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@po.state.ct.us
Web Site: www.ct.gov/csc

March 18, 2004

Michele G. Briggs
Manager of Real Estate
Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-028-040309** - Southwestern Bell Mobile Systems, LLC notice of intent to modify an existing telecommunications facility located at Lot 13, Middletown Road, Colchester, Connecticut.

Dear Ms. Briggs:

At a public meeting held on March 17, 2004, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated March 9, 2004. 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. 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.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz
Chairman

PBK/cm

c: Honorable Jenny Contois, First Selectman, Town of Colchester
Mary Ann Sadosky, Zoning Enforcement Officer, Town of Colchester
Kenneth C. Baldwin, Esq., Robinson & Cole LLP
Christopher B. Fisher, Esq., Cuddy & Feder LLP

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Web Site: www.ct.gov/csc

March 11, 2004

Honorable Jenny Contois
First Selectman
Town of Colchester
127 Norwich Avenue
Colchester, CT 06415

RE: **EM-CING-028-040309** - Southwestern Bell Mobile Systems, LLC notice of intent to modify an existing telecommunications facility located at Lot 13, Middletown Road, Colchester, Connecticut.

Dear Ms. Contois:

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.

The Council will consider this item at the next meeting scheduled for March 17, 2004 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/cm

Enclosure: Notice of Intent

c: Mary Ann Sadosky, Zoning Enforcement Officer, Town of Colchester

EM-CING-028-040309

Michele G. Briggs
Manager of Real Estate

March 9, 2004

Ms. Pam Katz, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: **Notice of Exempt Modification – Existing Verizon Telecommunications Tower Facility at Lot 13, Middletown Road, Colchester, Connecticut**

Dear Chairman Katz:

Southwestern Bell Mobile Systems, LLC ("SBMS") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower off Middletown Road in Colchester, Connecticut.

The Colchester facility is located on Lot 13, Middletown Road, which is on CT Route 16 and approximately 5 miles west of its intersection with CT Route 2. Tower coordinates (NAD 83) are N 41° 33' 05.8" and W 72° 25' 32.9". The facility is owned and operated by Verizon Wireless ("Verizon"), 180 Washington Valley Road, Bedminster, New Jersey 07921. Verizon leases the land from Lorraine Leone of Colchester.

Please accept this letter as notification to the Council, 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 is being sent to the 1st Selectman of Colchester.

SBMS, the local component of the nationwide Cingular Wireless network, is licensed by the Federal Communications Commission ("FCC") to provide cellular mobile telephone service in the New London, CT Metropolitan Statistical Area, which includes the area to be served by SBMS' proposed installation. The public need for cellular service has been predetermined by the FCC.

Verizon has agreed to plans put forth by SBMS pursuant to mutually acceptable terms and conditions and has also authorized SBMS to obtain necessary government approvals. Attached to this Notice are a site location map, a proposed site plan, the proposed tower profile, and a structural analysis report that shows the tower is structurally capable of supporting the proposed SBMS telecommunications equipment.

The Colchester facility was approved by the Council as Docket 218 on May 7, 2002. The applicant was Crown Atlantic Company, but the Certificate has been transferred to Verizon. Pursuant to an agreement between Verizon and AT&T Wireless, AT&T has constructed the facility. AT&T's co-location at the site was included in the D&M Plan approved by the Council on December 19, 2002.

The Middletown Road facility consists of a 180-foot monopole within a 100' x 100' compound surrounded by an 8-ft high chain link fence topped by barbed wire. Verizon and AT&T operate antennas and associated equipment at the facility.

As shown on the attached drawings and as further described below, SBMS proposes to install up to twelve CSS DUO-1417-8686 panel antennas, approximately 48 inches in height, with the center of radiation approximately 160 feet above ground level. Associated equipment to be installed on the tower are up to six dual-band tower top amplifiers ("TTA's"; small metal boxes approximately 26 pounds apiece) immediately behind the antennas, and up to three very small (5 pounds apiece) CSS dual-band "combiners." SBMS also proposes to place a 12' x 20' prefabricated concrete equipment building at the base of the tower. All work will be done inside the existing fenced compound.

With the "GSM-only" configuration, SBMS will broadcast up to:

- 2 channels, 296 Watts ERP, 880 – 894 MHz; and
- 2 channels, 427 Watts ERP, 1930 – 1935 MHz.

Statutory Considerations

The changes to the Colchester tower facility do not constitute a modification 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) because they will not result in any substantial adverse environmental effect.

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

2. The proposed changes will not affect the property boundaries. All new construction will take place on property leased by Verizon and within the existing fenced compound.

