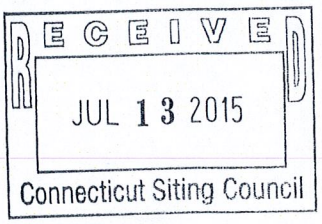


July 13, 2015

Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

ORIGINAL

RE: Notice of Work Complete
71 Moxley Road
Montville, CT
Sprint Site #: NV_CT23XC400
EM-SPRINT-086-130306

Members of the Siting Council:

On behalf of Sprint Spectrum, SBA Communications is hereby notifying the Connecticut Siting Council that work has been completed at the aforementioned telecommunications facility.

Pursuant to the Council's letter of acknowledgement dated April 10, 2013, please find the enclosed Post Modification Inspection Report confirming that the installation meets with the recommendations made in the structural analysis report.

Thank you,

Kri Pelletier
Property Specialist
SBA Communications Corporation
33 Boston Post Road West, Suite 320
Marlborough, MA 01752
508-251-0720 x 3804 + T
508-251-1755 + F
kpelletier@sbasite.com

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

CT23XC400

April 10, 2013

Rick Woods
SBA Communications Corporation
33 Boston Post Road West, Suite 320
Marlborough, MA 01752

RE: **EM-SPRINT-086-130306** – Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 71 Moxley Hill Road, Montville, Connecticut.

Dear Mr. Woods:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- The proposed coax and accessory equipment shall be installed in accordance with the recommendations made in the Structural Analysis Report prepared by FDH Engineering dated February 5, 2013 and stamped by Christopher Murphy;
- Within 45 days following completion of the antenna installation, Sprint shall provide documentation certified by a professional engineer that its installation complied with the recommendation of the structural analysis;
- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated March 5, 2013. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Linda Roberts
Executive Director

LR/CDM/jb

c: The Honorable Ronald K. McDaniel, Mayor, Town of Montville
Marcia Vlaun, Town Planner, Town of Montville
Sean Gormley, SBA

Final Report of Special Inspections

Project: *CT23XC400 Montville South - SPRINT (NV PROJECT)*

Location: *71 Moxley Road Montville, CT*

Owner: *SBA Towers II, LLC*

Owner's Address: 5900 Broken Sound Parkway, NW
Boca Raton, FL 33487

Engineer of Record: *Derek J. Creaser, P.E.*
Hudson Design Group, LLC.

To the best of my information, knowledge and belief, the Special Inspections required for this project, and itemized in the *Statement of Special Inspections* submitted for permit, have been performed and all discovered discrepancies have been reported and resolved.

Comments: Based on my knowledge, information and belief the completed construction substantially conforms to the approved plans, Connecticut State Building Code, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures (ANSI/TIA/EIA-222-F), the equipment manufacturer's installation guidelines, and the following:

1. Final Construction Drawings dated 11/05/12, prepared by Comex Consultants entitled "*Montville S.*".
2. Passing Structural Analysis dated 02/05/13, prepared by FDH Engineering.
3. Reference CT State Fire Marshal Modification Request # FM-0422-14 for information regarding the existing Sprint Hydrogen storage cabinet.

All deviations from the approved plans do not endanger the intended occupancy of the facility and equipment substitutions are approved as equivalent to the original specifications. Construction has been satisfactorily completed. This inspection does not include testing and inspections of any modifications to the tower. Such inspections are strictly the responsibility of the design professional performing those design and analyses.

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Special Inspector

Derek J. Creaser, P.E
(Type or print name)

Signature 7/9/15 Date

Licensed Professional Seal

p: 978.557.5553 f: 978.336.5586 a: 1600 Osgood Street, Building 20 North, Suite 3090, N. Andover, MA 01845
p: 413.588.8139 f: 413.517.0590 a: 116 Pleasant Street, Ste 302, Easthampton, MA 01027

STATE OF CONNECTICUT

Department of Administrative Services
Division of Construction Services

Office of State Fire Marshal

MODIFICATION REQUEST # FM-0422-14

PROJECT NAME: MONTVILLE (SBA/SPRINT PCS

ADDRESS: 71 MOXLEY ROAD

TOWN: MONTVILLE

STATE FIRE MARSHAL

In accordance with Section 29-338 of the Connecticut General Statutes, the decision of the Office of the State Fire Marshal in this matter is:

This modification request that seeks relief from the Connecticut Hazardous Chemicals Code effective January 24, 1997 specifically NFPA 50A/1994 Section 4-1.2 which requires electrical equipment within 15 feet of hydrogen cylinders located outdoors be in accordance with Article 501 of NFPA 70 for Class I, Division 2 Locations.

With consideration of the conditions that exist with respect to the location of the Reli-On HSM16 fuel cabinet containing 16-510 SCF hydrogen cylinders, totaling 8160 SCF, is installed within the Class I, Division 2 location of the electrical equipment, the proposal to install and 2 hour rated constructed CMU wall between the HSM16 Fuel Cabinet and the electrical equipment, this request is being ***APPROVED*** without the installation of the CMU wall. It is of our opinion that the properties of hydrogen allow for rapid dispersion and would not be a hazard in this type of installation.

Evaluated by JPD

Reviewed by: Joseph Kingston

Joseph. Kingston

Decision endorsed by: William Abbott

William Abbott
State Fire Marshal

Date: February 9, 2015

"In accordance with Connecticut General Statute 29-340, any person aggrieved by any such regulation or act of said commissioner in enforcing the same may apply for relief to the superior court for the judicial district of Hartford or for the judicial district in which such plant or equipment is located or, if said court is not in session, to any judge thereof, who may grant appropriate relief.."

DPS-0927-C Rev 1/2001

State of Connecticut, Department of Public Safety
Division of Fire, Emergency & Building Services
Office of State Fire Marshal

NOV 21 2014

APPLICATION FOR REQUEST FOR MODIFICATION OF A REQUIREMENT OF A FIRE SAFETY REGULATION ADOPTED PURSUANT TO CHAPTER 541 OF THE CONNECTICUT GENERAL STATUTES

Reference No. FM 14-680

Facility Name: Montville South (SBA/Sprint PCS)

Facility Address: 71 Moxley Road, Montville, CT 06353
Number Street City State Zip

Facility Owner: SBA Towers II, LLC Telephone: 561-226-9523

Owner's Address: 5900 Broken Sound Parkway NW, Boca Raton, FL 33487
Number Street City State Zip

Applicant's Name: Hudson Design Group Telephone: 978-557-5553

Applicant's Address: 1600 Osgood Landing, Bldg 20N, Suite 3090, North Andover, MA 01845
Number Street City State Zip

Contact Person: Derek Creaser, PE Telephone: 617-306-3034

Type of Facility: Utility - Telecommunications Tower with Hydrogen Storage for backup generator
Office Building, LP-Gas Bulk Plant, Automotive Service Station, etc

This Facility is: ☐ New; ■ Existing; ☐ Renovation; Date of Construction: 2012; Date of Present Use: current

Previous modifications for this Facility: ■ Unknown; ☐ No; ☐ Yes, Modification Numbers:

☐ Check if a Modification Request to the State Building Code is being submitted to the Office of State Building Inspector.

I, the above named applicant, being a lawful agent of the owner, request modification/relief from a requirement of the CT:

- ☐ Moving Picture Theater Code pursuant to C.G.S. § 29-109
- ☐ Amusements/Tent and Portable Shelter Codes pursuant to C.G.S. § 29-140
- ☐ State Fire Safety Code pursuant to C.G.S. §29-296
- ☐ Oil Burning Equipment Code pursuant to C.G.S. §29-317(c)
- ☐ Flammable & Combustible Liquids Code pursuant to C.G.S. §29-321
- ☐ Gas Equipment & Piping Code pursuant to C.G.S. §29-329(c)
- ☐ Liquefied Petroleum Gas & Liquefied Natural Gas Code pursuant to C.G.S. §29-333
- ☑ Hazardous Chemical Code pursuant to C.G.S. §29-338
- ☐ Fireworks and Special Effects Code pursuant to C.G.S. §29-357(c)
- ☐ Model Rocketry Code pursuant to C.G.S. §29-368

For the requirement as prescribed in:

Regulation Number: 29-337 (29-282-6d, 29-317-1b) Standard: NFPA 50A (If Applicable) (NFPA 30, NFPA 54, etc) Section Number: 3-2 & 4-1.2 (Identify Section Number)

I request this modification/relief due to the following reasons:

■ Equivalent Alternative ☐ Practical Difficulty ■ Requirements Unwarranted

Describe area of non-conformance with the appropriate regulation, its location in the facility, and a brief description why code compliance cannot be achieved, specify dimensions as applicable

An existing Reli-On 8000 SCF Hydrogen storage module (HSM) at 3000 psi does not meet the setback requirements per NFPA 50A-94 Section 3-2.2 #11: 50' setback to inlets to HVAC; and Section 4-1.2: 15' setback to unclassified electrical equipment.

Reli-On cites NFPA 497 for further information on classified electrical equipment locations; and seems to claim that the area directly adjacent to the HSM is not a classified location: "Experience has shown that the release of ignitable mixtures from some operations and apparatus is so infrequent that the area classification is not necessary."

☐ Separate Sheet Attached

Page 1 of 3

FM-0422-14

FM-0422-14

I intend to provide the following safeguard(s) as an alternative measure to secure public safety in lieu of strict compliance with the requirement of the 29-337 (Insert Name of Regulation for which Modification/Relief is being Requested) Section NFPA 50A-94 Sections 3-2 & 4-1.2 (Identify section of Code/Regulation) noted above:

Propose to install a 2 hour fire barrier in lieu of the 15' unclassified electrical setback, and reduce the 50' setback to 25' for HVAC noting that a 50' setback may be unwarranted as telecommunication shelters have a Hydrogen detection and alarm system that notifies the network operations center to call the fire department.

☐ Separate Sheet Attached

In addition the following are enclosed ■ Plans/Drawings/Sketches; ■ Photographs; ■ Product Data Sheets ☐ Supplement Information Sheet ☐ Other

as necessary for clarification of the information provided.

Applicant's Signature & Telephone Number — 11/17/14 Date

For Local Fire Marshal Use

I, ☒ Support, ☐ Do NOT Support, this Request for Modification to Connecticut NFPA 50A (Identify Code by Name; i.e. Fire Safety Code, Oil Burning Equip Code);

Regulation of Connecticut State Agency 29-337 (Insert regulation Number i.e. 29-292-8d, 29-317-3a, etc) inclusive; as identified above to Section

3-2, 4-1.2 (Identify code flow i.e. occupancy chapter, core chapter as applicable) because of the following reasons:

I support this request as presented.

