

Daniel F. Caruso Chairman

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

Internet: ct.gov/csc

June 17, 2008

Steven L. Levine Real Estate Consultant New Cingular Wireless PCS, LLC 500 Enterprise Drive Rocky Hill, CT 06067-3900

RE: EM-CING-086-080520 - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 71 Moxley Hill Road, Montville, Connecticut.

Dear Mr. Levine:

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 condition that the coax lines are installed per page 3 structural analysis report dated May 8, 2008.

The proposed modifications are to be implemented as specified here and in your notice dated May 20, 2008. including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50i-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. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

attention and cooperation.

Executive Director

SDP/MP

c: Honorable Joseph W. Jaskiewicz, Mayor, Town of Montville Marcia Vlaun, Town Planner, Town of Montville SBA



Daniel F. Caruso

Chairman

STATE OF CONNECTICUT

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May 22, 2008

The Honorable Joseph W. Jaskiewicz Mayor Town of Montville Town Hall 310 Norwich New London Turnpike Uncasville, CT 06382

RE: EM-CING-086-080520 - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 71 Moxley Hill Road, Montville, Connecticut.

Dear Mayor Jaskiewicz:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by June 4, 2008.

Thank you for your cooperation and consideration.

Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Marcia Vlaun, Town Planner. Town of Montville





EM-CING-086-080520

New Cingular Wireless PCS, LLC

500 Enterprise Drive Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7636 Fax: (860) 513-7190

Steven L. Levine Real Estate Consultant



CONNECTICUT SITING COUNCIL

HAND DELIVERED

May 20, 2008

Honorable Daniel F. Caruso, Chairman, and Members of the Connecticut Siting Council 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 71 Moxley Hill Road (owner, SBA)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("Cingular") 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.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in Cingular'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. Modifications to the existing site include all or some of the following as necessary to bring the site into conformance with the plan:
 - Replacement of existing panel antennas with new antennas of similar size, shape, and weight, or, installation of additional antennas of similar size, shape, and weight.
 - Installation of small tower mount amplifiers ("TMA's") and/or diplexers to the platform on which the panel antennas are mounted to enhance signal reception.
 - Installation of additional or larger coaxial cables as required.
 - Installation of an additional equipment cabinet in existing shelters, or on existing or enlarged concrete pads.

None of these modifications will extend the height of the tower.

- 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 GSM channel for UMTS transmissions. 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, Cingular Wireless 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) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,

Steven L. Levine

Real Estate Consultant

Attachments

CINGULAR WIRELESS Equipment Modification

71 Moxley Hill Road, Montville

Site Number 5236

Former AT&T Cell Site

Exempt Modification approved 8/02

Tower Owner/Manager:

SBA

Equipment configuration:

Guyed Lattice Tower

Current and/or approved:

Three Allgon 7250 panel antennas @ 130 ft c.l.

Six runs 1 ¼ inch coax

Planned Modifications:

Remove all three existing antennas

Install 3 Powerwave 7770 antennas (or equivalent) @ 130 ft

Install six TMA's @ 130 ft

Remove one existing outdoor equipment cabinet

Install 4 x 6 ft concrete pad

Install two new cabinets for UMTS and RXAIT

Power Density:

Calculations for Cingular's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the tower base, of approximately 12.9 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for Cingular's planned operations would be approximately 18.7 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
Other Users *							10.82
Cingular GSM *	130	1900 Band	4	250	0.0213	1.0000	2.13
Total							12.9%

^{*} Per CSC records.

