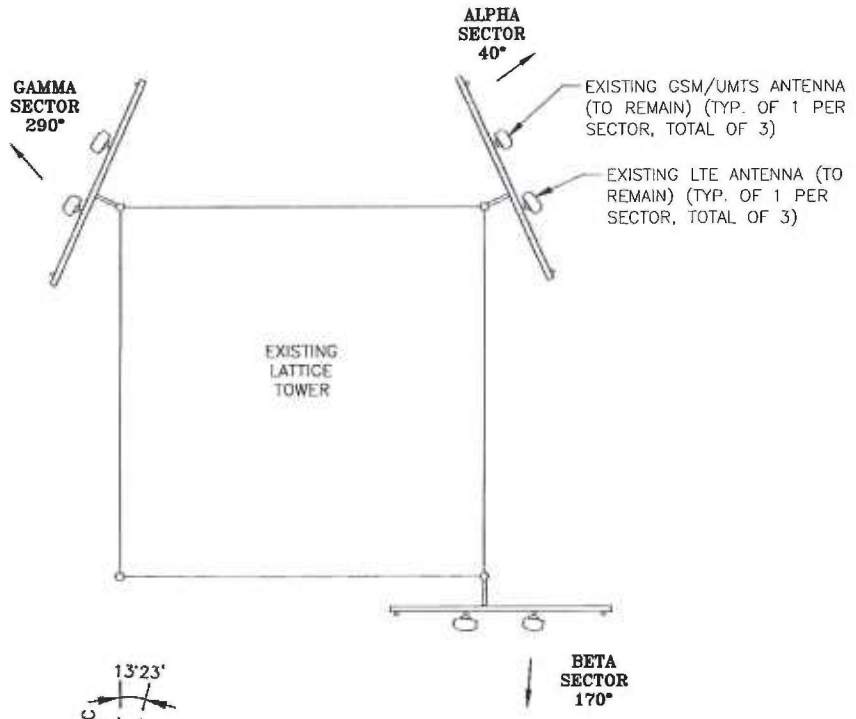
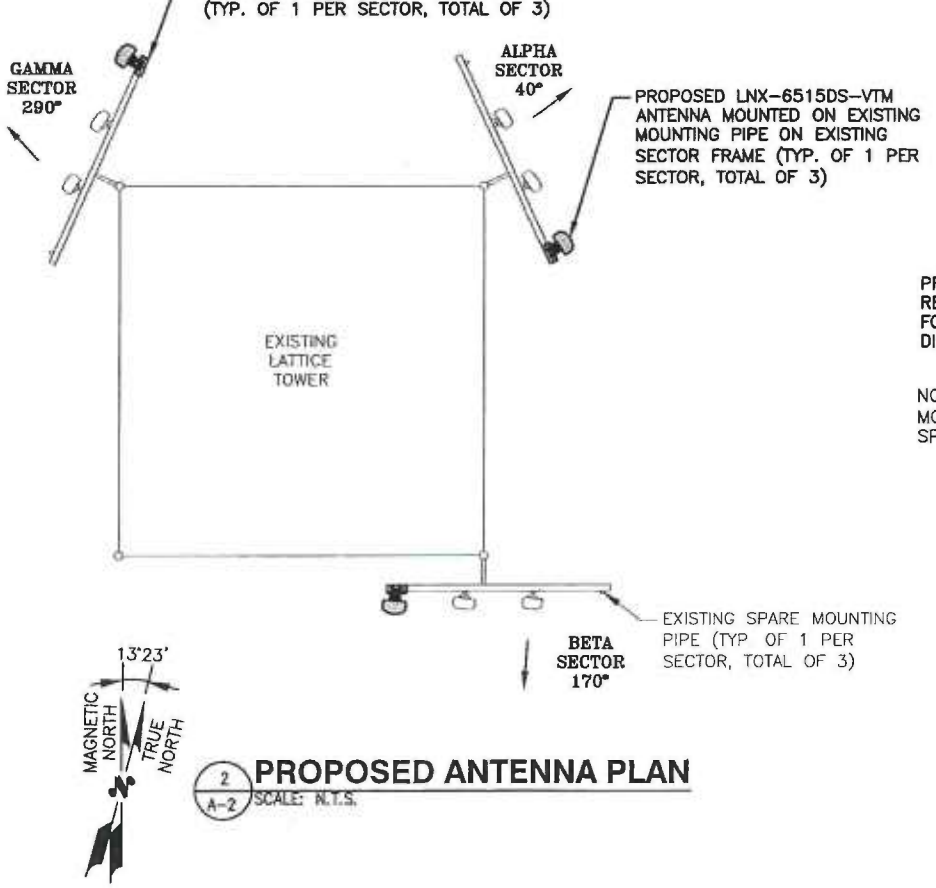
SHEET TITLE
SITE PLAN AND ELEVATION

SHEET NUMBER
A-1

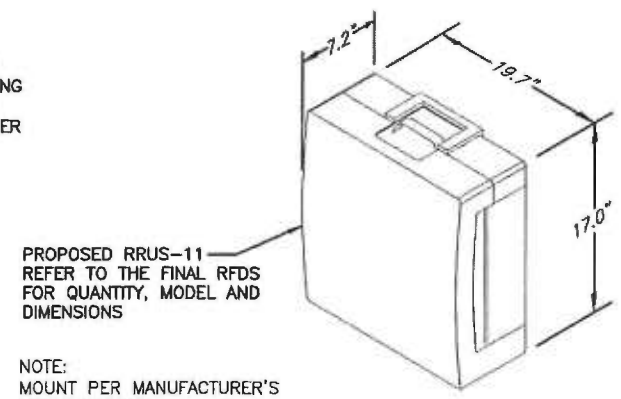


1/A-2 **EXISTING ANTENNA PLAN**
SCALE: N.T.S.

PROPOSED ANTENNA SCHEDULE			
SECTOR	MAKE	MODEL#	SIZE (INCHES)
ALPHA:	COMMSCOPE	LNX-6515DS-VTM	96.4x11.9x7.1
BETA:	COMMSCOPE	LNX-6515DS-VTM	96.4X11.9X7.1
GAMMA:	COMMSCOPE	LNX-6515DS-VTM	96.4X11.9X7.1

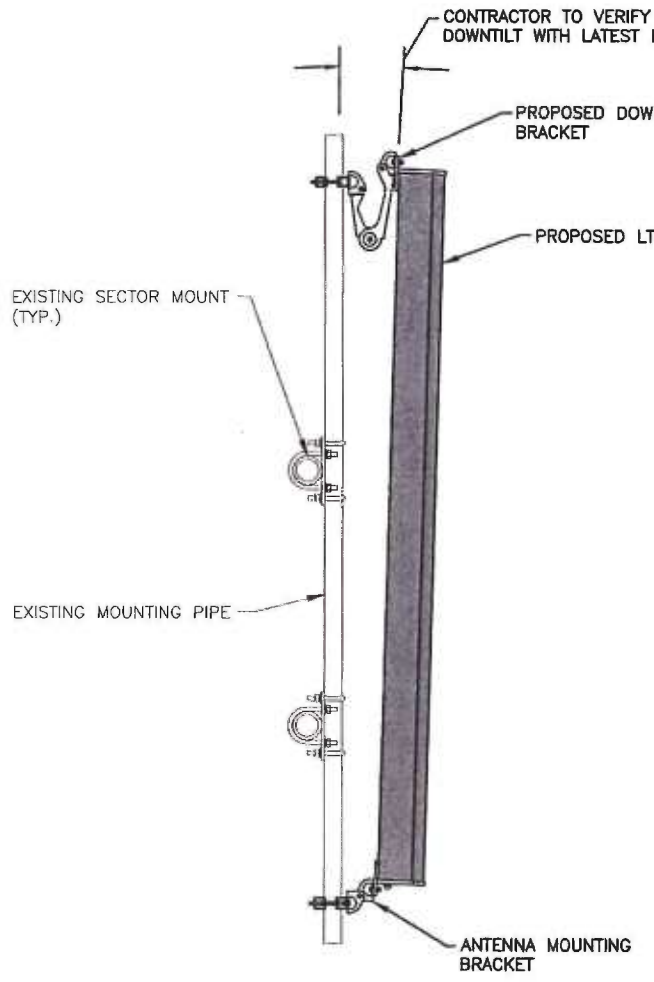


2/A-2 **PROPOSED ANTENNA PLAN**
SCALE: N.T.S.



NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

3/A-2 **RRU DETAIL**
SCALE: N.T.S.



4/A-2 **PROPOSED LTE ANTENNA DETAIL**
SCALE: N.T.S.

STRUCTURAL NOTE:
STRUCTURAL INFORMATION TAKEN FROM STRUCTURAL ANALYSIS
PERFORMED BY HUDSON DESIGN GROUP LLC
DATED: MARCH 6, 2015

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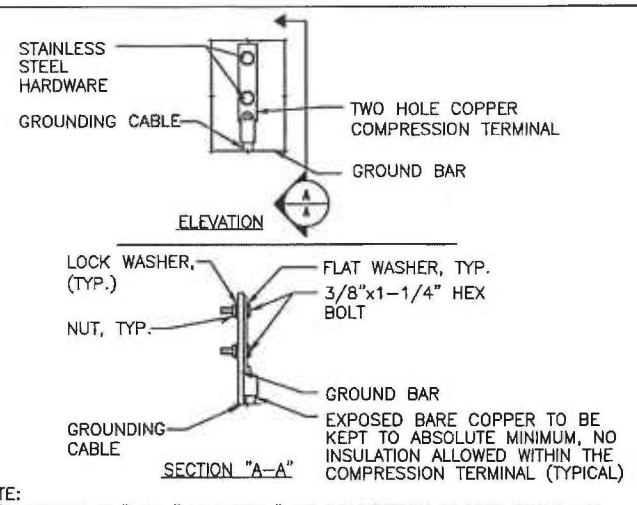
DANBURY, CT 06810

SHEET TITLE
ANTENNA PLAN & MOUNTING DETAILS

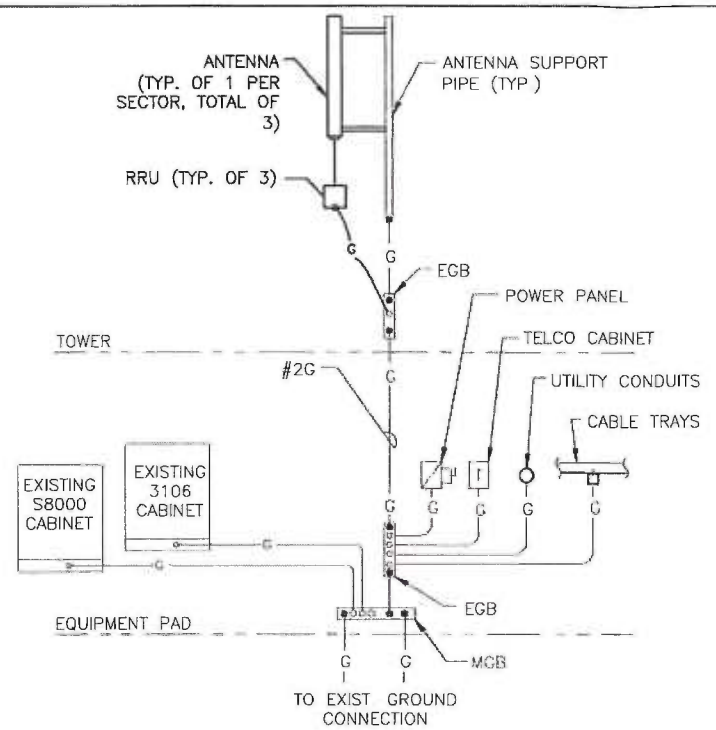
SHEET NUMBER
A-2



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.

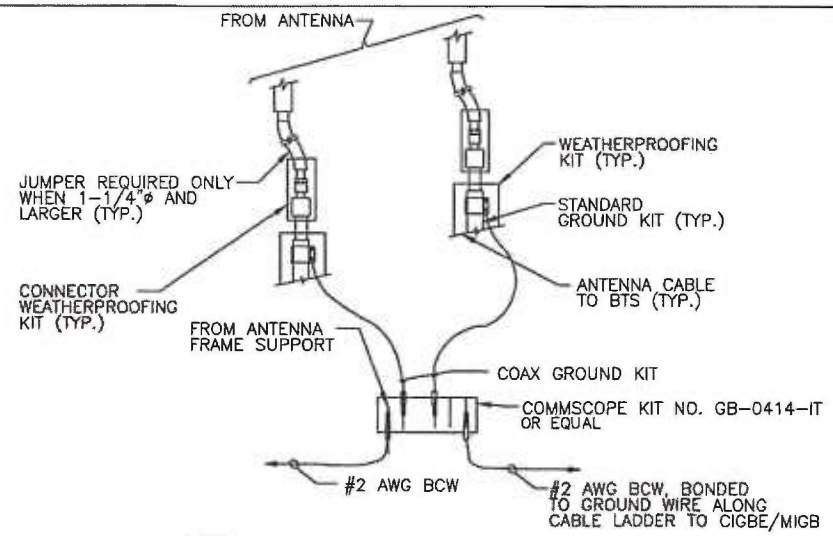
TYPICAL GROUND BAR CONNECTION DETAIL

1 / G-1 N.T.S.



GROUNDING RISER DIAGRAM

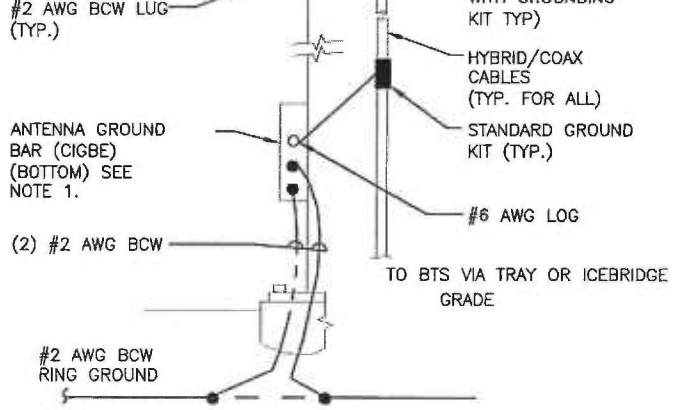
2 / G-1 N.T.S.



NOTE:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

GROUND WIRE TO GROUND BAR CONNECTION DETAIL

3 / G-1 N.T.S.



NOTE:
1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION AND CONNECTION ANTENNA LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
2. A SEPARATE GROUND BAR TO BE USED FOR GPS ANTENNA IF REQUIRED.

ANTENNA CABLE GROUNDING

4 / G-1 N.T.S.

