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

December 11, 2008

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

RE: **EM-CING-028-081110A-** New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 600 Old Hartford Road, Colchester, 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.

The proposed modifications are to be implemented as specified here and in your notice dated November 10, 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 16-50j-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. 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,

S. Derek Phelps
Executive Director

SDP/CDM/laf

c: The Honorable Linda M. Riley Hodge, First Selectman, Town of Colchester
Christopher Beauchemin, Town Planner, Town of Colchester
Cordless Data Transfer

G:\EM\CINGULAR\COLCHEST\dc121008a.DOC

CSC
CONNECTICUT SITING COUNCIL

Code Administration
Building Official
Fire Marshal
Wetlands Enforcement

Planning and Zoning
Planning Director
Zoning Enforcement
Town Engineer

November 26, 2008

ORIGINAL

RECEIVED
DEC 2 - 2008
CONNECTICUT
SITING COUNCIL

Honorable Daniel F. Caruso, Chairman
and Member of the Connecticut Sitting Council
Connecticut Sitting Council
10 Franklin Square
New Britain, CT 06051

Re: **EM-CING-028-08110A**-New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 600 Old Hartford Road, Colchester, Connecticut.

Re: **EM-CING-028-08100B**-New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at Lot 13 (aka 856 Middletown Road), Colchester, Connecticut.

On behalf of the Town of Colchester, we have no concerns or comments regarding the above proposals.

Thank you.

Sincerely,

Terry Phillips
Assistant to Adam Turner
Colchester Town Planner

Cc: Linda Hodge, 1st Selectman, Town of Colchester
Adam Turner, Town Planner, Town of Colchester

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

Daniel F. Caruso
Chairman

November 14, 2008

The Honorable Linda M. Riley Hodge
First Selectman
Town of Colchester
Town Hall
127 Norwich Avenue
Colchester, CT 06415

RE: **EM-CING-028-081110A-** New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 600 Old Hartford Road, Colchester, Connecticut.

Dear Ms. Hodge:

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 November 28, 2008.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Christopher Beauchemin, Town Planner, Town of Colchester

The new at&t Your world. Deli

EM-CING-028-081110A

ORIGINAL

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

HAND DELIVERED

November 10, 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 600 Old Hartford Road, Colchester (owner, Cordless Data Transfer)

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 ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

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

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

The changes to the facility do not constitute modifications as defined in Connecticut General

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

1. The height of the overall structure will be unaffected. 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 or, installation of additional antennas of a size required to accommodate UMTS.
- 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.
- Radome enlargement for flagpole and "stick" structures to accommodate larger antennas and additional associated equipment.

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 or more 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, New 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

NEW CINGULAR WIRELESS
Equipment Modification

600 Old Colchester Road, Colchester
Site Number 2032
Exempt Modifications approved 5/00, 10/02, and 8/07

Tower Owner/Manager: Cordless Data Transfer

Equipment Configuration: Self-Supporting Lattice

Current and/or Approved: Nine CSS DUO-1417-8686 panel antennas @ 170 ft AGL
Six TMA's and three combiners @ 170 ft
Nine runs 1 ¼ inch coax cable
Equipment Shelter

Planned Modifications: Remove existing antennas and TMA's
Install six Powerwave 7770 antennas (or equivalent) @ 170 ft
Install six TMA's and six diplexers @ 170 ft
Install three additional runs 1 ¼ inch coax

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 7.1 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density following proposed modifications would be approximately 6 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							1.39
Cingular TDMA *	170	880 - 894	16	100	0.0199	0.5867	3.39
Cingular GSM *	170	1900 Band	2	427	0.0106	1.0000	1.06
Cingular GSM *	170	880 - 894	2	296	0.0074	0.5867	1.26
Total							7.1%

* Per CSC records

Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							1.39
Cingular UMTS	170	880 - 894	1	500	0.0062	0.5867	1.06
Cingular GSM*	170	1900 Band	2	427	0.0106	1.0000	1.06
Cingular GSM	170	880 - 894	4	296	0.0147	0.5867	2.51
Total							6.0%

* Per CSC records

Structural information:

The attached structural analysis for Cingular's installation on this tower in 2002 accounts for 9 CSS antennas, 6 TMA's, 3 combiners, and 9 lines 1 ¼ inch coax in the Cingular equipment inventory. Additionally, AT&T (old) had 6 antennas and 12 lines coax included in the 2002 structural analysis; these items have since been decommissioned and removed.

As shown on the attached loading comparison, the *original configuration represents both greater weight and greater wind loading* than the proposed new array of 6 Powerwave antennas, 6 TMA's, 6 diplexers, and 12 lines 1 ¼ inch coax, and with the AT&T (old) equipment removed.

