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

January 21, 2009

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

RE: **EM-CING-086-081215A-** New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 695 Old Colchester 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 following conditions:

- The tower and guy anchors shall be reinforced per page 2 of the structural analysis report dated December 10, 2008 and sealed by E. Mark Malouf, P.E. prior to the antenna installation;
- Post-construction tower and guy anchor ratings of not more than 100 percent each shall be achieved; and
- A signed letter from a Professional Engineer shall be submitted to the Council to certify that the reinforcements were properly completed and post-construction tower and guy anchor ratings of not more than 100 percent each have been achieved.

The proposed modifications are to be implemented as specified here and in your notice dated December 15, 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/MP/laf

c: The Honorable Joseph W. Jaskiewicz, Mayor, Town of Montville
Marcia Vlaun, Town Planner, Town of Montville
Eastern Connecticut Cablevision

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 16, 2008

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

RE: **EM-CING-086-081215A-** New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 695 Old Colchester 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 December 30, 2008.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Marcia Vlaun, Town Planner, Town of Montville

The new at&t Your world. Delivered

EM-CING-086-081215A

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

ORIGINAL

HAND DELIVERED

December 15, 2008

RECEIVED
DEC 15 2008
CONNECTICUT
SITING COUNCIL

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 695 Old Colchester Road, Montville (owner, Eastern CT Cablevision)

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.

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

695 Old Colchester Road, Montville
Site Number 2049
Exempt Modifications Approved 7/89 and 8/02

Tower Owner/Manager: Eastern CT Cablevision

Equipment configuration: Guyed Lattice Tower

Current and/or approved: Nine CSS DUO 8670 panel antennas @ 230* ft AGL
Six TMA's @ 230* ft
Nine runs 1 ¼ inch coax
Equipment shelter

*Actually 239 ft due to presence of guy wire

Planned Modifications: Remove three existing antennas
Install three Powerwave 7770 antennas @ 239 ft c.l.
Install six diplexers @ 239 ft
Install three additional runs 1 ¼ inch coax.

Power Density:

Calculations for AT&T's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the tower base, of approximately 4.2 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for AT&T's planned operations would be approximately 3.6% 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 *							1.28
AT&T TDMA	239	880 - 894	16	100	0.0101	0.5867	1.72
AT&T GSM	239	880 - 894	2	296	0.0037	0.5867	0.64
AT&T GSM	239	1900 Band	2	427	0.0054	1.0000	0.54
Total							4.2%

* 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 *							1.28
AT&T GSM	239	880 - 894	4	296	0.0075	0.5867	1.27
AT&T GSM	239	1900 Band	2	427	0.0054	1.0000	0.54
AT&T UMTS	239	880 - 894	1	500	0.0031	0.5867	0.54
Total							3.6%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation will have adequate structural capacity to accommodate the proposed modifications following completion of the attached structural modifications. (Malouf Engineering Intl., 12/10/08)

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

December 15, 2008

Mayor Joseph W. Jaskiewicz
Town of Montville
Town Hall 310 Norwich-New London Tpke.
Uncasville, CT 06382

Re: Telecommunications Facility – 695 Old Colchester Road

Dear Mayor 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 ("AT&T") 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 AT&T'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 AT&T'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

December 10, 2008

Mr. Mark Appleby
SAI COMMUNICATIONS
22 Keewaydin Dr
Salem, NH 03079

MALOUF ENGINEERING INTL., INC.
STRUCTURAL CONSULTANTS

SUBJECT	**STRUCTURAL MODIFICATION DESIGN**			
Structure/Make/Model:	370 ft **Guyed Tower**		World Tower / 42 SR	
Client/Site Name/#:	**SAI Communications / AT&T**		**Montville**	**#2049**
Owner/Site Name/#:	MetroCast Communications of CT			
MEI Project ID:	**CT01162G-08V3**			
Location:	695 Old Colchester Rd Montville, CT 06353		New London County FCC #1054300	
	LAT	41-27-11 N	LON	72-09-14 W

Malouf Engineering Int'l (MEI), as requested, has performed a structural re-analysis and mast modification of the above mentioned structure in order to structurally support the changed condition as noted below. In addition, a foundation mapping was performed to determine the dimensional characteristics of the foundation system.

The structural modification design used the following criteria:

CODE / STANDARD	ANSI/TIA-222-F-96 Standard	
LOADING CASES	*Full Wind*:	85 Mph (fastest-mile) - with No Radial Ice
	Iced Case:	74 Mph (fastest-mile) + 0.5" Radial Ice
	Service:	50 Mph

Proposed Changed Condition Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
239	AT&T	3	7770.00 D.B. Panel Ants.	[(3) Exist. Sector Frame Mounts]	3	1-1/4" (in addition to 9 existing - Lines 50% shielded)
		6	Diplexers			