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

4. Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the FCC. The "worst-case" exposure calculation in accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at the base of the tower in relation to the operation of the currently proposed antenna array is as

follows:

Company	Centerline Height (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density† (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Verizon *	180	875	19	100	0.0211	0.5833	3.61
AT&T *	170	D: 1945 E: 1985	12	250	0.0373	1.0000	3.73
Cingular	160	880 - 894	2	296	0.0083	0.5867	1.42
Cingular	160	1930 - 1935	2	427	0.0120	1.0000	1.20
Total							**9.96%**

* Power density parameters taken from: Verizon's Application in Docket 218 and AT&T's most recent standard power density parameters.

† Please note that the standard power density equation provided by the Council in its memo of January 22, 2001 incorporates a ground reflection factor of 2.56 (i.e., the square of 1.6) as described in FCC OET Bulletin No. 65.

As the table demonstrates, the cumulative "worst-case" exposure would be approximately 10% of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from SBMS' use of the tower facility would thus be within applicable standards.

For the foregoing reasons, SBMS respectfully submits that proposed changes to implement expanded shared use at the Colchester site constitute an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7700 or Steve Levine at (860) 513-7636 with questions concerning this application. Thank you for your consideration in this matter.

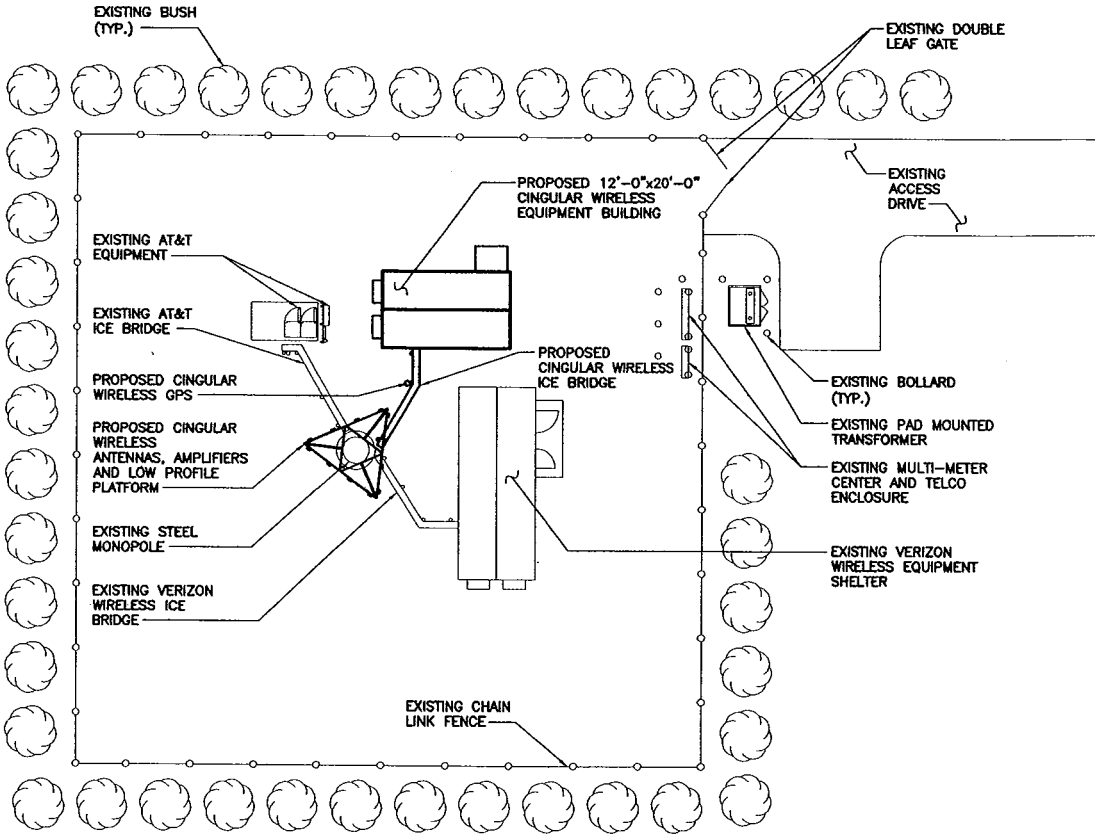
Respectfully yours,

Michele G. Briggs
Manager of Real Estate

Enclosures

cc: Honorable Jenny Contois, 1st Selectman, Town of Colchester

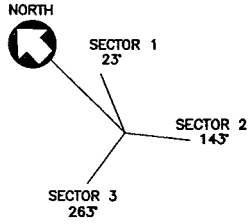
Colchester - Middletown Rd



1 / L-1 COMPOUND PLAN

SCALE: 1"=30'-0"