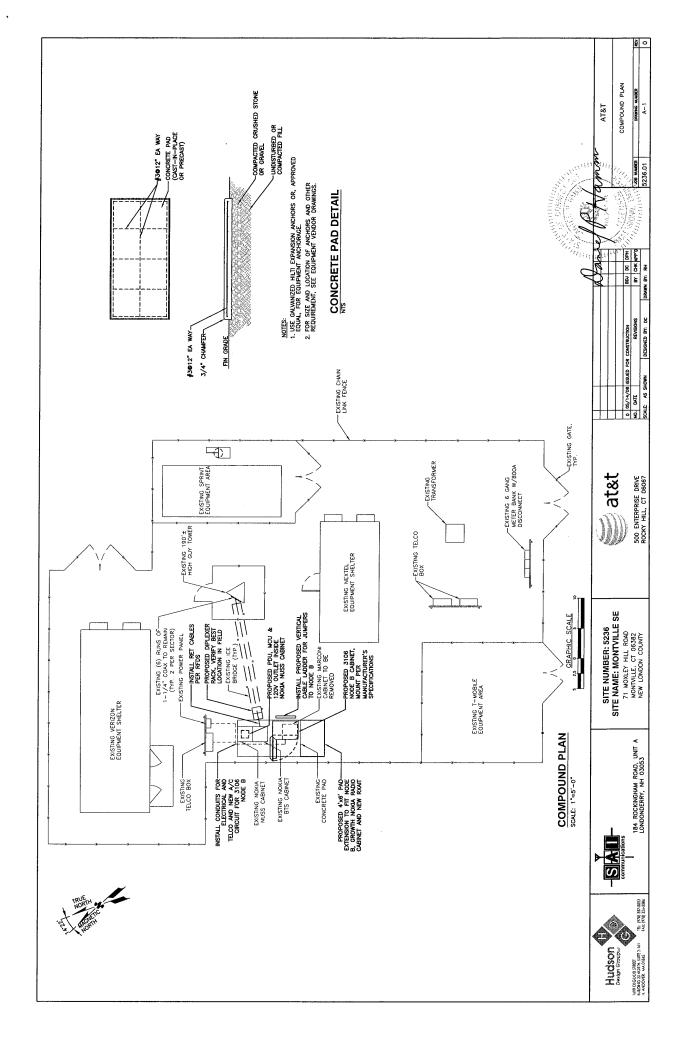
Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
Other Users *							10.82
Cingular GSM	130	880 - 894	4	296	0.0252	0.5867	4.29
Cingular GSM	130	1900 Band	2	427	0.0182	1.0000	1.82
Cingular UMTS	130	880 - 894	1	500	0.0106	0.5867	1.81
Total							18.7%

^{*} Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (FDH Engineering, dated 5/8/08)







New Cingular Wireless PCS, LLC

500 Enterprise Drive

Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7636 Fax: (860) 513-7190

Steven L. Levine Real Estate Consultant

May 20, 2008

Honorable Joseph W. Jaskiewicz 1st Selectman, Town of Montville Town Hall 310 Norwich-New London Tpke. Uncasville, CT 06382

Re: Telecommunications Facility – 71 Moxley Hill Road, Montville

Dear Mr. Jaskiewicz:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("Cingular") 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 Cingular'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 Cingular'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 (860) 513-7636 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine Real Estate Consultant

Enclosure



Structural Analysis for SBA Network Services, Inc.

190' Guy Tower

Site Name: Montville 3 Site ID: CT10016-A

5236

FDH Project Number 08-05010E S1

Prepared By:

Brent M. fain

Brent McLain, El Project Engineer Reviewed By:

Christopher M. Murphy, PE
Vice President

CT PE License No. 25842

FDH Engineering, Inc.

PO Box 99556 Raleigh, NC 27615 (919)-755-1012 info@fdh-inc.com



May 8, 2008

Prepared pursuant to EIA/TIA-222-F June 1996 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

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EXECUTIVE SUMMARY

At the request of SBA Network Services, FDH Engineering 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 Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F.* Information pertaining to the existing/proposed antenna loading, current tower geometry, 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, and SBA Network Services, Inc.

The basic design wind speed per TIA/EIA-222-F standards is 85 mph without ice and 74 mph with 1/2" radial ice.

Conclusions

With the existing and proposed antennas from AT&T/Cingular in place at 130 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards. Furthermore, provided the foundations were constructed per the original design drawings (see Rohn, Inc. Drawing No. A981215 & C 610621), 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 is accurate (i.e., the steel data, tower layout, and proposed antenna loading) and that the tower was properly erected and maintained per the original design drawings.

Recommendation

To ensure the requirements of the *TIA/EIA-222-F* standards are met with the existing and proposed loading in place, we have the following recommendations:

1. Coax lines must be installed as shown in **Figure 1.**

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**.

Table 1 – Appurtenance Loading

Existing Loading:

Antenna	Elevation (ft)	Coax and Lines ¹	Coax No.	Carrier	Mount Type	Description
1-9	183	(9) 1-5/8"	13-21	Nextel	(3) 12' T-Frames	(9) Allgon 7130.16.33.00
10-15	159.5	(6) 1-5/8"	1-6	Sprint	(3) 15.5' T-Frames	(6) Decibel DB980H90E-M
16-18	150.5	(6) 1-5/8"	28-33	T-Mobile	(3) 15' T-Frames	(3) EMS RR65-18-02DP (6) Remec S20057A1 TMAs
19-30	141.5	(12) 1-5/8"	34-39 7-12	Verizon	(3) 13.5' T-Frames	(6) Decibel DB844H90E-XY (6) 4' x 3" x 6.75" Panels
31-33	130 ²	(6) 1-1/4"		AT&T/ Cingular	(3) 12' T-Frames	(3) Allgon 7250.02
34	76.5	(1) 1/2'	40	Verizon	(1) 38" Standoff	(1) GPS (7.5" x 3")

