Centek Engineering, Inc.
3-2 North Branford Road
Branford, Connecticut 06405
Phone: (203) 488-0580
Fax: (203) 488-8587

Steven L. Levine
Real Estate Consultant

HAND DELIVERED

February 7, 2014

Attorney Melanie Bachman
Acting Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 49 Brainerd Road, East Lyme (owner, SBA)

Dear Ms. Bachman:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") and/or Long Term Evolution ("LTE") capabilities, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile ("GSM") communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

LTE is a high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will be unaffected.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.

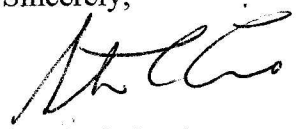
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.

4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. Moreover, LTE will utilize additional radio frequencies newly-licensed by the FCC for cellular mobile communications. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, AT&T respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 830-0380 with questions concerning this matter. Thank you for your consideration.

Sincerely,



Steven L. Levine
Real Estate Consultant

cc: Paul M. Formica, First Selectman, Town of East Lyme

Attachments

NEW CINGULAR WIRELESS PCS, LLC
Equipment Modification

49 Brainerd Road, East Lyme
CSC Approvals: Docket 396 (3/2011)
AT&T Site CT1269

Tower Owner/Manager: SBA

Equipment Configuration: Monopole

Current and/or Approved:
Three T-arm antenna mounts @ 167 ft AGL
Nine GSM/UMTS antennas @ 167 ft
Twelve runs 1 5/8 inch coax
Equipment shelter

Planned Modifications:
Remove all T-arms and antennas from 167 ft level.
Remove six runs of 1 5/8 inch coax.
Install two Valmont ULP12-496 Rigid T-Arm frames (@169.5 ft and @165.5 ft, respectively).
Install three CCI HPA-65R-BUU-H6 antennas @ 168.5 ft c.l.
Install three CCI HPA-65R-BUU-H8 antennas @ 168.5 ft c.l.
Install three Commscope SBNHH-1D65A antennas @ 168.5 ft c.l.
Install one KMW AM-X-CD-14-65-00T-RET antenna @ 168.5 ft c.l.
Install one KMW AM-X-CD-16-65-00T-RET antenna @ 168.5 ft c.l.
Install one Andrew SBNH-1D6565C antenna @ 168.5 ft c.l.
Install eighteen remote radio heads and six associated A2 modules @ 168.5 ft.
Install three TMA's @ 168.5 ft.
Install three Raycap DC6-48-60-18-8F surge arrestors @ 168.5 ft.
Install one fiber cable and six DC control cables.

Power Density:

Calculations for AT&T's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the monopole base, of approximately 40.8 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for AT&T's planned operations would be approximately 39.7 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							34.29
AT&T GSM *	167	1900 Band	4	427	0.0220	1.0000	2.20
AT&T GSM *	167	880 - 894	4	296	0.0153	0.5867	2.60
AT&T UMTS *	167	1900 Band	1	500	0.0064	1.0000	0.64
AT&T UMTS *	167	880 - 894	1	500	0.0064	0.5867	1.10
Total							**40.8%**

* Per CSC records.

Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							34.29
AT&T LTE	168.5	700 Band	1	500	0.0063	0.4667	1.36
AT&T LTE	168.5	1900 Band	1	500	0.0063	1.0000	0.63
AT&T LTE	168.5	2300 Band	1	500	0.0063	1.0000	0.63
AT&T UMTS	168.5	880 - 894	2	500	0.0127	0.5867	2.16
AT&T UMTS	168.5	1900 Band	1	500	0.0063	1.0000	0.63
Total							**39.7%**

* Per CSC records.

Structural information:

The Decision in Docket 396 restricts antenna mounts on the East Lyme tower to T-arms only. One set of three T-arms, however, will be insufficient to support the increased equipment weight load. To achieve requisite structural capacity, AT&T proposes to install two Valmont Ultra Low Profile Rigid T-Arm Frames (i.e., 6 individual T-arms) separated by four vertical feet. The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (FDH Engineering, 1/29/2014)

at&t

STATE OF CONNECTICUT
THOMAS E. JOHNSON
No. 28192
LICENSED
PROFESSIONAL ENGINEER
2-6-14

NIANTIC OLD BLACK POINT ROAD (CT-1269)

