



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

www.ct.gov/csc

November 18, 2009

Thomas F. Flynn III
Site Development Project Manager
Maxton Technology Inc.
1296 Blue Hills Avenue
Bloomfield, CT 06002

RE: **EM-CLEARWIRE-002-091015** – Clearwire Corporation notice of intent to modify an existing telecommunications facility located at 2 Osbourne Lane, Ansonia, Connecticut.

Dear Mr. Flynn:

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:

- The proposed coax shall be installed inside the pole's shaft;
- The proposed tower mounted amplifiers shall be installed behind the panel antennas; and
- Not more than 45 days after completion of construction, the Council shall be notified in writing that the coax and tower mounted amplifiers were installed as specified.

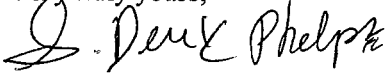
The proposed modifications are to be implemented as specified here and in your notice dated October 15, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations 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. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.



Thank you for your attention and cooperation.

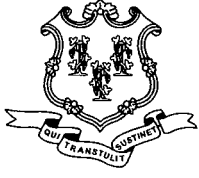
Very truly yours,

A handwritten signature in black ink that reads "S. Derek Phelps". The signature is written in a cursive style with a large initial "S" and a stylized "D".

S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable James T. DellaVolpe, Mayor, City of Ansonia
Peter Crabtree, Zoning Enforcement Officer, City of Ansonia
SBA



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
www.ct.gov/csc

October 21, 2009

The Honorable James T. DellaVolpe
Mayor
City of Ansonia
City Hall
253 Main Street
Ansonia, CT 06401-1866

RE: **EM-CLEARWIRE-002-091015** -- Clearwire Corporation notice of intent to modify an existing telecommunications facility located at 2 Osbourne Lane, Ansonia, Connecticut.

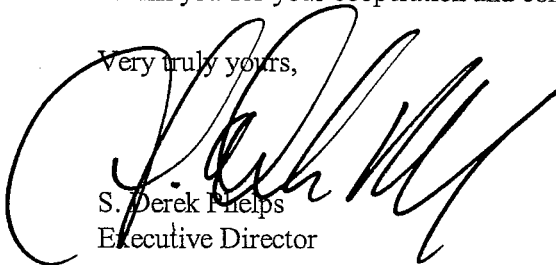
Dear Mayor DellaVolpe:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by November 4, 2009.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/jbw

Enclosure: Notice of Intent

c: Peter Crabtree, Zoning Enforcement Officer, City of Ansonia



EM-CLEARWIRE-002-091015

October 15, 2009

S. Derek Phelps, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

ORIGINAL

RECEIVED
OCT 15 2009
CONNECTICUT
SITING COUNCIL

**Re: Notice of Exempt Modification
Clearwire Corporation Notice to make an Exempt Modification to an Existing
Facility at 2 Osbourne Lane, Ansonia, CT aka 1 Deerfield Lane, Ansonia, CT
Clearwire Site Number CT-NHN0065**

Dear Mr. Phelps,

Pursuant to Conn. Agency Regulations Sections 16-50j-73 and 16-50j-72(b), Clearwire Corporation (Clearwire) hereby gives notice to the Connecticut Siting Council (Council) and the Town of Ansonia, CT. of Clearwire's intent to make an exempt modification to an existing monopole tower (tower) located at 2 Osbourne Lane, Ansonia, CT. Specifically, Clearwire plans to add three (3) antennas to the tower, one (1) per sector and to add two (2) microwave dishes, one (1) per sector for backhaul at the 127' AGL. Pursuant to the Council's regulations, (Conn. Agency Regulations Section 16-50j-72(b)), Clearwire's plans do not constitute a modification subject to the Council's review because Clearwire will not change the height of the tower, will not extend the boundaries of the compound, will not increase the noise levels at the site and will not increase the total radio frequency electromagnetic radiation power density at the site to levels above applicable standards. A copy of this notice has been sent to Mayor James Della Volpe, Ansonia, CT.

Clearwire is currently developing a 4G wireless broadband network to provide high-speed wireless data and VoIP service within the State of Connecticut. Clearwire's 4G service leverages the WiMAX technology to enable enhanced wireless data communications. In order to accomplish the upgrade at this site, Clearwire plans to add three (3) WiMAX antennas, two (2) dishes and to install additional WiMAX related electronic equipment at the base of the tower.