0 10 20 30 60



ANTENNA ORIENTATION KEY

PROJECT NO.	36917742
Designed by:	
Drawn by:	BAL
Checked by:	
Approved by:	

URS CORPORATION AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

cingular WIRELESS

WIRELESS COMMUNICATIONS FACILITY

COLCHESTER

SITE ADDRESS: 856 MIDDLETOWN ROAD
COLCHESTER, CONNECTICUT

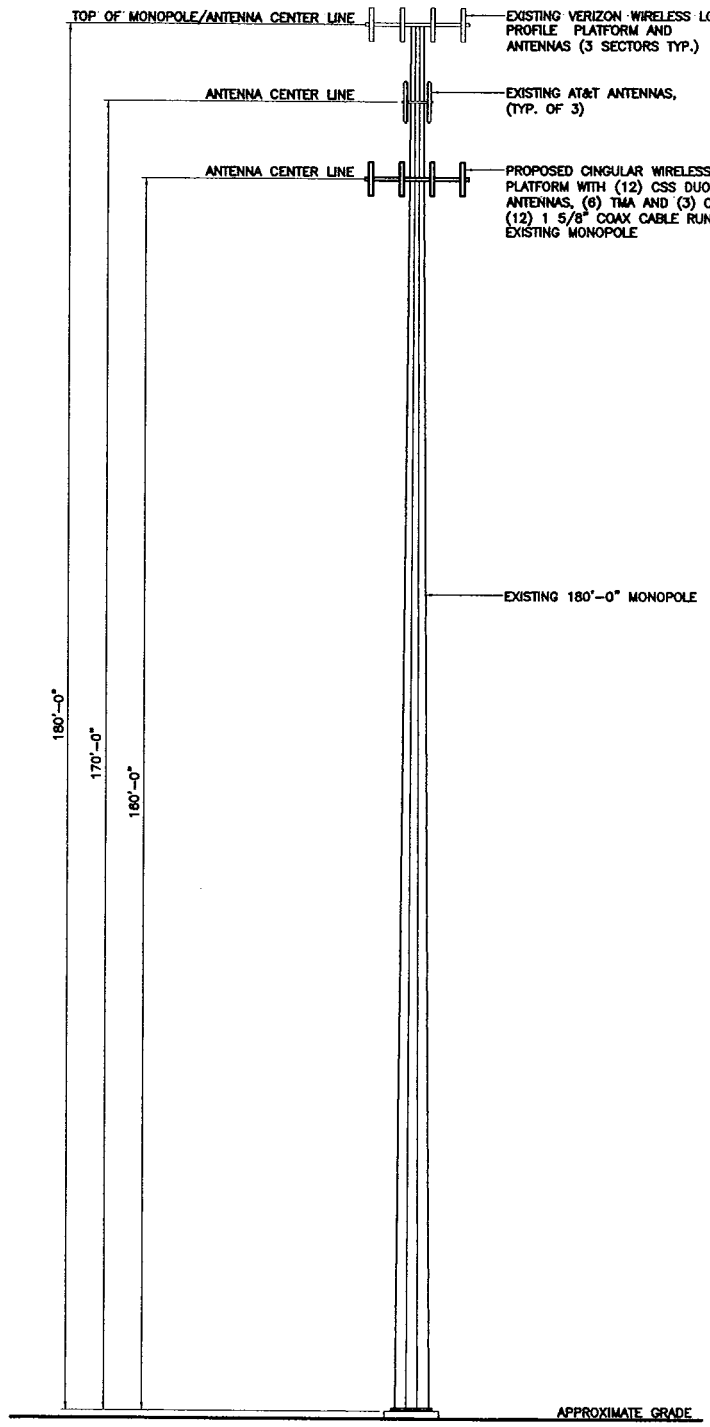
REV.	DATE:	DESCRIPTION

Scale: AS NOTED | Date: 03-05-04

Job No. CW1 027 | File No. L-1

Dwg. No. L-1

Dwg. 1 of 2



1 / L-2 TOWER ELEVATION

SCALE: 1"=25'-0"

0 5 10 15 20 25 50

PROJECT NO.	36917742
Designed by:	
Drawn by:	BAL
Checked by:	
Approved by:	