Accordingly, Cingular's 2002 structural is still valid for assessing the structural impacts of the proposed equipment modifications and demonstrates that there is adequate structural capacity to accommodate the proposed Cingular modifications.

Loading Comparison - 2032 - Colchester

		QTY	Length	Width	Depth	Weight	Sail Area	Total Sail Area (sq in)	Total Weight (lbs)
Existing (per 2005 structural analysis)									
Antennas - Cingular	CSS DUO 1417-8686	9	48	14	9	30.8	672	6,048	277
TMAs - Cingular	ADC CG1900W850	6	11.7	11.3	2.8	15.4	132.21	793	92
Combiners - Cingular	CSS DBC-750	3	7.9	6.6	1.3	4.9	52.14	156	15
coax - Cingular	1 1/4 inch	9	170			0.69	0		1,056
Antennas - old AT&T	Allgon 7250 on T-arms	6	61	6	2	15	366	2,196	90
coax - old AT&T	1.25 inch	6	160			0.69			662
								9,194	**2,192**
Proposed -- AT&T (old) equipment removed									
Antennas	Powerwave 7770	6	55	11	5	35	605	3,630	210
TMAs	Powerwave LGP 21401	6	14	9	2.7	19	126	756	114
Diplexers	Powerwave LGP 13519	6	4.4	6.3	3	5.3	27.72	166	32
coax	twelve 11/4 inch	12	170			0.69	0		1,408
								4,552	**1,763**

Antennas						
	CSS DUO 1417-8686	48	14	9	30.8	672
	Powerwave 7770	55	11	5	35	605
	APL 8013	52	13	1	8.2	676
	DAPA 58000	53	6	3	11	318
	Allgon 7250	61	6	2	15	366
TMAs	ADC CG1900W850	11.7	11.3	2.8	15.4	132.21
	Powerwave LGP 21401	14	9	2.7	19	126
Diplexers	CSS DBC-750	7.9	6.6	1.3	4.9	52.14
	Powerwave LGP 13519	4.4	6.3	3	5.3	27.72
	Powerwave LGP 21903	4.4	6.3	3	5.3	27.72
coax	7/8 inch				.34 / ft	
	1 1/4 inch				.69 / ft	
	1 5/8 inch				.8 / ft	

The new at&t Your world. Delivered. cingular raising the bar

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

November 10, 2008

Linda M. Hodge, 1st Selectman
Town of Colchester
Town Hall, 127 Norwich Ave.
Colchester, CT 06415

Re: Telecommunications Facility – 600 Old Hartford Road

Dear Ms. Hodge:

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

DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF 180' GUYED TOWER FOR REPLACEMENT ANTENNA ARRANGEMENT

600 Old Hartford Road
Colchester, Connecticut
Site No.: 2032

prepared for

cingular WIRELESS

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

prepared by

URS

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

36911722.00000

Revision 2: September 17, 2002

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the 180' guyed tower located on 600 Old Hartford Road in Colchester, Connecticut. The analysis was conducted in accordance with the TIA/EIA-222-E standard for wind velocity of 85 mph and 74 mph concurrent with ½" ice design wind load. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined in the Analysis Methodology and Loading Condition Section of this report. The proposed Cingular Wireless modification is to add the antennas listed below:

(9) DUO1417-8686 antenna with (3) Duplexer and (6) TMA mounted on (3) T-Frame with (9) 1 1/4" coax cables	Cingular	@ 170' elevation

The results of the analysis indicate that the tower structure is in compliance with the proposed loading conditions. The tower is considered feasible with the TIA/EIA-222-E wind load classification specified above and all the existing and proposed antenna loading. No further analysis was conducted on the tower foundation since the forces calculated were below the original design.

This analysis is based on:

1) The tower structure's theoretical capacity not including any assessment of the condition of the tower.

2) The tower and foundation report prepared by Fred A. Nudd Corporation project no. 7265 dated November 1999.

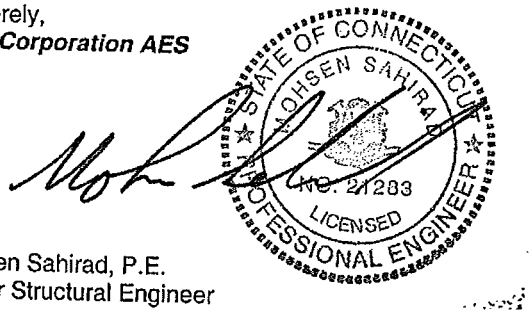
3) Antenna inventory as specified in section 2 and 6 of this report.

4) TIA\EIA-222-E 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 assumption of the antenna and mount configuration. Notify the engineer in writing immediately if any of the assumptions in this report are found to be other than specified.

If you should have any questions, please call.

