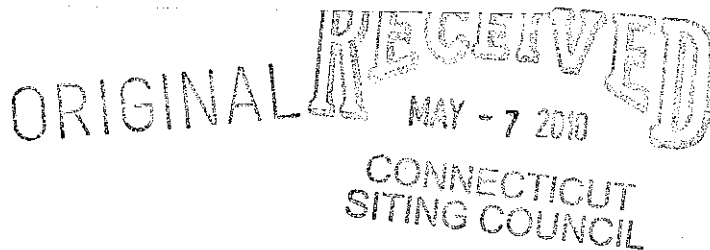


May 6, 2010

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



Re: Notice of Exempt Modification
Clearwire Corporation Notice to make an Exempt Modification to an Existing Facility at 201 Main Street, Cromwell, CT
Clearwire Site Number CT-HFD0132

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 Cromwell, CT. of Clearwire's intent to make an exempt modification to an existing monopole tower (tower) located at 210 Main Street, Cromwell, CT. Specifically, Clearwire plans to add three (3) antennas to the tower, one (1) per sector and to add three (3) microwave dishes, one (1) per sector for backhaul at the 125' 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 Town First Selectman John Flanders of the Town of Cromwell, 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, three (3) dishes and to install additional WiMAX related electronic equipment at the base of the tower.

The tower is a 125' monopole located at 201 Main Street, Cromwell, Connecticut (Latitude 41 35 00.1 N Longitude 72 38 59.4 W). The tower is owned by Crown Castle USA.. Currently, Verizon, AT&T, Nextel, Cingular and Pocket 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 three (3) microwave dishes, one (1) above each of those antennas. The center line for the microwave dishes will be 125'. 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

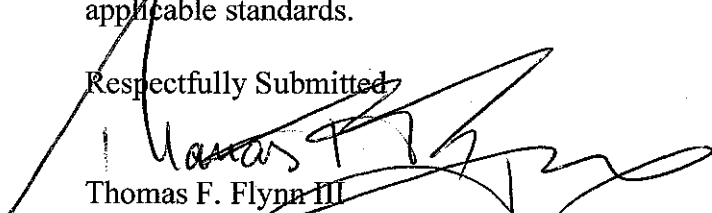
can support these changes, Clearwire commissioned Crown Castle to perform a structural analysis of the tower and the proposed changes. According to that structural dated March 8, 2010 and attached hereto, the structure is sufficient to support the proposed loading and will not need to be modified. The tower, with the additions and the modifications will be at less than 99.5% 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 .36% of the NCRP's standard for maximum permissible exposure. The cumulative power density analysis indicates that all the antennas on the structure will emit 43.71% 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.

