## ·T· · · Mobile·

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

January 29, 2016

Attorney Melanie Bachman Connecticut Siting Council 10 Franklin Square New Britain, CT 06501

## EM-T-MOBILE-081-141010

T-Mobile Site ID CT11052E 84 South Street Overpass, Middlebury CT Notice of Compliance with Conditions and Construction Completion

Dear Attorney Bachman:

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:

- Reinforce the tower in accordance with the structural analysis report prepared by URS Corp., dated September 30, 2014, stamped by Richard Sambor, prior to the installation of T-Mobile's equipment;
- Verify the removal of the equipment as listed in the structural analysis report;
- Within 45 days following completion of the equipment installation, T-Mobile shall provide documentation certified by a professional engineer that its installation complied -with the recommendations included in the Structural Analysis Report prepared by URS Corp., dated September 30, 2014, stamped by Richard Sambor;
- Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by T-Mobile Northeast LLC shall be removed within 60 days of the date the antenna ceased to function;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The attached PE Closeout Letter dated January 26, 2016 provides evidence of compliance with the conditions outlined by the Council.

In addition, T-Mobile hereby notifies the Council that construction of the acknowledged modifications were complete as of September 9, 2015.

Sincerely,

Sam Simons



Date: January 26, 2016

Sam Simons
Engineering Development - Connecticut
T-Mobile
35 Griffin Road South
Bloomfield, CT 06002

Paul J Ford and Company 250 E. Broad St., Suite 600 Columbus, OH 43215 614-221-6679

Subject: Post Construction Review

Carrier Designation: T-Mobile Co-Locate

Carrier Site Number: CT11052E

Siting Council ID: EM-T-Mobile-081-141010

**Engineering Firm Designation:** Paul J Ford and Company Project Number: 79916-0006.001.8100

Site Data: Interstate 84 South Street Overpass, Middlebury, CT

160 Foot - Self Support Tower

Dear Sam Simons,

Paul J. Ford and Company has completed a post-construction review per the requirements of the Connecticut Siting Council. The purpose of the letter is to verify that the proposed antennas listed in Table 1 (next page) have been installed. The review is consistent with the guidelines as stated in the 2005 Connecticut Building Code and the TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures using a fastest mile wind speed of 90 mph with 1/2 inch ice thickness and 50 mph under service loads.

Based on a comparison of the verified proposed loading (shown Table 1 & 2) versus the previous analysis loads (including wind speeds) from URS Corporation [project number 36928699.00000, dated September 30, 2014] we have determined that loading is similar and should not change the analysis concluded by others.

Based upon a review of the photos provided, it appears that the antennas and equipment listed in Table 1 have been installed.

We at *Paul J. Ford and Company* appreciate the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted by:

Jared Smith, E.I. Structural Designer

**Table 1 - Proposed Antenna and Cable Information** 

| Mounting<br>Level (ft) | Flovation | Number<br>of<br>Antennas | Antenna<br>Manufacturer | Antenna Model             | Number<br>of Feed<br>Lines | Feed Line<br>Size (in) | Note |
|------------------------|-----------|--------------------------|-------------------------|---------------------------|----------------------------|------------------------|------|
| 125.0                  | 125.0     | 3                        | commscope               | LNX-6515DS                | 6                          | 1-5/8                  | -    |
|                        |           | 3                        | -                       | Smart Bias-T Units        |                            |                        |      |
|                        |           | 3                        | -                       | 2-Panel Antenna<br>Mounts |                            |                        |      |

Notes:

