



Centek Engineering, Inc.
63-2 North Branford Road
Branford, Connecticut 06405
Phone: (203) 488-0580
Fax: (203) 488-8587

Steven L. Levine
Real Estate Consultant

July 2, 2015

Honorable Robert Stein, Chairman,
and Members of the Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

**Re: Proposed New Cingular Wireless PCS, LLC Temporary Cellular Communications Site
at the 2015 Durham Agricultural Fair, Durham, CT**

Dear Chairman Stein and Members of the Council:

Centek Engineering, Inc. is pleased to submit this Notice of Exempt Modification on behalf of New Cingular Wireless PCS, LLC (“AT&T”).

AT&T intends to install a temporary cellular communications facility for service during the 2015 Durham Agricultural Fair. Please accept this Notice to the Connecticut Siting Council (“Council”), pursuant to R.C.S.A Section 16-50j-73, of construction that constitutes an exempt modification under R.C.S.A Section 16-50j-72(d). In compliance with R.C.S.A. Section 16-50j-73, copies of this Notice of Exempt Modification are being sent to the First Selectman of Durham and the Durham Agricultural Fair Association, which owns the fairgrounds property.

The proposed temporary cell site meets the criteria set forth in R.C.S.A Section 16-50j-72(d) for temporary cellular service for events of statewide significance. This site is necessary to provide additional system capacity to accommodate increased communication needs during the Fair.

As in 2010 - 2014, moreover, AT&T plans to operate a Wi-Fi network during the Fair to serve vendors and fairgoers needing Internet access.

The Durham Agricultural Fair will be held at the Durham Fairgrounds off CT Route 17 on September 24 - 27, 2015.

AT&T operates under licenses issued by the Federal Communications Commission (“FCC”) to provide cellular and PCS mobile telephone service in Middlesex County, which includes the area to be served by AT&T’s proposed temporary installation.

Proposed Temporary Facility

The temporary cell site will be located off Town House Road in Durham on property owned by the Durham Agricultural Fair Association. (See the attached location map.) Coordinates for the location are N41 - 28 - 12.7, W72 - 40 - 53.8. A copy of the agreement between the Fair Association and AT&T for temporary use of the property is attached. Electric power will be provided by the Agricultural Fair Association. The proposed temporary cell site will not increase noise level by six decibels or more.

Equipment installation will begin approximately August 20. The site will begin on-air operations on or around September 4 to be available during set-up of the Fair, and removal is scheduled for within 5 days after the Fair concludes.

AT&T's temporary cell site will consist of radio equipment installed in a trailer-mounted module referred to as a "Cell on Wheels" ("COW"). (See the attached drawings.) The COW (including trailer) is 22 feet in length, 8 feet in width, and 12 feet in height. The COW carries its own integrated telescoping pneumatic antenna mast that can be extended to a height of 60 ft above ground. Three guy lines will stabilize and support the antenna mast when extended. A temporary fenced enclosure measuring 24 ft x 34 ft x 6 ft high will enclose the entire COW apparatus, including guy anchors. Three panel antennas will be mounted at the top of the mast with a centerline height of 58.5 feet.

Power Density Calculations

AT&T's temporary cell site will not result in a total radio frequency electromagnetic radiation power density, measured at ground level at the COW location, at or above State or Federal standards. The following table shows the power density at the site from the proposed temporary cellular and Wi-Fi transmissions from the COW.

Transmissions	Centerline Height (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density[†] (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
AT&T LTE	58.5	700	1	500	0.0525	0.4667	11.26
AT&T LTE	58.5	1900	1	500	0.0525	1.0000	5.25
AT&T UMS	58.5	850	2	500	0.1051	0.5867	17.91
AT&T UMS	58.5	1900	2	500	0.1051	1.0000	10.51
AT&T Wi-Fi	20	5800	18	1.6	0.0259	1.0000	2.59
Total							47.51%

[†] Please note that the standard power density equation provided by the Council in its memo of January 22, 2001 incorporates a ground reflection factor of 2.56 as described in FCC OET Bulletin No. 65.

This "worst-case" power density calculation shows that AT&T's temporary transmissions from the COW will result in a power density corresponding to approximately 47.5 % of the ANSI/IEEE standard for uncontrolled environments. Therefore, total worst-case density levels from temporary cellular and Wi-Fi operations at the COW location would be within the applicable standard limits.