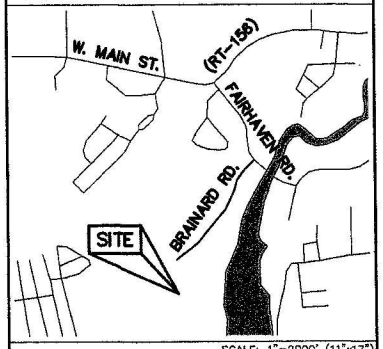
49 BRAINERD ROAD
NIANTIC, CT 06357

SITE TYPE: MONOPOLE – LTE ALTERATION

PROJECT SUMMARY

SITE NAME:	NIANTIC OLD BLACK POINT ROAD
SITE ADDRESS:	49 BRAINERD ROAD NIANTIC, CT 06357
COUNTY:	NEW LONDON
TAX ID:	MAP 07.4, PARCEL 21
ZONING JURISDICTION:	TOWN OF EAST LYME
ZONING CLASSIFICATION:	(B-4) GATEWAY BUSINESS DISTRICT
CONSTRUCTION TYPE:	LTE ALTERATION
LATITUDE:	41° 18' 27.30" N ± (RECORD SBA)
LONGITUDE:	72° 13' 26.10" W ± (RECORD SBA)
PROPERTY OWNER:	N/F SAMUELSEN CHRISTOPHER 49 BRAINER ROAD NIANTIC, CT 06357
TOWER OWNER:	SBA SITE#: CT11794-S EAST LYME 1
APPLICANT, LESSEE/LICENSEE, PROJECT OWNER:	NEW CINGULAR WIRELESS PCS, LLC d/b/a "AT&T" 500 ENTERPRISE DRIVE ROCKY HILL, CT 06067
ARCHITECT/ENGINEER:	PROTERRA DESIGN GROUP, LLC 1 SHORT STREET, SUITE 3 NORTHAMPTON, MA 01060

VICINITY MAP



SCALE: 1"=2000' (11"x17")
1"=1000' (22"x34")

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	3
GN-1	GENERAL NOTES	3
A-1	COMPOUND PLAN AND ELEVATION	3
A-2	SHELTER PLAN	3
S-1	STRUCTURAL DETAILS	3
S-2	STRUCTURAL DETAILS	3
S-3	STRUCTURAL DETAILS	3
E-1	ELECTRICAL & GROUNDING DETAILS	3

SCALE NOTES

1. THIS SHEET SET WAS ORIGINALLY SETUP AS 11"x17".
2. PRINTING TO ANSI D (22"x34") WILL RESULT IN A DOUBLE SCALE SHEET SET WITH 1" MARGINS. RESULTING SCALES WILL BE THOSE NOTED IN TEXT. EXAMPLE: 1"=20' WILL CHANGE TO 1"=10'.
3. CONFIRM ALL SCALED DISTANCES WITH GRAPHICAL SCALES SHOWN HEREIN. GRAPHICAL SCALES WILL BE UNCHANGED BY ENLARGEMENT OR REDUCTION.

PROJECT DESCRIPTION

1. THIS PLAN SET DETAILS A MODIFICATION TO AN EXISTING AT&T COMMUNICATIONS FACILITY.
2. THIS IS UNMANNED & RESTRICTED-ACCESS EQUIPMENT AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
3. THIS FACILITY WILL CONSUME NO UNRECOVERABLE ENERGY.
4. NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.
5. NO WASTE WATER WILL BE GENERATED AT THIS LOCATION.
6. NO SOLID WASTE WILL BE GENERATED AT THIS LOCATION.
7. AT&T MAINTENANCE CREW (TYPICALLY ONE PERSON) WILL MAKE AN AVERAGE OF ONE TRIP PER MONTH AT ONE HOUR PER VISIT.

PLAN NOTES

1. EXISTING CONDITIONS BASED ON A FIELD VISIT BY PROTERRA DESIGN GROUP, LLC ON 8/23/2013.
2. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OR BE RESPONSIBLE FOR SAME. ENGINEER OF RECORD IS TO BE INFORMED OF ANY DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION ACTIVITY.
3. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72-HOURS PRIOR TO ANY EXCAVATION ACTIVITY:
   DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 888-344-7233

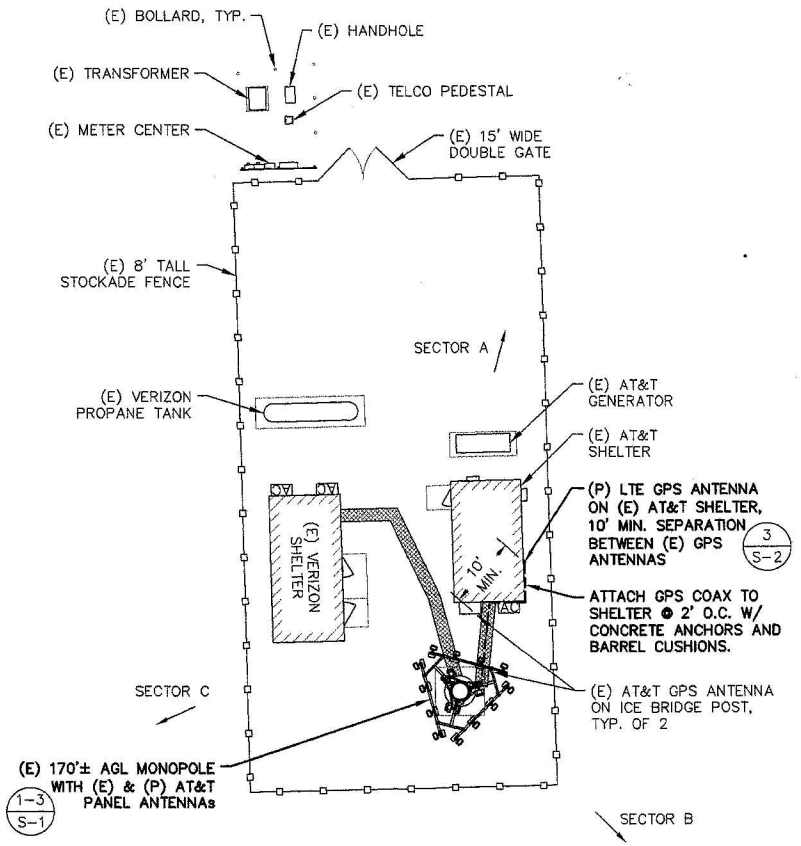
ProTerra DESIGN GROUP, LLC
1 Short Street
Suite 3
Northampton, MA 01060
Ph:(413)320-4918
Fax:(413)320-4917