☐ Separate Sheet Attached

Fire Marshal — Raymond Occhialini, Fire Marshal (Reviewer's Signature / Title) — 860848-1175 (Telephone Number) — 11/18/14 Date

☐ Contact me regarding this Request.

State Fire Marshal

The response of the Commissioner of Public Safety/State Fire Marshal to this request in accordance with Connecticut General Statutes § 29-33Y is attached on a separate sheet.

Supervisor's Initials

APPLICATION FOR REQUEST FOR MODIFICATION OF A REQUIREMENT OF A FIRE SAFETY REGULATION
SUPPLEMENT INFORMATION SHEET

If Modification request is for a building or structure, please complete the following:

Date of Construction: _____ Date of Occupancy for Present Use: _____

Number of Stories (Above grade)_____Dimension / Area Per Floor: _____

Attic: ☐ Full ☐ Partial ☐ None

Basement – # of Levels: _____ ☐ Full ☐ Partial ☐ None ☐ Finished ☐ Storage ☐ Crawl Space

Type of Occupancy (Check *all* that apply) ☐ **New** ☐ **Existing** ☐ **Addition** ☐ **Renovation of building**

☐ **Change of Occupancy**: From _____ to _____

☐ **Assembly**
Occupant Load: _____ persons
☐ **Educational**
☐ **Business**
☐ Single Tenant
☐ Multiple Tenant
☐ **Mercantile**
☐ Class A
☐ Class B
☐ Class C
☐ Covered Mall

☐ **Detention**
☐ with locking II
☐ with locking III
☐ with locking IV
☐ with locking V
☐ **Apartment**
No. of Units: ___
☐ **Day Care**
☐ Adult
☐ Family
☐ Group

☐ **Residential Board**
☐ Large ☐ Small
☐ Prompt
☐ Slow
☐ Impractical
☐ **Health Care**
☐ Hospital
☐ Nursing Home
☐ Ambulatory
☐ Limited

☐ **Hotel/Motel/Dorm**
☐ **Lodging/Rooming**
☐ Bed & Breakfast
☐ **1 & 2 Family**
☐ **Industrial**
☐ Storage
☐ High Rise
☐ **Underground**
☐ **Windowless**
☐ **Other:**_____
☐ **Other:**_____

Type of Construction per NFPA 220: (Check all that apply)

☐ **Type I**
☐ I (443)
☐ I (332)

☐ **Type II**
☐ II (222)
☐ II (111)
☐ II (000)

☐ **Type III**
☐ III (211)
☐ III (200)

☐ **Type IV**
☐ (2HH)

☐ **Type V**
☐ V (111)
☐ V (000)

Approved Systems Provided (Check all that apply):

☐ **Automatic Sprinklers**
☐ NFPA 13 ☐ Throughout the Building
☐ NFPA 13R ☐ Partial: Location _____
☐ NFPA 13D ☐ Electrically Supervised
☐ CSFSC 7-7.1.2 Isolated Hazardous Area System
Location: _____

☐ **Emergency Lighting** ☐ **NFPA 96 Hood System**

☐ **Smoke Control** ☐ **Standpipe**; Class: _____

☐ **Fire Alarm**
☐ Manual Activation ☐ Occupant Notification
☐ Automatic Activation ☐ General ☐ Zoned
☐ Throughout the Building ☐ Voice Evacuation
☐ Partial Location: _____
☐ Water Flow ☐ Special System: _____
☐ Other Activation Means: _____

☐ Other Systems: _____

Other Information:_____

SBA Communications Corporation
33 Boston Post Road West
Suite 320
Marlborough, MA 01752

T + 508.251.0720 x313
F + 508.251.1755

sbasite.com

CT State Fire Code Variance Request

Bryan Bakis

From: Kostandin Butka <kbutka@hudsondesigngroupllc.com>
Sent: Thursday, February 19, 2015 3:48 PM
To: Bryan Bakis
Subject: FW: 71 Moxley Road Tower - Hydrogen Tank Setback Requirements (Sprint Site CT23XC400)
Attachments: CT23XC400 CT Modification Request Form 11-14-14 Final.pdf

Bryan,
Please see attached.

Thank you
Kostandin Butka
Project Manager

Hudson Design Group LLC
978.557.5553 x230

From: Derek Creaser
Sent: Monday, November 17, 2014 3:38 PM
To: Raymond Occhialini
Subject: RE: 71 Moxley Road Tower - Hydrogen Tank Setback Requirements (Sprint Site CT23XC400)

Good Afternoon,
Attached is the modification request form for the hydrogen storage module setback at the telecommunication tower site. I've also included the abatement plan, picture and information from Reli-On attached to the file.

Please let me know if you would like to meet to discuss further.

Thank you,

Derek Creaser, PE
Sr. Project Manager
Hudson Design Group LLC
(617)306-3034

From: Raymond Occhialini [mailto:ROcchialini@montville-ct.org]
Sent: Friday, November 07, 2014 8:40 AM
To: Derek Creaser
Subject: RE: 71 Moxley Road Tower - Hydrogen Tank Setback Requirements (Sprint Site CT23XC400)

Good Morning,

Attached is the State regulation and code modification form for the state which would be needed at filled out and then submitted to the State Fire Marshal for review after local comments. No modifications are approved at the Local level only the State.

Please fill out the form and submit it to the local fire marshal and then I will look it over and forward it to the State.

Raymond T. Occhialini
Fire Marshal / EMD
Town of Montville
310 Norwich New London Turnpike
Uncasville, CT 06382
Office 860-848-3030 x 381
Fax 860-848-4063
http://www.townofmontville.org

From: Derek Creaser [mailto:derek.creaser@hudsondesigngroupllc.com]
Sent: Thursday, November 06, 2014 10:09 AM
To: Raymond Occhialini
Subject: 71 Moxley Road Tower - Hydrogen Tank Setback Requirements (Sprint Site CT23XC400)

Good Morning Sir,
I have recently left a message with your secretary regarding a Hydrogen storage tank setback issue at the SBA Tower site on Moxley Road. I work for SBA as an engineering code consultant, and both SBA and Sprint have agreed to have me pursue a mitigation design and code modification request for the setback requirements of NFPA 50A. I've attached the NFPA 50A-94 code and preliminary site/ abatement plan for the Hydrogen Storage Module (HSM) installed at the telecommunications site. I also included an email to Chick Kiessling with my interpretation of the setback requirements for the HSM. In particular, I believe that the HSM does not meet the 15' unclassified electrical equipment setback.

As a note, I have been in contact with a few other Local Fire Marshal's offices with the same setback problem (Glastonbury, Norwich…). I would be open to meeting onsite or at your office to discuss the interpretation and potential Modification Request, as required. Please feel free to contact me on my mobile number below.

Thank you,

Derek J. Creaser, P.E.
Sr. Project Manager
Hudson Design Group LLC
1600 Osgood Street
Suite 3090, Bldg 20N
North Andover, MA 01845

o: (978)557-5553 x238
m: (617)306-3034
f: (978)336-5586
www.hudsondesigngroupllc.com

**This e-mail, and any attachments, are intended only for use by the addressee(s) named herein and may contain legally privileged and/or confidential information. It is the property of Hudson Design Group LLC. Any dissemination, distribution or copying of this email, any attachments thereto, and any use of the information contained is strictly prohibited. If you have received this email in error, please notify me by return e-mail and permanently delete the original and any copy thereof.

DPS-0927-C Rev 1/2001

State of Connecticut, Department of Public Safety
Division of Fire, Emergency & Building Services
Office of State Fire Marshal

APPLICATION FOR REQUEST FOR MODIFICATION OF A REQUIREMENT OF A FIRE SAFETY REGULATION ADOPTED PURSUANT TO CHAPTER 541 OF THE CONNECTICUT GENERAL STATUTES

Reference No. _____

Facility Name: Montville South (SBA/Sprint PCS)

Facility Address: 71 Moxley Road, Montville, CT 06353
Number Street City State Zip

Facility Owner: SBA Towers II, LLC Telephone: 561-226-9523

Owner's Address: 5900 Broken Sound Parkway NW, Boca Raton, FL 33487
Number Street City State Zip

Applicant's Name: Hudson Design Group Telephone: 978-557-5553

Applicant's Address: 1600 Osgood Landing, Bldg 20N, Suite 3090, North Andover, MA 01845
Number Street City State Zip

Contact Person: Derek Creaser, PE Telephone: 617-306-3034

Type of Facility: Utility - Telecommunications Tower with Hydrogen Storage for backup generator
Office Building, LP-Gas Bulk Plant,, Automotive Service Station, etc

This Facility is: ☐ New; ■ Existing; ☐ Renovation; Date of Construction: 2012; Date of Present Use: current

Previous modifications for this Facility: ■ Unknown; ☐ No; ☐ Yes, Modification Numbers: _____

☐ Check if a Modification Request to the State Building Code is being submitted to the Office of State Building Inspector.

I, the above named applicant, being a lawful agent of the owner, request modification/relief from a requirement of the CT:

- ☐ Moving Picture Theater Code pursuant to C.G.S. § 29-109
- ☐ Amusements/Tent and Portable Shelter Codes pursuant to C.G.S. § 29-140
- ☐ State Fire Safety Code pursuant to C.G.S. §29-296
- ☐ Oil Burning Equipment Code pursuant to C.G.S. §29-317(c)
- ☐ Flammable & Combustible Liquids Code pursuant to C.G.S. §29-321
- ☐ Gas Equipment & Piping Code pursuant to C.G.S. §29-329(c)
- ☐ Liquefied Petroleum Gas & Liquefied Natural Gas Code pursuant to C.G.S. §29-333
- ☐ Hazardous Chemical Code pursuant to C.G.S. §29-338
- ☐ Fireworks and Special Effects Code pursuant to C.G.S. §29-357(c)
- ☐ Model Rocketry Code pursuant to C.G.S. §29-368

For the requirement as prescribed in:

Regulation Number: 29-337 (29-292-8d, 29-317-1b), Standard: NFPA 50A (If Applicable) (NFPA 30, NFPA 54, etc), Section Number: 3-2 & 4-1.2 (Identify Section Number)

I request this modification/relief due to the following reasons:

■ Equivalent Alternative ☐ Practical Difficulty ■ Requirements Unwarranted

Describe area of non-conformance with the appropriate regulation, its location in the facility, and a brief description why code compliance cannot be achieved, specify dimensions as applicable.

