## STATE OF CONNECTICUT SITING COUNCIL

In Re : DOCKET #421

T-Mobile Northeast, LLC : Application for a Certificate of : Environmental Compatibility and :

Public Need for a telecommunications

facility located at

128 Edison Road, Trumbull, Connecticut:

OCTOBER 25, 2011

## INTERROGATORIES TO APPLICANT

The following Interrogatories are directed to the Applicant and other carrier intervenors as appropriate by Citizens Against Trumbull Tower. The Term "you" refers to the Applicant or Intervenors as may be applicable.

- 1. What propagation model did the applicant employ to determine calculated coverage?
- 2. What is the frequency band that is depicted in these plots?
- 3. What clutter model and what terrain data base were utilized in these calculations?
- 4. What effective radiated power and antenna type along with beam tilt, if applicable, were utilized in these calculations?
- 5. Were drive tests ("scan tests") that would verify the results of the calculated plots conducted? If so, please provide the data sets which were generated by the tests and note whether the data needs to be corrected for variables including, but not limited to, antenna position, gain and line loss.
- 6. Have you performed continuous wave ("CW") tests from the proposed site or any other site either identified or considered?
- 7. In calculating the expected coverage from the proposed site, what antenna centerlines, antenna types and effective radiated power did the applicant assume would

be put in use?

- 8. Have you performed a minimum height analysis to determine the minimum antenna centerline that you require to meet your alleged coverage needs?
- 8a. Have you generated or reviewed any coverage maps generated by others which depict current and/or proposed coverage for the municipal arrays proposed tobe placed at the top of the tower? If so, please provide a copy of the same.
- 9. By what method was it determined that identified alternate sites did not meet the needs of the Applicant? If studies were conducted to confirm the utility of the alternate sites, please provide copies of those studies?
- 10. What antenna centerlines, antenna types and effective radiated power did the applicant assume to determine expected coverage from alternate sites indicated?
- 11. Is there another combination of alternate sites that could be utilized to achieve the alleged coverage needs?
- 12. What alternate means of achieving the alleged coverage needs have been explored? Please provide any studies upon which you relied in making this determination.
- 13. Does the applicant possess any data that support either dropped calls, customer complaints or other switch based or customer service representative based information that supports its claim of lack of service in the entire area that it claims it has a coverage issue?
- 14. Are there other sites in Trumbull at which you are considering developing wireless communications facilities? Please describe.
- 15. Please name all carriers with whom you have reason to believe will co-locate on the proposed facility.
- 16. Please identify the size of the search ring and explain why that radius was chosen and where the ring was centered.
- 17. What is the percent of dropped calls in the target area?
- 18. If you conducted any drive tests, please produce the results of those drive tests?
- 19. In any coverage simulations what angle of downtilt was assumed for each facility

depicted in the coverage map generation?

- 20. Please describe the methods used by your visual impact consultant to calculate seasonal visibility.
- 21. What studies did you undertake to eliminate alternate technologies (e.g. DAS) from consideration given that they are of lesser impact to surrounding property uses?
- 21. Who conducted the feasibility studies on alternate technologies?
- 22. Please provide the feasibility studies or data by which you determined the lack of feasibility?
- 23. Have you employed in Connecticut stealth technology including flush mounting, internal mounts, combined antenna arrays (single antennas which will serve LTE, PCS and 850Mhz), and close centerline to centerline antennas (close meaning < 8ft)? If so, which of these technologies and where?
- 24. Is there a particular standard or decibel signal strength which you believe is necessary for adequate coverage for PCS (1900MHz) service in the target coverage area? For 850MHz service? For 700 MHz
- 25. What particular dBm signal strength do you believe is necessary for in-vehicle coverage for PCS (1900MHz), 700 MHz and 850MHz in the target area?
- 26. In the proposed coverage maps submitted by the Applicant, what loss margin was assumed in the modeling?
- 27. How many residences (as opposed to acres) will have year round views of the proposed towers? Seasonal views?
- 28. What is the lowest height you can construct a tower to improve coverage (with and without co-located carriers)?
- 29. Can you provide separate proposed and existing coverage maps depicting the coverage from the target levels up to -88dBm with the levels at -3dBm intervals (e.g.: -74 to -77dBm, -77dBm to -80dBm, etc)?
- 30. Please identify how many other future sites will be necessary, at a minimum to

accomplish adequate coverage in Trumbull.

- 31. Please identify any sites in addition to the Proposed Facility at which you intend to seek permission from the Siting Council to construct or modify a facility in the Trumbull area (Trumbull and adjacent towns)?
- 32. Despite the pre-emption of local zoning by the CSC, will construction practices for the proposed facility conform to local building and zoning ordinances and regulations?
- 33. Can you provide coverage propagation maps and isolated propagation maps for the proposed facility on clear plastic overlays using a scale that matches that of the Application?
- 34. What is the minimum dBm signal strength to accomplish hand off of a call to an adjacent cell for 700Mhz, 850 MHz and 1900 Mhz?
- 35. What are the coordinates, antenna heights, antenna types, orientations, tilt, EIRP for all of your existing wireless facilities in Trumbull and adjacent towns which are directed into Trumbull?
- 36. What information, data, studies or other evidence was provided to you by the Town of Trumbull justifying the height of the tower for their emergency communications needs? If any studies exist (e.g.: coverage maps), please provide a copy.
- 37. The original proposal by T-Mobile was for a 130ft monopole, what caused the height increase to 150ft?

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Respectfully Submitted,

Citizens Against Trumbull Tower,

## Keith R. Ainsworth

Digitally signed by Keith R. Ainsworth DN: cn=Keith R. Ainsworth, o=Evans, Feldman and Ainsworth, ou=EFA, email=krainsworth@snet.net, c=US Date: 2011.10.21 17:27:04 -04'00'

## CERTIFICATE OF SERVICE

This is to certify that a true copy of the foregoing was electronically filed and deposited in the United States mail, first-class, postage pre-paid this 25th day of October, 2011 and addressed to:

Ms. Linda Roberts, Executive Director, Connecticut Siting Council, 10 Franklin Square, New Britain, CT 06051 (1 orig, 15 copies, plus 1 electronic) (US Mail/electronic).

T-Mobile Northeast, LLC c/o Julie D. Kohler, Esq., Jesse A. Langer, Esq. Cohen and Wolf, P.C. 1115 Broad Street, Bridgeport, CT 06604 (203) 368-0211, (203) 394-9901 fax jkohler@cohenandwolf.com, jlanger@cohenandwolf.com (electronic and US Mail)

Keith R. Ainsworth

Digitally signed by Keith R. Ainsworth
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and Ainsworth, ou=EFA,
email=krainsworth@snet.net, c=US
Date: 2011.10.21 17:27:45 -04'00'

Keith R. Ainsworth, Esq.