AT&T's proposed Wi-Fi network to serve vendors and other Internet users will consist of 24 stations, i.e., the Wi-Fi installation at the COW and 23 Wi-Fi repeater stations distributed throughout the fairgrounds. (See attachments for repeater station locations and a typical Wi-Fi station photograph.) Each of the low-power repeater stations will create its own local RF mini-environment. The repeaters will transmit signals back to the COW at 5800 MHz and will communicate with user devices over 2400 MHz transmissions. As demonstrated below, the repeater-to-COW and repeater-to-user RF emissions will be approximately 3% of the ANSI/IEEE standard for uncontrolled environments.

Transmissions	Centerline Height (feet)	Frequency (MHz)	Maximum Number of Channels	Power Per Channel (Watts)	Power Density † (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
AT&T Wi-Fi	10	5800	5	1	0.0180	1.0000	1.80
AT&T Wi-Fi	10	2400	3	1	0.0108	1.0000	1.08
Total							2.88%

Conclusion

For the reasons above, we respectfully request that the Council acknowledge AT&T's Notice of Exempt Modification for the temporary cell site and Wi-Fi network to be operated during the Durham Agricultural Fair pursuant to R.C.S.A. Section 16-50j-72(d).

Please call me at 860-830-0380 should you have any questions concerning this Notice. Thank you for your consideration in this matter.

Respectfully yours,



Steven Levine
Real Estate Consultant

cc: Honorable Laura L. Francis, 1st Selectman, Town of Durham
Durham Agricultural Fair Association (by email)

Attachments

DURHAM FAIR**OUTDOOR COMMERCIAL RENTAL CONTRACT**

This agreement made between THE DURHAM AGRICULTURAL FAIR ASSOCIATION, Inc. hereinafter called THE ASSOCIATION and:

Concession: New Cingular Wireless PCS, LLC

Name: David Vivian

E-Mail: david.vivian@sai-comm.com

Street: 500 Enterprise Drive, Suite 3A

Phone: (413) 218-5042

Town: Rocky Hill

State: CT

Zip: 06067

hereinafter called THE LESSEE.

THE ASSOCIATION agrees to lease to THE LESSEE certain space in a location to be determined by the Superintendent of Outdoor Rentals for use during The Durham Agricultural Fair to be held on September 24, 25, 26, and 27, 2015, subject to the following rules, regulations, terms and conditions

Type of Space: Non Food
 Food

Size of Space N/A

Rate: N/A

Type of Products Sold : C.O.W (Cell On Wheels) and WI-FI Services NOTE FACILITY IS UNMANNED

Rental Fee:		*Space: «Frontage»	(X) \$«Rate»	= \$ N/A
Soda Licensing Fee:	\$0	Insurance: «Insurance»		+ \$ N/A
Hookup by Electrician:	+ N/A	Total Electrical:		+ \$ N/A
Extra Amps:	N/A	Non-Profit Discount: «Discount»%		- \$ N/A
TOTAL ELECTRICAL	N/A	TOTAL RENTAL FEE		= [REDACTED]

Make Check Payable to: Durham Agricultural Fair Association

This contract subject to the attached addenda:

- 5) LOCAL ORDINANCE GOVERNING CONCESSIONS AT THE DURHAM AGRICULTURAL FAIR (See back of this contract)
- 6) RULES AND REGULATIONS OF THE DURHAM AGRICULTURAL FAIR ASSOCIATION, INC. (See back of this contract)
- 7) RULES AND REGULATIONS OF THE COMMERCIAL RENTALS DEPARTMENT (See back of this contract)
- 8) RULES OF DEPARTMENT OF REVENUE SERVICES (Supply Copy of Sales Tax License)
- 9) RULES OF DEPARTMENT OF CONSUMER PROTECTION
Rules and regulations pertaining to labeling, packaging and sale of commodities. CGS 42-1 15 J-1 through 42-1 15 J-8.
- 10) RULES OF DEPARTMENT OF CONSUMER PROTECTION (Supply Copy of License)
Rules and regulations pertaining to frozen dessert products. CGS 21-A Section 48 through 58.
- 11) RULES OF DEPARTMENT OF CONSUMER PROTECTION (Supply Copy of License)
Rules and regulations pertaining to bakeries. CGS 21-A Section 151 through 159.
- 12) FOOD AND BEVERAGE DISPENSING REQUIREMENTS OF THE TOWN OF DURHAM, HEALTH DEPARTMENT
- 13) CANCELLATION POLICY AS OUTLINED IN SECTION 13 (See back of this contract)
- 14) SPECIFIC ADDENDA AS ATTACHED