Current and Reserved/Future Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
370		1	Beacon			
360		1	8' Dia. Standard Dish	(1) Dish Pipe Mount	1	EW63
355		3	Omni Whip Antennas	(3) Standoff Mounts	3	1-5/8"
335		1	Omni Whip Antenna	(1) 6' Standoff Mount	1	1-5/8"
328		2	Panels w/screen	(2) Panel Mounts	2	1-5/8"
305		6	4' H (Type 2) Panel Ants.	(3) Sector Frame Mounts	12	1-5/8" (in 2 rows)
		6	4' H (Type 1) Panel Ants.			
270		1	ASP712 Antenna		1	1-5/8"
239	AT&T	6	DB Panel Antennas (CSS DUO-8670)	(3) Sector Frame Mounts	9	1-1/4"
		6	1900 TMA's			
230				(1) Empty 6' Standoff		
200		1	QCS-UHF Antenna		1	7/8"
180		1	QCS-10/12 Antenna		1	7/8"
140		1	QCS-UHF Antenna		1	1/2"
125		1	Omni Whip Antenna	(1) Standoff Mount	1	1/2"
105		1	QCA-6 Antenna		1	1/2"
85		1	TFM-2 Antenna		1	1/2"
		1	Yagi Antenna		1	7/8"
70		1	Yagi Antenna		1	7/8"
55		1	TFM-1 Antenna		1	1/2"

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
50		1	QCA-UHF Antenna nt.		1	1/2"
45		1	QCA-UHF Antenna		1	1/2"
		1	TFM-1 Antenna		1	1/2"
30		1	QCA-UHF Antenna Ant.		1	1/2"
20		1	SP3-5.2 Dish	(1) Dish Mount	1	1/2"

(I) = Internal; (E) = External; (FZ) = Within Face Zone & (OFZ) = Outside Face Zone - as per TIA-222

The subject structure is modified for the addition of the noted proposed changed condition. The design is based on a rigorous structural analysis performed by MEI relying on data records furnished. A computer stress analysis of the structure with the suggested strengthening elements was performed in accordance with the TIA-222 Standard provisions and with the agreed scope of work terms. This existing structure is assumed, for the purpose of this work, to have been properly maintained and to be in good condition with no structural defects and with no deterioration to its member capacities ('as-new' condition).

The structure will require structural strengthening as follows: (Refer to the drawings for details.)

STRUCTURAL STRENGTHENING REQUIRED	
1	Replace existing diagonal rods with new angles at 4 bays as noted. Use existing bolt pattern as templates for new members, and use new A325 high strength bolts. Use brace frame to insure stability.
2	Add Heap of compacted crushed gravel centered over the block of the existing outer guy anchors to increase capacity. Equivalent weight of concrete blocks can be used as an alternate.
3	Perform Maintenance work if required & as applicable to have a structure in good operational condition.

Prior to implementation of the changed conditions and modifications, **the data designated on the design documents requiring field determination and verification shall be validated.** Rigging and temporary supports required for the erection/modification shall be determined, documented, furnished and installed by the erector/contractor accounting for the loads imposed on the structure due to the proposed construction method.

Based on the stress analysis results, **the subject structure mast, after proper installation of the noted structural strengthening, is rated at 95.8%** of its support capacity (controlling component: Guy Anchors) with the proposed changed condition considered.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any projects please contact us.

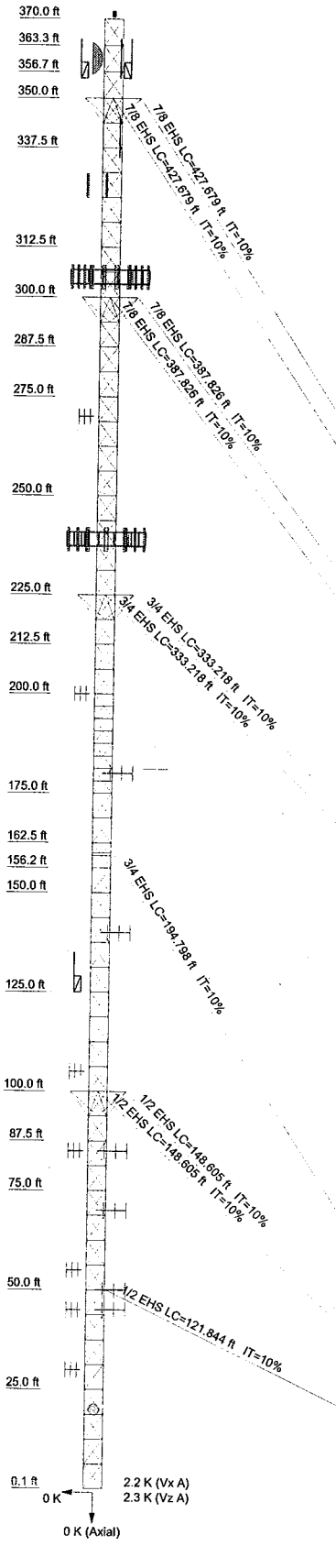
Respectfully submitted,

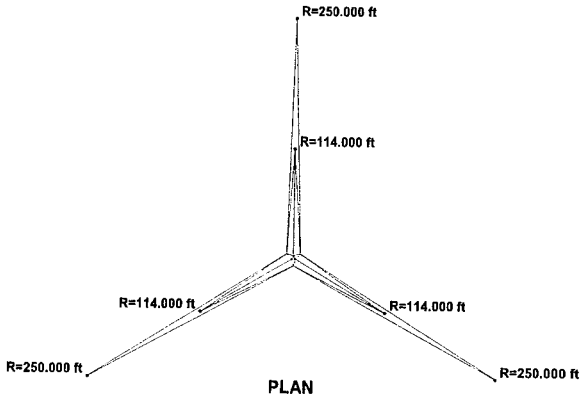
MALOUF ENGINEERING INT'L, INC.