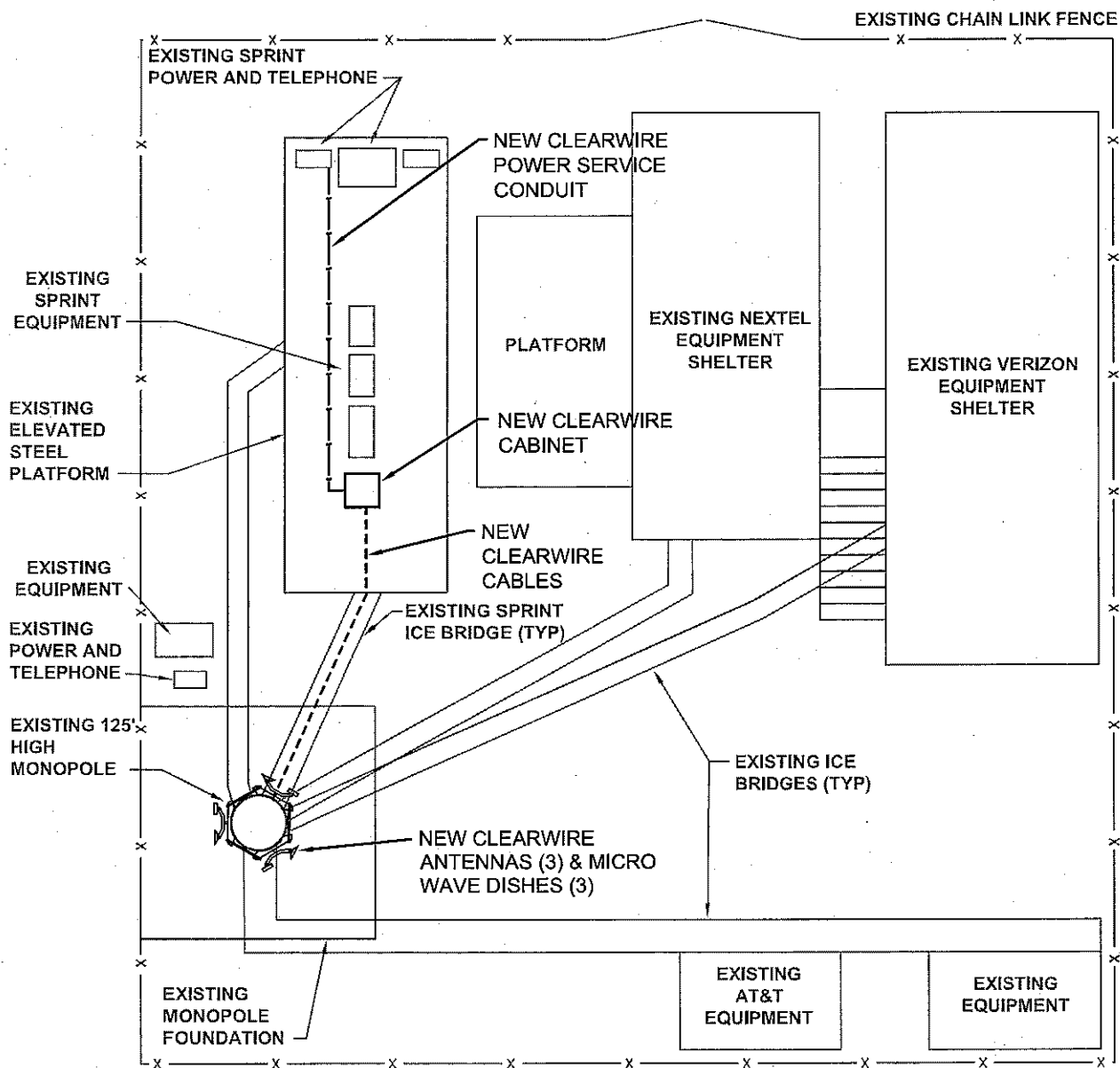
In conclusion, Clearwire's proposed plan to add three (3) WiMAX antennas, three (3) microwave dishes and the associated base station equipment does not constitute a modification subject to the Council's jurisdiction because Clearwire will not increase the height of the tower, will not extend the boundaries 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: First Selectman John M. Flanders
Town of Cromwell

