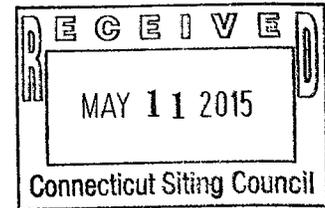


**T-Mobile**



Please Reply To:  
Sam Simons  
35 Griffin Road South  
Bloomfield, CT 06002  
203-482-5156  
Sam.Simons@T-Mobile.com

May 5, 2015

Attorney Melanie Bachman  
Acting Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06501

**Re: EM-T-MOBILE-043-120614**  
T-Mobile Site ID CT11737C  
100 Sunset Ridge Rd. East Hartford CT  
Notice of Construction Completion

Dear Attorney Bachman:

The Connecticut Siting Council ("Council") acknowledged the above referenced T-Mobile Northeast LLC ("T-Mobile") notice of exempt modification on July 9, 2012. T-Mobile hereby notifies the Council that construction of the acknowledged modifications were complete as of November 6, 2013.

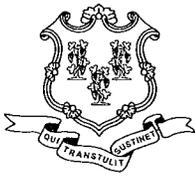
Please don't hesitate to contact me with any questions.

Sincerely,

*Sam Simons*

Samuel Simons, T-Mobile

cc: Mark Richard, T-Mobile



STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

July 9, 2012

Julie D. Kohler, Esq.  
Cohen and Wolf, P.C.  
1115 Broad Street  
Bridgeport, CT 06604

RE: **EM-T-MOBILE-043-120614** - Omnipoint Communications, as subsidiary of T-Mobile USA, Inc., notice of intent to modify an existing telecommunications facility located at 100 Sunset Ridge Road, East Hartford, Connecticut.

Dear Attorney Kohler:

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

- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Not less than 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated June 13, 2012. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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

Very truly yours,

Linda Roberts  
Executive Director

LR/CDM/jbw

c: The Honorable Marcia A. Leclerc, Mayor, Town of East Hartford  
Michael J. Dayton, Town Planner, Town of East Hartford



**JULIE D. KOHLER**

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

June 13, 2012

ORIGINAL

Ms. Linda Roberts,  
Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051



**Re: Notice of Exempt Modification  
Town of East Hartford/T-Mobile co-location  
Site ID CT11737C  
100 Sunset Ridge Road, East Hartford CT**

Dear Ms. Roberts:

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, the Town of East Hartford owns the existing telecommunications tower and related facility at 100 Sunset Ridge Road, East Hartford, Connecticut (latitude 41.77180, longitude -72.59030). T-Mobile intends to replace six antennas and add related equipment at this existing facility in East Hartford ("East Hartford 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, Marcia A. Leclerc.

The existing East Hartford Facility consists of a 140 foot tower. T-Mobile plans to replace six antenna mounted on the tower at a centerline of 120 feet. T-Mobile will also install equipment cabinets on a concrete pad within the existing compound area near the base of the tower. (See the plans dated April 17, 2012 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 May 4, 2012 and attached hereto as Exhibit B.

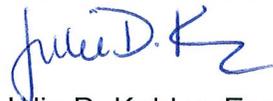
June 13, 2012  
Site ID CT11737C  
Page 2

The planned modifications to the East Hartford 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 replacement antennas will be installed at the 120 foot level. The enclosed tower drawing confirms that the proposed modification will not increase the height of the tower.
- 2 . The installation of the T-Mobile equipment in the existing compound, as reflected on the attached site plan, will not require an extension of the site boundaries. T-Mobile's proposed equipment will be located entirely within the existing compound area.
- 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 RF Exposure Analysis prepared by EBI dated June 8, 2012 T-Mobile' operations would add 0.802% 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 11.412% 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 East Hartford Facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