Table 2 - Existing Antenna and Cable Information

| Mounting<br>Level (ft) | Center<br>Line<br>Elevation<br>(ft) | Number<br>of<br>Antennas | Antenna<br>Manufacturer | Antenna Model     | Number<br>of Feed<br>Lines | Feed Line<br>Size (in)                    | Note |
|------------------------|-------------------------------------|--------------------------|-------------------------|-------------------|----------------------------|---|------|
| 400.0                  | 160.0                               | 3                        | -                       | 6' Microwave Dish | 2<br>9<br>2                | 7/8<br>1-5/8<br>1/2                       | 1    |
|                        |                                     | 1                        | celwave                 | PD-83             |                            |   |      |
|                        |                                     | 1                        | decibel                 | DB-228            |                            |   |      |
|                        |                                     | 2                        | scala                   | OGT9-806          |                            |   |      |
|                        |                                     | 2                        | -                       | Amplifier         |                            |   |      |
| 160.0                  |                                     | 1                        | decibel                 | DB810K-Y          |                            |   |      |
|                        |                                     | 6                        | sinclair                | SC479-HF1LDF      |                            |   |      |
|                        |                                     | 3                        | -                       | 4' Stand-Off      |                            |   |      |
|                        | 155.0                               | 5                        | -                       | Filter/Diplexers  | -                          | -   | 1    |
|                        | 153.0                               | 1                        | decibel                 | DB304-A           | 1                          | 7/8                                       | 1    |
|                        |                                     | 2                        | scala                   | OGT9-806          | 3                          | 1-5/8                                     | 1    |
| 143.0                  | 143.0                               | 1                        | decibel                 | DB810K            |                            |   |      |
|                        |                                     | 1                        | -                       | 4' Stand-Off      |                            |   |      |
|                        | 138.0                               | 3                        | powerwave               | 7770              | 12<br>1<br>3<br>6          | 1-1/4<br>3" Conduit<br>Fiber<br>DC Cables | 1    |
|                        |                                     | 3                        | powerwave               | 7020 RET          |                            |   |      |
|                        |                                     | 6                        | -                       | TMAs              |                            |   |      |
|                        |                                     | 6                        | -                       | Diplexers         |                            |   |      |
| 138.0                  |                                     | 4                        |                         | SBNH-1D6565C      |                            |   |      |
|                        |                                     | 2                        | kmw                     | AM-X-CD-16-65-00T |                            |   |      |
|                        |                                     | 9                        | -                       | TMA's             |                            |   |      |
|                        |                                     | 6                        | -                       | Diplexers         |                            |   |      |
|                        |                                     | 1                        | -                       | Surge Suppressor  |                            |   |      |
|                        |                                     | 3                        | -                       | T-Frames          |                            |   |      |
| 130.0                  | 130.0                               | 1                        | -                       | SC479-HF1LDF      | 1                          | 1-5/8                                     | 1    |
|                        |                                     | 1                        | -                       | Leg Mount         |                            |   |      |
| 125.0                  | 125.0                               | 3                        | -                       | Tower Mount       | -                          | -   | 3    |
|                        |                                     | 3                        | ems                     | RR90-17-02-DP     | 6                          | 1-5/8                                     | 1    |
|                        |                                     | 3                        | -                       | TMA's             |                            |   |      |
| 122.0                  | 122.0                               | 1                        | celwave                 | PD1142            |                            | 7/8                                       | 1    |
|                        |                                     | 1                        | -                       | 3' Stand-Off      | 1                          |   |      |

<sup>1)</sup> Verified antenna/coax installation heights and quantities

| Mounting<br>Level (ft) | Center<br>Line<br>Elevation<br>(ft) | Number<br>of<br>Antennas | Antenna<br>Manufacturer | Antenna Model      | Number of Feed Lines | Feed Line<br>Size (in)        | Note |
|------------------------|-------------------------------------|--------------------------|-------------------------|--------------------|----------------------|-------------------------------|------|
| 115.0                  | 115.0                               | 1                        | -                       | 20' Omni           | _                    | -                             | 2    |
|                        |                                     | 1                        | -                       | Leg Mount          |                      |                               |      |
| 110.0                  | 110.0                               | 2                        | -                       | 6' Dish            | 2                    | WEP65                         | 1    |
|                        |                                     | 2                        | -                       | Dish Mounts        |                      |                               |      |
| 97.0                   | 97.0                                | 3                        | rfs                     | APXV9TM14-ALU-I20  | 27<br>3<br>1         | 8' Jumper<br>8' AISG<br>Fiber | 2    |
|                        |                                     | 3                        | alcatel                 | TD-RRH-8x20-25 RRH |                      |                               |      |
|                        |                                     | 1                        | -                       | Junction Box       |                      |                               |      |
|                        |                                     | 3                        | rfs                     | APXVSPP-C-20       | 6 3                  | 1-1/4<br>Hybriflex            | 1    |
|                        |                                     | 3                        | andrew                  | RRH 800 MHz 2x40W  |                      |                               |      |
|                        |                                     | 3                        | panasonic               | RRH 1900 MHz 2x40W |                      |                               |      |
|                        |                                     | 1                        | -                       | Pipe Mounts        |                      |                               |      |
| 85.0                   | 85.0                                | 1                        | rfs                     | PD10054            | 1                    | 7/8                           | 1    |
|                        |                                     | 1                        | -                       | Leg Mount          |                      |                               |      |
| 55.0                   | 55.0                                | 1                        | -                       | GPS-TMG-HR-26NCM   | 1                    | 1/2                           | 1    |
|                        |                                     | 1                        | -                       | 2' Stand-Off       |                      |                               |      |

## Notes:

- Existing Equipment Reserved Equipment Equipment to be Removed 1) 2) 3)