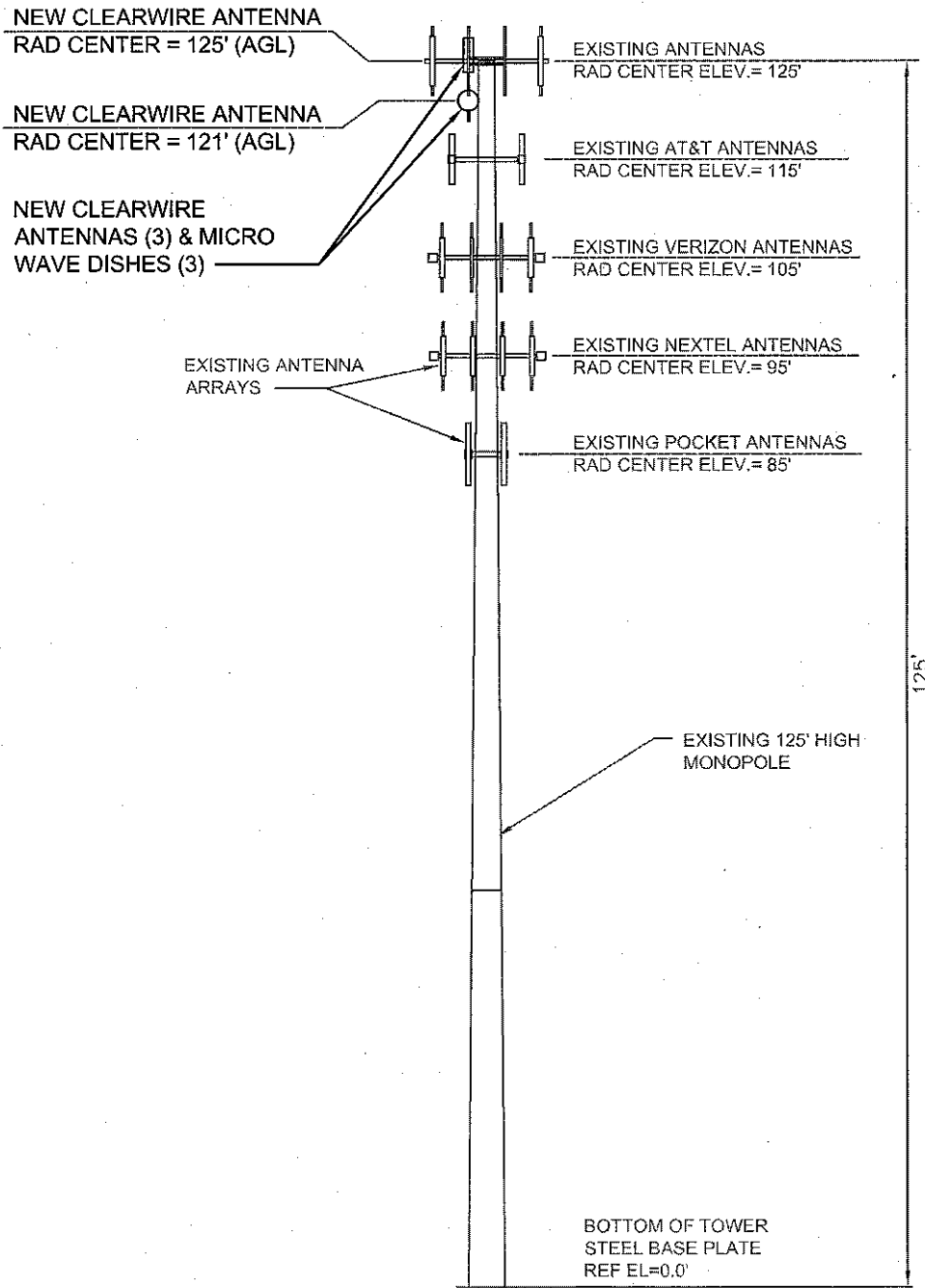


SITE PLAN

SCALE: NTS

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

 ENGINEERS / SURVEYORS / PLANNERS	<div>clearw're® CLEAR WIRELESS, LLC</div> <div>4400 CARILLION POINT KIRKLAND, WA 98033</div>	PROJECT LOCATION: CROMWELL CT-HFD0132A 201 MAIN STREET CROMWELL, CT	SITE TYPE: MONOPOLE CO-LOCATION	DB PROJ. #: 09-083.21
		APPROVED BY:	PROJECT MANAGER: PB	DRAWN BY: SEP
			DATE: 2/23/2010	REVISION: 1
		L1		



TOWER ELEVATION

SCALE: NTS

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



clearw're®
CLEAR WIRELESS, LLC
4400 CARILLION POINT
KIRKLAND, WA 98033

PROJECT LOCATION:
**CROMWELL
CT-HFD0132A**
201 MAIN STREET
CROMWELL, CT
APPROVED BY:

SITE TYPE:
**MONOPOLE
CO-LOCATION**
PROJECT MANAGER:
PB
DATE:
2/23/2010
DRAWN BY:
SEP
REVISION:
1

DB PROJ. #:
09-083.21

L2

Date: March 08, 2010

Eva Morales
Crown Castle
46 Broadway
Albany, NY 12204



Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
724-416-2000

Subject: Structural Analysis Report

Carrier Designation:

Clearwire Corp Co-Locate

Carrier Site Number:

CT23XC558

Carrier Site Name:

N/A

Crown Castle Designation:

Crown Castle BU Number:

876364

Crown Castle Site Name: CROMWELL / FIRST LINE EMERGENC

Crown Castle JDE Job Number:

131369

Crown Castle Work Order Number:

320820

Engineering Firm Designation:

Crown Castle Project Number:

320820

Site Data:

201 Main St., CROMWELL, Middlesex County, CT

Latitude 41° 35' 0.11", Longitude -72° 38' 59.14"

124.771 Foot - Monopole Tower

Dear Eva Morales,

Crown Castle is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above mentioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 320820, in accordance with application 87987, revision 1.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Existing + Reserved + Proposed Equipment

Sufficient Capacity

Note: See Table I and Table II for the proposed and existing/reserved loading, respectively.

The analysis has been performed in accordance with the TIA/EIA-222-F standard and local code requirements based upon a wind speed of 85 mph fastest mile.

All equipment proposed in this report shall be installed in accordance with the attached drawings for the determined available structural capacity to be effective.

We at Crown Castle appreciate the opportunity of providing our continuing professional services to you and Crown Castle USA Inc. If you have any questions or need further assistance on this or any other projects please give us a call.

Structural analysis prepared by: Jeffrey Fesko, E.I.T./JCM

Respectfully submitted by:

Douglas K. Pineo

Douglas K. Pineo, P.E.
Manager Structural Design



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1) INTRODUCTION

This tower is a 124.771 ft Monopole tower designed by ENGINEERED ENDEAVORS, INC. in February of 2002. The tower was originally designed for a wind speed of 90 mph per TIA/EIA-222-F. Modifications were designed by Semaan Engineering in December of 2004 and by Vertical Structures Inc. in October of 2007.

2) ANALYSIS CRITERIA

The structural analysis was performed for this tower in accordance with the requirements of TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures using a fastest mile wind speed of 85 mph with no ice, 37.6 mph with 0.75 inch ice thickness and 50 mph under service loads.

Table 1 - Proposed Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
125	127	2	andrew	VHLP2.5-11	6	5/16	-
		2	dragonwave	HORIZON COMPACT			1
		3	kathrein	840 10054 w/ Mount Pipe			-
		1	motorola	TIMING 2000	3	1/2	-
		3	samsung telecommunications	WIMAX DAP HEAD			1

Notes:

1) TMA's to be installed behind antennas

Table 2 - Existing and Reserved Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
125	127	6	decibel	DB980H90A-M w/ Mount Pipe	6	1-5/8	1
	125	1	tower mounts	Platform Mount [LP 712-1]			
115	115	3	powerwave technologies	7770.00 w/ Mount Pipe	6	1-1/4	1
		6	powerwave technologies	LGP21401			
		1	tower mounts	Pipe Mount [PM 501-3]			
105	105	2	adc	DUAL BAND 800/1900 FULL BAND MASTHEAD	-	-	2
		4	andrew	DB846F65ZAXY w/ Mount Pipe			
		2	decibel	DB844G65ZAXY w/ Mount Pipe			
		6	decibel	DB844H90 w/ Mount Pipe	6	1-5/8	3
		6	decibel	DB948F85T2E-M w/ Mount Pipe	6	1-5/8	1
		1	tower mounts	Platform Mount [LP 712-1]			
95	95	12	decibel	DB844H65E-XY w/ Mount Pipe	12	1-5/8	1
		1	tower mounts	Platform Mount [LP 304-1]			