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

Transcend Wireless
TRANSCEND WIRELESS
10 INDUSTRIAL AVE
MAHWAH, NJ 07430
TEL: (201) 684-0055
FAX: (201) 684-0066

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF CONNECTICUT * DANIEL HAMM * 24118 * LICENSED PROFESSIONAL ENGINEER

APPROVALS

CONSTRUCTION	DATE
RF ENGINEERING	DATE
ZONING/SITE ACQ.	DATE
OPERATIONS	DATE
TOWER OWNER	DATE
PROJECT NO:	CT11923C
DRAWN BY:	MH
CHECKED BY:	DR

1	03/10/15	ISSUED FOR REVIEW
0	03/02/15	ISSUED FOR REVIEW

SITE NUMBER: CT11923C
SITE NAME:
CT923/W. VIEW DR_GT
7 WEST VIEW DRIVE
DANBURY, CT 06810

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-1

EXHIBIT B

STRUCTURAL ANALYSIS REPORT

For

CT11923C

CT923/W. VIEW DR_GT

7 WEST VIEW DRIVE
DANBURY, CT 06810

Antennas Mounted on the Tower

Prepared for:

Transcend Wireless

T··Mobile·

Dated: March 6, 2015

Prepared by:

Hudson Design Group LLC

1600 Osgood Street Bldg. 20N Suite 3090
North Andover, MA 01845
(P) 978.557.5553 (F) 978.336.5586
www.hudsondesigngroupllc.com

STATE OF CONNECTICUT
KAI WANG
No. 28220
LICENSED
PROFESSIONAL ENGINEER

3/6/2015

SCOPE OF WORK:

Hudson Design Group LLC (HDG) has been authorized by T-Mobile to conduct a structural evaluation of the 100' self supporting tower supporting the existing and proposed T-Mobile's antennas located at elevation 50' above the ground level.

This report represents this office's findings, conclusions and recommendations pertaining to the support of T-Mobile's existing and proposed antennas listed below.

Record drawings of the existing tower were not available for our use. The previous structural analysis report prepared by TECTONIC Consultants, dated July 12, 2013, was available and obtained for our use.

CONCLUSION SUMMARY:

Based on our evaluation, we have determined that the existing tower **is in conformance** with the ANSI/TIA-222-F Standard for the loadings considered under the criteria listed in this report. The tower structure is rated at **82.7%** - (Diagonals at Tower Section T2 from EL.50' to EL.80' Controlling).

Hudson Design Group LLC

APPURTENANCES CONFIGURATION:

Tenant	Appurtenances	Elev.	Mount
	35' Omni	118'	Side Mount Standoff
	15' Omni	108'	Pipe Mount
	(2) PG1*0F-0090-310	106'	Side Mount Standoff
	DB561K-CR	104'	Tower Face
	10' Omni	101'	Side Mount Standoff
	DB292-A	93'	Pipe Mount
	10' Omni	91'	Side Mount Standoff
	Rohn 25G 20' Section	90'	Tower
	DB225-2-A	90'	Pipe Mount
	DB252	89'	Side Mount Standoff
	(2) 8' Omni	87'	Side Mount Standoff
	DB633-A	87'	Side Mount Standoff
	DB499-A	85.5'	Pipe Mount
	PMANT25 Grid Dish	85'	Side Mount Standoff
	DB432-A	84'	Pipe Mount
	15' Omni	84'	Side Mount Standoff
	PMANT25 Grid Dish	80'	Side Mount Standoff
	8' Omni	79'	Side Mount Standoff
	(3) TA-2304-2-DAB-H	79'	Pipe Mount
	10' Omni	71'	Side Mount Standoff
	(2) GPS	66'	Side Mount Standoff
	(2) ASP-2011	62'	Side Mount Standoff
	4' Dish	60'	Side Mount Standoff
	GPS	58'	Side Mount Standoff
T-Mobile	(3) AIR 21 B2A/B4P Antennas	50'	T-Frame
T-Mobile	(3) AIR 21 B4A/B2P Antennas	50'	T-Frame
T-Mobile	(3) TMA	50'	T-Frame
T-Mobile	***(3) LNX-6515DS-VTM Antennas***	50'	T-Frame
T-Mobile	***(3) RRUS 11***	50'	T-Frame
	3' Yagi	38'	Pipe Mount
	4' Dish	38'	Side Mount Standoff
	4' Dish	36'	Side Mount Standoff
	DB254-A	34'	Pipe Mount
	(2) 4' Dish	29'	Side Mount Standoff
	4' Dish	26'	Side Mount Standoff

Proposed T-Mobile Appurtenances shown in Bold.

T-MOBILE EXISTING/PROPOSED COAX CABLES:

Tenant	Coax Cables	Elev.	Mount
T-Mobile	(24) 7/8" Cables	50'	Tower Face
T-Mobile	(1) Fiber Cable	50'	Tower Face

Proposed T-Mobile Coax Cables shown in Bold.

ANALYSIS RESULTS SUMMARY:

Component	Max. Stress Ratio	Elev. of Component (ft)	Pass/Fail	Comments
Leg	64.4 %	0 – 15	PASS	
Diagonal	**82.7 %**	50 – 80	PASS	**Controlling**
Horizontal	58.6%	15 - 20	PASS	
Secondary Horizontal	6.3 %	0 – 15	PASS	
Top Girt	16.0 %	20 – 50	PASS	
Redundant Diagonal	0.5 %	15 – 20	PASS	
Inner Bracing	2.1 %	15 – 20	PASS	

Hudson Design Group LLC

DESIGN CRITERIA:

1. EIA/TIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

   County: Fairfield
   Wind Load: 85 mph (fastest mile)
   105 mph (3 second gust)
   Ice Thickness: 0.5 inch

2. Approximate height above grade to proposed antennas: 50'

Calculations and referenced documents are attached

ASSUMPTIONS:

1. The tower dimensions, member sizes and material strength are as indicated in the previous structural analysis report prepared by TECTONIC Consultants, dated July 12, 2013.

2. The appurtenances configuration is as stated in the previous structural analysis report prepared by TECTONIC Consultants, dated July 12, 2013. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer's requirements.

3. The tower and foundation are properly constructed and maintained. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities at this time.

4. The support mounts and platforms are not analyzed and are considered adequate to support the loading. The analysis is limited to the primary support structure itself.

5. All prior structural modification, if any, are assumed to be as per the data supplied (if available), and installed properly.

6. The foundation of the tower was not checked due to lack of information. As-built foundation drawings and geotechnical report would be required to determine whether the foundation is capable of supporting the proposed loadings.

SUPPORT RECOMMENDATIONS:

HDG recommends that the proposed antennas and RRHs be mounted on the existing T-frame supported by the tower.

Reference HDG's Latest Construction Drawings for all component and connection requirements (attached).

ONGOING AND PERIODIC INSPTECTION AND MAINTENANCE:

After the Contractor has successfully completed the installation and the work has been accepted, the Owner will be responsible for the ongoing and periodic inspection and maintenance of the tower.

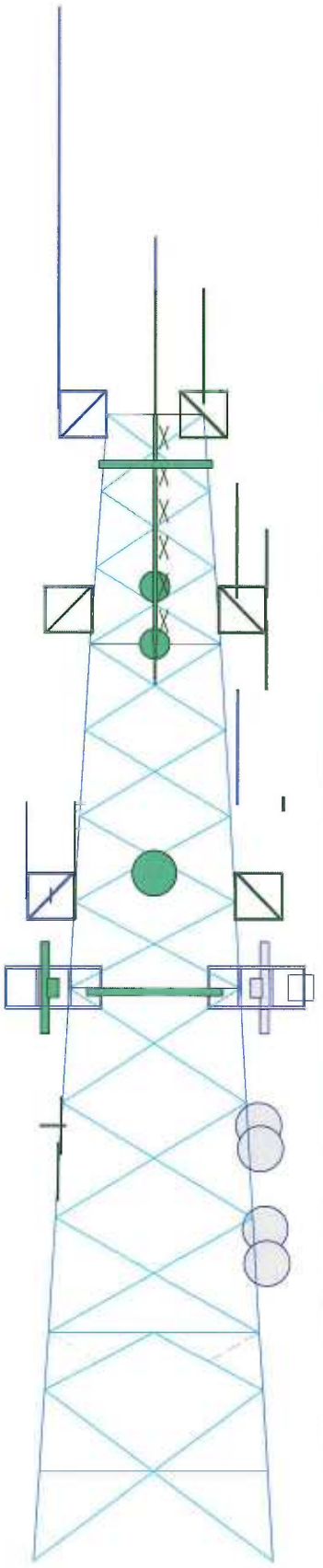
The owner shall refer to TIA/EIA-222-F for recommendations for maintenance and inspection. The frequency of the inspection and maintenance intervals is to be determined by the owner based upon actual site and environmental conditions. It is recommended that a complete and thorough inspection of the entire tower structural system be performed at least yearly and more frequently as conditions warrant. According to TIA/EIA-222-F section 14.1, Note 1: It is recommended that the structure be inspected after severe wind and/or ice storms or other extreme loading conditions.