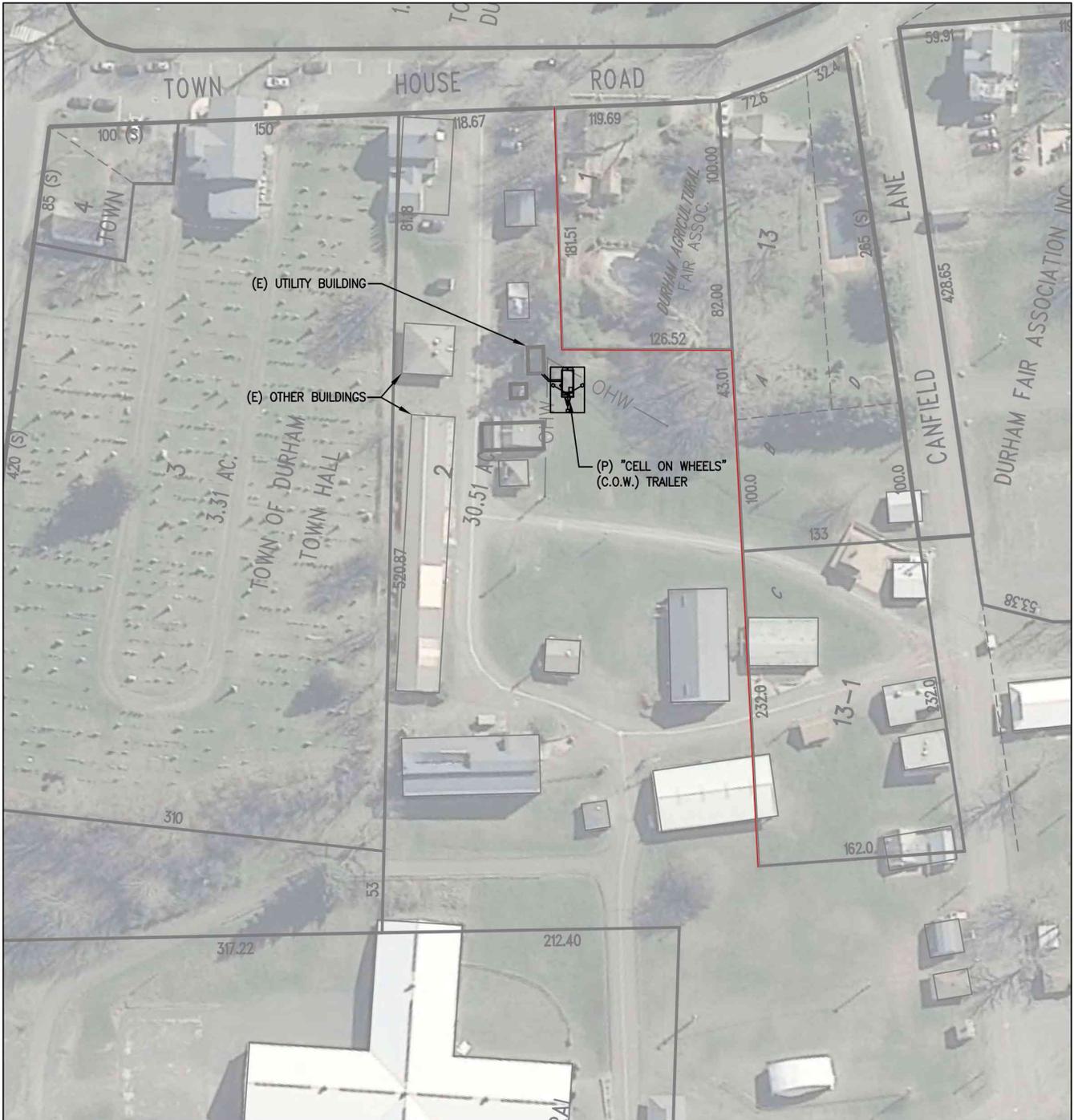
I have read this contract and attached addenda completely and agree to conduct the herein named concession in accordance with the rules, regulations, terms and conditions of this contract and addenda. I will also direct my employees to follow the said rules, regulations, terms and conditions of this contract and addenda. This contract is accepted upon condition that the business of the above stated is to be conducted in accordance with the rules and regulations of the State of Connecticut, Town of Durham and The Durham Agricultural Fair Association, Inc.