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
85	85	3	kathrein	742 213 w/ Mount Pipe	6	1-5/8	1
		1	tower mounts	Pipe Mount [PM 501-3]			

Notes:

- 1) Existing Equipment
- 2) Reserved Equipment
- 3) Equipment to be Removed; Coax to be Reused

Table 3 - Design Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
125	125	6	decibel	DB980H65	-	-
		3	decibel	DB980H90		
115	115	6	allgon	7250	-	-
105	105	12	decibel	DB844	-	-

3) ANALYSIS PROCEDURE

Table 4 - Documents Provided

Document	Remarks	Reference	Source
4-GEOTECHNICAL REPORTS	Dr. Clarence Welty, P.E.	1532312	CCISITES
4-POST-MODIFICATION INSPECTION	Vertical Structures	1956332	CCISITES
4-POST-MODIFICATION INSPECTION	Vertical Structures	2182292	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	EEI	1613909	CCISITES
4-TOWER MANUFACTURER DRAWINGS	EEI	2068958	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	Semaan	2055765	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	Vertical Structures	2296089	CCISITES

3.1) Analysis Method

RISATower (version 5.4.1.3), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

- 1) Tower and structures were built in accordance with the manufacturer's specifications.
- 2) The tower and structures have been maintained in accordance with the manufacturer's specification.
- 3) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

- 4) When applicable, transmission cables are considered as structural components for calculating wind loads as allowed by TIA/EIA-222-F.

This analysis may be affected if any assumptions are not valid or have been made in error. Crown Castle should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 5 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P _{allow} (K)	% Capacity	Pass / Fail
L1	124.771 - 84.9115	Pole	TP27.0855x18.5x0.1875	1	-6.84	806.30	67.5	Pass
L2	84.9115 - 40.3411	Pole	TP36.1854x25.8736x0.25	2	-12.80	1438.29	99.5	Pass
L3	40.3411 - 0	Pole	TP44.25x34.6164x0.3125	3	-21.54	2265.62	93.8	Pass
							Summary	
						Pole (L2)	99.5	Pass
						Rating =	99.5	Pass

Table 6 - Tower Component Stresses vs. Capacity – LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	72.7	Pass
1	Base Plate	0	71.3	Pass
1	Base Foundation	0	94.1	Pass

Structure Rating (max from all components) =	99.5%
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Notes:

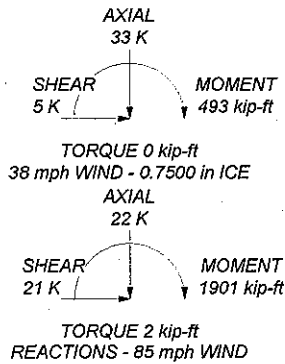
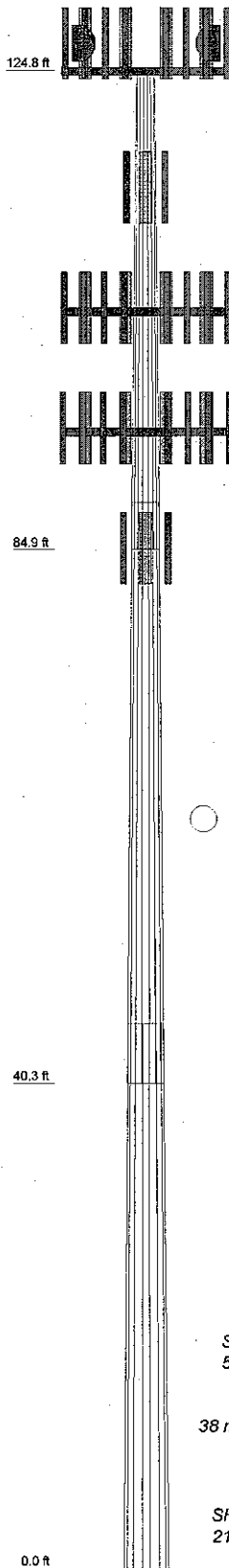
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the existing, reserved, and proposed loads. No modifications are required at this time.