The tower is a 169' monopole located at 2 Osbourne Lane, Ansonia, Connecticut (Latitude 41 21 2.7 Longitude 73 2 57.3). The tower is owned by SBA. Currently, XX, are located on the tower, as well as a number of other public service antennas. Presently, Clearwire is not located at the site. Clearwire's base station equipment will be located on the ground next to the pole. A site plan with the tower elevations and site plan specifications is attached.

Clearwire will add three (3) antennas, one (1) to each sector, and mount two (2) microwave dishes, one (1) above each of those antennas. The center line for the microwave dishes will be 127'. Nine coaxial cables will be added to the structure, 2 per antenna and one per microwave dish. These cables will be inside the tower and bundled. To confirm that the tower can support these changes, Clearwire commissioned FDH Inc. to perform a structural analysis of



the tower and the proposed changes. According to that structural dated September 23, 2009 and attached hereto, the structure is sufficient to support the proposed loading and will not need to be modified. The tower, with the additions and the modifications will be at 97.4% of its capacity.

Within the existing compound, Clearwire will install one (1) WiMAX radio and power cabinet on the existing pad at the site. The new equipment will be adjacent to the existing tower. Excluding brief, construction related noise during the addition of this equipment, the proposed changes to the tower will not increase noise levels at the site.

The addition of new WiMAX antennas and microwave dishes will not adversely impact the health and safety of the surrounding community or the people working on the tower. The total radio frequency exposure measured around the base of the tower will be well below the National Council on Radiation Protection and Measurements' (NCRP) standard adopted by the Federal Communications Commission (FCC). The worst case power density analysis for the WiMAX antennas and dishes, measured at the base of the tower, indicates that the WiMAX antennas and dishes will emit .000319% of the NCRP's standard for maximum permissible exposure. The cumulative power density analysis indicates that all the antennas on the structure will emit 18.64% of the NCRP's standard for maximum permissible exposure. Therefore, the power density levels will be well below the FCC mandated radio frequency exposure limits in all locations around the base of the tower. The power density analysis is attached.

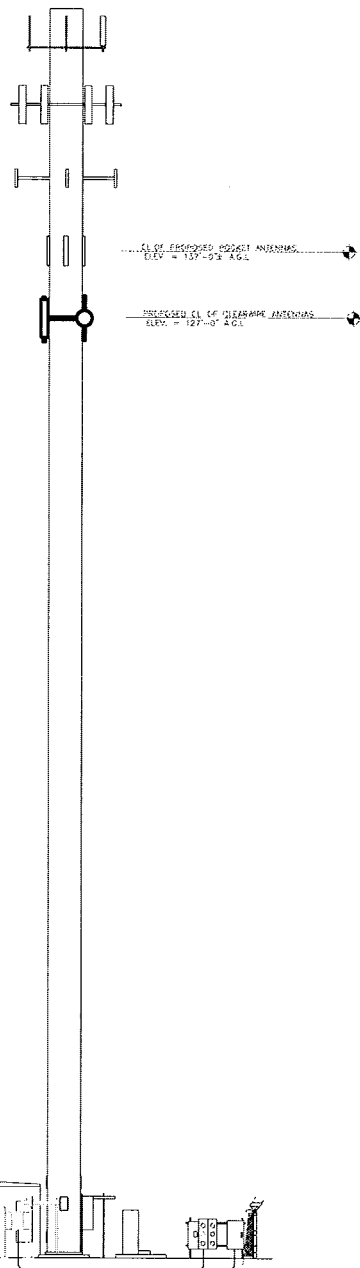
In conclusion, Clearwire's proposed plan to add three (3) WiMAX antennas, two (2) microwave dishes and the associated base station equipment does not constitute a modification subject to the Council's jurisdiction because Clearwire will not increase the height of the tower, will not extend the boundaries of the compound at the site, will not increase the noise levels at the site and the radio frequency electromagnetic radiation power density will stay within all applicable standards.