FOR OFFICE USE ONLY
FEE PAID:
CHECK #
CT SALES TAX #

ACCEPTED BY: New Cingular Wireless, PCS, LLC By: AT&T Mobility Corporation Its. Manager Print Name: Richard Detch, Sr. RE & Construction Manager	
Lessee Signature	
Richard Detch	
Digitally signed by Richard Detch DN: cn=Richard Detch, o=AT&T RE & Construction, ou, email=rd1090@att.com, c=US Date: 2015.05.29 09:21:59 -04'00'	
ACCEPTED BY:	DATE 6-3-15

PLEASE SIGN AND RETURN

CONTRACT 012-2015



AT&T CM APPROVED _____

AT&T RF APPROVED _____



PARTIAL SITE PLAN

SCALE: 1"=100'



Civil Engineering - Site Development
Surveying - Telecommunications

500 NORTH BROADWAY
EAST PROVIDENCE, RI 02914
PH: 401-354-2403
FAX: 401-633-6354



SITE ACQUISITION, INC.
27 NORTHWESTERN DRIVE
SALEM, NH 03079



550 COCHITUATE ROAD
SUITE 13
FRAMINGHAM, MA
01701-4681

SITE NO: CT2301

SITE NAME: DURHAM FAIR C.O.W.

ADDRESS: 24 TOWN HOUSE ROAD
DURHAM, CT

DATE: 6/25/2014

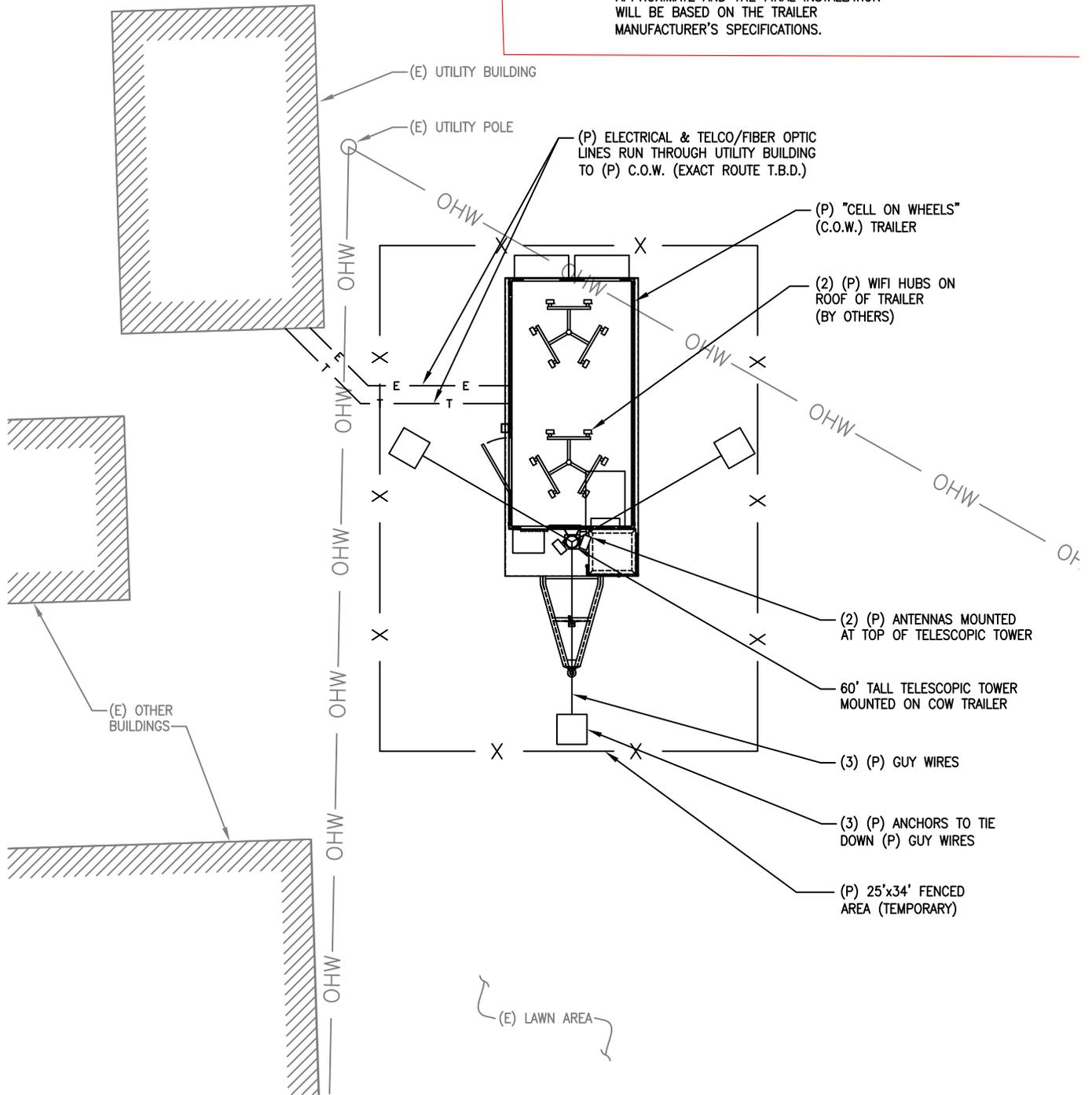
DRAWN BY: MER

REVISION: 0

SCALE: AS SHOWN

SHEET: 1 OF 3

NOTE:
 GUY WIRES AND ANCHOR LOCATIONS ARE APPROXIMATE AND THE FINAL INSTALLATION WILL BE BASED ON THE TRAILER MANUFACTURER'S SPECIFICATIONS.



AT&T CM APPROVED _____
 AT&T RF APPROVED _____



1
2

C.O.W. AREA PLAN

SCALE: 1"=10'

EG ADVANCED
 ENGINEERING GROUP, P.C.
 Civil Engineering - Site Development
 Surveying - Telecommunications
 500 NORTH BROADWAY
 EAST PROVIDENCE, RI 02914
 PH: 401-354-2403
 FAX: 401-633-6354



