



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

May 15, 2018

Anne Marie Zsamba, Esq. Real Estate Specialist Crown Castle 3 Corporate Park Drive, Suite 101 Clifton Park, NY 12065

RE: **EM-SPRINT-020-180502** - Sprint notice of intent to modify an existing telecommunications facility located at 12 Nepaug Road, Burlington, Connecticut.

Dear Attorney Zsamba:

The Connecticut Siting Council (Council) is in receipt of your correspondence of May 11, 2018 submitted in response to the Council's May 9, 2018 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission of the proof of notification to the underlying property owner partially satisfies the Council's request. You also provided a Mount Analysis Report dated January 23, 2018 with a recommendation that a standoff arm reinforcement kit be installed prior to installing the proposed equipment. The Structural Analysis Report dated January 12, 2018 provided with the exempt modification request does not account for the reinforcement kit. In the Council's May 9, 2018 letter the Council requested an Updated Structural Analysis Report which references a reinforcement kit. I have considered your suggestion to provide a Structural Opinion Letter; however, this does not fully address the final percentage of load on the capacity of the structure and foundation. The Council recommends that Crown Castle provide a full updated Structural Analysis Report for the proposed loading including the reinforcement kit that includes, but is not limited to, the Analysis Results section and final percentage of load on the capacity of the structure and foundation by June 14, 2018. If additional time is needed to gather the requested information, please submit a written request for an extension of time prior to June 14, 2018.

This second notice of incompletion shall have the effect of tolling the Federal Communications Commission (FCC) 60-day timeframe in accordance with Paragraph 217 of the FCC Wireless Infrastructure Report and Order issued on October 21, 2014 (FCC 14-153).

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 860-827-2951.

Sincerely,

Melanie A. Bachman Executive Director

MB/FOC/laf

c: The Honorable Theodore C. Shafer, First Selectman, Town of Burlington Abby Conroy, Zoning Enforcement Officer, Town of Burlington Audrey and Herbert Weaver Estate C/O Melinda Belcher, property owner **From:** Zsamba, Anne Marie (Contractor)

[mailto:AnneMarie.Zsamba.Contractor@crowncastle.com]

Sent: Friday, May 11, 2018 10:02 AM

To: Fontaine, Lisa **Cc:** Barbadora, Jeff

Subject: RE: Council Incomplete Letter for EM-SPRINT-020-180502 Nepaug Road

Please see the attached correspondence. Thank you.

ANNE MARIE ZSAMBA

Real Estate Specialist T: (201) 236-9224 | M: (518) 350-3639

CROWN CASTLE

3 Corporate Park Drive, Suite 101, Clifton Park, NY 12065 CrownCastle.com





May 11, 2018

Melanie A. Bachman Acting Executive Director Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: Response to Notice of Incomplete Filing

Notice of Exempt Modification for Sprint Crown Site BU: 845993

Sprint Site ID: CT54XC708

12 Nepaug Road, Burlington, Hartford County, CT 06013

Latitude: 41° 46′ 56.86"/ Longitude: -72° 59′ 22.68"

Dear Ms. Bachman:

I am in receipt of your letter dated May 9, 2018 wherein you provided notice to Crown Castle of deficiencies in our filing for Sprint's intended exempt modification.

I have updated our records to reflect that the current property owner is the Audrey and Herbert Weaver Estate C/O Melinda Belcher. Service was effectuated upon the estate to Ms. Belcher at 35 Bear Run, Woodbury, CT 06798. Fedex delivery notification attached hereto as proof of service. Please advise if this is sufficient to rectify the previously noted deficiency.

With regard to The Council's recommendation that Crown Castle provide an Updated Structural Analysis Report to reflect the inclusion of the mount reinforcement kit, I have attached hereto a Mount Structural Analysis Report dated January 23, 2018 stamped and signed by Joseph R. Johnston, P.E. This Mount Structural Analysis Report provides on page four, section 4.1) Recommendations, that the existing mount will be sufficient to support the existing and proposed loading so long as installation of (1) Site Pro 1 PRK-1245 Standoff Arm Reinforcement Kit occurs on the existing platform prior to installation of the proposed equipment. Given that this report specifically accounts for the reinforcement kit it is our hope that our filing will now be considered complete.

If The Council finds that the Mount Structural Analysis Report is not sufficient to meet the needs of The Council, Crown Caste respectfully suggests that the combination of the existing Mount Structural Analysis Report and a Structural Opinion Letter signed and stamped by a professional engineer duly licensed in the State of Connecticut will meet the needs of The Council as the reinforcement kit would be reflected within said Letter. An example Structural Opinion Letter has been provided to exemplify to The Council the contents of same.

Please advise as to The Council's position on the attachments provided, as well as, the recommendation above.

The Foundation for a Wireless World.

CrownCastle.com

Melanie A. Bachman May 10, 2018 Page 2

I appreciate your time and attention to this matter. Should you have any questions, please feel free to contact me at 518-350-3639.

Sincerely,

Anne Marie Zsamba, Esq.