Sincerely,
URS Corporation AES



Mohsen Sahirad, P.E.
Senior Structural Engineer

MS/rmn

cc: Richard Johanson – Cingular Wireless
Doug Roberts – URS
N.A. – URS
A.A. – URS
CF/Book

2. INTRODUCTION

The subject tower is located on 600 Old Hartford Road in Colchester, Connecticut. The structure is a self supporting 180' steel guyed tower manufactured by Fred A. Nudd Corporation.

The tower is constructed of pipe legs, diagonal rod braces and horizontal angle braces. The tower members are bolted or welded. The width of the tower is 3'-5". The tower geometry and structural sizes were taken from Fred A. Nudd Corporation project no. 7265 dated November 1999.

The existing structure supports several communication antennas. The antenna and mount configuration as specified below:

Antenna Type	Carrier	Mount	Elev.(ft)	Cable
(6) DAPA 58000	Sprint	(3) 12' T-Frame	180'	(6) 1 1/4" coax
(9) DUO1417-8686 antenna with (3) Duplexer and (6) TMA	**Cingular (Proposed)**	**(3) 12' T-Frame**	**170'**	**(9) 1 1/4" coax**
(6) Allgon 7262.02	AT&T	(3) 8' T-Frame	160'	(6) 1 1/4" coax

Note: The proposed Cingular Wireless modification will utilize the existing mounts, cables and orientation.

This structural analysis of the communications tower was performed by URS Corporation, AES (URS) for Cingular Wireless. The purpose of this analysis was to analyze the existing tower for its existing and proposed antenna loads. This analysis was conducted to evaluate twist (rotation), sway (deflection) and stress on the tower, and the effect of forces to the foundation of the tower resulting from existing and proposed antenna arrangements.

3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS

Methodology:

The structural analysis was done in accordance with the TIA/EIA-222-E, 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 2.0. The two load conditions were evaluated as shown below which were compared to allowable stresses according to AISC and TIA/EIA. The load combinations were investigated in ERI Tower 2.0 to determine the stress, sway and rotation.

Load Condition 1 = 85 mph Wind Load + Tower Dead Load
Load Condition 2 = 74 mph Wind Load (with ½" radial ice) + 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 tower members were increased by one-third in computing the load capacity; in addition, the appropriate "k" factors were assigned to each member.

4. FINDINGS AND EVALUATION

The combined axial and bending stresses on the tower structure were evaluated to compare with the allowable stress in accordance with AISC. The analysis indicates that the tower legs, diagonal members and horizontal members have sufficient capacity to carry the loads applied. No further

analysis was conducted on the tower foundation since the forces calculated were below the original design.

The tower reactions are as follows:

Original Reactions	
Horizontal force at anchor block (kips)	63
Uplift force at anchor block (kips)	55.8
Resultant force at anchor block (kips)	84.1
Shear at tower base (kips)	4
Compression at tower base (kips)	95

Proposed Reactions	
Horizontal force at anchor block (kips)	41
Uplift force at anchor block (kips)	38
Resultant force at anchor block (kips)	56
Shear at tower base (kips)	2
Compression at tower base (kips)	85

For detailed proposed tower reactions, see drawing no. E-1 in section 6 of this report.

5. CONCLUSIONS

The results of the analysis indicate that the structure is in compliance with the loading conditions and the materials and member sizes for the tower. The tower is considered feasible with the TIA/EIA-222-E wind load classification specified above and all the existing and proposed antenna loading. The user of this report shall field verify the assumption of the antenna and mount configuration. Notify the engineer in writing immediately if any of the assumptions in this report are found to be other than specified.

Limitations/Assumptions:

This report is based on the following:

A. Tower is properly installed and maintained.

B. All members were as specified in the original Construction Documents and are in good condition.

C. All required members are in place.

D. All bolts are in place and are properly tightened.

E. Tower is in plumb condition.

F. All members protective coating is in good condition.

G. All tower members were properly designed, detailed, fabricated, installed, and have been properly maintained since erection.