STATE OF CONNECTICUT MARK MALOUF No. 17715 LICENSED PROFESSIONAL ENGINEER

E. Mark Malouf, PE
Connecticut #17715
972-783-2578 ext. 106
mmalouf@maloufengineering.com

Section	T23	T22	T21	T20	T19	T18	T17	T16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs				SR 3 1/4							SR 3		SR 3 1/4		SR 3		A		SR 3			SR 2 3/4	
Leg Grade											A36												
Diagonals		SR 5/8			D		B				SR 5/8		D	B		SR 5/8		B		B	C		B
Diagonal Grade											A36												
Top Girts	P 1.25 STD.		2L2x2x3/16x3/8		P 1.25 STD.		N.A.		P 1.25 STD.	E	P 1.25 STD.		N.A.	2L2x2x3/16x3/8	P 1.25 STD.		N.A.		P 1.25 STD.	N.A.		D	
Horizontals			P 1.25 STD.		E		P 1.25 STD.		N.A.		P 1.25 STD.		2L2x2x3/16x3/8		P 1.25 STD.		E		P 1.25 STD.	E		N.A.	
Sec. Horizontals				N.A.						E	N.A.					N.A.							
Top Guy Pull-Offs		2L2x2x3/16x3/8			F		N.A.			E	P 1.25 STD.		F		N.A.		F		N.A.	F		N.A.	
Face Width (ft)				SR 3 1/4							N.A.												
# Panels @ (ft)		4 @ 6.215			5						52 @ 6.25												3 @ 6.667
Weight (K)	41.1	2.4	2.6	2.5	1.2	2.5	2.8	0.8	0.6	1.2	2.5	2.3	1.2	2.5	3.0	2.1	1.1	2.2	2.1	1.9	1.0	1.0	0.6





PLAN

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Beacon (E)	370	(6) 1900 TMA's (ATI / E)	239
Dish Pipe Mount (E)	360	(3) Sector Frame Mounts (E)	239
8' PAD (E)	360	(3) 7770.00 D.B. Panel Antennas (ATI / P)	239
Standoff Mount (E)	355		
Omni Whip Antenna (E)	355	Empty 6' Standoff Mount (E)	230
Standoff Mount (E)	355	(1) QCS-UHF Antenna (E)	200
Omni Whip Antenna (E)	355	(1) QCS-10/12 Antenna (E)	180
6' Standoff Mount (E)	355	(1) QCS-UHF Antenna (E)	140
Omni Whip Antenna (E)	355	Standoff Mount (E)	125
4' Standoff Mount (E)	335	Omni Whip Antenna (E)	125
Omni Whip Antenna (E)	335	(1) QCA-6 Antenna (E)	105
Mount for Panels (E)	328	(1) Yagi Antenna (E)	85
(2) Panels w/ Screen (E)	328	(1) TFM-2 Antenna (E)	85
(6) 4'H (Type 2) Panel Antennas (E)	305	(1) Yagi Antenna (E)	70
(3) Sector Frame Mounts (E)	305	(1) TFM-1 Antenna (E)	55
(6) 4'H (Type 1) Panel Antennas (E)	305	(1) QCA-UHF Antenna (E)	50
(1) ASP712 Antenna (E)	270	(1) QCA-UHF Antenna (E)	45
(6) Diplexers (ATI / P)	239	(1) TFM-1 Antenna (E)	45
(6) D.B. Panel Antennas (CSS DUO-8670) (ATI / E)	239	(1) QCA-UHF Antenna (E)	30
		SP3-5.2 (E)	20

SYMBOL LIST

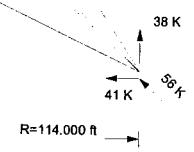
MARK	SIZE	MARK	SIZE
A	SR 3 1/4	E	2L2x2x3/16x3/8
B	L2 1/2x2 1/2x3/16	F	2L2 1/2x2 1/2x3/16x3/4
C	2L3x3x1/4x3/8	G	1 @ 0.139
D	2L2 1/2x2 1/2x3/16x3/8		

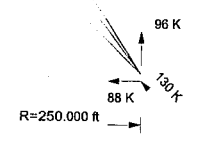
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi			

TOWER DESIGN NOTES

1. Tower is located in New London County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 94.5%





MALOUF ENGINEERING INTL, INC. STRUCTURAL CONSULTANTS
maloufengineering.com

Malouf Engineering Int'l, Inc.
17950 Preston Road; Suite #720
Dallas, TX 75252
Phone: (972) 783-2578
FAX: (972) 783-2583

Job:	370' GT - MONTVILLE - OLD COLCHESTER ROAD SITE #2049		
Project:	CT01162G-08V3 - MODIFICATION ANALYSIS		
Client:	HUDSON DESIGN GROUP / AT&T	Drawn by: LNguyen	App'd:
Code:	TIA/EIA-222-F	Date: 12/08/08	Scale: NTS
Path:	C:\MEIProjects\08 DATA\GT\CT01162G-08V3\CT1162G-08V3.eri		Dwg No. E-1

RISATower	Job	Page
	370' GT - MONTVILLE - OLD COLCHESTER ROAD SITE #2049	1 of 17
Malouf Engineering Int'l, Inc. 17950 Preston Road; Suite #720 Dallas, TX 75252 Phone: (972) 783-2578 FAX: (972) 783-2583	Project CT01162G-08V3 - MODIFICATION ANALYSIS	Date 11:03:30 12/08/08
	Client HUDSON DESIGN GROUP / AT&T	Designed by LNguyen