Real Estate Specialist

3 Corporate Park Drive, Suite 101, Clifton Park, NY 12065

(518) 350-3639

annemarie.zsamba.contractor@crowncastle.com

Attachments:

Fedex Delivery Notification for Melinda Belcher Mount Structural Analysis Report dated January 23, 2018 Example Structural Opinion Letter

cc: Mr. Theodore Shafer, First-Selectman

Town of Burlington 200 Spielman Highway Burlington, CT 06013 (860) 673-6789 ext.1

Ms. Abby Conroy Zoning Enforcement Officer Town of Burlington 200 Spielman Highway Burlington, CT 06013 (860) 673-6789 ext.6

Audrey and Herbert Weaver Estate C/O Melinda Belcher 35 Bear Run Woodbury, CT 06798

Zsamba, Anne Marie (Contractor)

From:

Sent:

To: Subject: TrackingUpdates@fedex.com

Friday, May 11, 2018 9:54 AM Zsamba, Anne Marie (Contractor)

FedEx Shipment 772199744130 Delivered

Your package has been delivered

Tracking # <u>772199744130</u>

Ship date:

Thu, 5/10/2018

Rebecca Alescio

Crown Castle

Clifton Park, NY 12065

US



Delivery date:

Fri, 5/11/2018 9:49 am

C/O Melinda Belcher

Audrey & Herbert Weaver

Estate

35 Bear Run

WOODBURY, CT 06798

US

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:

772199744130

Status:

Delivered: 05/11/2018 09:49

AM Signed for By: Signature

not required

Invoice number:

982896

Reference:

1766.668

Signed for by:

Signature not required

-

Delivery location:

Woodbury, CT

Delivered to:

Residence

Service type:

FedEx Priority Overnight

Packaging type:

FedEx Pak

Number of pieces:

1

Weight:

1.00 lb.

Special handling/Services:

Deliver Weekday

Residential Delivery

Standard transit:

5/11/2018 by 10:30 am



Date: January 23, 2018

Dashanna Hanlon

Crown Castle Real Estate Project Coordinator 12 Gill Street, Suite 5800 Woburn, MA 01801

FROM ZERO TO INFINIGY the solutions are endless Infinigy Engineering, PLLC 1033 Watervliet Shaker Road Albany, NY 12205 518-690-0790 structural@infiniay.com

Subject:

Mount Structural Analysis

Carrier Designation:

Sprint PCS Co-Locate Carrier Site Number:

CT54XC708

Carrier Site Name:

Burlington-Nepaug Road

Crown Castle Designation:

Crown Castle BU Number:

845993

Crown Castle Site Name:

Burlington-Nepaug Road

Crown Castle JDE Job Number:

474268 418450, Rev. 0

Crown Castle Application Number:

Engineering Frim Designation:

Infinigy Report Designation:

526-103

Site Data:

12 Nepaug Road, Burlington, Hartford County, CT 06013

Latitude 41'46'66.86" Longitude -72°59'22.68"

Structure Information:

Tower Height & Type: 119.5 Foot Monopole

Mount Elevation:

110 ft

Mount Type:

18 Foot Platform Mount

Dear Corrie Bass,

Infinigy Engineering, PLLC is pleased to submit this "Mount Structural Analysis Report" to determine the structural integrity of Sprint's antenna mounting system with the proposed appurtenance and equipment addition on the abovementioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tieoff point for fall protection or rigging is not part of this document.

Based upon our analysis, we have determined the adequacy of the antenna mounting system that will support the existing and proposed loading to be:

Platform Mount

Conditionally Sufficient

*Sufficient upon completion of the changes listed in the 'Recommendations' section of this report.

This analysis has been performed in accordance with the 2016 Connecticut State Building Code and the Infinigy Engineering, PLLC wind speed requirement of a 92 mph nominal 3-second gust wind. Exposure Category C and Risk Category II were used in this analysis.

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

Mount structural analysis prepared by: PKY

Respectfully Submitted by:

Joseph R. Johnston, P.E. VP Structural Engineering / Principal



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1) INTRODUCTION

The mount consists of a 18 Foot Platform Mount at the 110 ft elevation. The existing and proposed antenna loading was obtained from the Application provided by CCI, Application Number 418450, Revision 0.

2) ANALYSIS CRITERIA

The structural analysis was performed in accordance with the requirements of TIA 222-G Structural Standards for Steel Antenna Towers and Antenna Supporting Structures using a 3-second wind gust wind speed of 92 mph with no ice, 40 mph with 1 inch escalated ice thickness, Exposure Category C and Topographic Category 1. In addition, the 18 Foot platform mount been analyzed for a load combination consisting of a 500-pound man live load using a 3-second wind gustwind speed of 30 mph.

Table 1 - Proposed Equipment Loading Information

Mount Centerline (ft)		Number of Antennas	Antenna Manufacturer	Antenna Model	Proposed Mount Type	Note	
110.0	110.0 3 Alcatel Luce	3	3	KMW Communications	ETCR-654L12H6		•
		3	Alcatel Lucent	PCS 1900MHZ 4X45W- 65MHZ	-	1	
		Alcatel Lucent	RRH2X50-800				
		3	Alcatel Lucent	TD-RRH8X20-25			

Notes:

- Proposed Equipment
 - **Existing Mount to Remain**

Table 2 - Existing and Reserved Antenna and Cable Information

Mount Centerline (ft)		Number of Antennas	Antenna Manufacturer	Antenna Model	Existing Mount Type	Note
110.0	-	-	-	-	Platform mount	1

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Crown Application	Sprint Application	418450	CCI Sites
Construction Drawings		-	

Existing Equipment to Remain

3.1) Analysis Method

RISA-3D (Version 16.0.1), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

Infinigy Mount Analysis Tool 3.0.2, a tool internally developed by Infinigy, was used to calculate member loading for various load cases. Selected output from the analysis is included in Appendix B.