Respectfully Submitted



Thomas F. Flynn III
Site Development Project Manager
Maxton Technology Inc.
1296 Blue Hills Avenue
Bloomfield, CT 06002
508-821-6974
Tom.Flynn@maxtontech.com
Agent for Clearwire Corporation

Cc: Mayor James Della Volpe



..... C.G. OF PROPOSED PROJECT ANTENNAS
ELEV. = 137'-0" ± C.G.

..... PROPOSED C.G. OF CLEARWIRE ANTENNAS
ELEV. = 127'-0" ± C.G.

PROP CLEARWIRE
CABINET ON CONC PAD

50 Eastman Street
South Easton, MA 02375
Phone: (508) 936-5393
Fax: (508) 936-6395

1000.001
DRAWN BY:
SGB
CHECKED BY:
sgb
SCALE:
AS NOTED
RE:

clearwire

5808 LAKE WASHINGTON BLVD.
NE SUITE 300
KIRKLAND, WA 98033

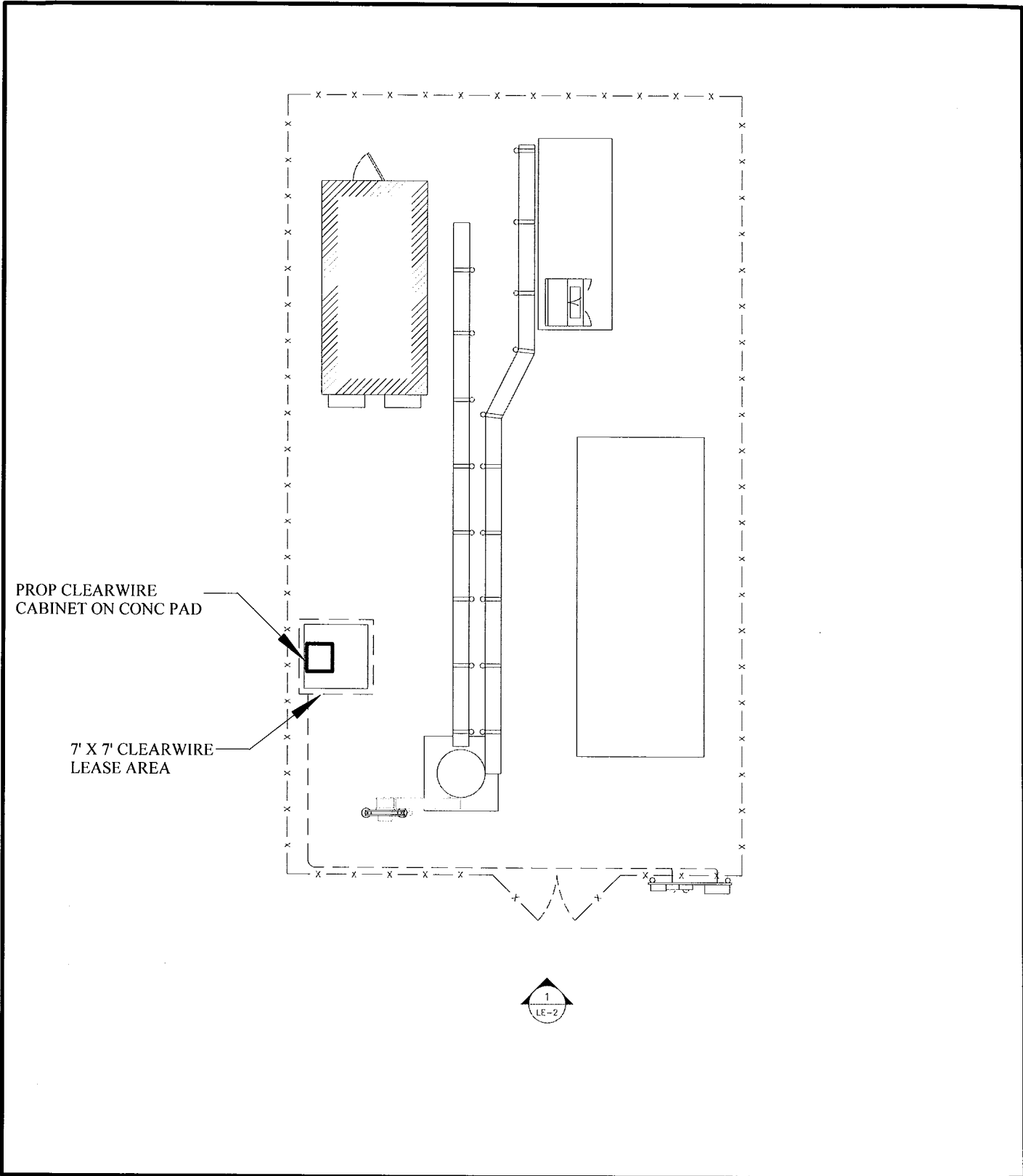
THIS PROPERTY IS THE PROPERTY AND COPYRIGHTED WORK OF CLEARWIRE. ANY DUPLICATION OR USE WITHOUT WRITTEN CONSENT IS STRICTLY PROHIBITED.