Tower Input Data

The main tower is a 3x guyed tower with an overall height of 370.000 ft above the ground line.
The base of the tower is set at an elevation of 0.000 ft above the ground line.
The face width of the tower is 5.000 ft at the top and 5.000 ft at the base.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Tower is located in New London County, Connecticut.
Basic wind speed of 85 mph.
Nominal ice thickness of 0.500 in.
Ice density of 56 pcf.
A wind speed of 74 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 50 mph.
Tension only take-up is 0.031 in.
Pressures are calculated at each section.
Safety factor used in guy design is 2.
Stress ratio used in tower member design is 1.333.
Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Treat Feedline Bundles As Cylinder
Consider Moments - Horizontals	Assume Legs Pinned	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Diagonals	√ Assume Rigid Index Plate	√ Calculate Redundant Bracing Forces
Use Moment Magnification	√ Use Clear Spans For Wind Area	Ignore Redundant Members in FEA
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	SR Leg Bolts Resist Compression
√ Use Code Safety Factors - Guys	√ Retension Guys To Initial Tension	√ All Leg Panels Have Same Allowable
Escalate Ice	Bypass Mast Stability Checks	Offset Girt At Foundation
Always Use Max Kz	√ Use Azimuth Dish Coefficients	Consider Feedline Torque
Use Special Wind Profile	√ Project Wind Area of Appurt.	Include Angle Block Shear Check
√ Include Bolts In Member Capacity	√ Autocalc Torque Arm Areas	Poles
√ Leg Bolts Are At Top Of Section	SR Members Have Cut Ends	Include Shear-Torsion Interaction
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	√ Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
Add IBC .6D+W Combination		

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	370.000-363.333			5.000	1	6.667
T2	363.333-356.666			5.000	1	6.667
T3	356.666-349.999			5.000	1	6.667
T4	349.999-337.499			5.000	1	12.500
T5	337.499-312.499			5.000	1	25.000
T6	312.499-299.999			5.000	1	12.500
T7	299.999-287.499			5.000	1	12.500
T8	287.499-274.999			5.000	1	12.500
T9	274.999-249.999			5.000	1	25.000
T10	249.999-224.999			5.000	1	25.000
T11	224.999-212.499			5.000	1	12.500
T12	212.499-199.999			5.000	1	12.500
T13	199.999-174.999			5.000	1	25.000
T14	174.999-162.499			5.000	1	12.500
T15	162.499-156.249			5.000	1	6.250
T16	156.249-149.999			5.000	1	6.250
T17	149.999-124.999			5.000	1	25.000

TECHNICAL SPECIFICATION NOTES

GENERAL

1. STRUCTURAL MODIFICATIONS HAVE BEEN DESIGNED IN CONFORMANCE WITH ANSI/TIA/222-F STANDARD SPECIFICATIONS FOR LOADING SPECIFIED ON SHEET S01.
2. ALL DIMENSIONS AND DETAILS SHOWN HAVE BEEN OBTAINED FROM PREVIOUS STRUCTURAL ANALYSIS REPORT BY O2 WIRELESS. NO ORIGINAL DESIGN DRAWINGS WERE SUPPLIED & NO FIELD INSPECTION WAS PERFORMED BY MEI.. THEREFORE, ACTUAL SITE DIMENSIONS SHOULD BE DETERMINED / VERIFIED PRIOR TO FABRICATION OF ANY MATERIAL OR PROVISION FOR FIELD ADAPTATION SHOULD BE MADE. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
3. THESE DRAWINGS INDICATE THE MAJOR OPERATIONS TO BE PERFORMED, BUT DO NOT SHOW EVERY FIELD CONDITION THAT MAY BE ENCOUNTERED. THEREFORE, PRIOR TO BEGINNING OF WORK, THE CONTRACTOR SHOULD SURVEY THE JOB SITE THOROUGHLY TO MINIMIZE FUTURE FIELD PROBLEMS. BID PRICE TO INCLUDE ALL RELATED COSTS TO FAMILIARIZE WITH ACTUAL SITE CONDITIONS AND FIELD DETERMINATIONS/VERIFICATION OF NOTED DIMENSIONS. MATERIAL QUANTITIES AND LENGTH ARE FOR BIDDING PURPOSE - CONTRACTOR TO BE RESPONSIBLE FOR PROPER FIT AND CLEARANCES.
4. ALL WORK SHALL BE PERFORMED AND INSTALLED BY A TOWER CONTRACTOR WITH MIN. 5 YEARS EXPERIENCE IN SIMILAR WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION AND INDUSTRY PRACTICE.
5. ALL PERMITS, LICENSES, APPROVALS, AND OTHER REQUIREMENTS FOR CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AMPLE NOTICE TO BUILDING INSPECTION DEPARTMENT TO SCHEDULE ANY REQUIRED INSPECTIONS.
6. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILTY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
7. CONTRACTOR SHALL SUBMIT TO ENGINEER ANY INTENT TO DEVIATE FROM PLANS AND DETAILS FOR APPROVAL PRIOR TO START OF ANY WORK. CONTACT THE ENGINEER OF RECORD CONCERNING ANY CHANGES, DISCREPANCIES &/OR MODIFICATIONS THAT MAY BE REQUIRED DUE TO THE EXISTING CONDITIONS AND SHALL NEED TO BE RESOLVED BEFORE PROCEEDING WITH THE WORK. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION
8. PHOTOGRAPHS SHALL BE TAKEN OF OVERALL SITE COMPOUND AND STRUCTURE PRIOR TO THE CONSTRUCTION, DURING CONSTRUCTION AND AFTER CONSTRUCTION INCLUDING BUT NOT LIMITED TO ALL REINFORCED AREAS. A CLOSE-OUT REPORT WITH PHOTOS IS TO BE SUBMITTED TO THE ENGINEER OF RECORD WITHIN REASONABLE TIME AFTER COMPLETION OF WORK.
9. SCOPE OF MODIFICATIONS LISTED ARE STRUCTURAL RELATED MODIFICATIONS BASED ON PRIOR ANALYSIS RESULTS. EXISTING STRUCTURE IS ASSUMED TO BE IN GOOD CONDITION AND FREE FROM STRUCTURAL DEFECTS. ALL MAINTENANCE TYPE WORK IS ASSUMED COMPLETED.
10. REFER TO OWNER SPECIFICATIONS FOR NEW MEMBERS PAINT REQUIREMENTS IF ANY, OTHERWISE PAINT NEW STEEL MEMBERS WITH A FINISH COAT OF ACRYLIC PAINT , INT'L ORANGE OR WHITE, TO MATCH EXISTING PAINT BANDS AT THAT ELEVATION & IN ACCORDANCE WITH FAA ADVISORY CIRCULAR AC 70/7460-1K.

