EM-CING-093-081218A

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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

HAND DELIVERED

ORIGINAL

December 18, 2008

RECEIVED
DEC 18 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 69 Wheeler Street, New Haven (owner, Laydon Construction)

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

69 Wheeler Street, New Haven
Site Number 2037
Exempt Modifications approved 5/99 and 8/02

Tower Owner/Manager: Laydon Construction

Equipment Configuration: Monopole

Current and/or Approved: Nine CSS DUO-1417-8686 panel antennas @ 90 ft
Six TMA's and three diplexers @ 90 ft
Nine runs 1 5/8 inch coax cable
Equipment Shelter

Planned Modifications: Remove all existing antennas, TMA's, and diplexers @ 90ft
Install six Powerwave 7770 antennas (or equivalent) @ 90 ft
Install six TMA's and six diplexers @ 90 ft
Install three additional lines 1 5/8 inch coax
Remove all "old" AT&T equipment & mount @ 70 ft

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 55.2 % 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 45.5 % 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 *							28.92
AT&T TDMA *	90	880 - 894	16	100	0.0710	0.5867	12.11
AT&T GSM *	90	1900 Band	2	427	0.0379	1.0000	3.79
AT&T GSM *	90	880 - 894	2	296	0.0263	0.5867	4.48
AT&T GSM (old)*	70	1900 Band	8	100	0.0587	1.0000	5.87
Total							55.2%

* 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 *							28.92
AT&T UMTS	90	880 - 894	1	500	0.0222	0.5867	3.78
AT&T GSM	90	1900 Band	2	427	0.0379	1.0000	3.79
AT&T GSM	90	880 - 894	4	296	0.0526	0.5867	8.96
Total							45.5%

* Per CSC records. "Old" AT&T removed.

Structural information:

The attached structural analysis demonstrates that the tower and foundation will have adequate structural capacity to accommodate the proposed equipment modifications, with removal of all "old" AT&T mount, equipment, and coax at 70 ft AGL. (All-Points Technology, 12/10/08) The mount, equipment, and coax at 70 ft will be removed prior to the proposed equipment modifications. For this reason, we respectfully request a conditional approval of the proposed equipment modifications.

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Real Estate Consultant

December 18, 2008

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City of New Haven
City Hall 165 Church Street
New Haven, CT 06510

Re: Telecommunications Facility – 69 Wheeler Street

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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

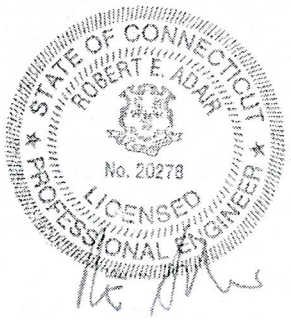
ALL-POINTS TECHNOLOGY CORPORATION, P.C.

STRUCTURAL ANALYSIS REPORT
98' MONOPOLE TOWER
NEW HAVEN, CONNECTICUT
69 WHEELER ST.

Prepared for
Hudson Design Group, LLC

AT&T Site #2037

December 10, 2008



APT Project #CT198740

□ 3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935
⊗ P.O. BOX 1491 · NORTH CONWAY, NH 03860 · PHONE 603-496-5853 · FAX 603-356-5214

STRUCTURAL ANALYSIS REPORT
98' MONOPOLE TOWER
NEW HAVEN, CONNECTICUT
prepared for
Hudson Design Group, LLC

EXECUTIVE SUMMARY:

All-Points Technology Corporation, P.C. (APT) performed a structural analysis of this 98-foot monopole tower located in New Haven, Connecticut. The analysis was performed for AT&T Mobility's proposed replacement of nine existing panel antennas currently installed on a 12' mounting platform at 88' with six antennas and associated equipment as detailed below. Waveguide cables are to be three additional 1-5/8" cables installed inside the pole. The analysis assumed that all antennas, mounts and feed lines currently installed at 70' will be removed.