DRAWING TITLE:
ELEVATION PLAN

PROJECT TITLE:
OSBOURNE LANE

PROJECT ADDRESS:
2 Osbourne Lane
ANSONIA, CT

REV.	DATE	REV.	DATE
0	09/14/09		
SITE ID#:		CT-NHN0065A	
DRAWING NO.:		REV. #:	
LE-2		0	



PROP CLEARWIRE
CABINET ON CONC PAD

7' X 7' CLEARWIRE
LEASE AREA



50 Eastman Street
South Easton, MA 02375
Phone: (508) 936-5393
Fax: (508) 936-6395

1000.001
DRAWN BY:
SGB
CHECKED BY:
sgb
SCALE:
AS NOTED
RE:

clearw're
5808 LAKE WASHINGTON BLVD.
NE SUITE 300
KIRKLAND, WA 98033
THIS PROPERTY IS THE PROPERTY AND COPYRIGHTED WORK OF
CLEARWIRE. ANY DUPLICATION OR USE
WITHOUT WRITTEN CONSENT IS STRICTLY PROHIBITED

DRAWING TITLE:
SITE PLAN
PROJECT TITLE:
OSBOURNE LANE
PROJECT ADDRESS:
2 Osbourne Lane
ANSONIA, CT

0	09/14/09		
REV.	DATE	REV.	DATE
SITE ID#: CT-NHN0065A			
DRAWING NO.:		REV. #:	
LE-1		0	

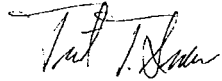
**Structural Analysis for
SBA Network Services, Inc.**

169 ft Monopole

**Site Name: Woodbridge
Site ID: CT13071-A**

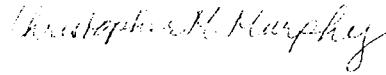
FDH Project Number 09-03182E S2

Prepared By:



Trent T. Snarr, EI
Project Engineer

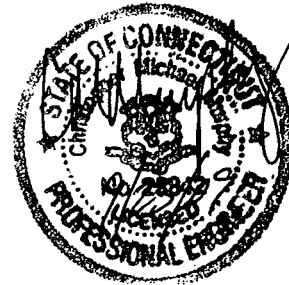
Reviewed By:



Christopher M. Murphy, PE
Vice President
CT PE License No. 25842

FDH Engineering, Inc.

2730 Rowland Road
Raleigh, NC 27615
(919)-755-1012
info@fdh-inc.com



September 23, 2009

Prepared pursuant to ANSI/TIA-222-G Structural Standard for Antenna Supporting Structures and Antennas

TABLE OF CONTENTS

EXECUTIVE SUMMARY..... 3
 Conclusions
 Recommendations

APPURTENANCE LISTING..... 4

RESULTS..... 5

GENERAL COMMENTS..... 6

LIMITATIONS..... 6

POLE PROFILE..... 7

TOWER BASE SECTION..... 8

EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Ansonia, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads, pursuant to the *Structural Standards for Antenna Supporting Structures and Antennas, ANSI/TIA-222-G*. Information pertaining to the existing/proposed antenna loading, current tower geometry, soil parameters, and member sizes was obtained from:

- Sabre Communications Corporation (Job No. 08-01016) original design drawings dated January 30, 2008
- FDH, Inc. (Project No. 08-07136T) TIA Inspection Report dated September 9, 2008
- JGI Eastern, Inc. (Project No. J2085109) Geotechnical Evaluation dated January 29, 2008
- SBA Network Services, Inc.