URS CORPORATION AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

cingular WIRELESS

WIRELESS COMMUNICATIONS FACILITY

COLCHESTER

SITE ADDRESS: 856 MIDDLETOWN ROAD
COLCHESTER, CONNECTICUT

REV.	DATE:	DESCRIPTION

Scale: AS NOTED | Date: 03-05-04

Job No. CW1 027 | File No. L-2 | Dwg. 2 of 2

Dwg. No. L-2

DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF 180' EXISTING MONOPOLE FOR NEW ANTENNA ARRANGEMENT

Colchester Communications Facility
856 Middletown Road
Colchester, Connecticut

Prepared for

cingular WIRELESS

Cingular Wireless
500 Enterprise Drive, Suite 3A
Rocky Hill, CT 06067

Prepared by

URS

URS CORPORATION AES
795 BROOK STREET, BUILDING 5
ROCKY HILL, CT 06067
TEL 860-529-8882

CW1 027
369917740.00000

March 4, 2004

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the existing 180' monopole for Cingular Wireless at 856 Middletown Road in Colchester, Connecticut. The analysis was conducted in accordance with the TIA/EIA-222-F standard for wind velocity of 85 mph and 85 mph concurrent with ½" ice with reduction. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined on the following page of this report.

The results of the analysis indicate the structure to be in compliance with the loading conditions and the material and member sizes for the monopole and foundation. **The monopole is considered structurally feasible with the TIA/EIA-222-F wind load classification specified above and all the existing and proposed antenna loading.** The proposed Cingular Wireless addition consists of:

Antenna and Mount	Carrier	Antenna Center
(12) CSS DUO 1417-8686 antennas with (6) ClearGain TMA's and (3) CSS dual-band combiners on low profile platform with (12) 1 5/8" coaxial cable within the monopole	Cingular Wireless	@ 160' elevation

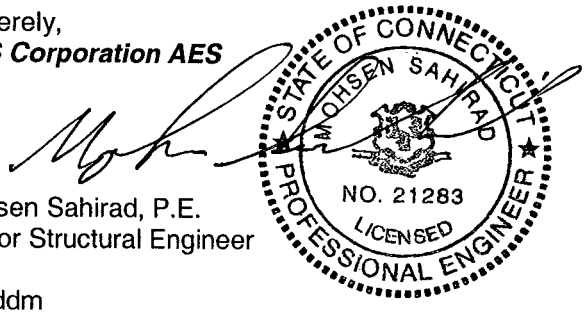
This analysis is based on:

1) Tower's theoretical structural capacity not including structural condition assessment or reduction for residual stress fatigue caused by manufacturing or installation process.
2) Tower structure and foundation design documents prepared by Engineered Endeavors Inc., job number 11294-P01, signed and sealed October 31, 2003.
3) Antenna inventory as specified on the following page of this report.
4) TIA/EIA-222-F wind load classification.

This report is only valid as per the assumptions and data utilized in this report for antenna inventory, mounts and associated cables. The user of this report shall field verify the assumptions of antenna and mount configurations. Notify the engineer in writing immediately if any of the assumptions found in this report are other than specified.

If you should have any questions, please call.

Sincerely,
URS Corporation AES



Mohsen Sahirad, P.E.
Senior Structural Engineer

MS/ddm

cc: Michelle Briggs – Cingular Wireless
Doug Roberts, AIA – URS
I.A., A.A. - URS
CF/Book

2. INTRODUCTION

A structural analysis of this existing 180' communications monopole was performed by URS Corporation AES (URS) for Cingular Wireless. The monopole is located at 856 Middletown Road in Colchester, Connecticut.

The structure is self-supporting and was designed by Engineered Endeavors Inc., job number 11294-P01, signed and sealed October 31, 2003.

This analysis was conducted to evaluate twist (rotation), sway (deflection), and stress on the monopole. The analysis was also used to find the effect of the forces to the foundation resulting from the antenna arrangement listed below:

Antenna and Mount Configuration:

ANTENNA & MOUNT DESCRIPTION	CARRIER	CENTERLINE ELEVATION
(12) DB844H90 antennas on low-profile platform with (12) 1 5/8" coaxial cables within the monopole	Verizon Wireless (existing)	@ 180'
(6) Allgon 7250.03 antennas on (3) T-arm mounts with (12) 1 5/8" coaxial cables within the monopole	AT&T Wireless (existing)	@ 170'
(12) CSS DUO 1417-8686 antennas with (6) ClearGain TMA's and (3) CSS dual-band combiners on low profile platform with (12) 1 5/8" coaxial cable within the monopole	**Cingular Wireless (proposed)**	**@ 160'**
(1) GPS antenna and mount with (1) 7/8" coaxial cable within the monopole	Verizon Wireless (existing)	@ 75'

Note:
1. **This analysis is based on the assumption that all carrier antenna cables are to be placed within the monopole unless otherwise noted. Porthole may be required. Installation of porthole shall be done per manufacturer suggestion.**
2. **Physical verification may be required to ensure that adequate space is available inside the monopole.**

3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS

Methodology:

The structural analysis was done in accordance with TIA/EIA-222-F June 1996, Structural Standard for Steel Antenna Towers and Antenna Supporting Structures, the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Allowable Stress Design (ASD).