COMPONENTS SPECIFIED

11. HEAP CRUSHED STONE GRAVEL ABOVE EXISTING ANCHOR AS NOTED SHALL BE PLACED AS SHOWN IN INSTALLATION DRAWINGS IN 6" HORIZONTAL LIFTS AND COMPACTED TO A MIN. DENSITY OF 120 PCF. SLOPE SIDES 30° APPROX. OR AS REQUIRED FOR STABILITY OF MOUND. ALTERNATIVELY, AN EQUIVALENT CONCRETE BLOCK WITH SAME WEIGHT MAY BE USED.

FIELD INSTALLATION

12. ALL INSTALLATION PROCEDURES, SAFEGUARDS AND MEANS AND METHODS OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA REQUIREMENTS AND NATE GUIDELINES. ALL ERECTION STRESSES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REVIEWED/PERFORMED BY A COMPETENT PROFESSIONAL EXPERIENCED IN SIMILAR WORK.
13. MINIMUM RECOMMENDED WEATHER CONDITION THAT SHOULD BE OBSERVED TO INSURE A SAFE WORKING CONDITION SHALL BE: WIND SPEED NOT TO EXCEED 10-15 MPH AT GROUND LEVEL, NO THUNDERSTORMS FORECASTED, AND WITH TOWER STEEL TEMPERATURE BETWEEN 20° F & 95° F. FOLLOW ALL APPLICABLE OSHA SAFETY GUIDELINES.
14. TOWER SHALL BE PROPERLY BRACED AND CARE SHALL BE TAKEN IN THE REMOVAL AND REPLACEMENT OF ANY TOWER MEMBER IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS AND PROCEDURES.
15. ALL PRECAUTIONS AND EFFORTS SHALL BE TAKEN TO INSURE THE TOWER STABILITY DURING THE MODIFICATIONS WORK. BRACING FRAMES WITH CAPACITY MATCHING MEMBERS BEING WORKED ON SHALL BE REQUIRED.
16. ANY STRUCTURAL MEMBER THAT HAS DAMAGED GALVANIZED SURFACES SHALL BE CLEANED AND TOUCHED UP WITH TWO COATS OF ZINC-RICH PAINT (ZRC PREFERRED).
17. IN AREAS TO BE MODIFIED, ANY MOUNTS, BRACKETS, CLAMPS, TRANS. LINES AND/OR MISCELLANEOUS HARDWARE INTERFERING WITH THE INSTALLATION OF THE MODIFICATIONS SHALL BE RE-WORKED OR TEMPORARILY MOVED AND THEN REPLACED AFTER THE COMPLETION OF THE WORK. CONTACT OWNER TO COORDINATE THIS ACTION AS REQUIRED.
18. FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES. ALL BOLTS AT EVERY CONNECTION SHALL BE INSTALLED SNUG FIT UNTIL THE SECTION IS FULLY COMPACTED, AND THEN TIGHTENED ADDITIONALLY IN ACCORDANCE WITH THE AISC "TURN-OF-THE-NUT" METHOD. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.
19. BOLT LENGTHS UP TO AND INCLUDING FOUR DIAMETERS SHALL BE TENSIONED 1/3 TURN BEYOND SNUG FIT. BOLT LENGTHS OVER 4 DIAMETERS SHALL BE 1/2 TURN BEYOND SNUG TIGHT.
20. UPON COMPLETION OF ALL WORK, THE SITE SHALL BE CLEANED OF ALL DEBRIS AS REQUIRED. ANY SURPLUS MATERIALS NOT REMOVED FROM THE SITE SHALL BE NEATLY STORED IN AN AREA DESIGNATED BY THE OWNER REPRESENTATIVE.