3.2) Assumptions

1) The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design and manufacturer's specifications.

2) The configuration of antennas, mounts, and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

3) All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

4) Steel grades have been assumed as follows:

Channel, Solid Round, Angle, Plate

HSS (Rectangular)

Pipe

Connection Bolts

ASTM A36 (GR 36)

ASTM A53 (GR B-35) ASTM A53 (GR 35)

ASTM A325

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 antenna mounting system.

4) ANALYSIS RESULTS

Table 4 - Mount Component Stresses vs. Capacity (Platform Mount, All Sectors)

Notes	Component	Mount Centerline (ft)	% Capacity	Pass / Fail
	Standoff Arm		61.8	Pass
1,2	Face Horizontal	110.0	54.1	Pass
	Mount Pipe	1	56.1	Pass

Structure Rating (max from all components) =	61.8%

Notes:

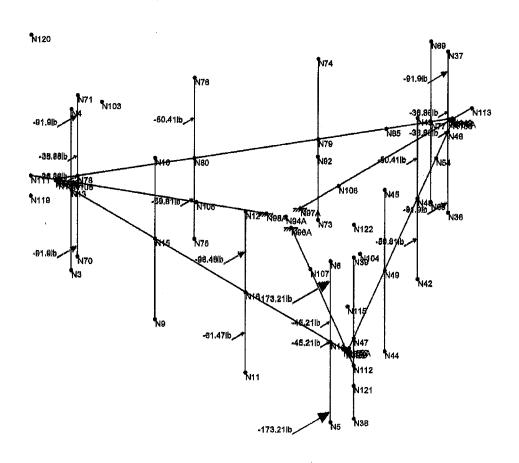
- See additional documentation in "Appendix C Analysis Output" for calculations supporting the % capacity consumed.
- 2) All sectors are typical

4.1) Recommendations

1) Install (1) Site Pro 1 PRK-1245 Standoff Arm Reinforcement Kit on the existing platform prior to the installation of the proposed equipment.

APPENDIX A WIRE FRAME AND RENDERED MODELS

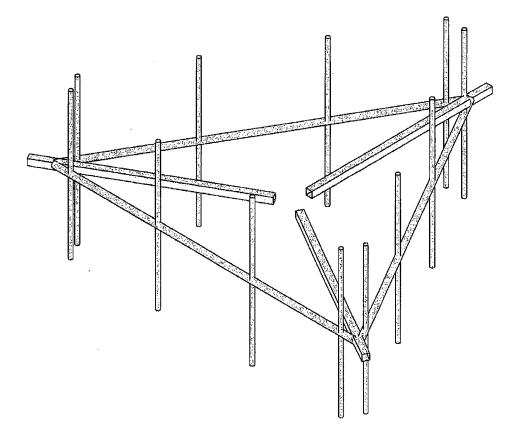




Loads: BLC 2, Wind Load AZI 000 Envelope Only Solution

Infinigy Engineering, PLLC.		Wire Frame and Loads
pky	CT54XC708	Jan 19, 2018 at 1:05 AM
526-103		Chenoa PCS .r3d



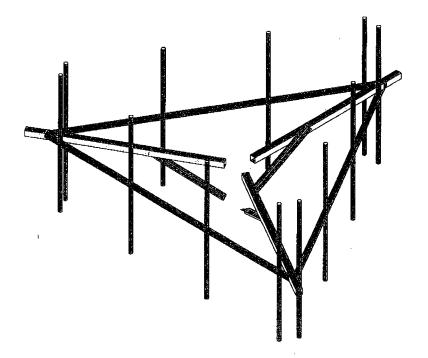


Envelope Only Solution

Infinigy Engineering, PLLC.		Existing Configuration
pky	CT54XC708	Jan 19, 2018 at 1:49 AM
526-103		Chenoa PCS .r3d

Install (1) Site Pro 1 PRK-1245 Standoff Arm Reinforcement Kit on the existing platform Envelope Only Solution Infinigy Engineering, PLLC. **Proposed Configuration** pky CT54XC708 Jan 23, 2018 at 11:46 AM 526-103 CT54XC708.r3d





Envelope Only Solution

Infinigy Engineering, F	LLC.
pky	
526-103	

CT54XC708

Final Configuration		
Jan 23, 2018 at 11:48 AM		
CTE4VC700 +24		

APPENDIX B SOFTWARE INPUT CALCULATIONS

Site Name:	CT54XC708
Client:	CCI
Carrier:	Sprint
Engineer:	PKY
Date:	1/23/2018



INFINIGY WIND LOAD CALCULATOR 3.0.2

Site Information Inputs:

Adopted Bullding Code:

Structure Load Standard:

Antenna Load Standard:

Structure Risk Category:

Structure Type:

Number of Sectors:

Structure Shape 1:

Flat

Rooftop Wind Speed-Up?: No

Wind Loading Inputs:

Design Wind Velocity:

Wind Centerline 1 (z₁):

Side Face Angle (θ):

Exposure Category:

Topographic Category:

1 mph (nominal 3-second gust) ft degrees

Wind with No Ice			
q _z (psf) Gh F _{ST} (psf)			
26.58	1.00	53.16	

Wind with Ice				
q _z (psf) Gh F _{ST} (psf)				
5.02	1.00	15.63		

ice Loading Inputs:

1.00

Is Ice Loading Needed?:

Ice Wind Velocity:

Base Ice Thickness:

mph (nominal 3-second gust)