Photo 1: Photo illustrating the Tower with Appurtenances shown.

Hudson Design Group LLC

CALCULATIONS

Legs	L6x6x1/2	L6x6x9/16		L6x6x3/8		L5x5x3/8
Leg Grade		A36		A36		
Diagonals	L3 1/2x4x1/4	A	L3x3 1/2x1/4		L2 1/2x2 1/2x3/16	L2x2 1/2x3/16
Diagonal Grade			A36			
Top Girts	N.A.		L2x3x3/16		L2x2 1/2x3/16	L2 1/2x2 1/2x3/16
Horizontals	N.A.	L3x3x1/4			N.A.	
Sec. Horizontals	L3 1/2x3 1/2x1/4				N.A.	
Red. Diagonals	N.A.	B			N.A.	
Inner Bracing	N.A.	C			N.A.	
Face Width (ft)	19.19	18.58	15	11.42		8.5
# Panels @ (ft)	1 @ 14.9167	1 @ 5	3 @ 10	4 @ 7.5		3 @ 6.66667
Weight (lb) 14857.5	2873.1	1382.5	5310.7	3405.8		1885.3



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
16' W6X25	100	Omni 2"x15" (GPS)	58
Rohn 25G 20' section	100 - 80	6' Standoff Arm W10X30	58
DB561K-CR	100	Omni 2"x15" (GPS)	58
(2) PG1*0F-0090-310	100	Omni 2"x15" (GPS)	58
SO 602-1	100	6' Standoff Arm W10X30	58
Omni 2"x35'	100	6' Standoff Arm W10X30	58
6' Standoff Arm W10X30	100	ERICSSON AIR 21 B4A B2P w/ Mount Pipe	50
Omni 2"x15'	100		
PM 602-1	100	ERICSSON AIR 21 B4A B2P w/ Mount Pipe	50
100' Max Shear	100		
Omni 2"x10'	96	Style 3 TMA	50
6' Standoff Arm W10X30	96	Style 3 TMA	50
Pirod 10' Box Arm	96	Style 3 TMA	50
6' Standoff Arm W10X30	96	2 1/2"x7' pipe	50
Omni 2"x10'	96	2 1/2"x7' pipe	50
DB292-A	93	2 1/2"x7' pipe	50
PM 602-1	93	Andrew LNX-6515DS-VTM w/mount pipe (T-Mobile - proposed)	50
PM 602-1	90	Andrew LNX-6515DS-VTM w/mount pipe	50
DB225-2-A	90	Andrew LNX-6515DS-VTM w/mount pipe	50
SO 701-1	89		
DB252	89		
PM 602-1	85.5	RRUS 11	50
DB499-A	85.5	RRUS 11	50
SO 602-1	85	RRUS 11	50
DB633-A	85	SM 301-1 (T-Mobile - existing)	50
PMANT25	85	SM 301-1	50
2"x12' pipe	84	SM 301-1	50
DB432-A	84	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	50
6' Standoff Arm W10X30	83	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	50
6' Standoff Arm W10X30	83		
6' Standoff Arm W10X30	83	ERICSSON AIR 21 B2A B4P w/ Mount Pipe	50
6' Standoff Arm W10X30	83		
Omni 2"x15'	83	ERICSSON AIR 21 B4A B2P w/ Mount Pipe	50
SO 602-1	83		
Omni 2"x8'	83	3' Yagi antenna	38
2"x12' pipe	83	2"x5' pipe	38
Omni 2"x8'	83	SO 201-1	38
Omni 2"x8'	83	Andrew PL4-105	38
PMANT25	80	Andrew PL4-105	36
80' Max Shear	80	SO 201-1	36
TA-2304-2-DAB-H	79	DB254-A	34
TA-2304-2-DAB-H	79	2"x5' pipe	34
TA-2304-2-DAB-H	79	SO 201-1	29
SO 201-1	66	Andrew PL4-105	29
Omni 2"x10'	66	Andrew PL4-105	29
Andrew PL4-105	60	SO 201-1	29
SO 301-1	60	SO 201-1	26
ASP-2011	58	Andrew PL4-105	26
2"x4' pipe	58		
ASP-2011	58		

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L2 1/2x2 1/2x1/4	C	L2x2 1/2x1/4
B	L2 1/2x2 1/2x1/8		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi			

TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.

Hudson Design Group, LLC
1600 Osgood Street, Building 20 North, Suite 3090
North Andover, MA 01845
Phone: (978) 557-5553
FAX: (978) 226-5586

Job: *CT11923C*		
Project: *100 ft Self Supporting Tower*		
Client: T-MOBILE	Drawn by: kw	App'd:
Code: TIA/EIA-222-F	Date: 03/05/15	Scale:
Path: C:\Users\kwang\Documents\HUDSON DESIGN GROUP\AAA\CT11923C - SST (Transcend Wireless T-Mobile)\CT11923CCT11923C.eri		Dwg N

Hudson Design Group LLC

Hudson Design Group, LLC
1600 Osgood Street, Building 20 North, Suite 3090
North Andover, MA 01845
Phone: (978) 557-5553
FAX: (978) 226-5586

Job	Page
CT11923C	1 of 13
Project	**Date**
100 ft Self Supporting Tower	11:02:03 03/05/15
Client	**Designed by**
T-MOBILE	kw

Tower Input Data

The main tower is a 4x free standing tower with an overall height of 100.00 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 8.50 ft at the top and 21.00 ft at the base.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Tower is located in Fairfield County, Connecticut.
Basic wind speed of 85 mph.
Nominal ice thickness of 0.5000 in.
Ice density of 56 pcf.
A wind speed of 74 mph is used in combination with ice.
Temperature drop of 50 °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 tower member design is 1.333.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Tower Section Geometry

Tower Section	*Tower Elevation*	*Assembly Database*	*Description*	*Section Width*	*Number of Sections*	*Section Length*
	ft			*ft*		*ft*
T1	100.00-80.00			8.50	1	20.00
T2	80.00-50.00			11.42	1	30.00
T3	50.00-20.00			15.00	1	30.00
T4	20.00-15.00			18.58	1	5.00
T5	15.00-0.00			19.19	1	15.00

Tower Section Geometry *(cont'd)*

Tower Section	*Tower Elevation*	*Diagonal Spacing*	*Bracing Type*	*Has K Brace End Panels*	*Has Horizontals*	*Top Girt Offset*	*Bottom Girt Offset*
	ft	*ft*				*in*	*in*
T1	100.00-80.00	6.67	X Brace	No	No	0.0000	0.0000
T2	80.00-50.00	7.50	X Brace	No	No	0.0000	0.0000
T3	50.00-20.00	10.00	X Brace	No	No	0.0000	0.0000
T4	20.00-15.00	5.00	K1 Down	No	Yes	0.0000	0.0000
T5	15.00-0.00	14.92	X Brace	No	Yes	0.0000	1.0000