The *basic design wind speed* per *ANSI/TIA-222-G* standards is 110 MPH without ice and 50 MPH with 3/4" radial ice. Ice is considered to increase in thickness with height.

Conclusions

With the current and proposed antennas from Clearwire in place at 127 ft, the tower meets the requirements of the *ANSI/TIA-222-G* standards, provided the **Recommendations** listed below are satisfied. Furthermore, provided the foundation was designed and constructed to support the original design reactions (see Sabre Job No. 08-01016), the foundation should have the necessary capacity to support both the proposed and existing loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH Engineering, Inc. is accurate (i.e., the steel data, tower layout, current antenna loading, and proposed antenna loading) and that the tower has been properly erected and maintained per the original design drawings.

Recommendations

To ensure the requirements of the *ANSI/TIA-222-G* standards are met with the existing and proposed loading in place, we have the following recommendations:

1. The proposed coax should be installed inside the pole's shaft.
2. The proposed BTSs should be installed directly behind the proposed antennas.

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**. *If the actual layout determined in the field deviates from this layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.*

Table 1 – Appurtenance Loading

Existing Loading:

Antenna No.	Centerline Elevation (ft)	Coax and Lines ¹	Carrier	Mounts	Description
1-9	167.5	(6) 1-5/8"	T-Mobile	(3) 4' T-Arms	(3) RFS APXV18-209014 (6) RFS APX16DWV-16DWV-A20 (3) Andrew ATMAA1214 TMAs (6) Ericsson KRY12711/201 TMAs
10-24	157	(18) 1-5/8" (1) 1/2"	Verizon	(3) T-Arms	(4) Decibel DB846F65ZAXY (2) Decibel DB846H80E-SX (6) Antel LPA-185063/12CF (3) Antel BXA-70063/6CF (1) GPS
25-30	148	(12) 1-5/8"	AT&T	(3) T-Arms	(6) Powerwave 7770 (6) Powerwave LGP21401 TMAs (6) Powerwave LGP13519 Diplexers
31-33	137	(6) 1-5/8"	Pocket	Flush	(3) RFS APXV18-206517S-C

¹ Coax installed inside the pole's shaft unless otherwise noted.

Proposed Loading:

Antenna No.	Centerline Elevation (ft)	Coax and Lines	Carrier	Mounts	Description
1-5	127	(3) 5/16" (2) 1/2"	Clearwire	(3) 12' T-Arms	(3) Argus LLPX310R (2) Andrew VHLP2.5-11 Dishes (3) Samsung 2.5Ghz RRR BTSs

RESULTS

Based on information obtained from the original design drawings, the yield strength of steel for individual members was as follows:

Table 2 - Material Strength

Member Type	Yield Strength
Tower Shaft Sections	65 ksi
Base Plate	60 ksi
Anchor Bolts	75 ksi

Table 3 displays the ratio (as a percentage) of actual force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. **Table 4** displays the maximum foundation reactions. **Table 5** displays the maximum antenna rotation (proposed dishes only) at service wind speed.

If the assumptions outlined in this report differ from actual field conditions, FDH Engineering, Inc. should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information.

Table 3 – Summary of Working Percentage of Structural Components

Section No.	Elevation ft	Component Type	Size	% Capacity	Pass Fail
L1	169 - 139	Pole	TP30x24x0.1875	40.5	Pass
L2	139 - 89.25	Pole	TP39.58x28.875x0.25	94.7	Pass
L3	89.25 - 40.75	Pole	TP48.78x38.0795x0.375	88.2	Pass
L4	40.75 - 0	Pole	TP56.18x46.7799x0.4375	87.0	Pass
		Anchor Bolts	(16) 2.25" diam. on 62.75" BC	83.1	Pass
		Base Plate	PL 3" thk. x 61.25" square	57.7	Pass

Table 4 – Maximum Base Reactions

Base Reactions	Current Analysis (ANSI/TIA-222-G)	Original Design (ANSI/TIA-222-G)
Axial	51 k	60 k
Shear	38 k	44 k
Moment	4,352 k-ft	4,977 k-ft

**Table 5 – Maximum Antenna Rotations at Service Wind Speed
(Proposed Antennas Only)**

Centerline Elevation (ft)	Antenna	Tilt (deg)*	Twist (deg)*
127	(2) Andrew VHLP2.5-11	0.9729	0.0005