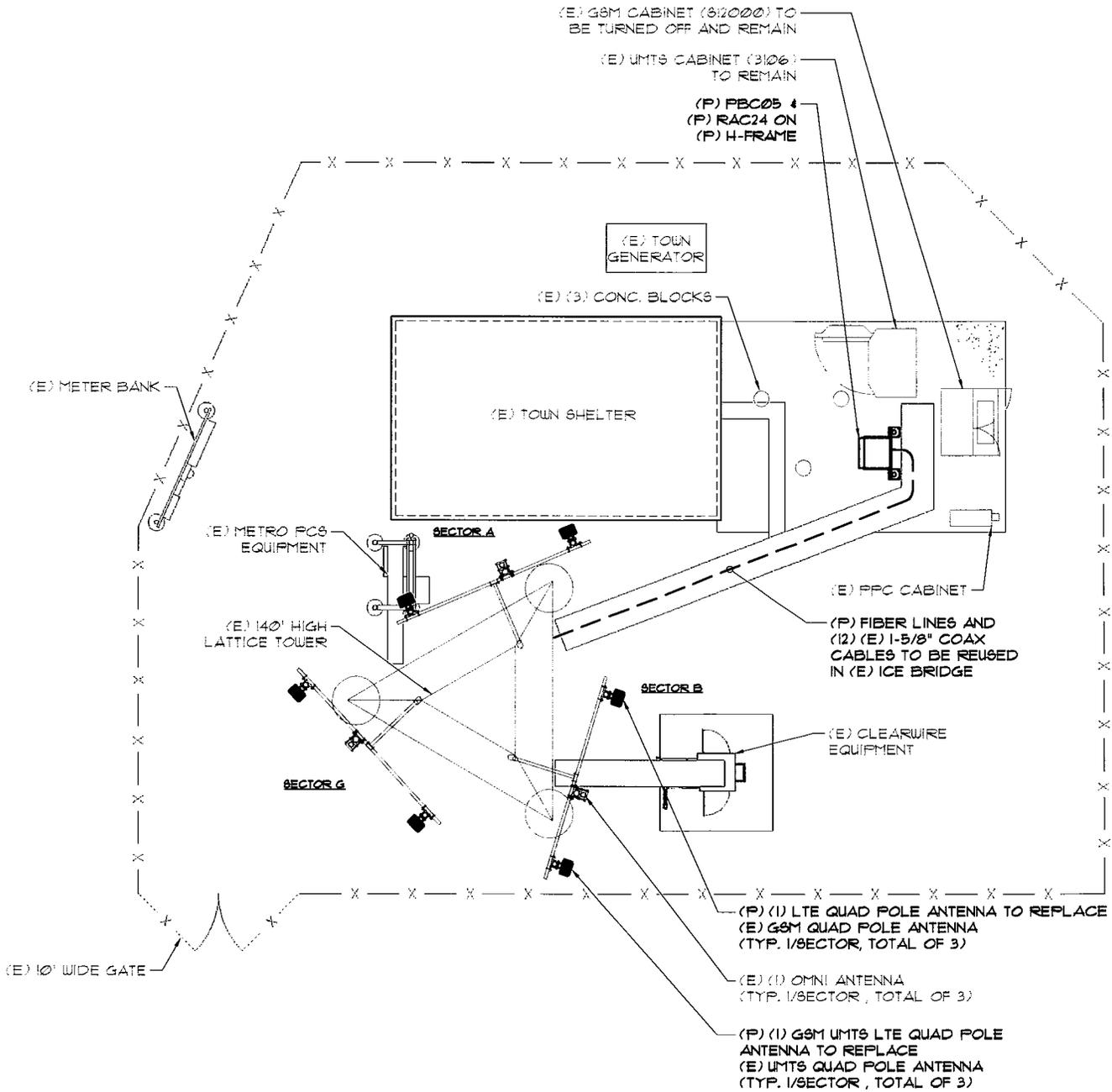
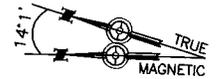
Sincerely,



Julie D. Kohler, Esq.

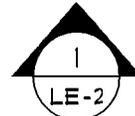
cc: Mayor Marcia A. Leclerc, Town of East Hartford  
Mark Richard, T-Mobile  
Scott Chase, Northeast Site Solutions

# **EXHIBIT A**



ALL EQUIPMENT LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY LESSEE/LICENSEE'S STRUCTURAL & RF ENGINEERS. LOCATIONS OF POWER & TELEPHONE FACILITIES ARE SUBJECT TO APPROVAL BY UTILITY COMPANIES.