Tower Section Geometry *(cont'd)*

Hudson Design Group LLC

Hudson Design Group, LLC
1600 Osgood Street, Building 20 North, Suite 3090
North Andover, MA 01845
Phone: (978) 557-5553
FAX: (978) 226-5586

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Project	**Date**
100 ft Self Supporting Tower	11:02:03 03/05/15
Client	**Designed by**
T-MOBILE	kw

Tower Elevation ft	*Leg Type*	*Leg Size*	*Leg Grade*	*Diagonal Type*	*Diagonal Size*	*Diagonal Grade*
T1 100.00-80.00	Equal Angle	L5x5x3/8	A36 (36 ksi)	Single Angle	L2x2 1/2x3/16	A36 (36 ksi)
T2 80.00-50.00	Equal Angle	L6x6x3/8	A36 (36 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T3 50.00-20.00	Equal Angle	L6x6x9/16	A36 (36 ksi)	Single Angle	L3x3 1/2x1/4	A36 (36 ksi)
T4 20.00-15.00	Equal Angle	L6x6x1/2	A36 (36 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T5 15.00-0.00	Equal Angle	L6x6x1/2	A36 (36 ksi)	Single Angle	L3 1/2x4x1/4	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	*Top Girt Type*	*Top Girt Size*	*Top Girt Grade*	*Bottom Girt Type*	*Bottom Girt Size*	*Bottom Girt Grade*
T1 100.00-80.00	Single Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T2 80.00-50.00	Single Angle	L2x2 1/2x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T3 50.00-20.00	Single Angle	L2x3x3/16	A36 (36 ksi)	Equal Angle		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	*No. of Mid Girts*	*Mid Girt Type*	*Mid Girt Size*	*Mid Girt Grade*	*Horizontal Type*	*Horizontal Size*	*Horizontal Grade*
T4 20.00-15.00	None	Equal Angle		A36 (36 ksi)	Equal Angle	L3x3x1/4	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	*Secondary Horizontal Type*	*Secondary Horizontal Size*	*Secondary Horizontal Grade*	*Inner Bracing Type*	*Inner Bracing Size*	*Inner Bracing Grade*
T4 20.00-15.00	Equal Angle		A36 (36 ksi)	Single Angle	L2x2 1/2x1/4	A36 (36 ksi)
T5 15.00-0.00	Equal Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)	Single Angle		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Hudson Design Group LLC

Hudson Design Group, LLC
1600 Osgood Street, Building 20 North, Suite 3090
North Andover, MA 01845
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Job	Page
CT11923C	3 of 13
Project	**Date**
100 ft Self Supporting Tower	11:02:03 03/05/15
Client	**Designed by**
T-MOBILE	kw

Tower Elevation ft	Redundant Bracing Grade		Redundant Type	Redundant Size	K Factor
T4 20.00-15.00	A36 (36 ksi)	Diagonal (1)	Equal Angle	L2 1/2x2 1/2x1/8	1

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
LDF4-50A (1/2 FOAM)	B	No	Ar (CfAe)	85.50 - 15.00	0.0000	-0.5	1	1	0.6300	0.6300		0.15
LDF4-50A (1/2 FOAM)	B	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.5	1	1	0.6300	0.6300		0.15
LDF5-50A (7/8 FOAM)	B	No	Ar (CfAe)	90.00 - 15.00	0.0000	-0.5	1	1	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	B	Yes	Ar (CfAe)	50.00 - 15.00	-2.5000	0.35	16	8	1.0900	1.0900		0.33
CAT5e(1/4")	B	No	Ar (CfAe)	100.00 - 15.00	-2.5000	0.4	2	1	0.2638	0.2638		0.15
Feedline Ladder (Af)	B	No	Af (CfAe)	60.00 - 15.00	-2.5000	0.35	1	1	3.0000	3.0000	12.0000	8.40
LDF5-50A (7/8 FOAM)	B	No	Ar (CfAe)	100.00 - 15.00	-2.0000	0.49	4	2	1.0900	1.0900		0.33
**********												
LDF5-50A (7/8 FOAM)	C	No	Ar (CfAe)	83.00 - 15.00	0.0000	-0.47	3	3	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	C	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.46	3	3	1.0900	1.0900		0.33
LDF7-50A (1-5/8 FOAM)	C	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.48	1	1	1.9800	1.9800		0.82
LDF4-50A (1/2 FOAM)	C	No	Ar (CfAe)	79.00 - 15.00	0.0000	-0.48	2	2	0.6300	0.6300		0.15
LDF1-50A (1/4 FOAM)	C	No	Ar (CfAe)	38.00 - 15.00	0.0000	-0.25	2	2	0.3500	0.3500		0.06
CAT5e(1/4")	C	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.1	1	1	0.2638	0.2638		0.15
LDF1-50A (1/4 FOAM)	C	No	Ar (CfAe)	29.00 - 15.00	0.0000	-0.1	1	1	0.3500	0.3500		0.06
LDF4-50A (1/2 FOAM)	C	No	Ar (CfAe)	29.00 - 15.00	0.0000	-0.1	1	1	0.6300	0.6300		0.15
LDF1-50A (1/4 FOAM)	C	No	Ar (CfAe)	26.00 - 15.00	0.0000	0.3	2	2	0.3500	0.3500		0.06
**********												
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	28.00 - 15.00	-2.0000	-0.49	8	3	0.6300	0.6300		0.15
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	34.00 - 15.00	-2.0000	-0.49	7	3	0.6300	0.6300		0.15
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	58.00 - 15.00	-2.0000	-0.49	6	2	0.6300	0.6300		0.15
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	80.00 - 15.00	-2.0000	-0.49	4	2	0.6300	0.6300		0.15
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	85.00 - 15.00	-2.0000	-0.49	2	1	0.6300	0.6300		0.15
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	100.00 - 15.00	-2.0000	-0.49	1	1	0.6300	0.6300		0.15
LDF4.5-50 (5/8 FOAM)	D	No	Ar (CfAe)	89.00 - 15.00	-2.0000	-0.49	1	1	0.8700	0.8700		0.15
LDF5-50A (7/8 FOAM)	D	No	Ar (CfAe)	100.00 - 15.00	-2.0000	-0.49	1	1	1.0900	1.0900		0.33

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North Andover, MA 01845
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FAX: (978) 226-5586

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T-MOBILE	kw

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	79.00 - 15.00	0.0000	-0.45	1	1	0.6300	0.6300		0.15
CAT5e(1/4")	D	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.45	1	1	0.2638	0.2638		0.15
CAT5e(1/4")	D	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.45	1	1	0.2638	0.2638		0.15
LDF7-50A (1-5/8 FOAM)	D	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.45	1	1	1.9800	1.9800		0.82
LDF4-50A (1/2 FOAM)	D	No	Ar (CfAe)	60.00 - 15.00	0.0000	-0.45	1	1	0.6300	0.6300		0.15
LDF5-50A (7/8 FOAM) **********	D	No	Ar (CfAe)	58.00 - 15.00	0.0000	0.5	1	1	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	A	No	Ar (CfAe)	50.00 - 15.00	-2.0000	-0.4	8	8	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	A	No	Ar (CfAe)	100.00 - 15.00	0.0000	-0.4	1	1	1.0900	1.0900		0.33
Feedline Ladder (Af)	A	No	Af (CfAe)	50.00 - 15.00	-2.0000	-0.4	1	1	3.0000	3.0000	12.0000	8.40
LDF5-50A (7/8 FOAM)	A	No	Ar (CfAe)	96.00 - 15.00	-12.0000	0	2	2	1.0900	1.0900		0.33
LDF4-50A (1/2 FOAM)	A	No	Ar (CfAe)	100.00 - 15.00	0.0000	0	1	1	0.6300	0.6300		0.15
2" Rigid Conduit	A	No	Ar (CfAe)	50.00 - 15.00	0.0000	0	1	1	2.0000	2.0000		2.80
2" Rigid Conduit	B	No	Ar (CfAe)	50.00 - 15.00	0.0000	0	1	1	2.0000	2.0000		2.80