The analysis was conducted using ERI Tower 3.0. Two load conditions were evaluated as shown below which were compared to allowable stresses according to AISC and TIA/EIA. The two load combinations were investigated in ERI Tower 3.0 to determine the stress, sway and rotation.

Load Condition 1 = 85 mph Wind Load (without ice) + Tower Dead Load
Load Condition 2 = 74 mph Wind Load (with ice) + Ice Load + Tower Dead Load

The TIA/EIA standard permits one-third increase in allowable stresses for towers and monopoles less than 700 feet tall. For purposes of this analysis, allowable stresses of the monopole members were increased by one-third in computing the load capacity.

4. FINDINGS AND EVALUATION

Combined axial and bending stresses on the monopole structure were evaluated to compare with allowable stresses in accordance with AISC. In all cases, calculated stresses under the proposed loading were less than allowable stresses. Additionally, the monopole structure foundation was found to be adequate.

5. CONCLUSIONS

Our analysis determined that the monopole and its foundation will support the proposed antenna loading based upon the information from the tower design documents provided by Engineered Endeavors Inc., job number 11294-P01, signed and sealed October 31, 2003

Detailed analysis for the proposed antenna arrangement and load condition is provided in Appendix A.

Limitations/Assumptions

1. This report is based on the following:
2. Tower inventory as listed in this report.
3. Tower is properly installed and maintained.
4. All members were as specified in the original design documents and are in good condition.
5. All required members are in place.
6. All steel structural members manufactured and installed in accordance with AISC quality control requirements
7. All bolts are in place and are properly tightened.
8. Tower is in plumb condition.
9. Protective coatings are in good condition
10. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
11. Foundations were properly constructed to support original design loads as specified in the original design documents.
12. All co-axial cable is installed within the monopole.

URS is not responsible for any modifications completed prior to or hereafter, which URS is not or was not directly involved. Modifications include but are not limited to:

1. Adding or relocating antennas and platform

URS hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon information contained and set forth herein. If you are aware of any information which conflicts with that which is contained herein, or you are aware of any defects arising from original design, material, fabrication, or erection deficiencies, you should disregard this report and immediately contact URS. URS disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

Ongoing and Periodic Inspection and Maintenance:

1. After the Contractor has successfully completed the installation and the work has been accepted, the owner will be responsible for the ongoing and periodic inspection and maintenance of the tower.

2. The owner shall refer to TIA/EIA-222-F, Section 14 and Annex E for recommendations for maintenance and inspection. The frequency of the inspection and maintenance intervals is to be determined by the owner based upon actual site and environmental conditions. It is recommended that a complete and thorough inspection of the entire tower structural system is performed at least yearly and more frequently as conditions warrant. According to TIA/EIA-222-F section 14.1, Note 1: It is recommended that the structure be inspected after severe wind and/or ice storms or other extreme loading conditions.

Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7700
Fax: (860) 513-7190

Michele G. Briggs
Manager of Real Estate

March 9, 2004

Honorable Jenny Contois
1st Selectman, Town of Colchester
Town Hall 127 Norwich Avenue
Colchester, Connecticut 06415

Re: Notice of Exempt Modification – Existing Verizon Telecommunications Tower Facility at Lot 13, Middletown Road, Colchester, Connecticut

Dear Ms. Contois:

Southwestern Bell Mobile Systems, LLC ("SBMS") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower on Lot 13, Middletown Road in Colchester, Connecticut.

The facility is owned and operated by Verizon Wireless ("Verizon"), 180 Washington Valley Road, Bedminster, New Jersey 07921. Verizon leases the land from Lorraine Leone of Colchester.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council as required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73. Please accept this letter as notification to the Town of Colchester 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 attached letter fully sets forth the SBMS proposal. However, if you have any questions or require any further information on the plans for the site or the Siting Council's procedures, please contact the undersigned or Mr. Derek Phelps, Executive Director of the Connecticut Siting Council, at (860) 827-2935.

Sincerely,

Michele G. Briggs
Manager of Real Estate

Enclosure