STEEL / FABRICATION

21. ALL STEEL FABRICATION AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL AND SPECIFICATIONS "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
22. DRAWINGS SHOW RELATED DETAILS BUT ARE NOT SHOP DRAWINGS. SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH AISC DETAILING REQUIREMENTS. DIMENSIONAL TOLERANCES SHALL BE IN ACCORDANCE WITH ASTM A7 REQUIREMENTS.
23. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (A.W.S.) STANDARDS AND SPECIFICATIONS, ANSI/AWS D1.1-latest edition.
24. NEW STEEL ANGLE, CHANNEL AND PLATE MEMBERS UNLESS NOTED OTHERWISE SHALL CONFORM TO ASTM A-36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS.
25. THE FINISHED DIAMETER OF BOLT HOLES SHALL NOT BE MORE THAN 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER UNLESS OTHERWISE NOTED.
26. MATERIAL MAY BE CUT BY SHEARING, SAWING, OR CUTTING WITH A ROUTER OR GAS CUT. MATERIAL GREATER THAN 1/2" THICKNESS SHALL NOT BE SHEARED.
27. CUT EDGES SHALL BE TRUE AND SMOOTH, AND FREE FROM EXCESSIVE BURRS AND RAGGED BREAKS. SHEARED EDGES OF THICK PLATES SHALL BE PLANED TO A DEPTH OF 1/4". RE-ENTRANT CUTS SHALL BE AVOIDED. IF USED, THEY SHALL BE FILLETED BY DRILLING PRIOR TO CUTTING.
28. DIMENSIONAL TOLERANCES, AS INDICATED IN THE AISC CODE OF STANDARD PRACTICE SHALL BE CAREFULLY FOLLOWED DURING FABRICATION.
29. PRIOR TO GALVANIZING, ALL FABRICATED STEEL SHALL BE THOROUGHLY SHOP INSPECTED AND QUANTITIES COUNTED ACCORDING TO THE BEST QUALITY CONTROL AND INSPECTION METHODS.
30. ALL BOLTS, WASHERS AND LOCKNUTS SHALL BE NEW DOMESTIC HIGH STRENGTH GALVANIZED BOLTS TYPE 'X' (THREADS EXCLUDED) AND SHALL CONFORM TO ASTM A325 SPECIFICATIONS UNLESS NOTED OTHERWISE.
31. ANY BOLT REMOVED FROM EXISTING TOWER STRUCTURE SHALL BE REPLACED WITH A NEW DOMESTIC ASTM A325 HIGH STRENGTH BOLT OF EQUAL DIAMETER SIZE UNLESS NOTED OTHERWISE.
32. ALL BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
33. ALL BOLT HOLES EDGE DISTANCES SHALL BE 1 1/2" UNLESS OTHERWISE NOTED.
34. ALL STEEL SHALL BE HOT DIPPED GALVANIZED PER ASTM A123 SPECIFICATIONS AFTER FABRICATION.
35. ALL STEEL HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A153.
36. FIELD PUNCH / DRILL HOLES AS REQUIRED FOR ACCURATE FIT OF MODIFICATION MEMBER.
37. AFTER ANY FIELD HOLE PUNCHING/DRILLING, OR CUTTING HAS BEEN COMPLETED, OR FOR ANY DAMAGED STRUCTURAL MEMBER, TOUCH UP ALL BARE MATERIAL AND WELDED AREAS WITH TWO COATS OF ZRC OR SIMILAR MATERIAL TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS.

at&t

MONTVILLE SITE
AT&T SITE #2049
OLD COLCHESTER ROAD
MONTVILLE, CONNECTICUTT

DRAWING INDEX

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MONTVILLE SITE
AT&T SITE #2049
OLD COLCHESTER ROAD
MONTVILLE, CONNECTICUTT

at&t

ALL SCALES SHOWN ARE BASED ON DRAWING SIZE OF 11" x 17" 0" 1/2" 1"