SAI
27 Northwestern Drive
Salem, NH 03079

at&t
New Cingular Wireless PCS, LLC
550 Cochituate Road
Framingham, MA 01701

SITE NUMBER
CT-1269
49 BRAINERD ROAD
NIANTIC, CT 06357

REVISIONS		DESIGNED BY: JMM/TEJ	JOB #: 13-033
2	COMMENTS	DRAWN BY: TBD	REV. #: 3
3	COMMENTS	DATE: 2/6/14	T-1
		SCALE: AS NOTED	



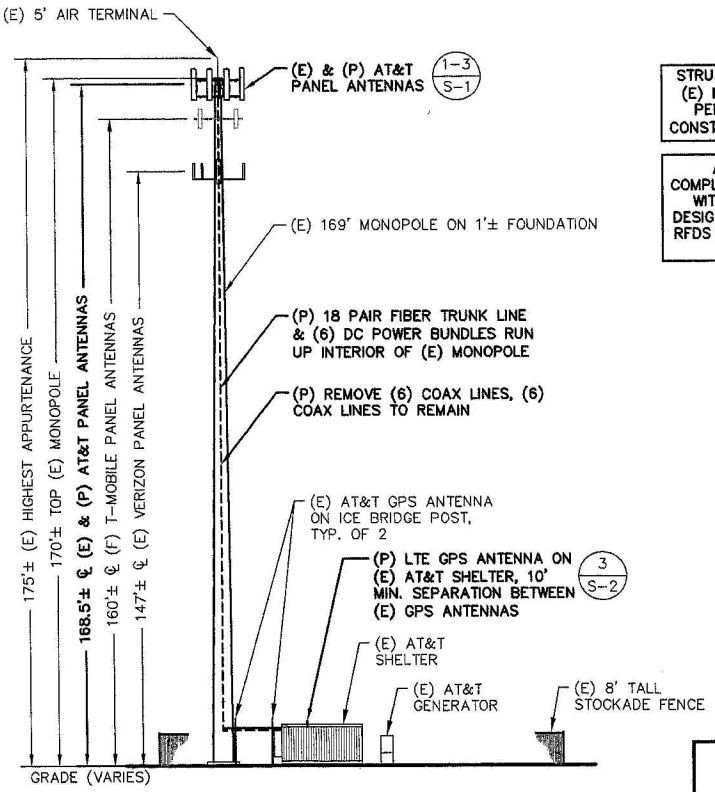
N
GRID

COMPOUND PLAN

1 A-1

SCALE: 1"=20' (11"x17")
1"=10' (22"x34")

20 10 0 20



EAST ELEVATION

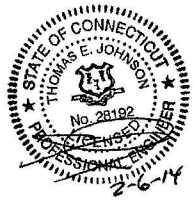
2 A-1

SCALE: 1"=30' (11"x17")
1"=15' (22"x34")

30 15 0 30

STRUCTURAL ANALYSIS OF (E) MONOPOLE SHALL BE PERFORMED PRIOR TO CONSTRUCTION (BY OTHERS)

ALL WORK TO BE COMPLETED IN ACCORDANCE WITH LATEST AT&T RF DESIGN SHEET. PLEASE SEE RFDS FOR RRU FREQUENCY AND MODEL



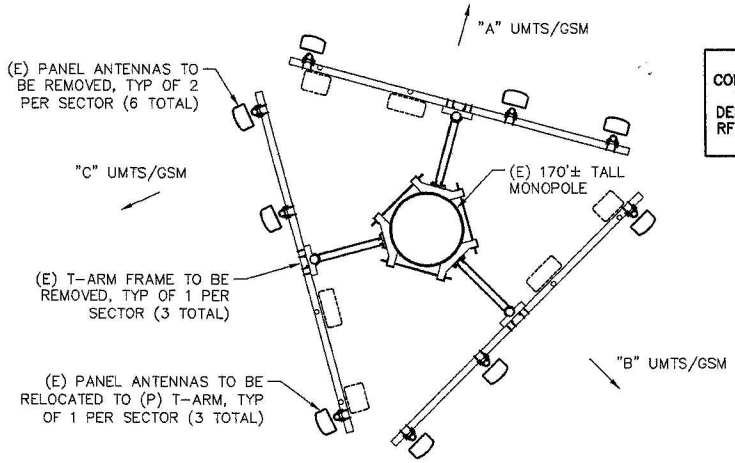
ProTerra DESIGN GROUP, LLC
1 Short Street
Suite 3
Northampton, MA 01060
Ph:(413)320-4918
Fax:(413)320-4917