An existing Reli-On 8000 SCF Hydrogen storage module (HSM) at 3000 psi does not meet the setback requirements per NFPA 50A-94 Section 3-2.2 #11: 50' setback to inlets to HVAC; and Section 4-1.2: 15' setback to unclassified electrical equipment.

Reli-On cites NFPA 497 for further information on classified electrical equipment locations; and seems to claim that the area directly adjacent to the HSM is not a classified location: "Experience has shown that the release of ignitable mixtures from some operations and apparatus is so infrequent that the area classification is not necessary."

☐ Separate Sheet Attached

I intend to provide the following safeguard(s) as an alternative measure to secure public safety in lieu of strict compliance with the requirement of the 29-337 (Insert Name of Regulation for which Modification/Relief is being Requested) Section NFPA 50A-94 Sections 3-2 & 4-1.2 (Identify section of Code/Regulation) noted above:

Propose to install a 2 hour fire barrier in lieu of the 15' unclassified electrical setback, and reduce the 50' setback to 25' for HVAC noting that a 50' setback may be unwarranted as telecommunication shelters have a Hydrogen detection and alarm system that notifies the network operations center to call the fire department.

☐ Separate Sheet Attached

In addition the following are enclosed ■ Plans/Drawings/Sketches; ■ Photographs; ■ Product Data Sheets ☐ Supplement Information Sheet ☐ Other

as necessary for clarification of the information provided.

Applicant's Signature & Telephone Number — 11/17/14 Date

FOR LOCAL FIRE MARSHAL USE

I, ☐ Support, ☐ Do NOT Support, this Request for Modification to Connecticut _____ (Identify Code by Name; i e Fire Safety Code, Oil Burning Equip Code);

Regulation of Connecticut State Agency _____ (Insert regulation Number i e 29-292-8d, 29-317-3a, etc) inclusive; as identified above to Section

_____ (Identify code flow i.e. occupancy chapter, core chapter as applicable) because of the following reasons:

☐ Separate Sheet Attached

Fire Marshal — Reviewer's Signature / Title — Telephone Number — Date

☐ Contact me regarding this Request.

STATE FIRE MARSHAL

The response of the Commissioner of Public Safety/State Fire Marshal to this request in accordance with Connecticut General Statutes § 29-_____ is attached on a separate sheet.

Supervisor's Initials

APPLICATION FOR REQUEST FOR MODIFICATION OF A REQUIREMENT OF A FIRE SAFETY REGULATION
SUPPLEMENT INFORMATION SHEET

If Modification request is for a building or structure, please complete the following:

Date of Construction: _____ Date of Occupancy for Present Use: _____

Number of Stories (Above grade)_____Dimension / Area Per Floor: _____

Attic: ☐ Full ☐ Partial ☐ None

Basement – # of Levels: _____ ☐ Full ☐ Partial ☐ None ☐ Finished ☐ Storage ☐ Crawl Space

Type of Occupancy (Check *all* that apply) ☐ **New** ☐ **Existing** ☐ **Addition** ☐ **Renovation of building**

☐ **Change of Occupancy**: From _____ to _____

☐ **Assembly**
Occupant Load: _____ persons

☐ **Educational**

☐ **Business**
☐ Single Tenant
☐ Multiple Tenant

☐ **Mercantile**
☐ Class A
☐ Class B
☐ Class C
☐ Covered Mall

☐ **Detention**
☐ with locking II
☐ with locking III
☐ with locking IV
☐ with locking V

☐ **Apartment**
No. of Units: ___

☐ **Day Care**
☐ Adult
☐ Family
☐ Group

☐ **Residential Board**
☐ Large ☐ Small
☐ Prompt
☐ Slow
☐ Impractical

☐ **Health Care**
☐ Hospital
☐ Nursing Home
☐ Ambulatory
☐ Limited

☐ **Hotel/Motel/Dorm**

☐ **Lodging/Rooming**
☐ Bed & Breakfast

☐ **1 & 2 Family**

☐ **Industrial**
☐ Storage
☐ High Rise

☐ **Underground**

☐ **Windowless**

☐ **Other:**_____

☐ **Other:**_____

Type of Construction per NFPA 220: (Check all that apply)

☐ **Type I**
☐ I (443)
☐ I (332)

☐ **Type II**
☐ II (222)
☐ II (111)
☐ II (000)

☐ **Type III**
☐ III (211)
☐ III (200)

☐ **Type IV**
☐ (2HH)

☐ **Type V**
☐ V (111)
☐ V (000)

Approved Systems Provided (Check all that apply):

☐ **Automatic Sprinklers**
☐ NFPA 13 ☐ Throughout the Building
☐ NFPA 13R ☐ Partial: Location _____
☐ NFPA 13D ☐ Electrically Supervised
☐ CSFSC 7-7.1.2 Isolated Hazardous Area System
Location: _____

☐ **Emergency Lighting** ☐ **NFPA 96 Hood System**

☐ **Smoke Control** ☐ **Standpipe**; Class: _____

☐ **Fire Alarm**
☐ Manual Activation ☐ Occupant Notification
☐ Automatic Activation ☐ General ☐ Zoned
☐ Throughout the Building ☐ Voice Evacuation
☐ Partial Location: _____
☐ Water Flow ☐ Special System: _____
☐ Other Activation Means: _____

☐ Other Systems: _____

Other Information:_____


NOTICE
DO NOT
EXCHANGE CYLINDERS
DANGER
HYDROGEN

CONCRETE NOTES:

1. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

2. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

3. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

4. CONTRACTOR TO SCARIFY EXISTING CONCRETE SURFACE AND APPLY A BONDING ADHESIVE SUCH AS WELDCRETE. (OR APPROVED EQUAL)

5. SOIL REPORT SHOULD BE CONSULTED PRIOR TO CONSTRUCTION. STEEL CASING OR SLURRY METHOD MAY BE REQUIRED TO PREVENT SOIL FROM CAVING DURING CONSTRUCTION. THE CASING SHOULD REMOVED AFTER COMPLETION OF CONCRETING OR, IF LEFT IN THE GROUND, ALL VOIDS AROUND THE CASING SHALL BE FILLED WITH PRESSURIZED GROUT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES.

6. SPECIAL INSPECTION OF REINFORCEMENT, AND CONCRETE IS REQUIRED PER IBC. FOUNDATION REINFORCEMENT SHALL BE INSPECTED PRIOR TO PLACEMENT.

7. REINFORCING STEEL SHALL CONFORM TO ASTM A615-87, Fy=60 ksi. REINFORCEMENT SHALL BE ASSEMBLED USING STEEL WIRE. WELDING IS NOT PERMITTED. MINIMUM SPLICE LENGTH: FOR No. 6 BARS AND SMALLER – 44 x #bar; FOR No. 7 BARS AND LARGER – 56 x #bar. HORIZONTAL TIES SHALL BE STAGGERED WITH NO MORE THAN 50% OF SPLICES IN ONE PLACE.

8. CONCRETE MIX DESIGN AND CONSTRUCTION PROCEDURE SHALL BE IN COMPLIANCE WITH ACI 318, ACI 336.3R, AND ALL APPLICABLE STATE AND LOCAL CODES.

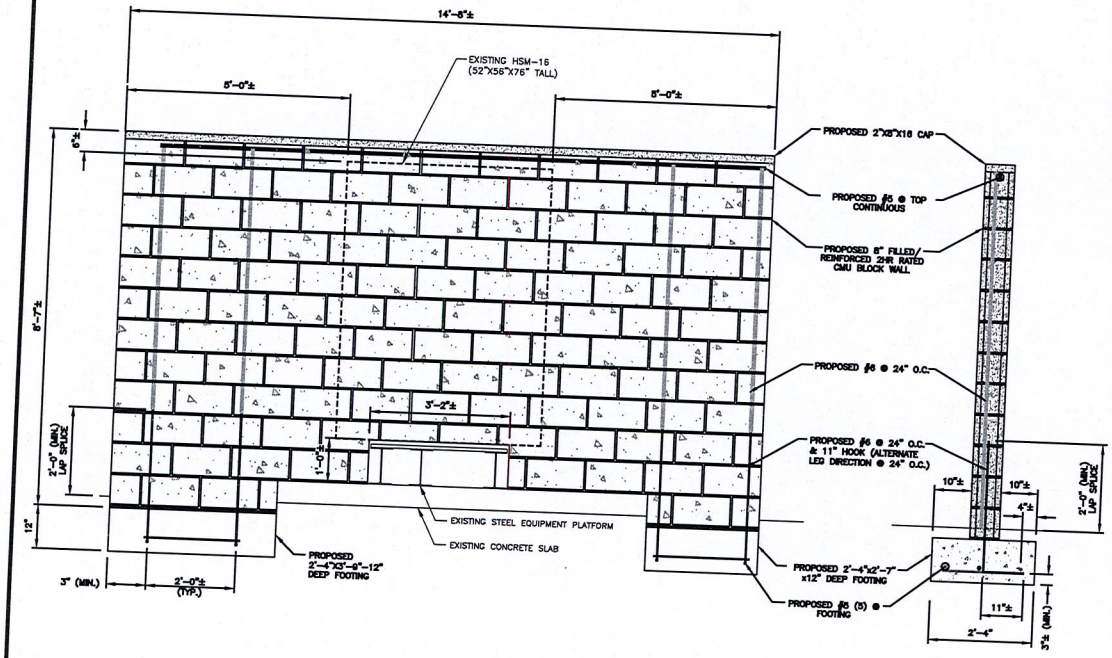
a. MINIMUM COMPRESSIVE STRENGTH – AS NOTED
b. CONCRETE MIX SHOULD HAVE A SLUMP OF 3" (±1") FOR MAT FOUNDATIONS.

9. PROPOSED FIRE BARRIER TO BE A MINIMUM OF 2 HOUR NON-BEARING RATING IN CONFORMANCE WITH UL DESIGN NO. U901 OR U906.

NOTE:
SEE NV CD'S DATED: 05/08/14
BY: HUDSON DESIGN GROUP LLC FOR PROJECT SPECIFICATIONS AND STANDARD NV SPECS FOR STEEL, CONCRETE AND SOIL COMPACTION.