**SITE PLAN**  
N.T.S.



Configuration

**2C**

SUBMITTALS	
LE REV A	04.17.12

**ATLANTIS GROUP**  
1340 Centre Street  
Suite 203  
Newton, MA 02459  
Office: 617-965-0789  
Fax: 617-213-5056

**LEASE EXHIBIT**

SITE NUMBER:  
CT11737C

SITE NAME:  
CT737/E HARTFORD TOWN SST

SITE ADDRESS:  
100 SUNSET RIDGE ROAD  
EAST HARTFORD, CT 06108

**NORTHEAST TOWERS**

199 BRICKYARD ROAD  
FARMINGTON, CT 06032  
OFFICE: (860) 677-1999

FOR

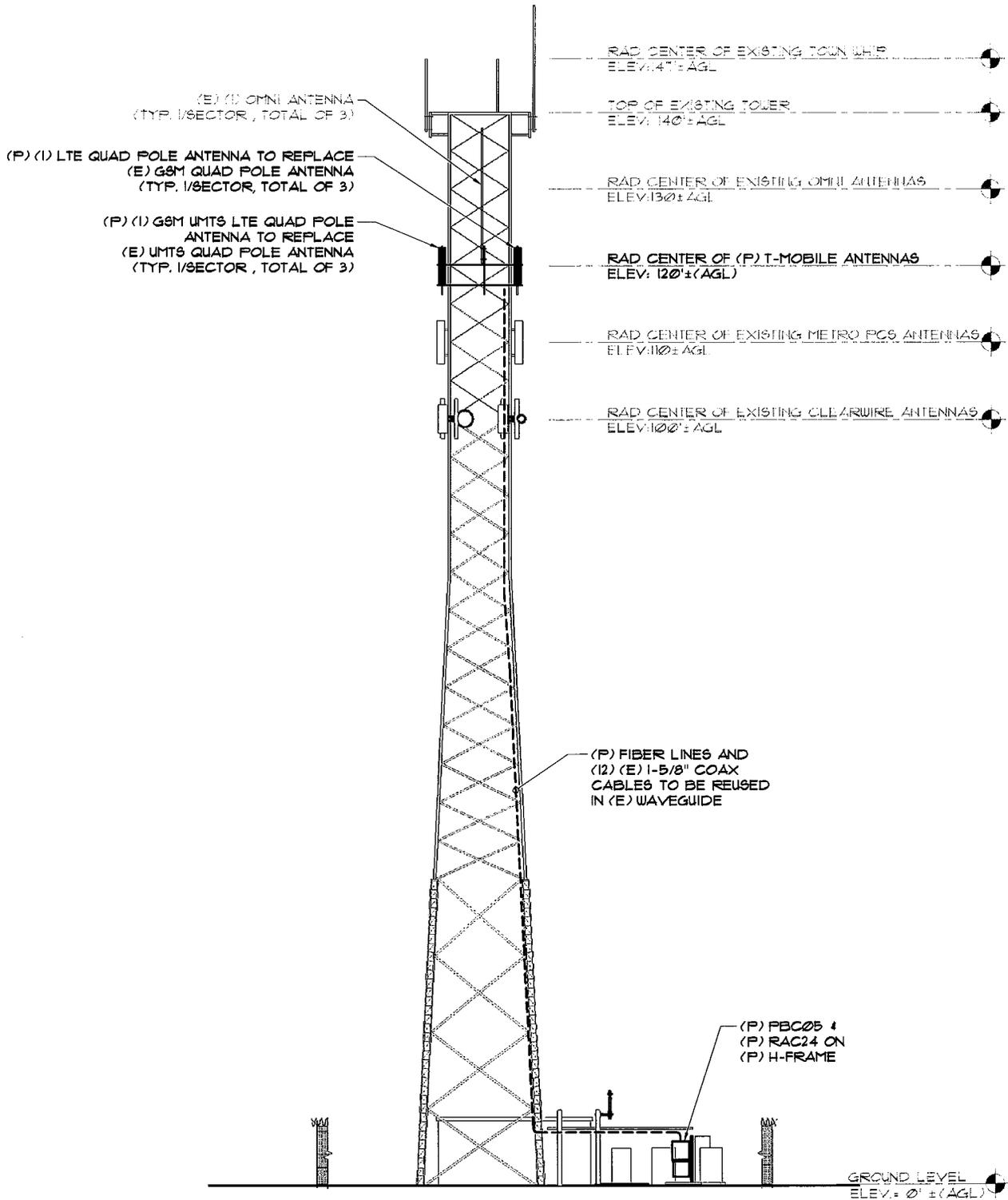
**T-MOBILE NORTHEAST, LLC**

35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002  
OFFICE: (860) 692-7100  
FAX: (860) 692-7159