SAI
27 Northwestern Drive
Salem, NH 03079

at&t
New Cingular Wireless PCS, LLC
550 Cochituate Road
Framingham, MA 01701

SITE NUMBER
CT-1269
49 BRAINERD ROAD
NIANTIC, CT 06357

REVISIONS		DESIGNED BY: JMM/TEJ	JOB #: 13-033
2	COMMENTS	DRAWN BY: TBD	REV. #: 3
3	COMMENTS	DATE: 2/6/14	A-1
		SCALE: AS NOTED	



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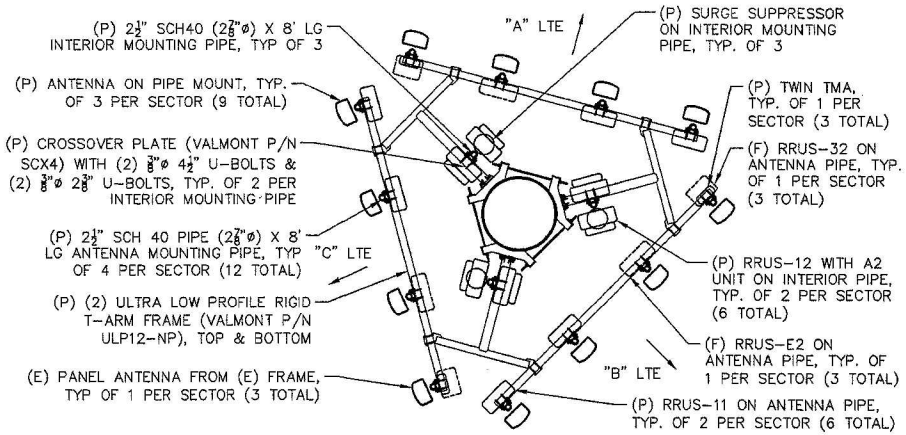


N
GRID

EXISTING ANTENNA PLAN

1 / S-1

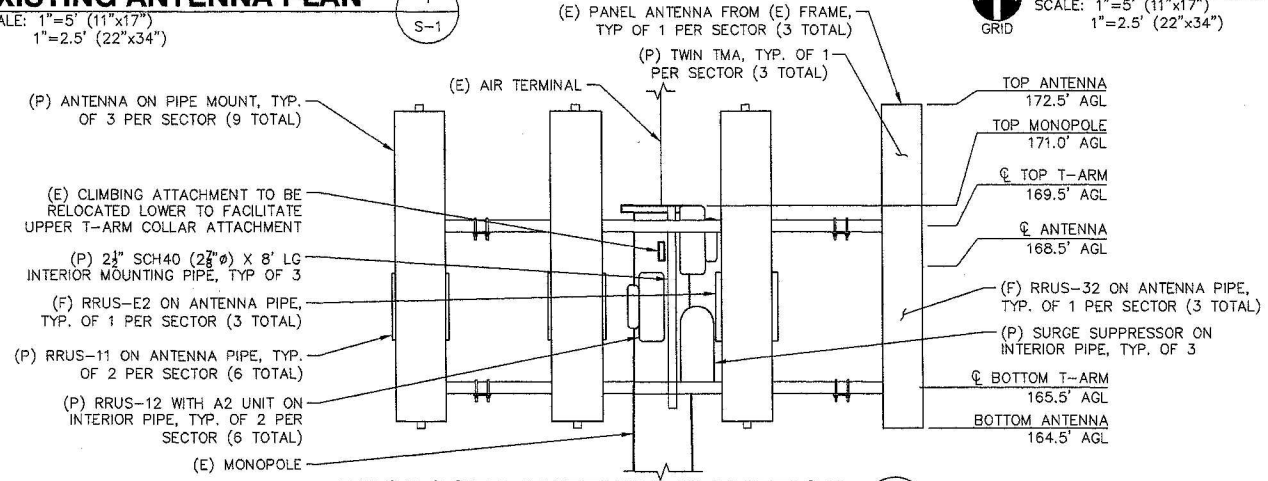
SCALE: 1"=5' (11"x17")
1"=2.5' (22"x34")

N
GRID

PROPOSED ANTENNA PLAN

2 / S-1

SCALE: 1"=5' (11"x17")
1"=2.5' (22"x34")