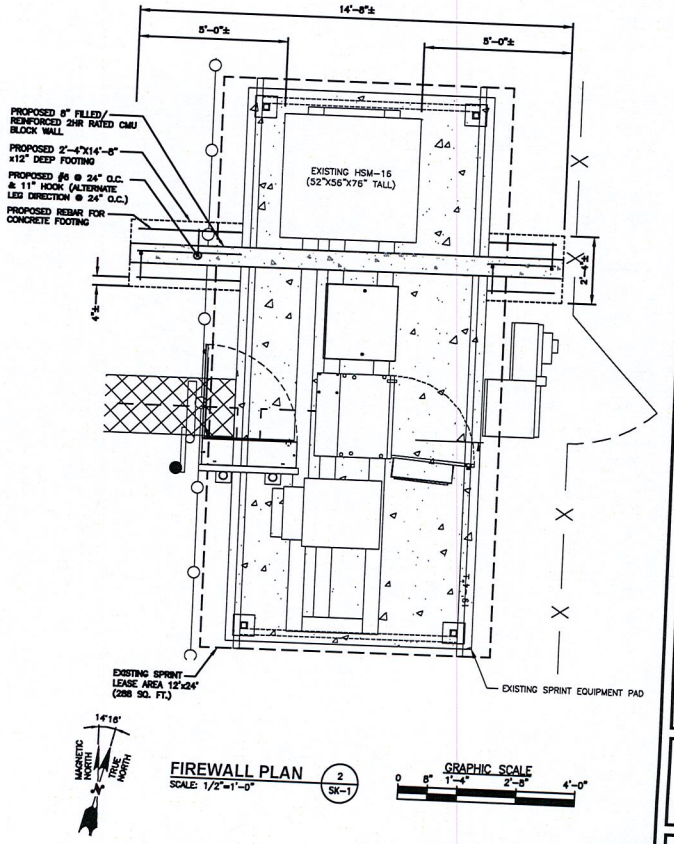
SPECIAL WORK NOTES:

1. ALL FOOTINGS MUST BE HAND DUG
2. USE ASTM C270 TYPE 'N' MORTAR
3. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.



FIREWALL ELEVATION (1 / SK-1)
SCALE: 3/4"=1'-0"

GRAPHIC SCALE
0 6" 1'-4" 2'-8" 4'-0"



FIREWALL PLAN (2 / SK-1)
SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 6" 1'-4" 2'-8" 4'-0"

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495
TEL: (800) 357-7641

SBA
SBA COMMUNICATIONS CORP.
33 BOSTON POST ROAD WEST, SUITE 320
MARLBOROUGH, MA 01752 TEL: (508) 251-0720

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845 TEL: (978) 557-5553 FAX: (978) 336-5586

CHECKED BY: KB

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	10/07/14	ISSUED FOR REVIEW	JA

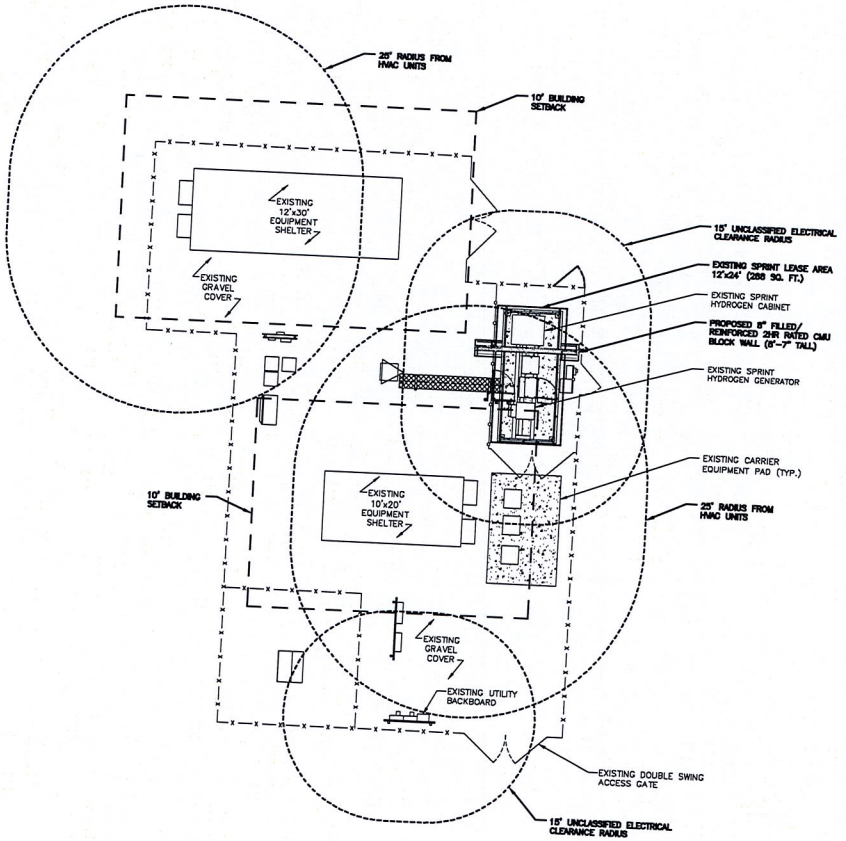
SITE NUMBER:
CT23XC400-A

SITE NAME:
MONTVILLE S.

SITE ADDRESS:
71 MOXLEY ROAD
MONTVILLE, CT 6353

SHEET TITLE
FIREWALL

SHEET NUMBER
SK-1



CLEARANCE PLAN (1 / SK-2)
SCALE: 1/8"=1'-0"

GRAPHIC SCALE
0 4 8 16 24 FEET

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495
TEL: (800) 357-7641

SBA
SBA COMMUNICATIONS CORP.
33 BOSTON POST ROAD WEST, SUITE 320
MARLBOROUGH, MA 01752
TEL: (508) 251-0720

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

CHECKED BY: KB
APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	10/07/14	ISSUED FOR REVIEW	JA

SITE NUMBER:
CT23XC400-A

SITE NAME:
MONTVILLE S.

SITE ADDRESS:
71 MOXLEY ROAD
MONTVILLE, CT 6353

SHEET TITLE
CLEARANCE PLAN

SHEET NUMBER
SK-2

ReliOn, a Plug Power company
15913 E. Euclid Ave.
Spokane, Washington 99216
Telephone 509-228-6500
Facsimile 509-228-6510
www.relion-inc.com

August 8, 2014

Derek Creaser, PE
Sr. Project Manager
Hudson Design Group LLC

RE: Setback to Exposure Distance Questions for Gaseous Hydrogen Fuel Storage at Existing Sprint Sites on SBA Property in the State of Connecticut

Dear Mr. Creaser,

At your request, I have reviewed the email comments and corresponding attachments provided in your July 31st, 2014 email regarding SBA's concerns pertaining to the ReliOn fuel cell hydrogen gas storage at multiple Sprint sites located on SBA properties in the State of Connecticut. SBA's concerns were based upon the setback distances listed in NFPA documents and how they are related to the gaseous hydrogen fuel contained within the ReliOn hydrogen storage module (HSM) and the Sprint telecommunications gear adjacent to the storage.

Volumes could be written to discuss this topic but I will attempt to be as succinct as possible and provide guidance to the best of my knowledge, since though we would like to believe that the matter is absolute, it is actually very subjective. The one thing that is absolute is that all parties involved; authorities having jurisdiction (AHJ's), equipment manufacturers, landlords, liquid & gas fuel providers, inspectors, and end users all strive to promote and maintain an application with a reasonable level of safety. It is the responsibility of all parties involved, yet the ultimate responsibility is that of the AHJ whose charter it is to review the site and references various support documents, industry track record, and precedence during the permitting reviews for electrical, fire, building (planning/zoning), and any other locally mandated requirements within the jurisdiction. In order to mitigate risk the AHJ may choose to reference various documents such as the international (IFC) or state fire code, mechanical and/or fuel gas codes, NFPA codes & standards, or any other references which may also include manufacturer's literature. Some of these documents reference each other, and there are various ongoing edition releases and updates so the entire process is quite dynamic and confusing, though the overall purpose of providing a reasonable level of safety is still primary.

In the case of these Sprint sites on SBA property, these would have been permitted through an AHJ prior to construction. After looking at the slides you provided they appear to be a very typical application of our product applied per the recommendations in our manual and permitting guide. They are also indicative of the other 1900+ installed sites located within 46 US States and 36 countries around the globe, of which there have been no reported fire-safety incidents. This positive industry track record is the result of rigorous testing and the use of robust materials used to contain and transfer the hydrogen fuel gas, as well as hydrogen's inherent safety properties which include very low energy (<300 BTUs per cu-ft), extreme buoyancy (14x lighter than air), rapid dispersion rates, and extremely low heat emissivity whereby any possible combustion would

contain no carbon and therefore would radiate very little heat beyond the actual flame front itself. All of these properties are superior with regards to safety in comparison to legacy fuels such as diesel, gasoline, natural gas, or propane. As an example, 1 gallon of diesel fuel contains over 450x as much energy as 1 cu-ft of hydrogen gas fuel. Also, diesel, gasoline, and propane leaks tend to pool and collect to form long-lasting vapor zones while hydrogen rapidly rises and diffuses almost immediately.

The worst case scenario with hydrogen storage would be an unplanned fuel release due to a rupture of piping combined with an ignition source at the point of release which would have to occur simultaneously during this temporary event. This risk is mitigated through the use of a well-sealed storage containment (DOT cylinders and sealed piping) which prevents an unplanned release, as well as measures to keep normally arcing and sparking equipment outside of a possible release zone. The walls of the hydrogen storage module (HSM) provide an additional level of safety by turning any jetted release into a buoyant release up, out, and away from the storage area. Risk of ignition is mitigated through the nature of the site application since generally telecommunications devices (BTS, DC plant, batteries, AC power transformers & utility meters, routers, etc.) are not generally capable of acting as a source of ignition due to the equipment being sealed, or located within general purpose telecommunications enclosures.

The question was posed as to whether NFPA has any language addressing the setback distance from the gas storage to electrical equipment. NFPA55-2010 has a reference for unclassified electrical equipment (15') in Table 10.3.2.2.1(a) but caveats this with a note that indicates "when the area is in accordance with NFPA497."