User Defined Loads

Description	Elevation ft	Offset From Centroid ft	Azimuth Angle °		Weight lb	F_x lb	F_z lb	Wind Force lb	C_AA_C ft^2
100' Max Shear	100.00	0.00	0.0000	No Ice	0.00	0.00	0.00	1783.00	**60.43**
				Ice	0.00	0.00	0.00	2715.00	**122.69**
				Service	0.00	0.00	0.00	618.00	**60.53**
80' Max Shear	80.00	0.00	0.0000	No Ice	0.00	0.00	0.00	-722.00	**26.08**
				Ice	0.00	0.00	0.00	-1100.00	**52.98**
				Service	0.00	0.00	0.00	-251.00	**26.20**

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
16' W6X25	C	None		0.0000	100.00	No Ice	0.09	11.91	400.00
						1/2" Ice	0.15	13.20	455.85
Rohn 25G 20' section	C	None		0.0000	100.00 - 80.00	No Ice	20.00	20.00	400.00
						1/2" Ice	22.28	22.28	502.70
DB561K-CR	D	From Face	0.00	0.0000	100.00	No Ice	5.32	5.32	43.00
			0.00			1/2" Ice	6.83	6.83	73.39

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North Andover, MA 01845
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Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral Vert* *ft ft ft*	*Azimuth Adjustment* °	*Placement* *ft*		C_AA_A *Front* ft^2	C_AA_A *Side* ft^2	*Weight* *lb*
			4.00						
(2) PG1*0F-0090-310	C	From Leg	0.00	0.0000	100.00	No Ice	3.00	3.00	30.00
			0.00			1/2" Ice	4.03	4.03	51.79
			6.00						
SO 602-1	C	From Leg	0.00	0.0000	100.00	No Ice	2.72	12.93	146.00
			0.00			1/2" Ice	4.11	17.82	223.00
			0.00						
Omni 2"x35'	A	From Leg	6.00	0.0000	100.00	No Ice	7.00	7.00	60.00
			0.00			1/2" Ice	10.53	10.53	113.68
			18.00						
6' Standoff Arm W10X30	A	From Leg	3.00	0.0000	100.00	No Ice	0.59	7.33	180.00
			0.00			1/2" Ice	0.70	7.87	222.85
			0.00						
Omni 2"x15'	B	From Face	0.00	0.0000	100.00	No Ice	3.00	3.00	30.00
			0.00			1/2" Ice	4.53	4.53	53.14
			8.00						
PM 602-1	B	From Leg	0.00	0.0000	100.00	No Ice	5.25	1.58	93.00
			0.00			1/2" Ice	6.50	1.95	118.00
			0.00						
Omni 2"x10'	D	From Face	6.00	0.0000	96.00	No Ice	2.00	2.00	20.00
			0.00			1/2" Ice	3.02	3.02	35.50
			5.00						
Omni 2"x10'	D	From Face	6.00	0.0000	96.00	No Ice	2.00	2.00	20.00
			0.00			1/2" Ice	3.02	3.02	35.50
			-5.00						
6' Standoff Arm W10X30	D	From Face	3.00	0.0000	96.00	No Ice	0.59	7.33	180.00
			0.00			1/2" Ice	0.70	7.87	222.85
			0.00						
DB292-A	B	None		0.0000	93.00	No Ice	1.80	1.80	15.00
						1/2" Ice	3.24	3.24	19.50
PM 602-1	B	None		0.0000	93.00	No Ice	5.25	1.58	93.00
						1/2" Ice	6.50	1.95	118.00
DB225-2-A	B	None		0.0000	90.00	No Ice	3.21	3.21	74.00
						1/2" Ice	5.78	5.78	96.20
PM 602-1	B	None		0.0000	90.00	No Ice	5.25	1.58	93.00
						1/2" Ice	6.50	1.95	118.00
DB252	C	From Leg	3.00	0.0000	89.00	No Ice	3.20	3.20	26.00
			0.00			1/2" Ice	5.76	5.76	33.80
			0.00						
SO 701-1	C	From Leg	1.50	0.0000	89.00	No Ice	0.85	1.67	65.00
			0.00			1/2" Ice	1.14	2.34	79.00
			0.00						
DB499-A	B	None		0.0000	85.50	No Ice	0.25	0.25	5.00
						1/2" Ice	0.45	0.45	6.50
PM 602-1	B	None		0.0000	85.50	No Ice	5.25	1.58	93.00
						1/2" Ice	6.50	1.95	118.00
DB633-A	D	From Face	4.00	0.0000	85.00	No Ice	0.65	0.65	8.00
			0.00			1/2" Ice	0.86	0.86	13.57
			2.00						
SO 602-1	D	From Face	2.00	0.0000	85.00	No Ice	2.72	12.93	146.00
			0.00			1/2" Ice	4.11	17.82	223.00
			0.00						
DB432-A	C	None		0.0000	84.00	No Ice	0.30	0.30	5.00
						1/2" Ice	0.54	0.54	6.50
2"x12' pipe	C	None		0.0000	84.00	No Ice	2.85	2.85	45.00
						1/2" Ice	4.08	4.08	66.36
2"x12' pipe	D	None		0.0000	83.00	No Ice	2.85	2.85	45.00