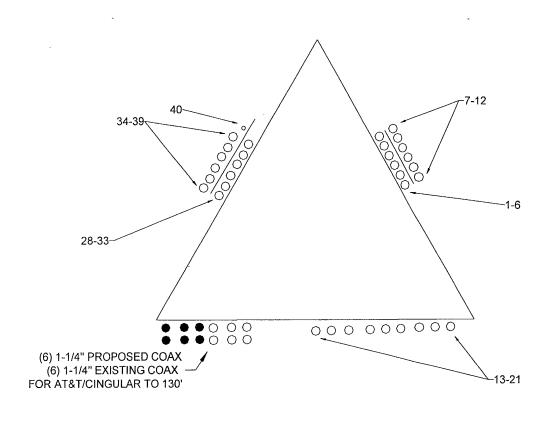
¹ See Figure 1 for coax location.

Proposed Loading:

Antenna	Elevation (ft)	Coax and Lines	Carrier	Mount Type	Description
1-6	130	(12) 1-1/4" ¹	AT&T/ Cingular	(3) 12' T-Frames	(3) Allgon 7250.02 (3) Powerwave 7770 (6) Powerwave LGP21401 TMAs

¹ Currently, AT&T/Cingular has (3) Allgon 7250.02 antennas and (6) 1-1/4" coax at 130 ft. According to the information provided by SBA, AT&T/Cingular will add (3) Powerwave 7770 antennas to the existing loading at 130 ft. AT&T/Cingular will also add (6) Powerwave LGP21401 TMAs and (6) 1-1/4" coax for a final configuration of (6) antennas, (6) TMAs, and (12) coax at 130 ft.

² AT&T/Cingular's existing loading will be altered at 130 ft. See the proposed loading below.



= PROPOSED

= EXISTING

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 actual force in the member to their allowable capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its allowable capacity. *Note: Capacities up to 105% are considered acceptable.* **Table 4** displays the factor of safety for each guy level. Values less than 2.0 indicate overstressing. **Table 5** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH 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	18.2	Pass
		Diagonal	L2x2x1/4	12.6 22.5 (b)	Pass
		Top Girt	L2x2x1/4	0.4	Pass
		Bottom Girt	L2x2x1/4	3.7	Pass
T2	170 - 150	Leg	ROHN 3 EH	45.3	Pass
		Diagonal	L2x2x1/4	24.3 43.7 (b)	Pass
, =		Top Girt	L2x2x1/4	6.2	Pass
		Bottom Girt	L2x2x1/4	5.2	Pass
T3	150 - 130	Leg	ROHN 2.5 EH	77.5	Pass
		Diagonal	ROHN TS1.5x16 ga	27.2 33.2 (b)	Pass
		Top Girt	ROHN TS1.5x16 ga	2.6	Pass
		Bottom Girt	ROHN TS1.5x16 ga	5.9	Pass
T4	130 - 110	Leg	ROHN 2.5 EH	75.3	Pass
		Diagonal	ROHN TS1.5x16 ga	48.6 61.5 (b)	Pass
		Top Girt	ROHN TS1.5x16 ga	9.7	Pass
		Bottom Girt	ROHN TS1.5x16 ga	7.3	Pass