NFPA497 "Classified Locations" provides language which indicates that the area directly surrounding flammable gas cylinders is Class 1, Division 2 (a type of classified location requiring non-arcing/sparking equipment), but then also provides additional language that makes a counterpoint that this type of outdoor application would not necessarily need to be classified. Chapter 3: Classification of Class I (Combustible Material) Areas states that "The decision to classify an area as hazardous is based upon the possibility that an ignitable mixture may occur." Subsection 3-1.2 Division 2 Classified Areas states that "The criterion for a Division 2 area is whether the area is likely to have ignitable mixtures present only under abnormal conditions." 3-1.2 claims that the area directly beyond the tank (DOT cylinder) wall is a Cl. I Div. 2 by definition, but to expand upon this general definition, a following Section 3-3 Unclassified Areas clarifies in 3-3.1 **"Experience has shown that the release of ignitable mixtures from some operations and apparatus is so infrequent that the area classification is not necessary. For example it is not usually necessary to classify the following areas where combustible materials are processed, stored, or handled: (a) Areas that have adequate ventilation, where combustible materials are contained within suitable, well-maintained, closed piping systems" and "(c) Areas where combustible materials are stored in suitable containers."**

Subsection 3-3.2 further clarifies that **"Areas considered to have adequate ventilation include the following (a) An outside area."**

Since this application meets these criteria,

- An outside area
- Materials stored in ½" thick steel DOT-certified containers

- Well maintained closed piping systems (stainless steel/brass, tanks recertified periodically by law and plumbing inspected yearly by owner per ReliOn's operators manual)

it is reasonable to conclude that the area can be considered Unclassified as opposed to CL1, Div. 2 and the 15' setback shown in NFPA55-2010 Table 10.3.2.2.1(a) and special wiring requirements of NEC Article 505 are non-applicable for this type of location. This is the decision that the AHJ makes during the permitting review process.

Thought the language in NFPA can be quite ambiguous, the intent is clearly that one must make best efforts to keep the flammable gas from releasing and igniting. NFPA encourages one to look at established precedence and industry track records when making a safety evaluation. We believe that these types of outdoor applications using an HSM meet the intent of the language, and on a related note and as proof of performance, the ReliOn system has undergone an actual Network Equipment Building Systems (NEBS) brushfire test whereby the entire fuel cell system with hydrogen gas storage onboard was subjected to an induced brushfire as shown in the photo below.

Actual Photo of a ReliOn System Undergoing and Passing the NEBS Standards Brushfire Test

The system passed the test and did not contribute to the fire in any way. Most diesel and propane generator manufacturers are not willing to perform this aggressive test, yet it is standard fare for ReliOn equipment and proves that we can be held to a higher standard. Feel free to contact me if you have any questions or concerns.

Best regards,

Mike Maxwell, PE
Director of Applications Engineering
ReliOn, Inc.
509-228-6612 (office) 509-879-0493 (mobile)
mmaxwell@relion-inc.com

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

April 10, 2013

Rick Woods
SBA Communications Corporation
33 Boston Post Road West, Suite 320
Marlborough, MA 01752

RE: **EM-SPRINT-086-130306** – Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 71 Moxley Hill Road, Montville, Connecticut.

Dear Mr. Woods:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- The proposed coax and accessory equipment shall be installed in accordance with the recommendations made in the Structural Analysis Report prepared by FDH Engineering dated February 5, 2013 and stamped by Christopher Murphy;
- Within 45 days following completion of the antenna installation, Sprint shall provide documentation certified by a professional engineer that its installation complied with the recommendation of the structural analysis;
- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated March 5, 2013. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Linda Roberts
Executive Director

LR/CDM/jb

c: The Honorable Ronald K. McDaniel, Mayor, Town of Montville
Marcia Vlaun, Town Planner, Town of Montville
Sean Gormley, SBA

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

March 11, 2013

The Honorable Ronald K. McDaniel
Mayor
Town of Montville
Town Hall
310 Norwich New London Turnpike
Uncasville, CT 06382

RE: **EM-SPRINT-086-130306** – Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 71 Moxley Hill Road, Montville, Connecticut.

Dear Mayor McDaniel:

The Connecticut Siting Council (Council) received a request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72, a copy of which has already been provided to you.

If you have any questions or comments regarding the proposal, please call me or inform the Council by March 25, 2013.

Thank you for your cooperation and consideration.

Very truly yours,

LRoberts

Linda Roberts
Executive Director

LR/jb

c: Marcia Vlaun, Town Planner, Town of Montville

EM-SPRINT-086-130306

March 5, 2013

ORIGINAL

RECEIVED
MAR - 6 2013
CONNECTICUT
SITING COUNCIL

David Martin and
Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification
71 Moxley Hill Road
Montville, CT 06353
N 41 ° 26' 11.26"
W 72 ° 7' 23.70"

Dear Mr. Martin and Members of the Siting Council:

On behalf of Sprint Spectrum, SBA Communications is submitting an exempt modification application to the Connecticut Siting council for modification of existing equipment at a tower facility located at 71 Moxley Hill Road Montville, CT.

The 71 Moxley Hill Road facility consists of a 190' GUYED Tower owned and operated by SBA Communications. In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum 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.

As part of Sprint's Network Vision modification project, Sprint desires to upgrade their equipment to meet the new standards of 4G technology. The new antennas and associated equipment will allow customers to download files and browse the internet at a high rate of speed while also allowing their phones to be compatible with the latest 4G technology.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in Sprint's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna and equipment configuration along with the required fee of $625.

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 overall height of the 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 the new equipment cabinets.

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

4. The changes in radio frequency power density 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, SBA Communications on behalf of Sprint Spectrum, respectfully submits that he proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to cal me at (508) 614-0389 with any questions you may have concerning this matter.

Thank you,

Rick Woods
SBA Communications Corporation
33 Boston Post Road West Suite 320
Marlborough, MA 01752
508-251-1691 x 319 + T
508-251-1755 + F
508-614-0389 + C
rwoods@sbasite.com

Sprint Spectrum
Equipment Modification

71 Moxley Hill Road Montville, CT
Site number CT23XC400

Tower Owner: SBA Communications Corporation

Equipment Configuration: GUYED Tower

Current and/or approved:
Six (6) CDMA Antennas @ 159'
Six (6) lines of 1-5/8" coax
Two (2) equipment cabinets

Planned Modifications:
Remove Six (6) CDMA antennas & Six (6) lines of 1-5/8"
Install Three (3) Network Vision antennas & Six (6) RRHs @ 159'
Install Three (3) Hybriflex fiber cables
Install Three (3) Filters
Install Four (4) RETs
Install One (1) Fiber Distribution Box
Replacing Two (2) equipment cabinets with Two (2) new equipment cabinets

Structural Information:

The attached structural analysis demonstrates that the tower and foundation will have adequate structural capacity to accommodate the proposed modifications.

Power Density:

The anticipated Maximum Composite contributions from the Sprint facility are 9.435% of the allowable FCC established general public limit. The anticipated composite MPE value for this site assuming all carriers present is 40.935% of the allowable FCC established general public limit sampled at the ground level.

Site Composite MPE %	
Carrier	MPE %
Sprint	9.435%
Verizon Wireless	16.870%
Nextel	1.670%
T-Mobile	1.480%
Metro PCS	1.560%
AT&T	7.920%
Total Site MPE %	40.935%

March 5, 2013

COPY

Mayor Ronald McDaniel
Town of Montville
310 Norwich-New London Tpke.
Uncasville, CT 06382

RE: Telecommunications Facility-71 Moxley Hill Road Montville, CT 06353

Dear Mayor McDaniel,

In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum 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 Sprint'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 accompanying letter to the Siting Council fully describes Sprint's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (508) 614-0389.

Thank you,

Rick Woods
SBA Communications Company
33 Boston Post Road West Suite 320
Marlborough, MA 01752
508-251-1691 x 319 + T
508-251-1755 + F
508-614-0389 + C
rwoods@sbasite.com

EBI Consulting
environmental | engineering | due diligence

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

Sprint Existing Facility

Site ID: CT23XC400

Montville S.
71 Moxley Hill Road
Montville, CT 06353

October 19, 2012

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
environmental | engineering | due diligence

October 19, 2012

Sprint
Attn: RF Engineering Manager
1 International Boulevard, Suite 800
Mahwah, NJ 07495

Re: Emissions Values for Site: **CT23XC400 – Montville S**

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 71 Moxley Hill Road, Montville, CT, for the purpose of determining whether the emissions from the proposed Sprint equipment upgrades on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of μW/cm2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limit for the cellular band is approximately 567 $\mu W/cm^2$, and the general population exposure limit for the PCS band is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed upgrades to the existing Sprint Wireless antenna facility located at 71 Moxley Hill Road, Montville, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario. Actual values seen from this site will be dramatically less than those shown in this report. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all emissions were calculated using the following assumptions:

1) 2 CDMA Carriers (1900 MHz) were considered for each sector of the proposed installation.
2) 1 CDMA Carrier (850 MHz) was considered for each sector of the proposed installation
3) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
4) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
5) The antenna used in this modeling is the APXVSPP18-C-A20. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario.

6) The antenna mounting height centerline of the proposed antennas is **160 feet** above ground level (AGL)
7) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculation were done with respect to uncontrolled / general public threshold limits

Site ID	CT23XC400 - Montville S
Site Addresss	71 Moxley Hill Road, Montville, CT, 06353
Site Type	Guyed Tower

Sector 1

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	15.9	160	154	1/2 "	0.5	0	1386.9474	21.02444	2.10244%
1a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	160	154	1/2 "	0.5	0	389.96892	5.911457	1.04259%
															Sector total Power Density Value:		3.145%

Sector 2

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
2a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	15.9	160	154	1/2 "	0.5	0	1386.9474	21.02444	2.10244%
2a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	160	154	1/2 "	0.5	0	389.96892	5.911457	1.04259%
															Sector total Power Density Value:		3.145%

Sector 3

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
3a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	15.9	160	154	1/2 "	0.5	0	1386.9474	21.02444	2.10244%
3a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	160	154	1/2 "	0.5	0	389.96892	5.911457	1.04259%
															Sector total Power Density Value:		3.145%

Site Composite MPE %	
Carrier	MPE %
Sprint	9.435%
Verizon Wireless	18.870%
Nextel	1.670%
T-Mobile	1.480%
Metro PCS	1.560%
AT&T	7.920%
Total Site MPE %	**40.935%**

EBI Consulting
environmental | engineering | due diligence

Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public exposure to RF Emissions.

The anticipated Maximum Composite contributions from the Sprint facility are **9.435% (3.145%from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **40.935%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government

Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

FDH Engineering, Inc., 2730 Rowland Rd. Raleigh, NC 27615, Ph. 919.755.1012, Fax 919.755.1031

Structural Analysis for SBA Network Services, Inc.