Appurtenance Name	Elevation (ft)	Total Quantity	Ка	Front Shape	Side Shape	q, (psf)	EPA (ft²)	Fz (lbs)	Fx (lbs)	Fz(60) (lbs)	Fx(30) (lbs)
KMW Communications ETCR= 654L12H6	110.0	3	1.00	Flat	Flat	26.58	13.03	346.43	129.58	183.79	292.21
Alcatel Lucent PCS 1900MHZ 4X45W- 65MHZ	110.0	3	1.00	Flat	Flat	26.58	2.31	61,47	59.25	59.81	60.91
Alcatel Lucent RRH2X50-800	110.0	3	1,00	Flat	Flat	26.58	1.70	45.21	34.08	36.86	42.43
Alcatel Lucent RRH2X50-800	110.0	3	1.00	Flat	Flat	26.58	1.70	45.21	34.08	36.86	42.43
Afcatel Lucent TD-RRH8X20-25	110.0	3	1.00	Flat	Flat	26.58	3.70	98.46	34.39	50.41	82.44
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APPENDIX C SOFTWARE ANALYSIS OUTPUT



Company

: Infinigy Engineering, PLLC.

Designer Job Number : pky : 526-103 Model Name : CT54XC708 Jan 23, 2018 11:45 AM Checked By:_

Member Primary Data

	Label	l Joint	J Joint	K Joint	Rotate (deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N131A	N135			3" Sched 40 Pi	Beam		A53 Gr. B	Typical
2	MP1	N5	N6			2" Sched 40 Pi	Beam		A53 Gr. B	Typical
3	MP3	N9	N10			2' Sched 40 Pi	Beam		A53 Gr. B	Typical
4	MP2	N11	N12			2" Sched 40 Pi	Beam		A53 Gr. B	Typical
5	M13	N154	N150			3" Sched 40 Pi	Beam		A53 Gr. B	Typical
6	MP9	N36	N37			2" Sched 40 Pi	Beam	Pipe	A53 Gr. B	Typical
7	MP12	N38	N39			2" Sched 40 Pi	Beam		A53 Gr. B	Typical
_8	MP10	N42	N43			2" Sched 40 Pi	Beam		A53 Gr. B	Typical
_ 9	MP11	N44	N45			2" Sched 40 Pi	Beam		A53 Gr. B	Typical
10	M25	N142	N146			3" Sched 40 Pi	Beam		A53 Gr. B	Typical
11	MP8	N68	N69			2" Sched 40 Pi	Beam		A53 Gr. B	Typical
12	MP5	N70	N71			2" Sched 40 Pl	Beam		A53 Gr. B	Typical
13	MP7	N73	N74			2" Sched 40 Pl	Beam		A53 Gr. B	Typical
14	MP6	N75	N76			2" Sched 40 Pl	Beam		A53 Gr. B	Typical
15	M46	N111	N98A			Tube Steel	Beam	SquareTube		Typical
16	M47	N113	N97A			Tube Steel	Beam	SquareTube	A53 Gr. B	Typical
17	M48	N112	N96A			Tube Steel	Beam	SquareTube	A53 Gr. B	Typical
18	M50	N133	N148			RIGID	None	None	RIGID	Typical
19	M52A	N137	N152			RIGID	None	None	RIGID	Typical
20	M54A	N144	N156			RIGID	None	None	RIGID	Typical
21	MP4	N3	N4			2" Sched 40 Pl	Beam		A53 Gr. B	Typical
22	M22	N77A	N75A			Standoff Reinf	Beam	None	A38 Gr.38	Typical
23	M23	N78A	N80A			Standoff Reinf	Beam	None	A36 Gr.36	Typical
24	M24	N76A	N83			Stand off Reinf	Beam	None	A36 Gr.36	Typical
25	M25A	N77A	N75A			Stand off Reinf	Beam	None	A36 Gr.36	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	General				
2	RÌGID		3	9	0
3	Total General		3	9	0
4					
5	Hot Rolled Steel				
6	A36 Gr. 36	L2.5x2.5x3/16	4	204	.1
7	A53 Gr. B	HSS4x4x4	3	360	.3
8	A53 Gr. B	PIPE 2.0	12	1152	.3
9	A53 Gr. B	PIPE_3.0	3	606	.4
10	Total HR Steel		22	2322	1.1

Basic Load Cases

	BLC Description	Category	X Gravity Y Gravity Z Gravity	Joint	Point	Distributed	Area(M Surface
1	Self Weight	DL	-1	,	18		
_2	Wind Load AZI 000	WLZ			18		1
3_	Wind Load AZI 090	WLX			18		1
4	Ice Weight	OL1			18	21	
5	Wind + Ice Load AZI 000	012			18		1
6	Wind + Ice Load AZI 090	OL3			18		1
7	Service Live 1	LL		3			



: Infinigy Engineering, PLLC.