PROPOSED ANTENNA ELEVATION

3 / S-1

SCALE: 1"=3' (11"x17")
1"=1.5' (22"x34")

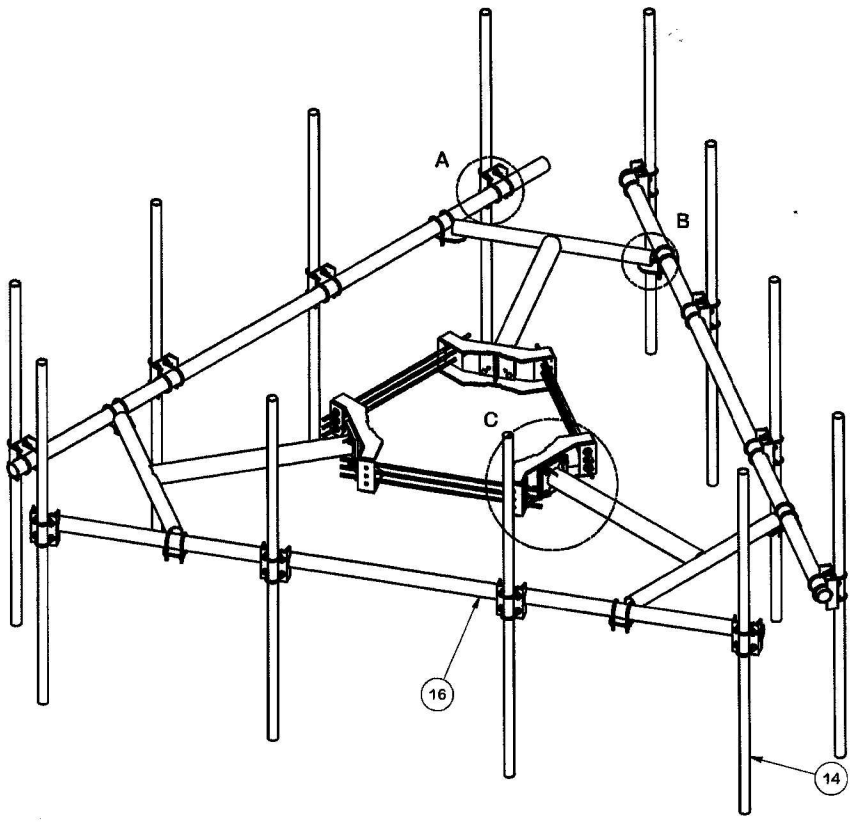
ProTerra DESIGN GROUP, LLC
1 Short Street
Suite 3
Northampton, MA 01060
Ph:(413)320-4918
Fax:(413)320-4917

SAI
27 Northwestern Drive
Salem, NH 03079

at&t
New Cingular Wireless PCS, LLC
550 Cochituate Road
Framingham, MA 01701

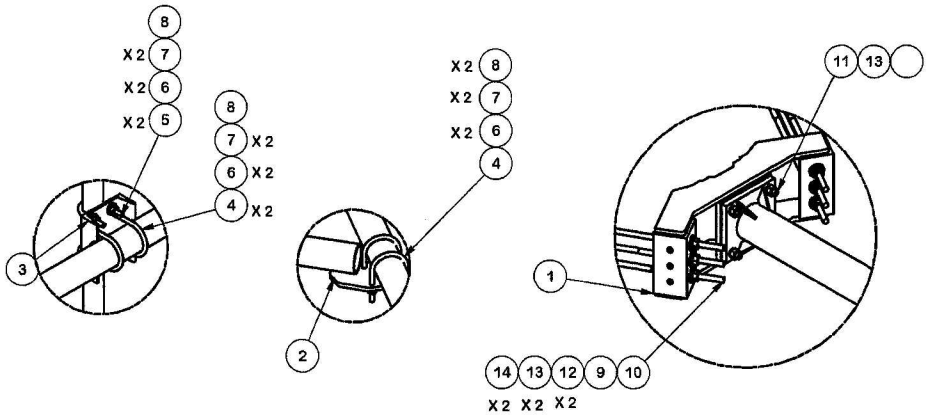
SITE NUMBER
CT-1269
49 BRAINERD ROAD
NIANTIC, CT 06357

REVISIONS		DESIGNED BY: JMM/TEJ	JOB #: 13-033
2	COMMENTS	DRAWN BY: TBD	REV. #: 3
3	COMMENTS	DATE: 2/6/14	**S-1**
		SCALE: AS NOTED	



PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-LWRM	RING MOUNT WELDMENT		68.16	204.48
2	3	X-ULP	SUPPORT ARM WELDMENT - 36"		103.07	309.20
3	12	X-SP219	SMALL SUPPORT CROSS PLATE	8.250 in	8.61	103.33
4	36	X-UB1306	1/2" X 3-5/8" X 6" X 3" U-BOLT (HDG.)		0.66	23.63
5	24	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	15.00
6	120	G12FW	1/2" HDG USS FLATWASHER		0.03	4.08
7	120	G12LW	1/2" HDG LOCKWASHER		0.01	1.67
8	120	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	8.58
9	9	G58R-24	5/8" X 24" GALV THREADED ROD		2.09	18.82
10	9	G58R-48	5/8" X 48" GALV THREADED ROD		4.39	39.52
11	12	A58234	5/8" x 2-3/4" HDG A325 HEX BOLT	2.75	0.36	4.27
12	18	G58FW	5/8" HDG USS FLATWASHER		0.07	1.27
13	30	G58LW	5/8" HDG LOCKWASHER		0.03	0.78
14	30	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	3.89
16	3	P3174	3-1/2" X 174" SCH 40 GALVANIZED PIPE	174.000 in	109.97	329.90
17	12	A	B	C	D	

TYPICAL OF TWO



DETAIL A DETAIL B DETAIL C

ATENNA PIPES					
"ASSEMBLY NO."	PART NO. "A"	PART DESCRIPTION "B"	LENGTH "C"	UNIT WT. "D"	TOTAL WT.
ULP14-NP	NP	N\A	N\A	N\A	973.52
ULP14-472	P272	2-3/8" O.D. SCH. 40 PIPE	72"	23.07	1,311.05
ULP14-484	P284	2-3/8" O.D. SCH. 40 PIPE	84"	26.91	1,357.13
ULP14-496	P296	2-3/8" O.D. SCH. 40 PIPE	96"	30.76	1,403.33

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING (± 0.030")
ALL OTHER ASSEMBLY (± 0.060")

DESCRIPTION
ULTRA LOW PROFILE RIDGED T-ARM
FOR 12 ATENNAS

SITE PRO 1
A valmont COMPANY
Engineering Support Team: 1-888-753-7446
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
5416	LMD 12/20/2012		SEE "ASSEMBLY NO."

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 12/27/2012	ULP14-4XX

FDH Engineering, Inc., 6521 Meridien Drive Raleigh, NC 27616, Ph. 919.755.1012

Structural Analysis for SBA Network Services, Inc.

169' Monopole Tower

SBA Site Name: East Lyme 1
SBA Site ID: CT11794-S-02
AT&T Site ID: CT1269
AT&T Site Name: East Brainerd Road

FDH Project Number 14224T1400

Analysis Results

Tower Components	85.9 %	Sufficient
Foundation	73.5 %	Sufficient

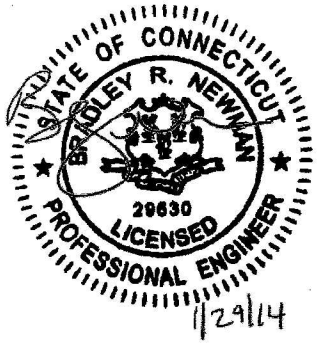
Prepared By:

Christopher B. Stryffeler, EI
Project Engineer

Reviewed By:

Bradley R. Newman, PE
Senior Project Engineer
CT PE License No. 29630

FDH Engineering, Inc.
6521 Meridien Drive
Raleigh, NC 27616
(919) 755-1012
info@fdh-inc.com



January 29, 2014

Prepared pursuant to TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures and 2005 Connecticut State Building Code

TABLE OF CONTENTS

EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Niantic, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F* and the *2005 Connecticut State Building Code (CSBC)*. Information pertaining to the existing/proposed antenna loading, current tower geometry, foundation dimensions, and member sizes was obtained from:

- ❑ Sabre Towers & Poles (Job No. 42498) original tower and foundation drawings dated April 6, 2011
- ❑ Sabre Towers & Poles (Job No. 42498) Structural Design Report dated April 4, 2011
- ❑ SBA Network Services, Inc.

The *basic design wind speed* per the *TIA/EIA-222-F* standards and *2005 CBC* is 85 mph without ice and 38 mph with 3/4" radial ice. Ice is considered to increase in thickness with height.

Conclusions

With the existing and proposed antennas from AT&T in place at 167 ft & 170 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards and the *2005 CSBC* provided the **Recommendations** listed below are satisfied. Furthermore, provided the foundations were designed and constructed to support the original design reactions (see Sabre Towers & Poles Job No. 42498), the foundations should have the necessary capacity to support the existing and proposed 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, existing 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 *TIA/EIA-222-F* standards and the *2005 CSBC* are met with the existing and proposed loading in place, we have the following recommendations:

1. The proposed feed lines must be installed on the inside of the monopole shaft.
2. The existing TMAs should be installed directly behind the existing and/or proposed panel antennas.
3. RRU/RRH Stipulation: The equipment may be installed in any arrangement as determined by the client.