190' Guy Tower

SBA Site Name: Montville 3
SBA Site ID: CT10016-A
Sprint Site Name: Montville S.
Sprint Site ID: CT23XC400

FDH Project Number 12-03634E S3 (R1)

Analysis Results

Tower Components	98.6%	Sufficient
Foundations	52.5%	Sufficient

Prepared By:

Randy C. Williams

Randy C. Williams, EI
Project Engineer

Reviewed By:

Christopher M. Murphy

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

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Raleigh, NC 27615
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info@fdh-inc.com

February 5, 2013

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

TABLE OF CONTENTS

EXECUTIVE SUMMARY

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

- Rohn, Inc. (Eng. File No. 37183AE001) original design drawings dated April 21, 1998
- FDH, Inc. (Project No. 07-0319T) TIA Inspection Report dated April 13, 2007
- FDH Engineering, Inc. (Project No. 11-02193E G1) Geotechnical Evaluation of Subsurface Conditions dated August 10, 2011
- SBA Network Services, Inc.

The *basic design wind speed* per the *ANSI/TIA-222-G* standard is 120 mph without ice and 50 mph with 3/4" radial ice. Ice is considered to increase in thickness with height. Furthermore, this structure was analyzed as a Class II structure in Exposure Category B with a topographical factor of 1.

Conclusions

With the existing and proposed loading from Sprint in place at 160', the tower meets the requirements of the *ANSI/TIA-222-G* standard provided the **Recommendations** listed below are satisfied. Furthermore, given the existing foundation dimensions (see Rohn Eng. File No. 37183AE001) and existing soil parameters (see FDH Engineering, Inc. Project No. 11-02193E G1), 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 *ANSI/TIA-222-G* standard are met with the existing and proposed loading in place, we have the following recommendations:

1. Coax lines should be installed as shown in **Figure 1.**
2. RRU/RRH Stipulation: The proposed 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 this layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.*

Table 1 – Appurtenance Loading

Existing Loading:

Antenna Elevation (ft)	Description	Coax and Lines	Carrier	Mount Elevation (ft)	Mount Type
183	(9) Allgon 7130.16.33.00	(9) 1-5/8"	Nextel	183	(3) 12' T-Frames
175	(6) Kathrein 800 10504 (6) Kathrein 860-10118 RETs	(12) 1-5/8" (1) 3/8"	Metro PCS	175	(3) T-Frames (Andrew QT-SF10-2-72)
159.5	(6) Decibel DB980H90E-M	(6) 1-5/8"	Sprint	159.5	(3) 15.5' T-Frames
150.5	(3) EMS RR65-18-02DP (6) Remec S20057A1 TMAs	(6) 1-5/8"	T-Mobile	150.5	(3) 15' T-Frames
141.5	(3) Antel BXA-70063/6CF (6) Rymsa AT-41-645TX (3) Rymsa MGD5-800T2 (6) RFS FD9R6004/2C-3L Diplexers	(12) 1-5/8"	Verizon	141.5	(3) 13.5' T-Frames
130	(3) Powerwave 7770 (1) KMW AM-X-CD-16-65-00T (1) KMW AM-X-CD-14-65-00T (1) Andrew SBNH 1D6565C (6) Powerwave LGP21401 TMAs (6) Ericsson RRUS-11 RRUs (1) Raycap DC6-48-60-18-8F Surge Arrestor	(12) 1-1/4" (2) DC Cables (1) Fiber Cable	AT&T	130	(3) 12' T-Frames
76.5	(1) GPS (7.5" x 3")	(1) 1/2'	Verizon	76.5	(1) 38" Standoff

Proposed Loading:

Antenna Elevation (ft)	Description	Coax and Lines	Carrier	Mount Elevation (ft)	Mount Type
160	(3) RFS APXVSPP18-C-A20 (3) ALU 1900MHz RRUs (3) ALU 800MHz RRUs (3) ALU 800MHz Filters (4) RFS ACU-A20-N RETs	(3) 1-1/4"	Sprint	159.5	(3) 15.5' T-Frames

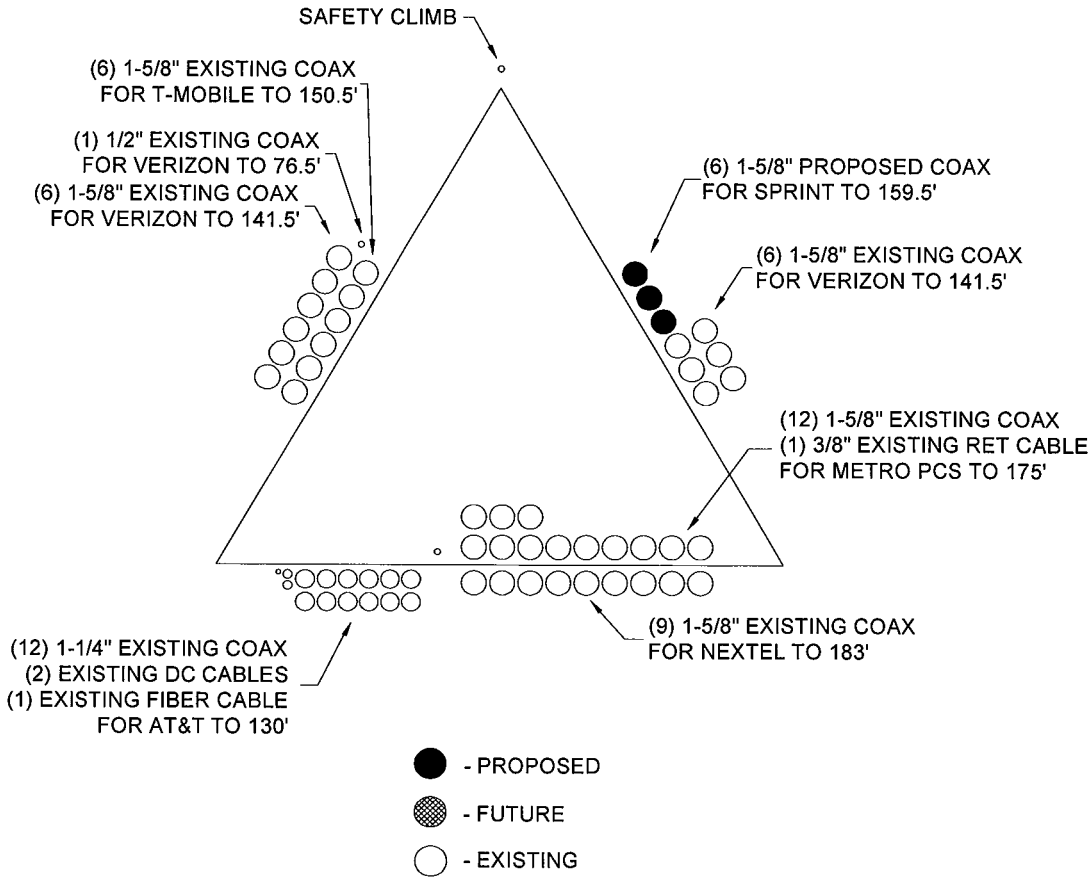


Figure 1 – Coax Layout

RESULTS

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

Table 2 - Material Strength

Member Type	Yield Strength
Legs	50 ksi (assumed)
Diagonals	36 ksi (assumed)
Horizontals	36 ksi (assumed)

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. **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
T1	190 - 170	Leg	ROHN 3 EH	27.4	Pass
		Diagonal	L2x2x1/4	20.4 46.8 (b)	Pass
		Top Girt	L2x2x1/4	0.5	Pass
		Bottom Girt	L2x2x1/4	4.3	Pass
T2	170 - 150	Leg	ROHN 3 EH	59.8	Pass
		Diagonal	L2x2x1/4	36.4 84.6 (b)	Pass
		Top Girt	L2x2x1/4	16.4	Pass
		Bottom Girt	L2x2x1/4	7.8	Pass
		Guy A@167.227	7/8	54.1	Pass
		Guy B@167.227	7/8	54.5	Pass
		Guy C@167.227	7/8	54.5	Pass
		Torque Arm Top@167.227	C15x40	50.8	Pass
T3	150 - 130	Leg	ROHN 2.5 X-STR	96.9	Pass
		Diagonal	ROHN TS1.5x16 ga	55.2	Pass
		Top Girt	ROHN TS1.5x16 ga	4.0	Pass
		Bottom Girt	ROHN TS1.5x16 ga	6.2	Pass
T4	130 - 110	Leg	ROHN 2.5 X-STR	92.8	Pass
		Diagonal	ROHN TS1.5x11 ga	50.6 54.4 (b)	Pass
		Top Girt	ROHN TS1.5x11 ga	10.9	Pass
		Bottom Girt	ROHN TS1.5x11 ga	7.4	Pass
T5	110 - 90	Leg	ROHN 3 EH	70.7	Pass
		Diagonal	ROHN TS1.5x11 ga	76.0 83.0 (b)	Pass
		Top Girt	ROHN TS1.5x11 ga	9.1	Pass
		Bottom Girt	ROHN TS1.5x11 ga	15.9	Pass
		Guy A@92.7734	5/8	70.3	Pass
		Guy B@92.7734	5/8	70.9	Pass
		Guy C@92.7734	5/8	70.9	Pass
		Torque Arm Top@92.7734	C15x40	26.1	Pass

Section No.	Elevation ft	Component Type	Size	% Capacity	Pass Fail
T6	90 - 70	Leg	ROHN 3 EH	65.5	Pass
		Diagonal	ROHN TS1.5x16 ga	91.8 98.6 (b)	Pass
		Top Girt	ROHN TS1.5x16 ga	12.3	Pass
		Bottom Girt	ROHN TS1.5x16 ga	9.5	Pass
T7	70 - 50	Leg	ROHN 3 EH	67.8	Pass
		Diagonal	ROHN TS1.5x11 ga	50.3 55.0 (b)	Pass
		Top Girt	ROHN TS1.5x11 ga	14.7	Pass
		Bottom Girt	ROHN TS1.5x11 ga	4.7	Pass
T8	50 - 35	Leg	ROHN 3 EH	70.8	Pass
		Diagonal	ROHN TS1.5x16 ga	33.3	Pass
		Top Girt	ROHN TS1.5x16 ga	4.8	Pass
		Bottom Girt	ROHN TS1.5x16 ga	3.2	Pass
T9	35 - 20	Leg	ROHN 3 EH	70.2	Pass
		Diagonal	ROHN TS1.5x16 ga	58.1 61.8 (b)	Pass
		Top Girt	ROHN TS1.5x16 ga	4.5	Pass
		Bottom Girt	ROHN TS1.5x16 ga	7.0	Pass
T10	20 - 5	Leg	ROHN 3 EH	60.1	Pass
		Diagonal	ROHN TS1.5x11 ga	42.9 46.8 (b)	Pass
		Top Girt	ROHN TS1.5x11 ga	5.7	Pass
		Bottom Girt	ROHN TS1.5x11 ga	20.8	Pass
T11	5 - 0	Leg	ROHN 3 EH	49.9	Pass
		Horizontal	L3x3x1/4	20.3	Pass

Table 4 – Maximum Base Reactions

	Current Analysis *(ANSI/TIA-222-G)**		Original Design *(TIA/EIA-222-F)*	
Reaction	Horizontal	Vertical	Horizontal	Vertical
Tower Base	4 k	183 k	---	173 k
Anchor @ 150'	63 k	55 k	66 k	59 k

*Foundations determined adequate per independent analysis.