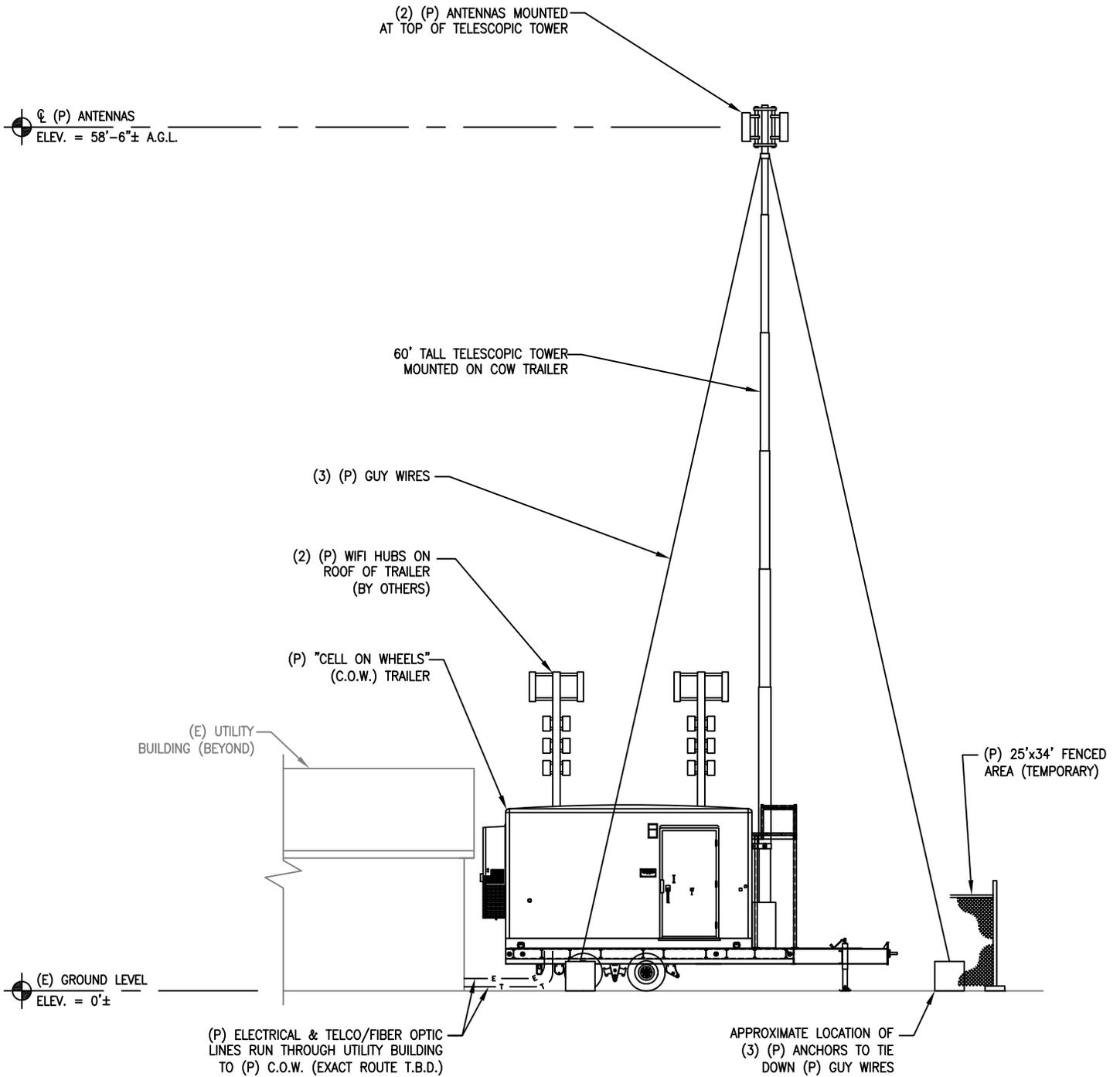
SITE ACQUISITION, INC.
 27 NORTHWESTERN DRIVE
 SALEM, NH 03079



550 COCHITUATE ROAD
 SUITE 13
 FRAMINGHAM, MA
 01701-4681

SITE NO: CT2301
 SITE NAME: DURHAM FAIR C.O.W.
 ADDRESS: 24 TOWN HOUSE ROAD
 DURHAM, CT

DATE: 6/25/2014
 DRAWN BY: MER
 REVISION: 0
 SCALE: AS SHOWN
 SHEET: 2 OF 3



AT&T CM APPROVED _____

AT&T RF APPROVED _____

1 C.O.W. ELEVATION
3 SCALE: 1"=10'



Civil Engineering - Site Development
Surveying - Telecommunications

500 NORTH BROADWAY
EAST PROVIDENCE, RI 02914
PH: 401-354-2403
FAX: 401-633-6354



SITE ACQUISITION, INC.
27 NORTHWESTERN DRIVE
SALEM, NH 03079



550 COCHITUATE ROAD
SUITE 13
FRAMINGHAM, MA
01701-4681

SITE NO: CT2301

SITE NAME: DURHAM FAIR C.O.W.