Hudson Design Group, LLC
1600 Osgood Street, Building 20 North, Suite 3090
North Andover, MA 01845
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Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
						1/2" Ice	4.08	4.08	66.36
Omni 2"x8'	B	From Leg	6.00 0.00 4.00	0.0000	83.00	No Ice 1/2" Ice	1.60 2.42	1.60 2.42	35.00 47.45
Omni 2"x8'	C	From Leg	6.00 0.00 4.00	0.0000	83.00	No Ice 1/2" Ice	1.60 2.42	1.60 2.42	35.00 47.45
Omni 2"x8'	C	From Leg	6.00 0.00 -4.00	0.0000	83.00	No Ice 1/2" Ice	1.60 2.42	1.60 2.42	35.00 47.45
6' Standoff Arm W10X30	A	From Leg	3.00 0.00 0.00	0.0000	83.00	No Ice 1/2" Ice	0.59 0.70	7.33 7.87	180.00 222.85
6' Standoff Arm W10X30	B	From Leg	3.00 0.00 0.00	0.0000	83.00	No Ice 1/2" Ice	0.59 0.70	7.33 7.87	180.00 222.85
6' Standoff Arm W10X30	C	From Leg	3.00 0.00 0.00	0.0000	83.00	No Ice 1/2" Ice	0.59 0.70	7.33 7.87	180.00 222.85
6' Standoff Arm W10X30	D	From Leg	3.00 0.00 0.00	0.0000	83.00	No Ice 1/2" Ice	0.59 0.70	7.33 7.87	180.00 222.85
Omni 2"x15'	B	From Face	4.00 0.00 1.00	0.0000	83.00	No Ice 1/2" Ice	3.00 4.53	3.00 4.53	30.00 53.14
SO 602-1	C	None		0.0000	83.00	No Ice 1/2" Ice	2.72 4.11	12.93 17.82	146.00 223.00
TA-2304-2-DAB-H	B	None		0.0000	79.00	No Ice 1/2" Ice	3.15 3.63	3.15 3.63	15.00 35.00
TA-2304-2-DAB-H	C	None		0.0000	79.00	No Ice 1/2" Ice	3.15 3.63	3.15 3.63	15.00 35.00
TA-2304-2-DAB-H	D	None		0.0000	79.00	No Ice 1/2" Ice	3.15 3.63	3.15 3.63	15.00 35.00
Omni 2"x10'	B	From Leg	1.00 0.00 5.00	0.0000	66.00	No Ice 1/2" Ice	2.00 3.02	2.00 3.02	20.00 35.50
SO 201-1	B	None		0.0000	66.00	No Ice 1/2" Ice	2.96 4.10	2.11 2.93	96.00 117.00
SO 301-1	D	None		0.0000	60.00	No Ice 1/2" Ice	1.00 1.39	0.90 1.42	23.00 33.00
ASP-2011	A	From Leg	6.00 0.00 4.00	0.0000	58.00	No Ice 1/2" Ice	1.06 1.93	1.06 1.93	4.00 13.22
Omni 2"x15" (GPS)	A	From Leg	3.00 0.00 0.00	0.0000	58.00	No Ice 1/2" Ice	0.17 0.27	0.17 0.27	10.00 12.14
6' Standoff Arm W10X30	A	From Leg	3.00 0.00 0.00	0.0000	58.00	No Ice 1/2" Ice	0.59 0.70	7.33 7.87	180.00 222.85
Omni 2"x15" (GPS)	B	From Leg	6.00 0.00 8.00	0.0000	58.00	No Ice 1/2" Ice	0.17 0.27	0.17 0.27	10.00 12.14
6' Standoff Arm W10X30	B	From Leg	3.00 0.00 0.00	0.0000	58.00	No Ice 1/2" Ice	0.59 0.70	7.33 7.87	180.00 222.85
Omni 2"x15" (GPS)	C	From Leg	6.00 0.00	0.0000	58.00	No Ice 1/2" Ice	0.17 0.27	0.17 0.27	10.00 12.14

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1600 Osgood Street, Building 20 North, Suite 3090
North Andover, MA 01845
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FAX: (978) 226-5586

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Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral Vert* *ft* *ft* *ft*	*Azimuth Adjustment* °	*Placement* *ft*		C_AA_A *Front* ft^2	C_AA_A *Side* ft^2	*Weight* *lb*
			8.00						
6' Standoff Arm W10X30	C	From Leg	3.00	0.0000	58.00	No Ice	0.59	7.33	180.00
			0.00			1/2" Ice	0.70	7.87	222.85
			0.00						
ASP-2011	D	From Leg	0.00	0.0000	58.00	No Ice	1.06	1.06	4.00
			0.00			1/2" Ice	1.93	1.93	13.22
			4.00						
2"x4' pipe	D	From Leg	0.00	0.0000	58.00	No Ice	0.87	0.87	14.00
			0.00			1/2" Ice	1.11	1.11	21.33
			0.00						
********									
SM 301-1	A	From Leg	2.00	0.0000	50.00	No Ice	15.43	10.89	434.00
(T-Mobile - existing)			0.00			1/2" Ice	20.15	15.23	614.00
			0.00						
SM 301-1	B	From Leg	2.00	0.0000	50.00	No Ice	15.43	10.89	434.00
			0.00			1/2" Ice	20.15	15.23	614.00
			0.00						
SM 301-1	D	From Leg	2.00	0.0000	50.00	No Ice	15.43	10.89	434.00
			0.00			1/2" Ice	20.15	15.23	614.00
			0.00						
ERICSSON AIR 21 B2A	A	From Leg	3.00	0.0000	50.00	No Ice	6.83	5.64	112.18
B4P w/ Mount Pipe			0.00			1/2" Ice	7.35	6.48	169.02
			0.00						
ERICSSON AIR 21 B2A	B	From Leg	3.00	0.0000	50.00	No Ice	6.83	5.64	112.18
B4P w/ Mount Pipe			0.00			1/2" Ice	7.35	6.48	169.02
			0.00						
ERICSSON AIR 21 B2A	D	From Leg	3.00	0.0000	50.00	No Ice	6.83	5.64	112.18
B4P w/ Mount Pipe			0.00			1/2" Ice	7.35	6.48	169.02
			0.00						
ERICSSON AIR 21 B4A	A	From Leg	3.00	0.0000	50.00	No Ice	6.81	5.63	112.15
B2P w/ Mount Pipe			0.00			1/2" Ice	7.33	6.47	168.90
			0.00						
ERICSSON AIR 21 B4A	B	From Leg	3.00	0.0000	50.00	No Ice	6.81	5.63	112.15
B2P w/ Mount Pipe			0.00			1/2" Ice	7.33	6.47	168.90
			0.00						
ERICSSON AIR 21 B4A	D	From Leg	3.00	0.0000	50.00	No Ice	6.81	5.63	112.15
B2P w/ Mount Pipe			0.00			1/2" Ice	7.33	6.47	168.90
			0.00						
Style 3 TMA	A	From Leg	2.00	0.0000	50.00	No Ice	0.78	0.21	11.30
			0.00			1/2" Ice	0.90	0.30	15.86
			0.00						
Style 3 TMA	B	From Leg	2.00	0.0000	50.00	No Ice	0.78	0.21	11.30
			0.00			1/2" Ice	0.90	0.30	15.86
			0.00						
Style 3 TMA	D	From Leg	2.00	0.0000	50.00	No Ice	0.78	0.21	11.30
			0.00			1/2" Ice	0.90	0.30	15.86
			0.00						
2 1/2"x7' pipe	A	From Leg	3.00	0.0000	50.00	No Ice	1.73	1.73	41.00
			0.00			1/2" Ice	2.09	2.09	53.77
			0.00						
2 1/2"x7' pipe	B	From Leg	3.00	0.0000	50.00	No Ice	1.73	1.73	41.00
			0.00			1/2" Ice	2.09	2.09	53.77
			0.00						
2 1/2"x7' pipe	D	From Leg	3.00	0.0000	50.00	No Ice	1.73	1.73	41.00
			0.00			1/2" Ice	2.09	2.09	53.77
			0.00						
********									