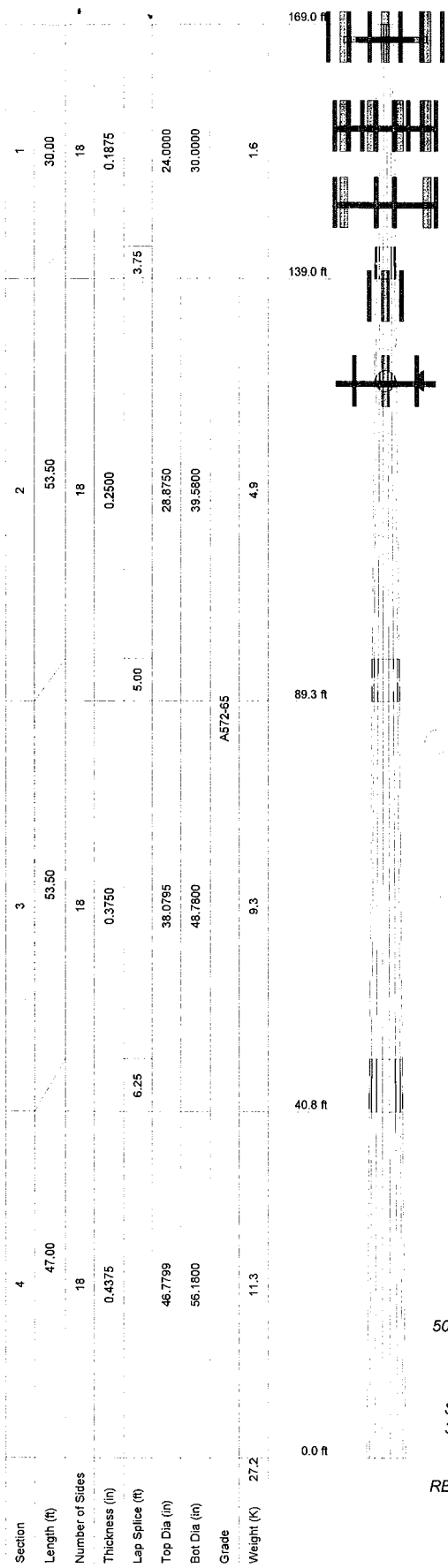
*Allowable tilt and twist values to be reviewed by Clearwire.

GENERAL COMMENTS

This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading information) modeled. If there are substantial modifications to be made or the assumptions made in this analysis are not accurate, FDH Engineering, Inc. should be notified immediately to perform a revised analysis.

LIMITATIONS

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.