Section No.	Elevation ft	Component Type	Size	% Capacity	Pass Fail
T5	110 - 90	Leg	ROHN 3 EH	63.0	Pass
		Diagonal	ROHN TS1.5x11 ga	47.1 77.4 (b)	Pass
		Top Girt	ROHN TS1.5x11 ga	5.9	Pass
		Bottom Girt	ROHN TS1.5x11 ga	13.3	Pass
T6	90 - 70	Leg	ROHN 3 EH	61.7	Pass
		Diagonal	ROHN TS1.5x16 ga	59.5 76.1 (b)	Pass
		Top Girt	ROHN TS1.5x16 ga	11.2	Pass
		Bottom Girt	ROHN TS1.5x16 ga	8.7	Pass
T7	70 - 50	Leg	ROHN 3 EH	72.2	Pass
		Diagonal	ROHN TS1.5x11 ga	39.7 48.4 (b)	Pass
		Top Girt	ROHN TS1.5x11 ga	11.7	Pass
		Bottom Girt	ROHN TS1.5x11 ga	4.0	Pass
T8	50 - 35	Leg	ROHN 3 EH	77.1	Pass
		Diagonal	ROHN TS1.5x16 ga	28.2	Pass
		Top Girt	ROHN TS1.5x16 ga	4.2	Pass
		Bottom Girt	ROHN TS1.5x16 ga	2.7	Pass
Т9	35 - 20	Leg	ROHN 3 EH	77.2	Pass
		Diagonal	ROHN TS1.5x16 ga	45.1 49.1 (b)	Pass
		Top Girt	ROHN TS1.5x16 ga	4.1	Pass
		Bottom Girt	ROHN TS1.5x16 ga	6.1	Pass
T10	20 - 5	Leg	ROHN 3 EH	69.8	Pass
		Diagonal	ROHN TS1.5x16 ga	65.4 91.4 (b)	Pass
		Top Girt	ROHN TS1.5x16 ga	7.8	Pass
		Bottom Girt	ROHN TS1.5x16 ga	93.2	Pass
T11	5 - 0	Leg	ROHN 3 EH	57.7	Pass
		Horizontal	L3x3x1/4	9.7	Pass

^{*}Capacities include 1/3 allowable increase for wind.

Table 4 – Guy Wire Factor of Safety

Guy Level	Guy Wire Size	Factor of Safety With Existing and Proposed Loading
167 ft	7/8" EHS	3.94
93 ft	5/8" EHS	2.91

^{*}Factor of Safety must be greater than or equal to 2.0 per TIA/EIA-222-F standards.

Table 5 - Maximum Base Reactions

Reaction	Existing and Pr Horizontal	roposed Loading Vertical
Tower Base	4 k	116 k
Anchor @ 150'	52 k	44 k

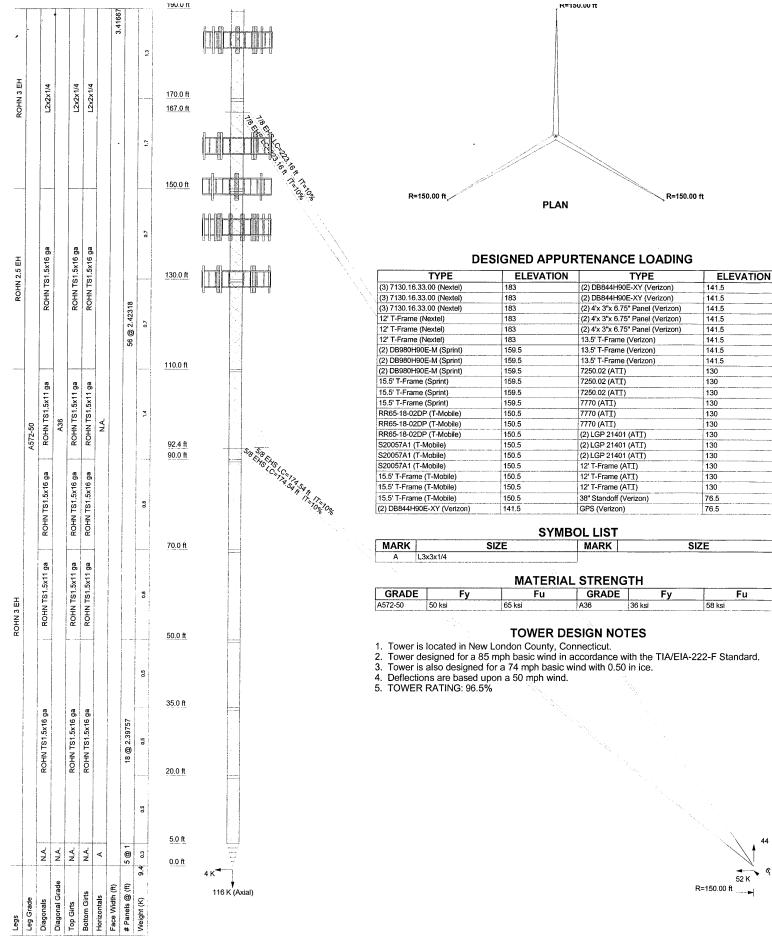
GENERAL COMMENTS

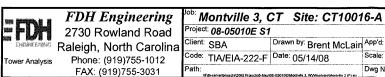
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA to verify that the tower modeled and analyzed is the correct structure. If there are substantial modifications made to the appurtenance loading provided by SBA, FDH Engineering 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





52 K