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Description	*Face or Leg*	*Offset Type*	*Offsets: Horz Lateral ft / Vert ft / ft*	*Azimuth Adjustment °*	*Placement ft*		*C_AA_A Front ft^2*	*C_AA_A Side ft^2*	*Weight lb*
Andrew LNX-6515DS-VTM	A	From Leg	3.00	0.0000	50.00	No Ice	11.72	10.28	102.41
w/mount pipe			0.00			1/2" Ice	12.44	11.81	196.22
(T-Mobile - proposed)			0.00						
Andrew LNX-6515DS-VTM	B	From Leg	3.00	0.0000	50.00	No Ice	11.72	10.28	102.41
w/mount pipe			0.00			1/2" Ice	12.44	11.81	196.22
			0.00						
Andrew LNX-6515DS-VTM	D	From Leg	3.00	0.0000	50.00	No Ice	11.72	10.28	102.41
w/mount pipe			0.00			1/2" Ice	12.44	11.81	196.22
			0.00						
RRUS 11	A	From Leg	2.00	0.0000	50.00	No Ice	3.25	1.37	50.70
			0.00			1/2" Ice	3.49	1.55	71.50
			0.00						
RRUS 11	B	From Leg	2.00	0.0000	50.00	No Ice	3.25	1.37	50.70
			0.00			1/2" Ice	3.49	1.55	71.50
			0.00						
RRUS 11	D	From Leg	2.00	0.0000	50.00	No Ice	3.25	1.37	50.70
			0.00			1/2" Ice	3.49	1.55	71.50
			0.00						
**********									
3' Yagi antenna	D	From Leg	1.00	0.0000	38.00	No Ice	0.70	0.35	10.00
			0.00			1/2" Ice	0.95	0.48	36.35
			0.00						
2"x5' pipe	D	From Leg	0.00	0.0000	38.00	No Ice	1.19	1.19	19.00
			0.00			1/2" Ice	1.50	1.50	28.09
			0.00						
DB254-A	D	From Leg	0.00	0.0000	34.00	No Ice	1.10	1.10	10.00
			0.00			1/2" Ice	1.98	1.98	13.00
			0.00						
2"x5' pipe	D	From Leg	0.00	0.0000	34.00	No Ice	1.19	1.19	19.00
			0.00			1/2" Ice	1.50	1.50	28.09
			0.00						
**********									
SO 201-1	C	From Face	0.00	0.0000	38.00	No Ice	2.96	2.11	96.00
			0.00			1/2" Ice	4.10	2.93	117.00
			0.00						
SO 201-1	C	From Face	0.00	0.0000	36.00	No Ice	2.96	2.11	96.00
			0.00			1/2" Ice	4.10	2.93	117.00
			0.00						
SO 201-1	C	From Face	0.00	0.0000	29.00	No Ice	2.96	2.11	96.00
			0.00			1/2" Ice	4.10	2.93	117.00
			0.00						
SO 201-1	C	From Face	0.00	0.0000	29.00	No Ice	2.96	2.11	96.00
			0.00			1/2" Ice	4.10	2.93	117.00
			0.00						
SO 201-1	C	From Face	0.00	0.0000	26.00	No Ice	2.96	2.11	96.00
			0.00			1/2" Ice	4.10	2.93	117.00
			0.00						
**********									
Pirod 10' Box Arm	C	None		0.0000	96.00	No Ice	5.00	5.00	250.00
						1/2" Ice	10.00	10.00	300.00
6' Standoff Arm W10X30	C	None		0.0000	96.00	No Ice	0.59	7.33	180.00
						1/2" Ice	0.70	7.87	222.85

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Project	**Date**
100 ft Self Supporting Tower	11:02:03 03/05/15
Client	**Designed by**
T-MOBILE	kw

Dishes

Description	*Face or Leg*	*Dish Type*	*Offset Type*	*Offsets: Horz Lateral Vert*	*Azimuth Adjustment*	*3 dB Beam Width*	*Elevation*	*Outside Diameter*		*Aperture Area*	*Weight*
				ft	°	°	*ft*	*ft*		*ft²*	*lb*
PMANT25	D	Grid	From	1.00	0.0000		85.00	2.83	No Ice	5.19	8.20
			Face	0.00					1/2" Ice	6.68	42.48
				0.00							
PMANT25	D	Grid	From	1.00	0.0000		80.00	2.83	No Ice	5.19	8.20
			Face	0.00					1/2" Ice	6.68	42.48
				0.00							
Andrew PL4-105	D	Paraboloid w/o Radome	From	1.00	0.0000		60.00	4.00	No Ice	12.57	110.00
			Face	0.00					1/2" Ice	13.10	180.00
				0.00							
Andrew PL4-105	C	Paraboloid w/o Radome	From	1.00	0.0000		38.00	4.00	No Ice	12.57	110.00
			Face	0.00					1/2" Ice	13.10	180.00
				0.00							
Andrew PL4-105	C	Paraboloid w/o Radome	From	1.00	0.0000		36.00	4.00	No Ice	12.57	110.00
			Face	0.00					1/2" Ice	13.10	180.00
				0.00							
Andrew PL4-105	C	Paraboloid w/o Radome	From	1.00	0.0000		29.00	4.00	No Ice	12.57	110.00
			Face	0.00					1/2" Ice	13.10	180.00
				0.00							
Andrew PL4-105	C	Paraboloid w/o Radome	From	1.00	0.0000		29.00	4.00	No Ice	12.57	110.00
			Face	0.00					1/2" Ice	13.10	180.00
				0.00							
Andrew PL4-105	C	Paraboloid w/o Radome	From	1.00	0.0000		26.00	4.00	No Ice	12.57	110.00
			Face	0.00					1/2" Ice	13.10	180.00
				0.00							

Load Combinations

Comb. No.	*Description*
1	Dead Only
2	Dead+Wind 0 deg - No Ice
3	Dead+Wind 45 deg - No Ice
4	Dead+Wind 90 deg - No Ice
5	Dead+Wind 135 deg - No Ice
6	Dead+Wind 180 deg - No Ice
7	Dead+Wind 225 deg - No Ice
8	Dead+Wind 270 deg - No Ice
9	Dead+Wind 315 deg - No Ice
10	Dead+Ice+Temp
11	Dead+Wind 0 deg+Ice+Temp
12	Dead+Wind 45 deg+Ice+Temp
13	Dead+Wind 90 deg+Ice+Temp
14	Dead+Wind 135 deg+Ice+Temp
15	Dead+Wind 180 deg+Ice+Temp
16	Dead+Wind 225 deg+Ice+Temp
17	Dead+Wind 270 deg+Ice+Temp
18	Dead+Wind 315 deg+Ice+Temp
19	Dead+Wind 0 deg - Service
20	Dead+Wind 45 deg - Service
21	Dead+Wind 90 deg - Service
22	Dead+Wind 135 deg - Service

EXHIBIT C

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

T-Mobile Existing Facility

Site ID: CT11923C

W. View Dr_GT
7 West View Drive
Danbury, CT 06810

March 18, 2015

EBI Project Number: 6215001629

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	65.94 %

21 B Street · Burlington, MA 01803 Tel: (781) 273.2500 Fax: (781) 273.3311

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March 18, 2015

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

Emissions Analysis for Site: **CT11923C – W. View Dr_GT**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **7 West View Drive, Danbury, 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 (μW/cm2). The number of $\mu W/cm^2$ 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 ($\mu W/cm^2$). The general population exposure limit for the 700 MHz Band is 467 $\mu W/cm^2$, and the general population exposure limit for the PCS and AWS bands is 1000 $\mu W/cm^2$. 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.

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 **7 West View Drive, Danbury, 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.

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&B2A/B4P)** 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&B2A/B4P)** have a maximum gain of **15.9 dBd** at their 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 **50 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:	B	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):	50	Height (AGL):	50	Height (AGL):	50
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):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A1 MPE%	8.67	Antenna B1 MPE%	8.67	Antenna C1 MPE%	8.67
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	50	Height (AGL):	50	Height (AGL):	50
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):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A2 MPE%	8.67	Antenna B2 MPE%	8.67	Antenna C2 MPE%	8.67
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):	50	Height (AGL):	50	Height (AGL):	50
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):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A3 MPE%	3.44	Antenna B3 MPE%	3.44	Antenna C3 MPE%	3.44

Site Composite MPE%	
Carrier	**MPE%**
T-Mobile	**62.34**
On Site Measurements Per CSC Database For All Existing Carriers	3.60 %
Site Total MPE %:	**65.94 %**

T-Mobile Sector 1 Total:	20.78 %
T-Mobile Sector 2 Total:	20.78 %
T-Mobile Sector 3 Total:	20.78 %
Site Total:	65.94 %

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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:	20.78 %
Sector 2:	20.78 %
Sector 3 :	20.78 %
T-Mobile Total:	62.34 %
Site Total:	65.94 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **65.94%** 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.

Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803