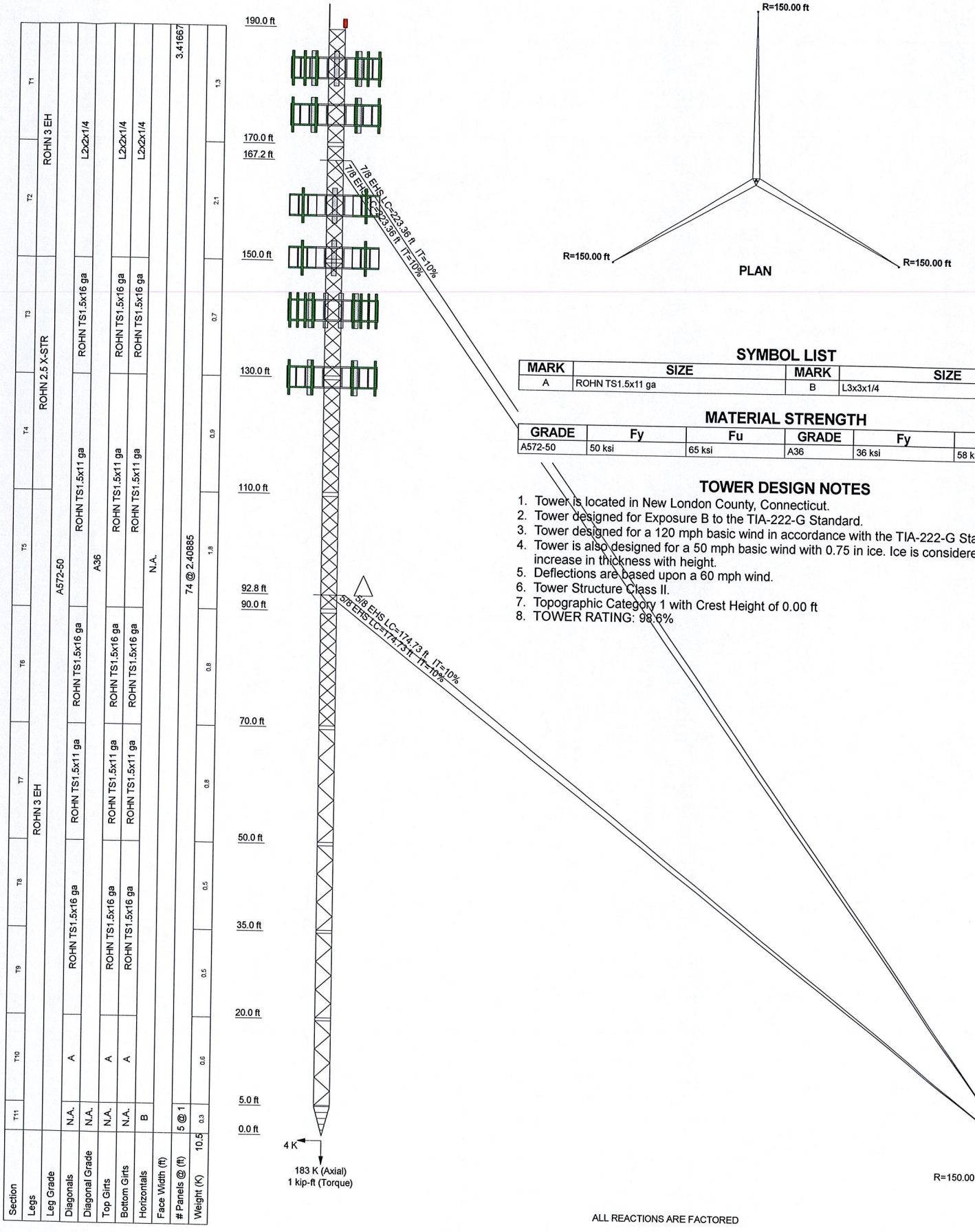
GENERAL COMMENTS

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	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs					ROHN 3 EH			ROHN 2.5 X-STR			ROHN 3 EH
Leg Grade						A572-50					
Diagonals	N.A.	A		ROHN TS1.5x16 ga	ROHN TS1.5x11 ga	ROHN TS1.5x16 ga	ROHN TS1.5x11 ga		ROHN TS1.5x16 ga	L2x2x1/4	
Diagonal Grade	N.A.					A36					
Top Girts	N.A.	A		ROHN TS1.5x16 ga	ROHN TS1.5x11 ga	ROHN TS1.5x16 ga	ROHN TS1.5x11 ga		ROHN TS1.5x16 ga	L2x2x1/4	
Bottom Girts	N.A.	A		ROHN TS1.5x16 ga	ROHN TS1.5x11 ga	ROHN TS1.5x16 ga	ROHN TS1.5x11 ga		ROHN TS1.5x16 ga	L2x2x1/4	
Horizontals	B			N.A.							
Face Width (ft)											3.41667
# Panels @ (ft)	5 @ 1						74 @ 2.40885				
Weight (K)	10.5	0.3	0.6	0.5	0.5	0.8	1.8	0.9	0.7	2.1	1.3

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	ROHN TS1.5x11 ga	B	L3x3x1/4

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

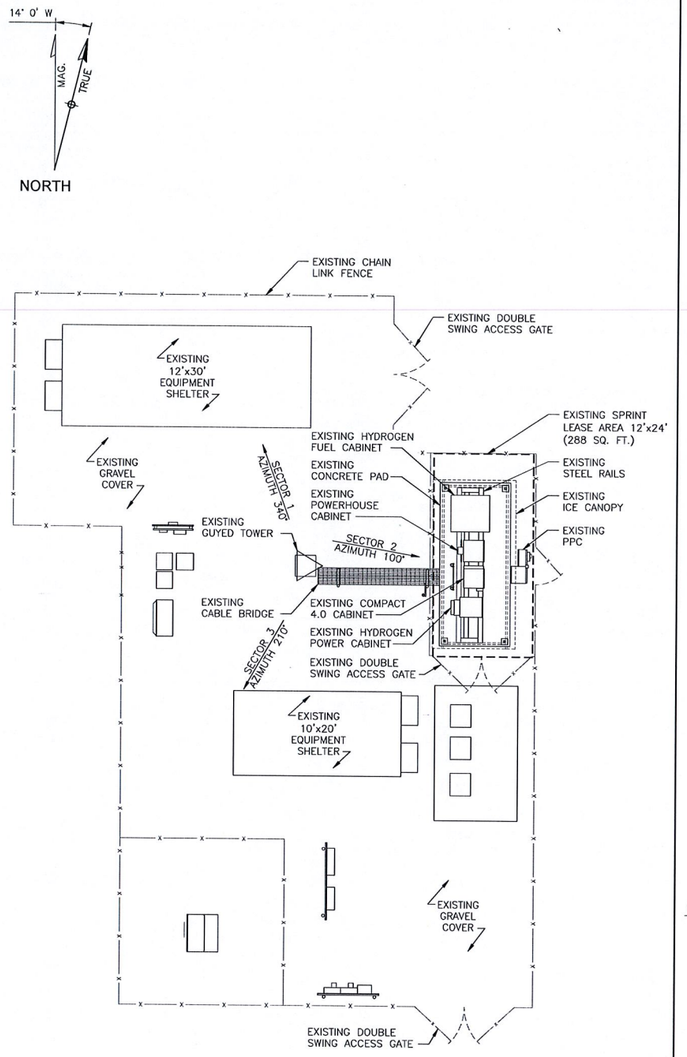
1. Tower is located in New London County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-G Standard.
3. Tower designed for a 120 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 98.6%

ALL REACTIONS ARE FACTORED

FDH Engineering, Inc.
6521 Meridian Drive
Raleigh, NC 27616
Phone: (919) 755-1012
FAX: (919) 755-1031

Tower Analysis

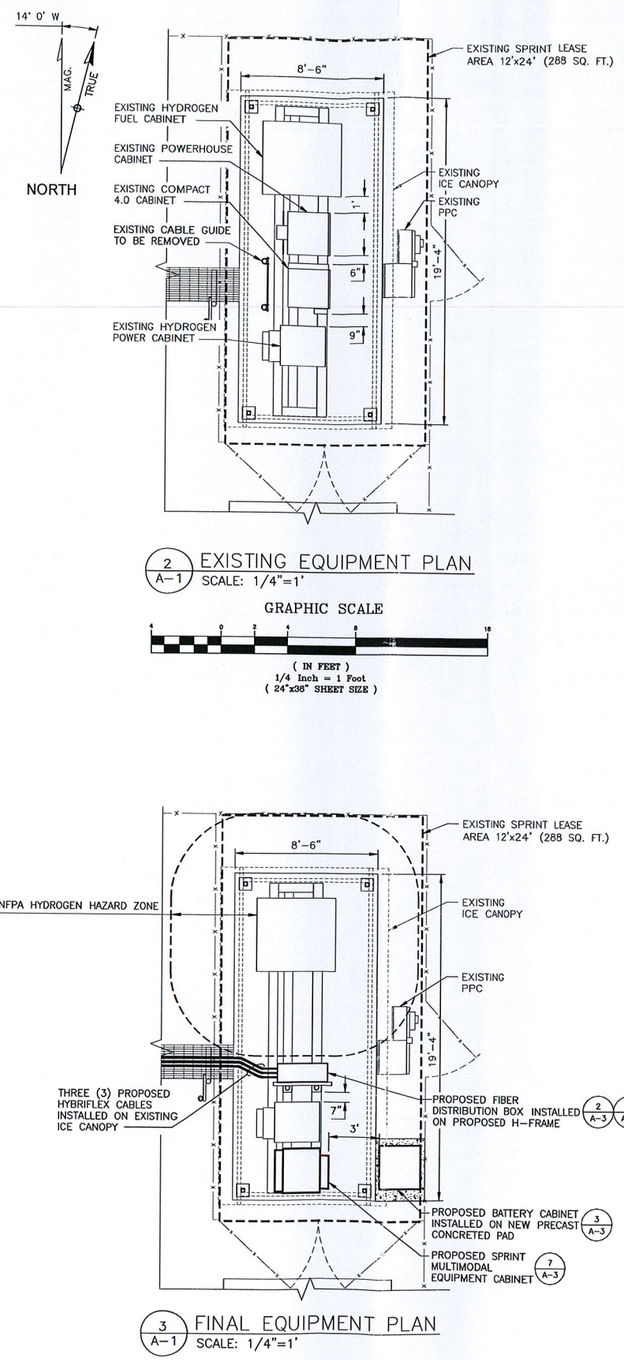
Job: Montville 3, CT10016-A			
Project: 12-03634E S3 (R1)			
Client: SBA Network Services, Inc.	Drawn by: John Wood	App'd:	
Code: TIA-222-G	Date: 02/05/13	Scale: NTS	
Path:		Dwg No. E-1	