DESIGNED APPURTENANCE LOADING

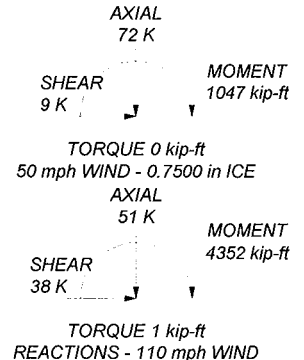
TYPE	ELEVATION	TYPE	ELEVATION
APXV18-209014-C w/ mount pipe (T-Mobile)	167.5	BXA-70063/6CF w/ mount pipe (Verizon)	157
APXV18-209014-C w/ mount pipe (T-Mobile)	167.5	BXA-70063/6CF w/ mount pipe (Verizon)	157
APXV18-209014-C w/ mount pipe (T-Mobile)	167.5	BXA-70063/6CF w/ mount pipe (Verizon)	157
ATMAA1412 TMA (T-Mobile)	167.5	(3) T-Arms (Verizon)	157
ATMAA1412 TMA (T-Mobile)	167.5	GPS (Verizon)	157
ATMAA1412 TMA (T-Mobile)	167.5	(2) 7770.00 w/ mount pipe (ATT)	148
4' T-Arm (T-Mobile)	167.5	(2) 7770.00 w/ mount pipe (ATT)	148
4' T-Arm (T-Mobile)	167.5	(2) 7770.00 w/ mount pipe (ATT)	148
4' T-Arm (T-Mobile)	167.5	(2) LGP 21401 TMA (ATT)	148
(2) APX16DWV-16DWVS-A20 w/ mount pipe (T-Mobile)	167.5	(2) LGP 21401 TMA (ATT)	148
(2) APX16DWV-16DWVS-A20 w/ mount pipe (T-Mobile)	167.5	(2) LGP 21401 TMA (ATT)	148
(2) APX16DWV-16DWVS-A20 w/ mount pipe (T-Mobile)	167.5	(2) LGP 13519 Diplexer (ATT)	148
(2) APX16DWV-16DWVS-A20 w/ mount pipe (T-Mobile)	167.5	(2) LGP 13519 Diplexer (ATT)	148
(2) APX16DWV-16DWVS-A20 w/ mount pipe (T-Mobile)	167.5	(2) LGP 13519 Diplexer (ATT)	148
(2) KRY1271/201 TMA (T-Mobile)	167.5	(3) T-Arms (ATT)	148
(2) KRY1271/201 TMA (T-Mobile)	167.5	APXV18-206517 w/ mount pipe (Pocket)	137
(2) KRY1271/201 TMA (T-Mobile)	167.5	APXV18-206517 w/ mount pipe (Pocket)	137
(2) DB846F65ZAXY w/Mount Pipe (Verizon)	157	APXV18-206517 w/ mount pipe (Pocket)	137
(2) DB846F65ZAXY w/Mount Pipe (Verizon)	157	LLPX310R w/ mount pipe (Clearwire)	127
(2) DB846H80E-SX w/Mount Pipe (Verizon)	157	LLPX310R w/ mount pipe (Clearwire)	127
(2) LPA-185063/12CF w/ mount pipe (Verizon)	157	LLPX310R w/ mount pipe (Clearwire)	127
(2) LPA-185063/12CF w/ mount pipe (Verizon)	157	2.5 Ghz RRH BTS (Clearwire)	127
(2) LPA-185063/12CF w/ mount pipe (Verizon)	157	2.5 Ghz RRH BTS (Clearwire)	127
(2) LPA-185063/12CF w/ mount pipe (Verizon)	157	2.5 Ghz RRH BTS (Clearwire)	127
(2) LPA-185063/12CF w/ mount pipe (Verizon)	157	(3) 12' T-Arms (Clearwire)	127
		VHLP2.5-11 (Clearwire)	127
		VHLP2.5-11 (Clearwire)	127

MATERIAL STRENGTH

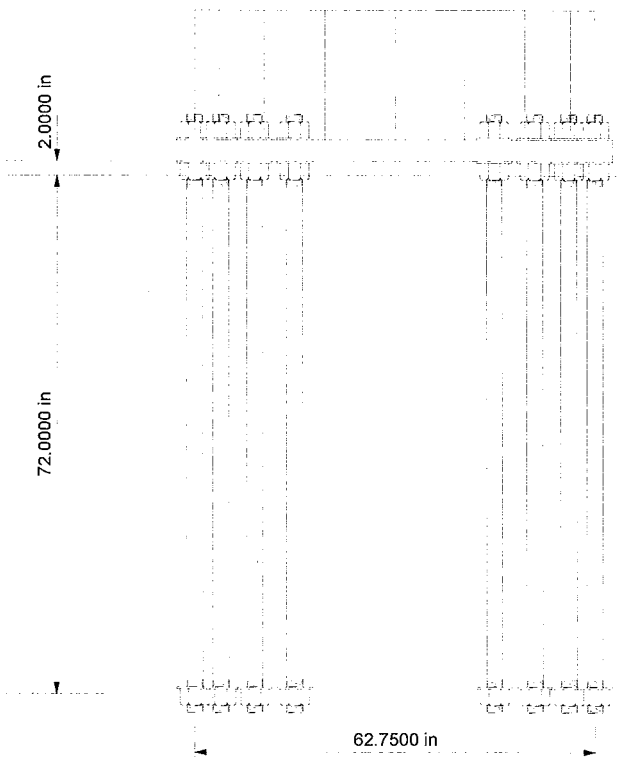
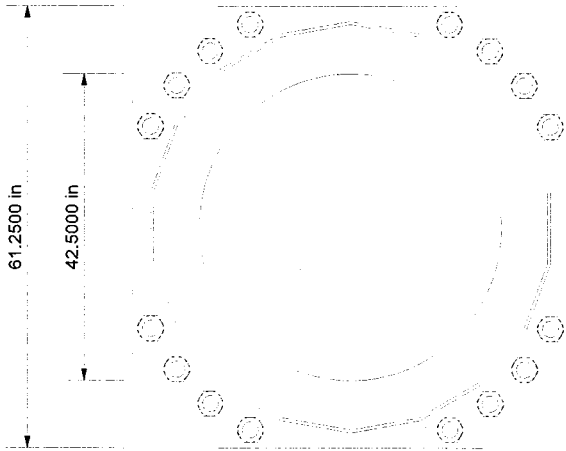
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 110 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. TOWER RATING: 94.7%