ADDRESS: 24 TOWN HOUSE ROAD
DURHAM, CT

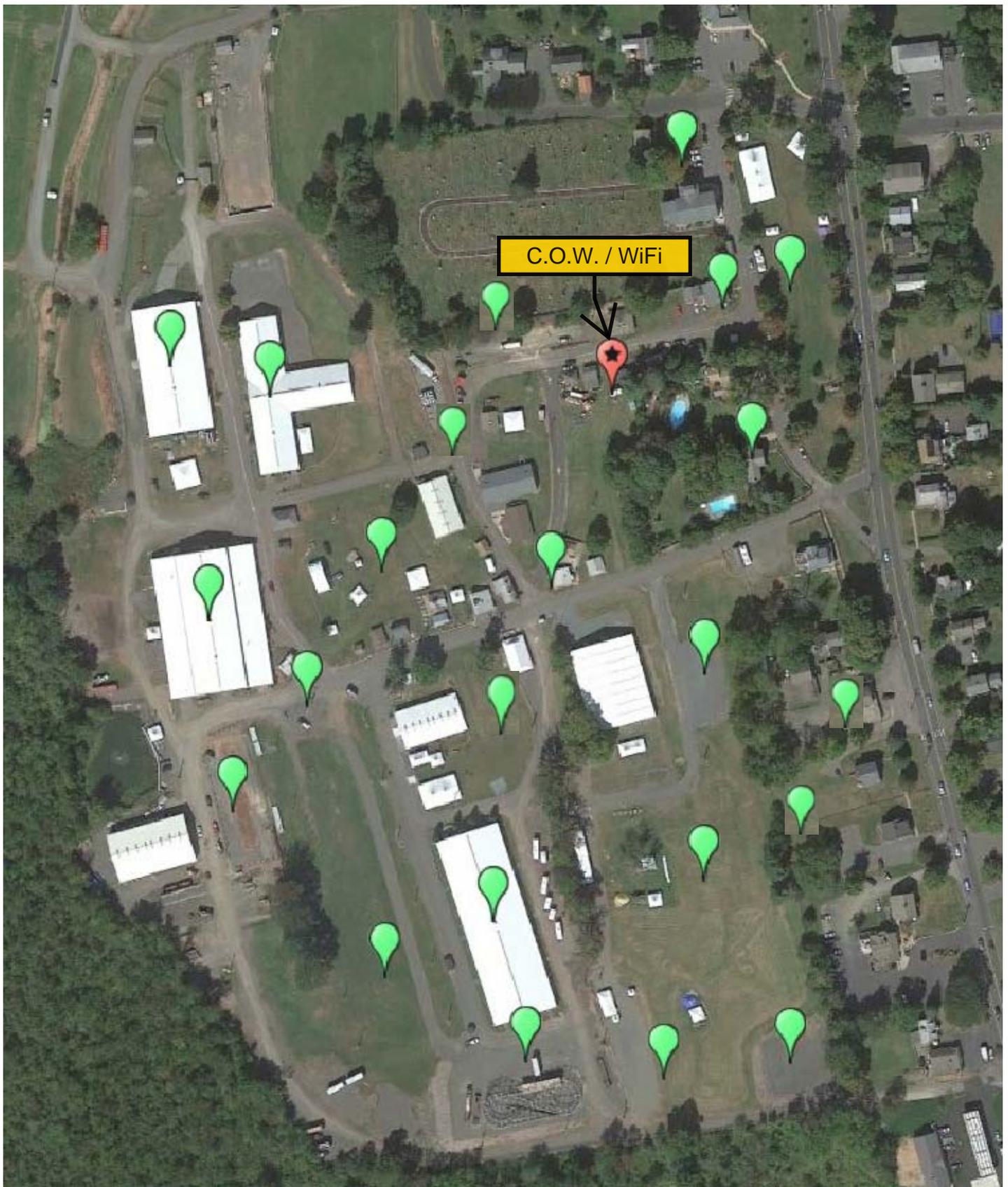
DATE: 6/25/2014

DRAWN BY: MER

REVISION: 0

SCALE: AS SHOWN

SHEET: 3 OF 3



Civil Engineering - Site Development
Surveying - Telecommunications

500 NORTH BROADWAY
EAST PROVIDENCE, RI 02914
PH: 401-354-2403
FAX: 401-633-6354



SITE ACQUISITION, INC.
27 NORTHWESTERN DRIVE
SALEM, NH 03079



550 COCHITUATE ROAD
SUITE 13
FRAMINGHAM, MA
01701-4681

WiFi Cluster Locations: 

SITE NAME: DURHAM FAIR C.O.W.

ADDRESS: 24 TOWN HOUSE ROAD
DURHAM, CT

DRAWN BY: MER

REVISION: 0

SCALE: N.T.S.

SHEET: 1 OF 1

Typical WiFi Antenna Cluster





Centek Engineering, Inc.
63-2 North Branford Road
Branford, Connecticut 06405
Phone: (203) 488-0580
Fax: (203) 488-8587

Steven L. Levine
Real Estate Consultant

July 2, 2015

Honorable Laura L. Francis
1st Selectman, Town of Durham
Town Hall, 30 Town House Rd.
Durham, Connecticut 06422

**Re: Proposed New Cingular Wireless PCS, LLC Temporary Cellular Communications Site
at the 2015 Durham Agricultural Fair, Durham, CT**

Dear Ms. Francis:

Centek Engineering, Inc. is pleased to submit the enclosed Notice on behalf of New Cingular Wireless PCS, LLC ("AT&T").

AT&T intends to install a temporary cellular and Wi-Fi communications facility for service during the upcoming 2015 Durham Agricultural Fair.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council as required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73. Please accept this letter as notification to the Town of Durham under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(d).

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 Levine
Real Estate Consultant

Enclosure