DRAWN BY: MB

CHECKED BY: SM

PAGE 1 OF 2



**ELEVATION**

N.T.S



Configuration

**2C**

SUBMITTALS	
LE REV A	04.17.12

**ATLANTIS GROUP**  
 1340 Centre Street  
 Suite 203  
 Newton, MA 02459  
 Office: 617-965-0789  
 Fax: 617-213-5056

**LEASE EXHIBIT**

SITE NUMBER:  
CT11737C

SITE NAME:  
CT737/E HARTFORD TOWN SST

SITE ADDRESS:  
100 SUNSET RIDGE ROAD  
EAST HARTFORD, CT 06108

**NORTHEAST TOWERS**  
 199 BRICKYARD ROAD  
 FARMINGTON, CT 06032  
 OFFICE: (860) 677-1999

FOR

**T-MOBILE NORTHEAST, LLC**  
 35 GRIFFIN ROAD SOUTH  
 BLOOMFIELD, CT 06002  
 OFFICE: (860) 692-7100  
 FAX: (860) 692-7159

DRAWN BY: MB

CHECKED BY: SM

PAGE 2 OF 2

# **EXHIBIT B**

5-4-2012

Re: Structural Evaluation Letter  
 T-Mobile Site ID: CT11737C  
 T-Mobile Site Name: CT737/E Hartford Town SST  
 Site Address: 100 Sunset Ridge Road, East Hartford, CT 06108

Atlantis Group Inc. (Atlantis Group) evaluated the structural capacity of the existing wireless telecommunication installation on the self-support tower at the above referenced address for the additions and alterations proposed by T-Mobile. Please refer to the lease exhibit prepared by Atlantis Group, dated 4/17/2012 for details of the proposed changes at the site. The evaluation is based on:

- Structural Analysis prepared by Bay State Design, dated 03-05-10.

**Proposed Changes:**

**Equipment Cabinets:** T-Mobile equipment cabinets are located directly on a concrete slab on grade at the base of the tower. T-Mobile is proposing to add a PBC05 cabinet and RAC24 cabinet mounted on an H-frame. The existing UMTS 3106 (1875 lbs.), PPC (220 lbs.) and GSM S12000 (1257 lbs.) cabinets will remain.

**Antennas and accessories:** T-Mobile is proposing the following changes to the antennas, which are attached to sector mounts:

**Existing Configuration of T-MOBILE Appurtenances:**

Rad Center (ft)	Antenna & TMA		Mount
120	UMTS Antenna GSM Antenna Other Antennas TMA	(3) APX16DWV-16DWVS (3) APX16PV_16PVL (3) 20' Omni Antennas (3) dd B4, (6) d B2	(3) Sector mounts

**Proposed Configuration of T-MOBILE Appurtenances:**

Rad Center (ft)	Antenna & TMA		Mount
120	GSM/UMTS QUAD POLE LTE QUAD POLE Other Antennas TMA	(3) AIR21 B2A/B4P (3) AIR21 B4A/B2P (3) 20' Omni Antennas (3) dd B4	(3) Sector mounts

**Evaluation Conditions:** The analysis is based on the information provided to Atlantis Group and is assumed to be current and correct. Unless otherwise noted, the structure and the foundation system are assumed to be in good condition, free of defects and can achieve theoretical strength. It is assumed that the structure has been maintained and shall be maintained during its service. The superstructure and the foundation system are assumed to be designed with proper engineering practice and fabricated,

CT11737C  
Structural Letter

constructed and erected in accordance with the design documents. Atlantis Group will accept no liability which may arise due to any existing deficiency in design, material, fabrication, erection, construction, etc. or lack of maintenance. Contractor should inspect the condition of the existing structure, mounts and connections and notify Atlantis Group for any discrepancies and deficiencies before proceeding with the construction.