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

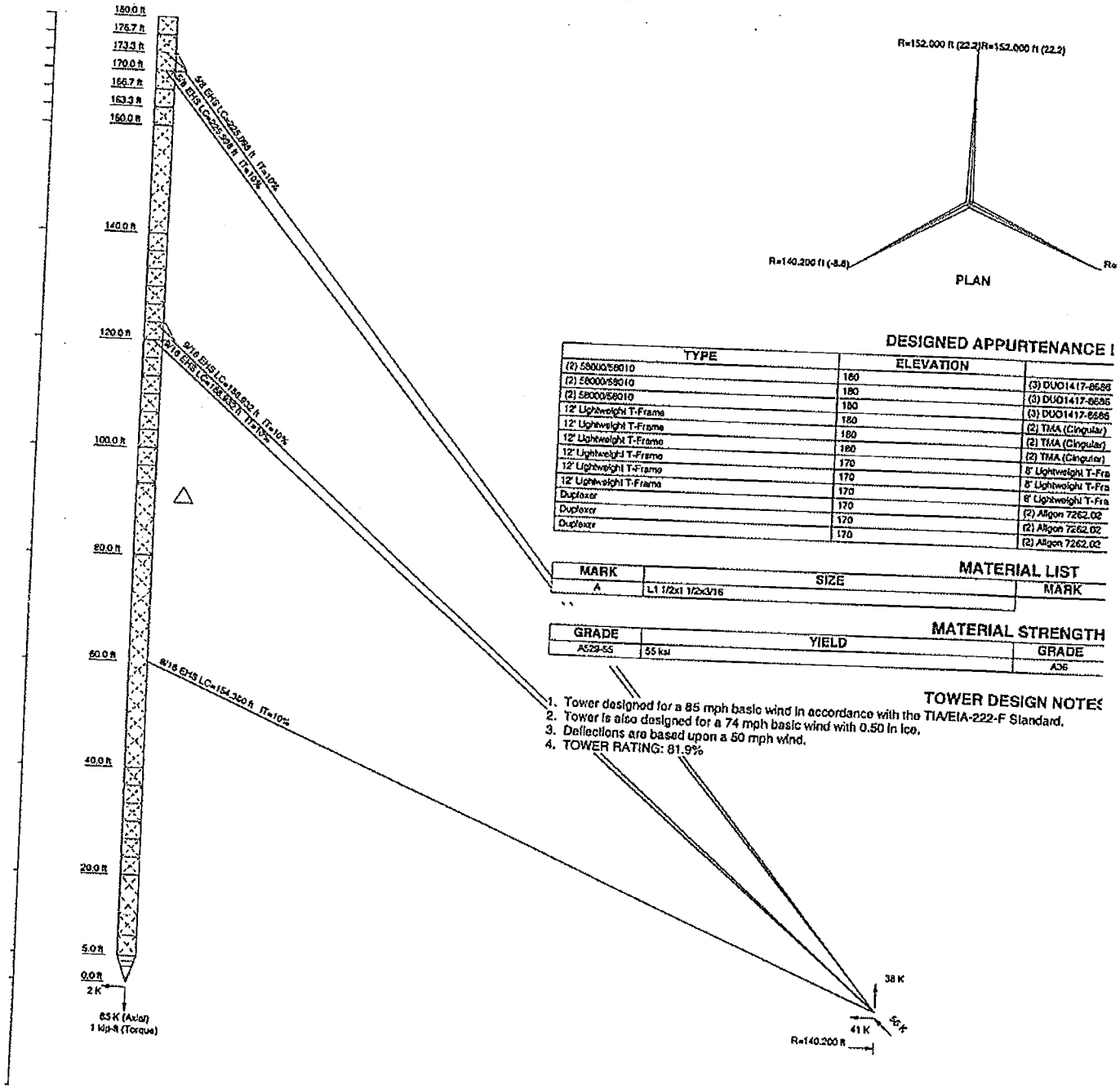
A. Removing/Replacing antennas
B. Adding antennas and amplifiers

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 by the Owner:

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

2. The owner shall refer to TIA/EIA-222-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-E. It is recommended that the structure be inspected after severe wind and/or ice storms or other extreme loading conditions.



DESIGNED APPURTENANCE I

TYPE	ELEVATION	
(2) 58000/58010	180	(3) DUO1417-8686
(2) 58000/58010	180	(3) DUO1417-8686
(2) 58000/58010	180	(3) DUO1417-8686
12' Lightweight T-Frame	180	(2) TMA (Cingular)
12' Lightweight T-Frame	180	(2) TMA (Cingular)
12' Lightweight T-Frame	180	(2) TMA (Cingular)
12' Lightweight T-Frame	170	8' Lightweight T-Fra
12' Lightweight T-Frame	170	8' Lightweight T-Fra
Duplexer	170	8' Lightweight T-Fra
Duplexer	170	(2) Allgon 7262.02
Duplexer	170	(2) Allgon 7262.02
	170	(2) Allgon 7262.02

MATERIAL LIST

MARK	SIZE	MARK
A	L1 1/2x1 1/2x3/16	

MATERIAL STRENGTH

GRADE	YIELD	GRADE
A529-55	55 ksi	A36

TOWER DESIGN NOTES

1. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 74 mph basic wind with 0.50 in Ice.
3. Deflections are based upon a 50 mph wind.
4. TOWER RATING: 81.9%

URS CORPORATION
795 Brook Street, Building 5
Rocky Hill, Connecticut 06067
Phone: (860) 529-8882
FAX: (860) 529-5566

Job:	180' Guyed
Project:	Site: "Colc
Client:	Bechtel Tele
Code:	TIA/EIA-222
Path:	P:\Telecom\F12\C