1 / A-1 EXISTING COMPOUND PLAN
SCALE: 1/8"=1'

GRAPHIC SCALE

(IN FEET)
1/8 Inch = 1 Foot
(24"x36" SHEET SIZE)



2 / A-1 EXISTING EQUIPMENT PLAN
SCALE: 1/4"=1'

GRAPHIC SCALE

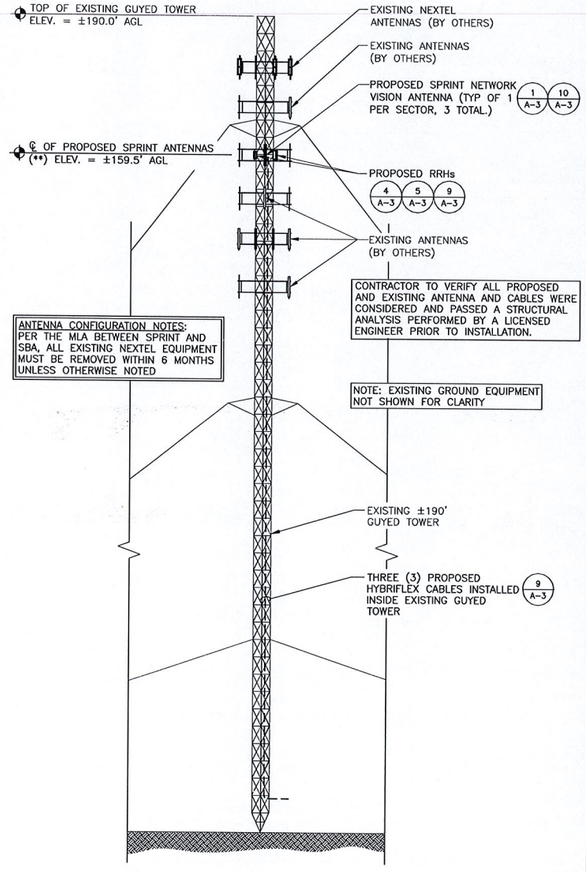
(IN FEET)
1/4 Inch = 1 Foot
(24"x36" SHEET SIZE)

3 / A-1 FINAL EQUIPMENT PLAN
SCALE: 1/4"=1'

GRAPHIC SCALE

(IN FEET)
1/4 Inch = 1 Foot
(24"x36" SHEET SIZE)

(**) - NOTE: NETWORK VISION ANTENNA RADIATION CENTERLINE AGL (FEET) BASED ON SBA EQUIPMENT DATABASE AND SBA TOWER STRUCTURAL ANALYSIS AND WILL SUPERSEDE ANY CONFLICTING INFORMATION DERIVED FROM THE ALU/SPRINT DATABASE



ANTENNA CONFIGURATION NOTES:
PER THE MLA BETWEEN SPRINT AND SBA, ALL EXISTING NEXTEL EQUIPMENT MUST BE REMOVED WITHIN 6 MONTHS UNLESS OTHERWISE NOTED

CONTRACTOR TO VERIFY ALL PROPOSED AND EXISTING ANTENNA AND CABLES WERE CONSIDERED AND PASSED A STRUCTURAL ANALYSIS PERFORMED BY A LICENSED ENGINEER PRIOR TO INSTALLATION.

NOTE: EXISTING GROUND EQUIPMENT NOT SHOWN FOR CLARITY

4 / A-1 FINAL GUYED TOWER ELEVATION
SCALE: 1/16"=1'

GRAPHIC SCALE

(IN FEET)
1/16 Inch = 1 Foot
(24"x36" SHEET SIZE)

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1 INTERNATIONAL BLVD, SUITE 800
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PHONE: 862.209.4300
FAX: 862.209.4301

NICHOLAS D. BARILE
PROFESSIONAL ENGINEER, CT LIC. No. 28643

SCHEDULE OF REVISIONS

REV. NO.	DATE	DESCRIPTION OF CHANGES
9		
8		
7		
6		
5		
4		
3		
2	11/05/12	REVISED PER CLIENT COMMENTS
1	09/26/12	CONSTRUCTION REVIEW

DRAWN BY:	GSB
CHECKED BY:	NB
SCALE:	AS NOTED
JOB NO:	12021-SBA

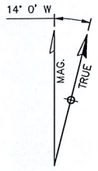
CT23XC400
MONTVILLE S.
71 MOXLEY HILL ROAD
MONTVILLE, CT 06353
NEW LONDON COUNTY

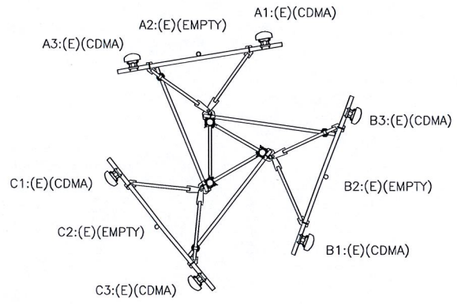
DRAWING TITLE:

COMPOUND PLAN, EQUIPMENT PLANS & ELEVATION

DRAWING SHEET: 3 OF 9

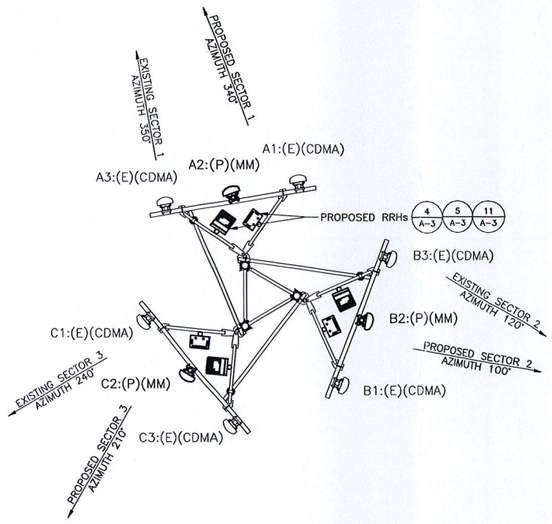
A-1





1 A–2 EXISTING ANTENNA PLAN
SCALE: N.T.S.

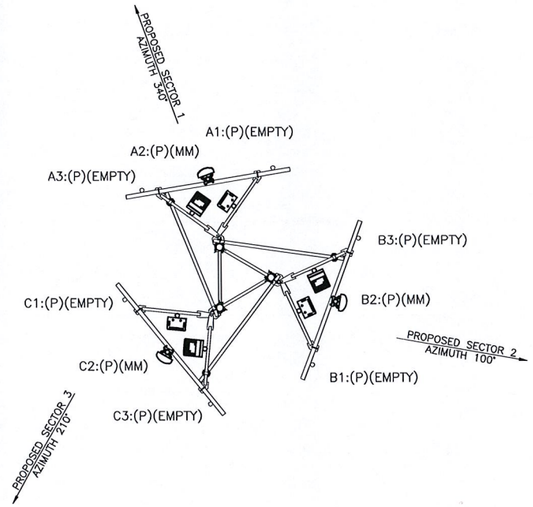
EXISTING AZIMUTHS TAKEN FROM SITE SURVEY FORM DATED 07.30.12



2 A–2 INTERIM ANTENNA PLAN
SCALE: N.T.S.

PROPOSED TOWER STRUCTURAL ANALYSIS IS PENDING AND WILL BE PROVIDED BY TOWER OWNER. GC TO INCLUDE IN THEIR BID AND SCOPE OF WORK ALL STRUCTURAL MODS AND EQUIPMENT MODS INCLUDED IN ANY SUBSEQUENT TOWER STRUCTURAL ANALYSIS

ANTENNA CONFIGURATION NOTES:
PER THE MLA BETWEEN SPRINT AND SBA, ALL EXISTING NEXTEL EQUIPMENT MUST BE REMOVED WITHIN 6 MONTHS UNLESS OTHERWISE NOTED



3 A–2 FINAL ANTENNA PLAN
SCALE: N.T.S.

ANTENNA STATUS LEGEND:
(E) – EXISTING
(P) – PROPOSED
(SP) – ACTIVE SINGLE POLE SPRINT ANTENNA
(CDMA) – ACTIVE SPRINT DUAL POLE ANTENNA
(MM) – 800/1900MHz MULTIMODAL ANTENNA
(EMPTY) – EMPTY MAST

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PHONE: 862.209.4300
FAX: 862.209.4301

SCHEDULE OF REVISIONS

REV. NO.	DATE	DESCRIPTION OF CHANGES
9		
8		
7		
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2	11/05/12	REVISED PER CLIENT COMMENTS
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DRAWN BY:	GSB
CHECKED BY:	NB
SCALE:	AS NOTED
JOB NO:	12021-SBA

CT23XC400
MONTVILLE S.
71 MOXLEY HILL ROAD
MONTVILLE, CT 06353
NEW LONDON COUNTY

DRAWING TITLE:

ANTENNA ORIENTATIONS & RF SYSTEM SCHEDULE

DRAWING SHEET: 4 OF 9

A-2