APPENDIX A
RISA TOWER OUTPUT

Section	1	2	3
Length (ft)	39.86	48.46	45.36
Number of Sides	18	18	18
Thickness (in)	0.1875	0.2500	0.3125
Socket Length (ft)	3.89	5.02	
Top Dia (in)	18.5000	25.8735	34.6164
Bot Dia (in)	27.0855	36.1854	44.2500
Grade		A572-55	
Weight (K)	1.8	4.0	6.0



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) DB980H90A-M w/ Mount Pipe	125	7770.00 w/ Mount Pipe	115
840 10054 w/ Mount Pipe	125	(2) LGP21401	115
TIMING 2000	125	(2) DB948F85T2E-M w/ Mount Pipe	105
WIMAX DAP HEAD	125	(2) DB844G65ZAXY w/ Mount Pipe	105
(2) DB980H90A-M w/ Mount Pipe	125	(2) DB948F85T2E-M w/ Mount Pipe	105
840 10054 w/ Mount Pipe	125	(2) DUAL BAND 800/1900 FULL BAND MASTHEAD	105
HORIZON COMPACT	125	(2) DB846F65ZAXY w/ Mount Pipe	105
WIMAX DAP HEAD	125	Platform Mount [LP 712-1]	105
(2) DB980H90A-M w/ Mount Pipe	125	(2) DB948F85T2E-M w/ Mount Pipe	105
HORIZON COMPACT	125	(2) DB846F65ZAXY w/ Mount Pipe	105
840 10054 w/ Mount Pipe	125	(4) DB844H65E-XY w/ Mount Pipe	95
WIMAX DAP HEAD	125	Platform Mount [LP 304-1]	95
Platform Mount [LP 712-1]	125	(4) DB844H65E-XY w/ Mount Pipe	95
VHLP2.5-11	125	(4) DB844H65E-XY w/ Mount Pipe	95
VHLP2.5-11	125	742 213 w/ Mount Pipe	85
7770.00 w/ Mount Pipe	115	Pipe Mount [PM 501-3]	85
(2) LGP21401	115	742 213 w/ Mount Pipe	85
7770.00 w/ Mount Pipe	115	742 213 w/ Mount Pipe	85
(2) LGP21401	115		
Pipe Mount [PM 501-3]	115		

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in Middlesex 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 38 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 99.5%



Crown Castle
 2000 Corporate Drive
 Canonsburg, PA 15317
 Phone: 724-416-2000
 FAX:

Job: **876364**

Project:	Client: Crown Castle	Drawn by: JFesko	App'd:
Code: TIA/EIA-222-F	Date: 03/05/10	Scale: NTS	
Path: R:\GA Models - Letters\Work Area\JFesko\876364\1.C7\876364.dwg	Dwg No. E-1		



To: Maxton
From: Frantz Pierre – Radio Frequency Engineer
Cc: Micah Hawthorne
Subject: Power Density Report for CT-HFD0132
Date: April 21, 2010

1. Introduction:

This report is the result of Electromagnetic Field Intensities (EMF – Power Densities) study for the Clearwire broadband antenna installation on a Steele Monopole at 201 Main Street, Cromwell, CT, 06416. 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 VHLP2.5 with 30" Diameter.
- 5) The Clearwire Panel antenna centerline is 125 feet.
- 6) The Clearwire Microwave dish centerline is 121 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 Steele Monopole at 201 Main Street, Cromwell, CT, 06416 is 0.003637 mW/cm^2 . This value represents 0.36% 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 43.35 %. The combined Power Density for this site is 43.71% of the M.P.E. standard.