Company Designer Job Number Model Name

pky 526-103 CT54XC708 Jan 23, 2018 11:45 AM Checked By:_

Basic Load Cases (Continued)

 BLC Description	Category	X Gravity Y Gravity Z Gravity	Joint Point	Distributed	Area(M Surface
BLC 2 Transient Area Loa	None			24	
9 BLC 3 Transient Area Loa	None			23	
1 BLC 6 Transient Area Loa	None			23	

Load Combinations

	Description	S	P	SBLC	Factor	BLC	Factor	BLC	Fa	B	Fa	B	Fa	R	Eo.	B	En	Ð	E۵	D	Ea	В	
1	1.4D	Ye	Y	DL	1.4	DEC	1 actor		Q. ,	<u> </u>	1 a	J	1 a	<u> </u>	<u>[a</u>	D	Ta	. .	<u> </u>	<u> </u>	га	<u> </u>	<u>га</u>
2	1.2D + 1.6W AZ			DL		WLZ	1.6			1		\vdash			<u> </u>				 	\vdash			
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8	1.2D + 1.6W AZ	1180 Yes	Υ	DL		WLZ													İ				
9	1.2D + 1.6W AZ	1210 Yes	Y	DL		WLZ		WLX	8									<u> </u>					
10	1.2D + 1.6W AZ	1240 Ye	Y	DL	1.2	WLZ		WLX															
11	1.2D + 1.6W AZ	1270 Ye	Y	DL	1.2			WLX	-1.6										i e				
12	1.2D + 1.6W AZ	1300 Yes	Y	DL		WLZ	.8	WLX													_		
	1.2D + 1.6W AZ			DL	1.2	WLZ	1.386					"						Г					
	0.9D + 1.6W AZ			DL	.9	WLZ																	
	0.9D + 1.6W AZ			DL	.9	WLZ	1.386																
	0.9D + 1.6W AZ			DL	.9	WLŻ		WLX															
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	0.9D + 1.6W AZ			DL	.9	WLZ	8	WLX	1.3														
	0.9D + 1.6W AZ			DL	.9	WLZ		WLX	.8														
	0.9D + 1.6W AZ			DL	.9	WLZ																	
	0.9D + 1.6W AZ			DL	.9	WLZ																	
	0.9D + 1.6W AZ			DL	.9	WLZ	8	WLX	-1	[_		
	0.9D + 1.6W AZ			DL	.9			WLX															
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25	0.9D + 1.6W AZ			DL	.9	WLZ	1.386	WLX	8														
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	1.2D + 1.0Di + 1.0W			DL	1.2	OL1		012	1														
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1	012	.866	0	.5												
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1	012	.5	0	.866												
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1			0	1												
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1	012															
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1	012		0	.5												
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1_	02															
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1	012															
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	_1_	012	<u>5</u>			Ш											
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1_			0													
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1	1	012	.5]	
	1.2D + 1.0Di + 1.0W			DL	1.2	OL1		012			5												
	1.2D + 1.5L + 1.0W			DL	1.2	LL		WLZ															
	1.2D + 1.5L + 1.0W			DL	1.2	LL		WLZ]
	1.2D + 1.5L + 1.0W			DL	1.2	LL		WLZ															
	1.2D + 1.5L + 1.0W			DL	1.2	LL	1.5				-111											.	
	1.2D + 1.5L + 1.0W			DL	1.2	LL		WLZ															
44	1.2D + 1.5L + 1.0W	L (3 Yes	Υ	DL	1.2	LL	1.5	WLZ	0	W	.056												



: Infinigy Engineering, PLLC.

Company Designer Job Number Model Name

: pky : 526-103 : CT54XC708

Jan 23, 2018 11:45 AM Checked By:_

Load Combinations (Continued)

	Description	S	P	S	BLC	Factor	BLC	Factor	BLC	Fa	B	Fa	B	Fa	B.,,	Fa	B	Fa	.B	Fa	.B	Fa	.B	Fa
45 1.2D	+ 1.5L + 1.0WL (3	Yes	Υ		DL	1.2	LL	1.5	WLZ	1								l						
46 1.2D	+ 1.5L + 1.0WL (3	Υes	Υ		DL	1.2	LL	1.5	WLZ	0	₩.	O				Ĺ								
47 1.2D	+ 1.5L + 1.0WL (3	Yes	Υ		DL	1.2	LL	1.5	WLZ	0	W.,	O												
48 1.2D	+ 1.5L + 1.0WL (3	Yes	Υ		DL	1.2	LL	1.5			W.,	1												
49 1.2D	+ 1.5L + 1.0WL (3	Yes	Y		DL	1.2	LL	1.5	WLZ	.056	٧	0									L_			
50 1.2D	+ 1.5L + 1.0WL (3	Yes	Υ		DL	1.2	LL	1.5	WLZ	.096	٧.	O												

Envelope Joint Reactions

	Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LĊ	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N98A	max 6773.454	30	-389.866	24	709.168	24	1.484	29	.593	25	2.035	35
2		min -1:107.015	24	-2467.607	30	-3885.797	31	.026	21	604	19	.252	14
3	N97A	max 754.046	5	-420.104	20	7771.555	27	499	20	2.734	23	.422	11
4		min -754.621	11	-2539.842	33	-1091.756	20	-2.784	33	<i>-</i> 2.731	17	285	17
5	N96A	max 931.718	16	-396.72	16	903.48	15	1.047	37	2.093	21	294	14
6		min -6731.143	36	-2462.08	36	-3901.086	35	081	19	-2.076	15	-2.282	32
7	N76A	max 8117.327	36	5008.078	36	4689.111	36	0	1	0	1	0	1
8		min 1493.991	16	926.133	16	859.768	16	0	1	0	1	0	1
9	N77A	max 12.733	17	51 13.436	33	-1802.91	20	0	1	0	1	0	1
10		min -12.73	23	975.547	20	-9538.562	33	0	1	0	1	0	_1_
11	N78A	max -1483.628	24	5018.429	30	4698.498	30	0	1	0	1	0	1
12		min -8134.4	30	920,355	24	858.026	24	0	1	0	1	0	_1_
13	Totals:	max 4550.191	5	7645.249	30	4623,87	14						
14		min -4550.191	23	1863.851	22	-4623.87	8						