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 the layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.*

Table 1 - Appurtenance Loading

Existing Loading:

Antenna Elevation (ft)	Description	Feed Lines[1]	Carrier	Mount Elevation (ft)	Mount Type
167	(3) KMW AM-X-CD-14-65-00T (3) Andrew SBNH-1D6565C (3) KMW AM-X-CD-16-65-00T (6) CCI DTMABP7819VG TMAs (6) Ericsson RRUS-11 RRUs (1) Raycap DC6-48-60-18-8F Surge Arrestors	(12) 1-5/8" (2) 5/8" DC (1) 3/8" Fiber	AT&T	167	(3) T-Arms
160	(6) Ericsson AIR 21 (3) Ericsson KRY 112-114/1 TMAs	(12) 1-5/8" (1) 1-5/8" Fiber	T-Mobile	160	(3) T-Arms [Valmont P/N RMV 12-472]
147	(4) Swedcom SC-E 6014 rev2 (2) Antel LPA-80080/4CF (3) Antel BXA-171063-8BF-2 (3) Antel BXA-70063/6CFx2 (6) RFS FD9R6004/2C-3L Diplexers	(12) 1-5/8"	Verizon	147	(1) Low Profile Platform

1. Feed lines are installed inside the monopole shaft unless otherwise noted.

Proposed Loading:

Antenna Elevation (ft)	Description	Feed Lines	Carrier	Mount Elevation (ft)	Mount Type
170	(3) CCI HPA-65R-BBU-H8 (3) CCI HPA-65R-BUU-H6 (3) Commscope SBNHH-1D65A (6) Ericsson RRUS-12 RRUs (3) Ericsson RRUS-32 RRUs (3) Ericsson RRUS-E2 RRUs (6) Ericsson A2 Modules (3) Raycap DC6-48-60-18-8F Surge Suppressors	(6) 1-5/8" (1) 1.496" Fiber (6) 0.645" DC	AT&T	167	(6) 12.5' T-Arms [(2) per sector] [Valmont P/N ULP12-NP]
167	(1) KMW AM-X-CD-14-65-00T (1) KMW AM-X-CD-16-65-00T (1) Andrew SBNH-1D6565C (3) CCI DTMABP7819VG12A TMAs (6) Ericsson RRUS-11 RRUs				

RESULTS

The following yield strength of steel for individual members was used for analysis:

Table 2 - Material Strength

Member Type	Yield Strength
Tower Shaft Sections	65 ksi
Base Plate	50 ksi
Anchor Bolts	75 ksi

Table 3 displays the summary of the ratio (as a percentage) of force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. *Note: Capacities up to 100% are considered acceptable.* **Table 4** displays the maximum foundation reactions.

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 or proposed 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 - 145.25	Pole	TP22.48x16x0.1875	85.9	Pass
L2	145.25 - 95	Pole	TP35.83x21.2183x0.375	80.3	Pass
L3	95 - 46.5	Pole	TP48.32x33.7144x0.4375	73.3	Pass
L4	46.5 - 0	Pole	TP60.14x45.6022x0.4375	74.7	Pass
---	0	Anchor Bolts	(20) 2.25" ø on a 66.75" BC	65.5	Pass
		Base Plate	PL 72.75" ø x 2.75" thick	46.8	Pass

* Capacities include a 1/3 allowable stress increase for wind per the *TIA/EIA-222-F* standards.

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis *(TIA/EIA-222-F)**	Original Design *(ANSI/TIA-222-G)*
Axial	41 k**	63 k
Shear	29 k	56 k
Moment	3,689 k-ft	6,777 k-ft

* Current analysis reactions are based on allowable stress design which are to be factored by 1.35 per the *ANSI/TIA-222-G* standard when the original design reactions are based on a load and resistance factor design.

** Per our experience with foundations of similar type, the axial loading should not control the foundation analysis.

GENERAL COMMENTS

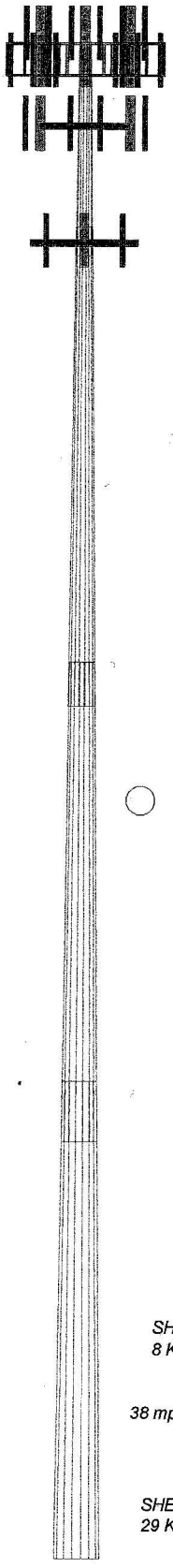
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading 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.