It is assumed that all prior additions and alterations by T-Mobile has been properly designed and structural components, including building structural members, have been qualified for the changed conditions. Atlantis Group does not assume any liability which may arise due to invalidity of this assumption.

The evaluation results presented in this report are only applicable for the previously mentioned existing and proposed additions and alterations. Any deviation of the proposed equipment and placement, etc., will require Atlantis Group to generate an additional structural evaluation.

**Conclusion:**

**Cabinets:** As the existing cabinet configuration on the concrete slab on grade is not modified and load addition being within capacity of slab, the structure is considered to have **adequate** structural capacity without further evaluation per 2005 Connecticut Building Code, 2005 Connecticut Supplement and 2009 Amendment.

**Antenna Mounts & Monopole:** Current tower usage is 53.7% of capacity as a maximum. The proposed antennas are smaller than existing, which imparts less loading on the existing structure. Therefore, as the structure was previously qualified for the existing configuration and higher wind loads, the design still applies and the tower is considered to have **adequate** strength for the proposed changes.

The proposed H-frame and connection design is not within the scope of this letter.

Therefore, the additions and alterations proposed by T-Mobile **can be implemented as intended** with the conditions outlined in this letter.

Should you need any clarifications or have any questions about this letter, please contact me at (617) 965-0789.

Sincerely,  
Atlantis Group  
5-4-2012



Ahmet Colakoglu, PE  
Connecticut Professional Engineer  
License No: 27057



1340 Centre Street Suite 203  
Newton Massachusetts, 02459  
Phone: 617-965-0789  
Fax: 617-965-0103

# **EXHIBIT C**

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

T-Mobile Existing Facility

Site ID: CT11737C

East Hartford Town Self Support Tower  
100 Sunset Ridge Road  
East Hartford, CT 06108

**June 08, 2012**

June 8, 2012

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

Re: Emissions Values for Site CT11737C –East Hartford Town Self Support Tower

EBI Consulting was directed to analyze the proposed T-Mobile facility located at 100 Sunset Ridge Road, East Hartford, 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 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The number of  $\mu\text{W}/\text{cm}^2$  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 ( $\mu\text{W}/\text{cm}^2$ ). The general population exposure limit for the cellular band is  $567 \mu\text{W}/\text{cm}^2$ , and the general population exposure limit for the PCS band is  $1000 \mu\text{W}/\text{cm}^2$ . 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.



- 7) The antenna mounting height centerline of the proposed antennas is 120 feet above ground level (AGL)
- 8) 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 calculation were done with respect to uncontrolled / general public threshold limits

Site ID	CT11737C - East Hartford Town SST
Site Address	100 Sunset Ridge Road, East Hartford, CT 06108
Site Type	Self Support Tower

**Sector 1**

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBi)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	120	114	None	0	0	48.326044	1.336834	0.133688%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-	0	0	0	-3.95	120	114	None	0	0	0	0	0.000000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	120	114	None	0	0	24.163022	0.668417	0.066884%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.066884%
Sector total Power Density Value: 0.26737%																	

**Sector 2**

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBi)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	120	114	None	0	0	48.326044	1.336834	0.133688%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-	0	0	0	-3.95	120	114	None	0	0	0	0	0.000000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	120	114	None	0	0	24.163022	0.668417	0.066884%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.066884%
Sector total Power Density Value: 0.26737%																	

**Sector 3**

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBi)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	120	114	None	0	0	48.326044	1.336834	0.133688%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-	0	0	0	-3.95	120	114	None	0	0	0	0	0.000000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	120	114	None	0	0	24.163022	0.668417	0.066884%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.066884%
Sector total Power Density Value: 0.26737%																	

Site Composite MPE %	
Carrier	MPE %
T-Mobile	0.802%
Pocket	5.630%
Cleanwire	1.860%
Public Works	0.620%
Fire	0.410%
Fire Admin	0.410%
Police Ch. 1&2	1.020%
Parks and Rec	0.170%
Health	0.250%
800	0.240%
<b>Total Site MPE %</b>	<b>11.412%</b>

## Summary

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

The anticipated Maximum Composite contributions from the T-Mobile facility are **0.802% (0.267% from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **11.412%** 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