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear C	. Loc[in]	Dir	LC	phi*Pnc [iphi*Pphi*Mphi*M Eqn
1	M46	HSS4x4x4	.618	75	30	.117	75	У	30	77205.365 1061 12.311 12.311 H1-1b
2	M48	HSS4x4x4	.615	75	36	.117	75	У	31	77205.365 1061 12.311 12.311 H1-1b
3	M47	HSS4x4x4	.608	75	27	.122	75	y	36	77205.365 1061 12.311 12.311 H1-1b
4	MP1	PIPE_2.0	.561	48	8	.043	48		8	16811.605 32130 1.872 1.872 H1-1b
5	M13	PIPE_3.0	.541	2.104	31	.132	2.104		6	15779.091 65205 5.749 5.749 H1-1b
6	M25	PIPE_3.0	.538	199.8	36	.130	199.8		10	15779.091 65205 5.749 5.749 H1-1b
7	M1	PIPE_3.0	.538	199.8	38	.152	199.8		2	15779.091 65205 5.749 5.749 H1-1b
8	MP5	PIPE_2.0	.489	48	_5	.038	48		5_	16811.605 32130 1.872 1.872 1 H1-1b
9	MP9	PIPE 2.0	.489	48	11	.038	48		11	16811.605 32130 1.872 1.872H1-1b
10	M23	L2.5x2.5x3/	.259	27.094	30	.002	51	z		42109.772 5847 4.246 2.615 H1-1a
11	M24	L2.5x2.5x3/	.258	27.094	36	.002	51	z	25	42109.772 5847 4.246 2.615 H1-1a
12	MP2	PIPE_2.0	.244	48	8	.023	48		8	16811.605 32130 1.872 1.872 1 H1-1b
13	MP10	PIPE 2.0	.217	48	11	.021	48		11	16811.605 32130 1.872 1.872H1-1b
14	MP6	PIPE 2.0	.217	48	5	.021	48		5	16811.605 32130 1.872 1.872 1 H1-1b
15	M22	L2.5x2.5x3/	.129	0	33	.002	51	z	17	42109.772 5847 4.246 2.615 1 H1
16	M25A	L2.5x2.5x3/	.129	0	33	.002	51	Z	17	42109.772 5847 4.246 2.615 1 H1
17	MP7	PIPE_2.0	.073	48	4	.007	48_	<u>L</u>	4	16811.605 32130 1.872 1.872 1 H1-1b
18	MP11	PIPE 2.0	.073	48	12	.007	48		12	16811.605 32130 1.872 1.872H1-1b
19	MP3	PIPE_2.0	.073	48	9	.007	48		9	16811.605 32130 1.872 1.872 H1-1b
20	MP4	PIPE_2.0	.072	48	7	.007	48_		7	14916.096 32130 1.872 1.872 H1-1b
21	MP8	PIPE_2.0	.072	48	4	.007	48_		4	16811.605 32130 1.872 1.872 1 H1-1b
22	MP12	PIPE 2.0	.072	48	12	.007	48	L.,	12	16811.605 32130 1.872 1.872 H1-1b

Date: April 2, 2018

Chanhdara Ratsavong Crown Castle 3530 Toringdon Way Suite 300 Charlotte, NC 28277



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

Subject:

Structural Opinion Letter

Carrier Designation:

Verizon Wireless Co-Locate

Carrier Site Number:

Carrier Site Name:

RDG Shofer

RDG Shofer

Crown Castle Designation:

Crown Castle BU Number: Crown Castle Site Name: **Crown Castle JDE Number:**

Maxatawny 472525

Crown Castle Work Order Number:

1550201

825720

Crown Castle Order Number:

416463 Revision 5

Engineering Firm Designation:

Crown Castle Project Number:

1550201

Site Data:

15411 Kutztown Road, Reading, Berks County, PA Latitude: 40° 31′ 52.52" Longitude: -75° 44′ 38.5"

193 ft. - Monopole

Dear Chanhdara Ratsavong,

Crown Castle is pleased to submit this "Structural Opinion Letter" to determine the structural integrity of the above mentioned tower. This evaluation has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 1550201, in accordance with order number 416463, revision 5.

The purpose of the opinion letter is to determine the suitability of the tower with the proposed, existing, and reserved loading as specified in Tables 1 & 2. This opinion is consistent with the guidelines as stated in the TIA-222-G standard and the 2009 International Building Code based upon a 3-second gust wind speed of 90 mph.

Based on a comparison of the previous analysis loads (Crown Castle Work Order Number: 1525988 dated February 21, 2018) with the loads listed in Tables 1 & 2, we have determined the tower structure and foundation ARE sufficient.