APPENDIX

Section	1	2	3	4
Length (ft)	23.75	53.50	53.50	53.25
Number of Sides	18	18	18	18
Thickness (in)	0.1875	0.3750	0.4375	0.4375
Socket Length (ft)	3.25	5.00	6.75	
Top Dia (in)	16.0000	21.2183	33.7144	45.6022
Bot Dia (in)	22.4800	35.8300	48.3200	60.1400
Grade	A572-65	A572-65	A572-65	A572-65
Weight (K) 30.5	0.9	6.1	10.3	13.2



DESIGNED APPURTENANCE LOADING

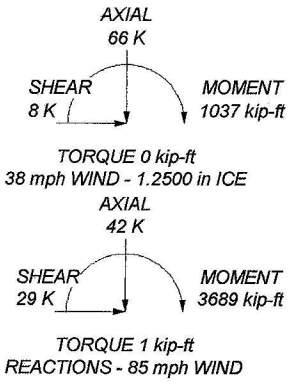
TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod	169	(2) A2 Module	167
AM-X-CD-14-65-00T w/ Mount Pipe	167	DC6-48-60-18-8F	167
AM-X-CD-16-65-00T w/ Mount Pipe	167	DC6-48-60-18-8F	167
SBNH-1D6565C w/Mount Pipe	167	DC6-48-60-18-8F	167
CCI DTMABP7819VG TMA	167	(6) 12.5' T-Arms [(2) per sector] [Valmont P/N ULP12-NP] MNT	167
CCI DTMABP7819VG TMA	167		
CCI DTMABP7819VG TMA	167	(2) AIR 21 w/ Mount Pipe	160
(2) RRUS-11	167	(2) AIR 21 w/ Mount Pipe	160
(2) RRUS-11	167	(2) AIR 21 w/ Mount Pipe	160
(2) RRUS-11	167	Ericsson KRY 112-114/1	160
HPA-65R-BUU-H8 w/ Mount Pipe	167	Ericsson KRY 112-114/1	160
HPA-65R-BUU-H8 w/ Mount Pipe	167	Ericsson KRY 112-114/1	160
HPA-65R-BUU-H8 w/ Mount Pipe	167	(3) T-Arms	160
HPA-65R-BUU-H6 w/ Mount Pipe	167	BXA-171063-8BF-2 w/ Mount Pipe	147
HPA-65R-BUU-H6 w/ Mount Pipe	167	BXA-171063-8BF-2 w/ Mount Pipe	147
HPA-65R-BUU-H6 w/ Mount Pipe	167	BXA-70063/6CFx2 w/ Mount Pipe	147
SBNHH-1D65A w/ Mount Pipe	167	BXA-70063/6CFx2 w/ Mount Pipe	147
SBNHH-1D65A w/ Mount Pipe	167	BXA-70063/6CFx2 w/ Mount Pipe	147
SBNHH-1D65A w/ Mount Pipe	167	(2) FD9R6004/2C-3L Diplexer	147
(2) RRUS-12	167	(2) FD9R6004/2C-3L Diplexer	147
(2) RRUS-12	167	(2) FD9R6004/2C-3L Diplexer	147
(2) RRUS-12	167	(1) Low Profile Platform	147
RRUS-32	167	SC-E 6014 rev2 w/Mount Pipe	147
RRUS-32	167	SC-E 6014 rev2 w/Mount Pipe	147
RRUS-32	167	SC-E 6014 rev2 w/Mount Pipe	147
RRUS-E2	167	SC-E 6014 rev2 w/Mount Pipe	147
RRUS-E2	167	LPA-80080/4CF W/Mount Pipe	147
RRUS-E2	167	LPA-80080/4CF W/Mount Pipe	147
(2) A2 Module	167	BXA-171063-8BF-2 w/ Mount Pipe	147
(2) A2 Module	167		

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 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 1.25 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 85.9%



FDH Engineering, Inc.
6521 Meridien Drive
Raleigh, NC 27616
Phone: (919) 755 1012
FAX: (919) 755 1031
Tower Analysis

Job: East Lyme 1, CT11794-S-02			
Project: 14224T1400			
Client: SBA Network Services, Inc.	Drawn by: Christopher B. Stryffeler, EI		App'd:
Code: TIA/EIA-222-F	Date: 01/29/14		Scale: NTS
Path:			Dwg No. E-1

Centek Engineering, Inc.
3-2 North Branford Road
Branford, Connecticut 06405
Phone: (203) 488-0580
Fax: (203) 488-8587

Steven L. Levine
Real Estate Consultant

February 7, 2014

Honorable Paul M. Formica
First Selectman, Town of East Lyme
Town Hall 108 Pennsylvania Avenue
Niantic, Connecticut 06357-0519

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 49 Brainerd Road, East Lyme (Owner, SBA)

Dear Mr. Formica:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") and Long Term Evolution ("LTE") capabilities, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review AT&T's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The enclosed Notice fully sets forth the AT&T proposal. However, if you have any questions or require any further information on the plans for the site or the Siting Council's procedures, please contact the undersigned at 860-830-0380 or Ms. Melanie Bachman, Acting Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine
Real Estate Consultant

Enclosure