NO.	DATE	REVISIONS	DRAWN	ENG'D	APP'D
0	12/10/08	ISSUED FOR CONSTRUCTION	CRM	LKN	MM

DEC 10 2008

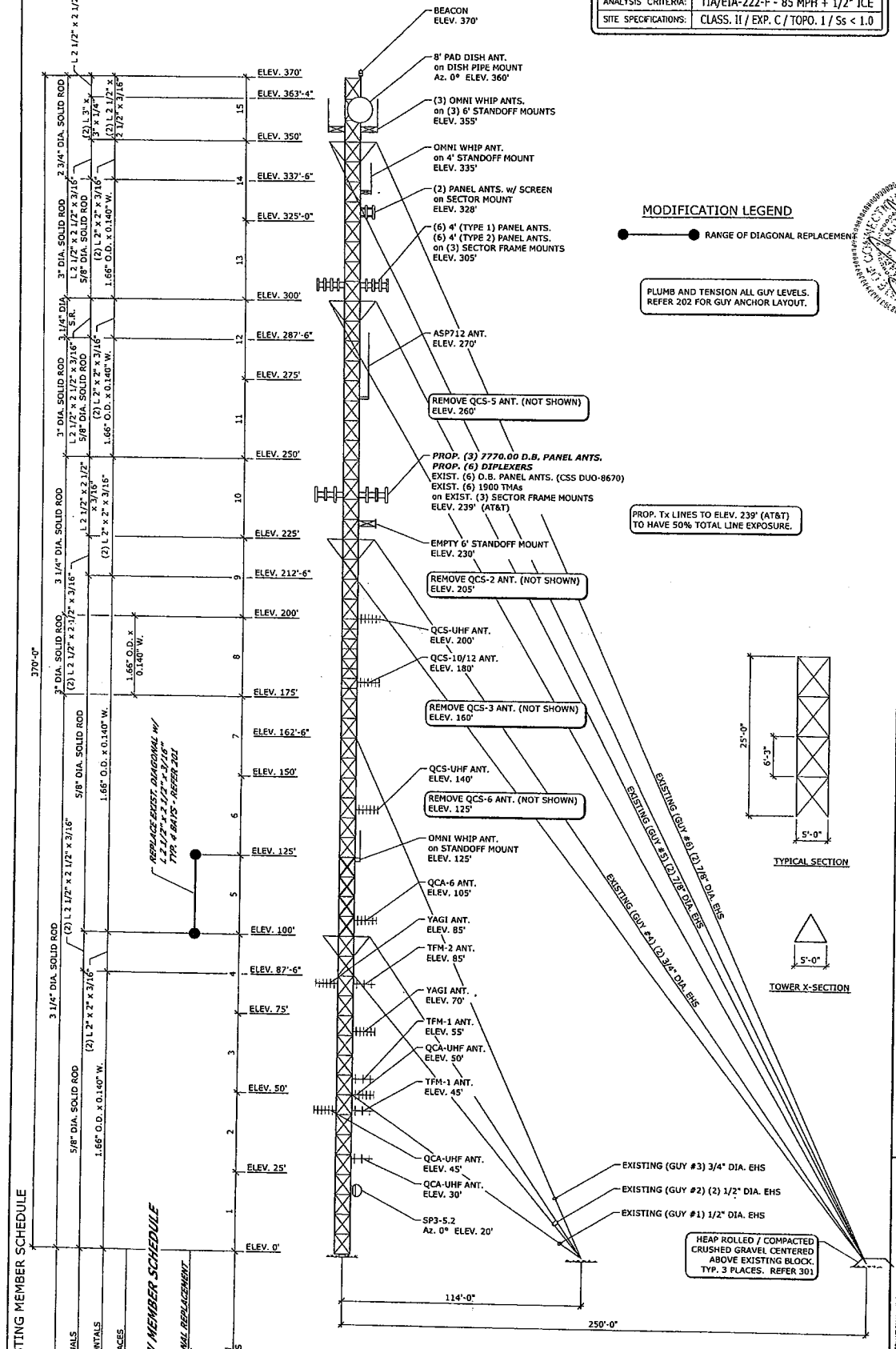
SAI COMMUNICATIONS

TITLE SHEET AND TECHNICAL SPECIFICATION NOTES

ME: PROJECT ID	SHEET NUMBER	REV.
CT01162G-08-V3	T01	0

REFER SHEET T01 FOR TECH. SPEC. NOTES

TOWER HEIGHT & TYPE:	370' GUYED TOWER
SITE NAME:	MONTVILLE SITE #2049
SITE LOCATION:	MONTVILLE, CONNECTICUTT
TOWER MANUF. / MODEL:	UNKNOWN
ORIGINAL DESIGN CRITERIA:	TIA/EIA-222 - UNKNOWN
ANALYSIS CRITERIA:	TIA/EIA-222-F - 85 MPH + 1/2" ICE
SITE SPECIFICATIONS:	CLASS. II / EXP. C / TOPO. 1 / Ss < 1.0



MODIFICATION LEGEND

RANGE OF DIAGONAL REPLACEMENT

PLUMB AND TENSION ALL GUY LEVELS. REFER 202 FOR GUY ANCHOR LAYOUT.

PROP. Tx LINES TO ELEV. 239' (AT&T) TO HAVE 50% TOTAL LINE EXPOSURE.

TYPICAL SECTION

TOWER X-SECTION

101 ELEVATION: 370' GUYED TOWER

SCALE: 1" = 30'-0"

SAI COMMUNICATION

TOWER MODIFICATION SCHEDULE

MEI PROJECT ID	SHEET NUMBER	REV.
CT01162G-08-V3	S01	0

NO.	DATE	REVISIONS	DRAWN (DBT)	APP'D
0	12/16/08	ISSUED FOR CONSTRUCTION	CRM	LKN

ALL SCALES SHOWN ARE BASED ON DRAWING SIZE OF 11" x 17"

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MONTVILLE SITE
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MONTVILLE, CONNECTICUTT

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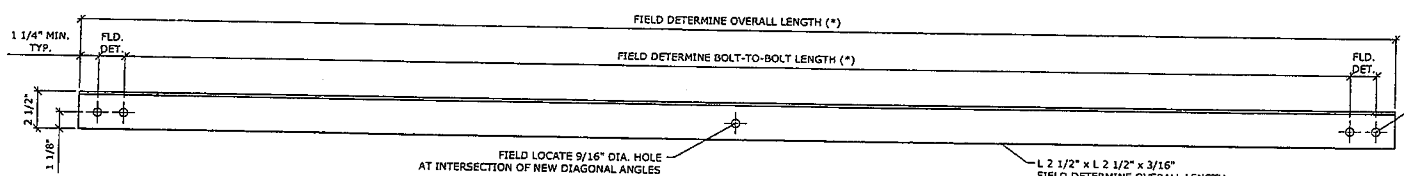
REFER SHEET T01 FOR TECH. SPEC. NOTES