We at Crown Castle 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:

Ali Abbaszadeh, P.E. Project Engineer

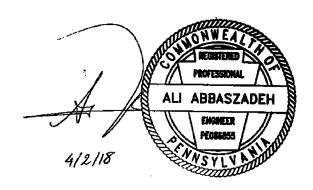


Table 1 - Proposed Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
		6	commscope	NHH-65B-R2B w/ Mount Pipe			
		3	alcatel lucent	B13 RRH 4X30]		
		3	alcatel lucent	B25 RRH4X30			
		3	alcatel lucent	B66A RRH4X45			
110.0	110.0	3	nokia	AIRSCALE RRH 4T4R B5 160W	2	1 1/2	-
		1	raycap	RCMDC-6627-PF-48			
		1	tower mounts	Miscellaneous [NA 510-1]			
		1	perfect vision	PV-ULP14L-HR-12-96		`	

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
	400.0	3	ADC	DD1900 FULL BAND W/800 BYPASS MASTHEAD			
193.0	196.0	6	ems wireless	RR90-18-00DP w/ Mount Pipe	10	1 5/8	1
	193.0	1	tower mounts	Platform Mount [LP 1201-1]			
		2	KMW Comm.	EPBQ-654L8H6			
		1	KMW Comm	EPBQ-654L8H8-L2_CCIV2			
		3	nokia	FRBI			
		3	alcatel lucent	B66A RRH4X45	2	7/8	2
		9	generic	H-Frames			
		3	alcatel lucent	RRH2X40-07L-AT			
		<u> </u>	raycap	DC6-48-60-18-8C			
175.0	175.0	3	alcatel lucent	RRH2X60-1900A-4R			
175.0	175.0	3	alcatel lucent	RRH4X25-WCS			
]	4	andrew	SBNHH-1D65A			
		2	andrew	SBNHH-1D65C] 1	3/8	
		3	powerwave tech	7770.00	2	3/4	1
		6	powerwave tech	LGP17201	12	1 5/8	
		2	raycap	DC6-48-60-18-8F	_		
		1	tower mounts	Miscellaneous [NA 509-3]			
		1	tower mounts	Platform Mount [LP 301-1]]	

Notes:

1) Existing Equipment Reserved Equipment





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

May 9, 2018

Anne Marie Zsamba, Esq. Real Estate Specialist Crown Castle 3 Corporate Park Drive, Suite 101 Clifton Park, NY 12065

RE: EM-SPRINT-020-180502 – Sprint notice of intent to modify an existing telecommunications facility located at 12 Nepaug Road, Burlington, Connecticut.

Dear Attorney Zsamba:

The Connecticut Siting Council (Council) received a notice of intent to modify the above-referenced facility on May 2, 2018.

According to Section 16-50j-71 of the Regulations of Connecticut State Agencies, "...any modification, as defined in Section 16-50j-2a of the Regulations of Connecticut State Agencies, to an existing tower site, except as specified in Sections 16-50j-72 and 16-50j-88 of the Regulations of Connecticut State Agencies, may have a substantial adverse environmental effect."

Staff has reviewed this exempt modification request for completeness and has identified the following deficiencies in the filing:

1. The property owner appears to be incorrect. Based on the Burlington CT GIS Data Portal online geographical information systems, the property hosting the existing tower is owned by Audrey and Herbert Weaver Estate C/O Melinda Belcher;

2. There is no proof of mailing to the property owner. In accordance with the memorandum issued by the Council dated June 22, 2017, a copy of the exempt modification notice and the attachments are to be physically mailed to the chief elected official of the host municipality and the underlying property owner and proof of such mailing shall be submitted to the Council with the exempt modification request. The Council's June 22, 2017 memorandum is attached for your convenience;

3. Site plan drawing Sheet A-2 under tower elevation "According to the results of the mount analysis [dated January 23, 2018] the structure has sufficient capacity to support the proposed loading w/ the proposed modifications: install (1) site pro 1 PRK-1245 reinforcement kit." The Structural Analysis Report dated January 12, 2018 does not account for the reinforcement kit.

Therefore, the exempt modification request is incomplete at this time. The Council recommends that Crown Castle provide an Updated Structural Analysis Report including the reinforcement kit that is stamped and signed by a professional engineer duly licensed in the State of Connecticut and mail the exempt modification request with the attachments to the underlying property owner and provide proof of such notice to the Council on or before June 8, 2018. If additional time is needed to complete the Updated Structural Analysis Report, notification and/or provide proof to the Council, please submit a written request for an extension of time prior to June 8, 2018.



This notice of incompletion shall have the effect of tolling the Federal Communications Commission (FCC) 60-day timeframe in accordance with Paragraph 217 of the FCC Wireless Infrastructure Report and Order issued on October 21, 2014 (FCC 14-153).

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 860-827-2951.

Sincerely

Melanie Bachman Executive Director

MAB/FC

Enclosure

c: The Honorable Theodore C. Shafer, First Selectman, Town of Burlington Abby Conroy, Zoning Enforcement Officer, Town of Burlington Audrey and Herbert Weaver Estate C/O Melinda Belcher, property owner



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
B-Mail: siting.council@ct.gov
www.ct.gov/csc

VIA ELECTRONIC MAIL

MEMORANDUM

To: Telecommunications Carriers and their Representatives

From: Melanie Bachman, Executive Director

Re: Exempt Modification/Tower Share Filing Notification

Date: June 22, 2017

Pursuant to Regulations of Connecticut State Agencies § 16-50j-73 and §16-50j-88, the April 2013 Filing Guide for Modification of Existing Telecommunications Facilities, and the August 2013 Tower Share Filing Guide, notice in writing shall be provided to "the Council, the property owner of record... and the chief elected official" of the intent to modify or share an existing telecommunications facility" (see Attachments).

Effective immediately, a copy of the notice and the attachments, including, but not limited to, engineering drawings, structural analysis (the structural analysis report without tower data and calculation appendices is sufficient) and power density calculation of the request for an exempt modification or tower share shall be <u>physically mailed</u> to the chief elected official of the host municipality and underlying property owner where the existing telecommunications facility is located and proof of mailing shall be submitted to the Council with the request. Proof of mailing requires an acknowledgment from the carrier (United States Postal Service or private carrier such as UPS/FedEx) that a parcel was delivered to the recipient. E-mail service is unacceptable.