<p>FDH Engineering, Inc. 2730 Rowland Road Raleigh, NC 27615 Tower Analysis Phone: 919-755-1012 FAX: 919-755-1031</p>	<p>Job: Woodbridge, CT13071-A</p>
	<p>Project: 09-03182E S2</p>
	<p>Client: SBA Drawn by: TTS App'd:</p>
	<p>Code: TIA-222-G Date: 09/23/09 Scale: NTS</p>
	<p>Path: E-1</p>



FOUNDATION NOTES

1. Plate thickness is 3.0000 in.
2. Plate grade is A633-60.
3. Anchor bolt grade is A615-75.
4. f_c is 4 ksi.

 FDH <small>ENGINEERING</small> Tower Analysis	FDH Engineering, Inc. 2730 Rowland Road Raleigh, NC 27615 Phone: 919-755-1012 FAX: 919-755-1031	Job: Woodbridge, CT13071-A Project: 09-03182E S2 Client: SBA Code: TIA-222-G Path:	Drawn by: TTS Date: 09/23/09 App'd: Scale: NTS Dwg No: F-1
	<small>\\G:\projects\0909\Projects\09-03182E\Woodbridge_CT13071-A_Chester\Drawings\Woodbridge_CT13071-A</small>		
	<small>09-03182E S2</small>		
	<small>09-03182E S2</small>		



To: Connecticut Siting Council
From: Mark Brauer – Radio Frequency Engineer
Cc: Cameron Syme
Subject: Power Density Report for CT-NHN0065
Date: October 13, 2009

1. Introduction:

This report is the result of Electromagnetic Field Intensities (EMF – Power Densities) study for the Clearwire broadband antenna installation on a monopole tower at 1 Deerfield Lane, Ansonia, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location:

2: Discussion:

The following assumptions were used in the calculations:

- 1) The emissions from Clearwire transmitters are in the (2496 – 2960) Frequency Band
- 2) The emissions from the Clearwire Microwave dishes are in the 11 GHz Frequency Band
- 3) The model number for Clearwire Antenna is Argus LLPX310R
- 4) The model number for the Microwave dish is Andrew VHLP2-23 with 24” Diameter.
- 5) The Clearwire Panel antenna centerline is 127 feet.
- 6) The Clearwire Microwave dish centerline is 127 feet.
- 7) The Maximum Transmit power from any Clearwire panel antenna is 251 Watts Effective Isotropic Radiated Power (EiRP) assuming 2 channels per sector.
- 8) The Maximum Transmit power from any Clearwire Microwave Dish is 346 Watts Effective Isotropic Radiated Power (EiRP) assuming 1 channel per dish.
- 9) All antennas are simultaneously transmitting and receiving 24 hours per day.
- 10) The average ground level of the studied area does not change significantly with respect to the transmitting location.

Equations given in “FCC OET Bulletin 65, Edition 97-01” were used with the above information to perform the calculations.

3: Conclusion:

Based on the above worst case assumptions, the power density calculation from the Clearwire antenna installation on a Self Support Tower at 1 Deerfield Lane, Ansonia, CT is 0.000003 mW/cm^2 . This value represents 0.000319% of the Maximum Permissible Exposure (MPE) standard of 1 milliwatt per square centimeter (mW/cm^2) set forth in the FCC/ANSI/IEEE C95-1-1991. Furthermore, the proposed antenna location for Clearwire will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.

The combined Power Density from all other carriers is 18.63 %. The combined Power Density for this site is 18.64% of the M.P.E. standard.