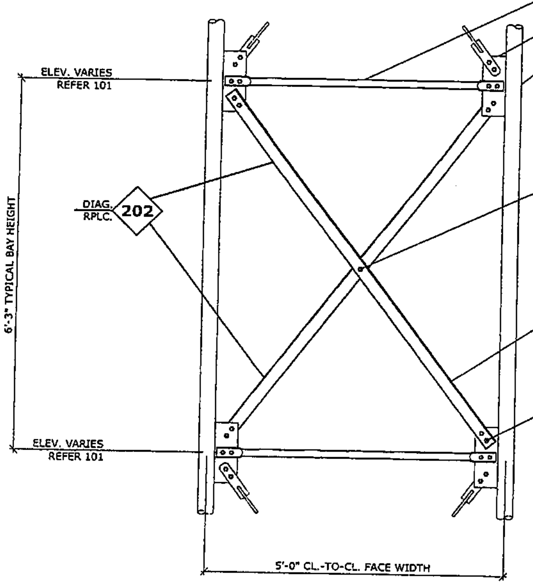
(*) NOTE: OVERALL LENGTH AND BOLT LOCATIONS SHALL BE FIELD DETERMINED BASED UPON LOCATION OF EXISTING DIAGONAL BOLTS.



202 DETAIL: TYPICAL DIAGONAL REPLACEMENT

SCALE: 1 1/2" = 1'-0"

(6 REQ'D PER BAY - 24 REQ'D TOTAL)
(MARK "DR01")



NOTE: TOWER BAY TO BE ADEQUATELY SUPPORTED w/ TEMPORARY BRACING FRAME PRIOR TO REMOVING ANY MEMBERS. EXISTING MEMBERS ARE TO BE REMOVED AND REPLACED ONE AT A TIME. TAKE ALL NECESSARY PRECAUTIONS TO RETAIN THE STRUCTURAL INTEGRITY OF THE TOWER. EXERCISE ALL DUE CAUTION WHILE MODIFYING THE TOWER.

TYPICAL ALL THREE FACES

201 ELEVATION: TYPICAL NEW DIAGONAL REPLACEMENT

SCALE: 1/2" = 1'-0"

(1 BAY SHOWN - 4 BAYS TOTAL)

REFER 101 FOR NEW AND EXISTING MEMBER SIZES AND SCHEDULES.

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NO.	DATE	REVISIONS	DRAWN	ENG'D.	APP'D.
0	12/10/08	ISSUED FOR CONSTRUCTION	CHM	LSX	MM

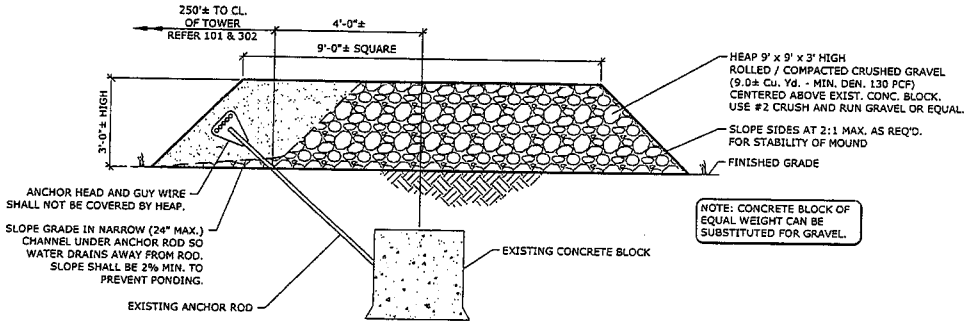
DEC 10 2008

SAI COMMUNICATIONS

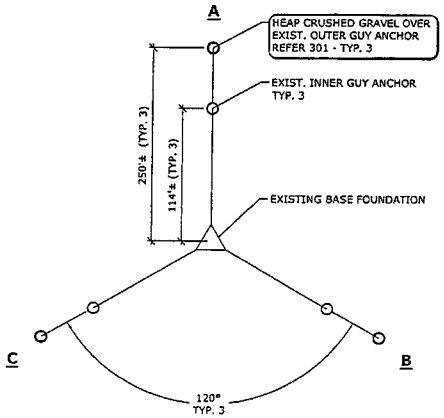
NEW DIAGONAL REPLACEMENT DETAILS

MEI PROJECT ID	SHEET NUMBER	REV.
CT01162G-08-V3	S02	0

REFER SHEET T01 FOR TECH. SPEC. NOTES



301 ELEVATION: NEW OUTER GUY ANCHOR HEAP
SCALE: NOT TO SCALE (TYPICAL 3 PLACES)



302 PLAN: GUY ANCHOR LAYOUT
SCALE: NOT TO SCALE

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NO.	DATE	REVISIONS	DRAWN	CHK'D	APP'D
0	12/10/08	ISSUED FOR CONSTRUCTION	CRM	LKM	MM

DEC 10 2008

SAI COMMUNICATIONS
NEW GUY ANCHOR HEAP DETAILS

MEI PROJECT ID	SHEET NUMBER	REV.
CT01162G-08-V3	S03	0