Thank you in advance for your cooperation.

Attachments: Altrio Investment Group, LLC correspondence, dated June 16, 2017 City of Danbury email correspondence, dated June 8, 2017

MAB/FOC/laf



Recipient Christopher B. Fisher, Esq., AT&T
List: Rsv Perry, Airosmith Development

Ray Perry, Airosmith Development, Inc. Arthur Perkowski, Airosmith Development, Inc. Alex Murshteyn, Centerline Communications Michael Gentile, Centerline Communications David Ford, Centerline Communications Adam Wolfey, Centerline Communications Steve Levine, Centek Engineering, Inc. Jeff Barbadora, Crown Castle Amanda Cornwall, Crown Castle Kimberly Myl, Crown Castle Donna Neal, Crown Castle Sarah Snell, Empire Telecom Nicole Caplan, Empire Telecom Jack Andrews, Empire Telecom Jennifer Iliades, Empire Telecom Melanie Howlett, HPC Wireless Alex Giannaras, HPC Wireless Denise Sabo, Northeast Site Solutions Deborah Chase, Northeast Site Solutions Victoria Masse, Northeast Site Solutions

Mark Roberts, QC Development Tim Burks, SAI Communications Rick Woods, SBA Kri Pelletier, SBA Peter Nute, SBA Adam Braillard, Smartlink, LLC David Barbagallo, Smartlink LLC Romina Kirchmaier, Smartlink LLC Thomas J. Regan, Esq., Sprint Sam Simons, T-Mobile Greg Shappy, Transcend Wireless Kyle Richers, Transcend Wireless Jennifer Ardis, Transcend Wireless James Burgess, TRM, Inc. Jacqueline Clifford, TRM, Inc. Matt Burke, TRM, Inc. Jon Ritter, TRM, Inc. Kenneth C. Baldwin, Esq., Verizon Wireless Eric Dahl, Vertical Development LLC

Jamie Ford, Vertical Development LLC

Matthew Bandle, Vertical Development LLC

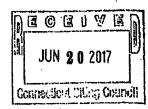


21 Acom Road Branford, CT

Phone: 203-481-3498

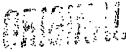
ALTRIO INVESTMENT GR

PM-t-mobile-014-170523



June 16, 2017

Ms. Amanda Cornwall Crown Castle 12 Gill Street, Suite 5800 Woburn, MA 01801



T-Mobile Tower Modifications, 21 Acoru Read, Branford CT Reference Site # CTNH509A

Dear Ms. Cornwall.

Please provide Altrio Investment Group (Landlord and Property Owner) with all pertinent documentation and information regarding modifications to the subject communication tower or ground lease area including structural analysis report, medification drawings, structural drawings, and drawings indicating T-Mobile equipment plans and elevations.

Please also notify all involved parties that any holes or penetrations in the building envelope are to be performed by the Landlord, Altrio Investment Group LLC and will be billed to the responsible parties.

Best regards,

Affred J. Secondino

Managing Member

CC:

Melanie A Bachman, CT Siting Council, Executive Director

Lecendera

File

Cunliffe, Fred

From:

Bachman, Melanie

Sent:

Thursday, June 08, 2017 3:35 PM

To:

'Deborah Chase'

Cc:

'Sheldon Freincle'; 'Denise Sabo'; 'Victoria Masse'

Subject:

RE: 41 Padanaram Road, Danbury CT 06811 (CT11896A L1900) T-Mobile Antenna EM

Application

Good afternoon.

I received a call from Robin Edwards, Corporation Counsel for the City of Danbury. She was concerned about how notice of this request was provided to the City and indicated that it appeared the request was submitted through their "311 service?" From their website, this appears to be a City Service Request Form. I snipped the link to it below for your convenience. The cover letter indicates that a copy was sent to the Mayor and the Director of Planning. Could someone please confirm that a copy of the letter was actually sent rather than submitted to the "311 service" when you have a chance?

Thanks.

Resources



Melanie A. Bachman, Esq. Executive Director/Staff Attorney Connecticut Siting Council 10 Franklin Square New Britain, CT 06051 860-827-2951



CONFIDENTIAL INFORMATION:

From: Deborah Chase [mailto:deborah@northeastsitesolutions.com]

Sent: Friday, May 26, 2017 3:12 PM

To: CSC-DL Siting Council <Siting.Council@ct.gov>; Bachman, Melanie <Melanie.Bachman@ct.gov>; Mathews, Lisa A <Lisa.A.Mathews@ct.gov>

Cc: Sheldon Freincle <sheldon@northeastsitesolutions.com>; Denise Sabo <denise@northeastsitesolutions.com>;

Victoria Masse <victoria@northeastsitesolutions.com>

Subject: 41 Padanaram Road, Danbury CT 06811 (CT11896A L1900) T-Mobile Antenna EM Application

Siting Council,

Enclosed please find the Notice of Exempt Modification package from Northeast Site Solutions on behalf of T-Mobile in connection with the above-referenced site.

We are mailing the original and two (2) copies to your office.

Please let me know if you have any questions or problems with the attachment.

Sincerely,

Deborah Chase

Senior Project Coordinator & Analyst

Mobile: 860-490-8839



Save a tree. Reduce. Reuse. Recycle.