Our analysis indicates the tower meets the requirements of the Connecticut State Building Code with the proposed antenna changes. The tower foundation was evaluated and found to be adequately sized.

INTRODUCTION:

A structural analysis of this communications tower was performed by APT for Hudson Design Group, LLC. The tower is located at 69 Wheeler Street in New Haven, Connecticut.

APT previously visited the tower site on November 21, 2006 to verify satisfactory completion of base plate reinforcement. This analysis also relied on information previously provided by T-Mobile, which included a structural analysis conducted by Tectonic Engineering Consultants dated May 3, 2002, and Engineered Endeavors Incorporated (EEI) design drawings.

The structure is a 98-foot galvanized steel, three section monopole manufactured by EEI. The analysis was conducted for the following antenna inventory (proposed changes in **bold** text):

Antenna	Elev.	Mount	Coax.
(6) DR65-19-00DPQ panels [1]	98'	14' low-profile platform	(12) 1-5/8"
(6) 7750 panels, (6) TMAs, (6) diplexers, (6) RETs [2]	91'	12' platform w/rails	**(12)** 1-5/8"
8' x 2" omnidirectional whip	92'	On above platform	7/8"
(12) DB844G45 panels	80'	(3) 12' T-arms	(12) 1-1/4"

[1] Currently three panel antennas installed.
[2] Currently nine CSS DUO1417-8670 panels installed fed by nine 1-5/8" lines.

STRUCTURAL ANALYSIS:

Methodology:

The structural analysis was done in accordance with TIA/EIA-222, Revisions F and G (TIA), Structural Standards for Steel Antenna Towers and Antenna Supporting Structures; and the American Institute of Steel Construction (AISC), Manual of Steel Construction, Allowable Stress Design, Ninth Edition. The more stringent of the two TIA revisions, in this case Revision F, was used to compute the tower capacity values shown below.

The analysis was conducted using an 85 mph fastest mile wind speed (equivalent to 105 mph 3-second gust) and one-half inch of radial ice over the structure and associated appurtenances. The TIA Standard requires a basic wind speed of 85 miles per hour for New Haven County, Connecticut.

Two loading conditions were evaluated in accordance with TIA/EIA-222-F to determine tower capacity. The more demanding of the two cases is used to calculate tower capacity:

- Case 1 = Wind Load (without ice) + Tower Dead Load
- Case 2 = 0.75 Wind Load (with ice) + Ice Load + Tower Dead Load

The TIA/EIA standard permits a one-third increase in allowable stresses for towers less than 700-feet tall. Allowable stresses of tower members were increased by one-third when computing the tower capacity values shown below.

ANALYSIS RESULTS:

Our analysis indicates the tower requires base plate reinforcement to support the proposed extension and 6-panel antenna array. The following table summarizes the capacity of the pole:

Elevation	Capacity
88'-98'	18%
46'-88'	93%
0'-46'	91%

The base foundation, reportedly a 26' by 18' by 3'-3" thick mat and pier, was evaluated from dimensions provided in the Tectonic structural analysis report. The foundation was found to meet the required safety factor with the proposed changes.

Base reactions imposed with the proposed antenna changes were calculated to be as follows:

Compression:	11.5 kips
Total Shear:	11.8 kips
Overturning Moment:	860 ft-kips

CONCLUSIONS AND SUGGESTIONS:

As detailed above, our analysis indicates that the existing 98' monopole tower located at 69 Wheeler Street in New Haven, Connecticut meets the requirements of the Connecticut State Building Code with AT&T Mobility's proposed antenna and associated equipment changes.

LIMITATIONS:

This report is based on the following:

1. Tower is properly installed and maintained.
2. All members are in new condition.
3. All bolts are in place and are properly tightened.
4. Tower is in plumb condition.
5. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
6. Record drawings accurately reflect tower dimensions and height.

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Adding or relocating antennas.
2. Installing antenna mounts or waveguide cables.
3. Reinforcing tower in any manner.
4. Extending tower.

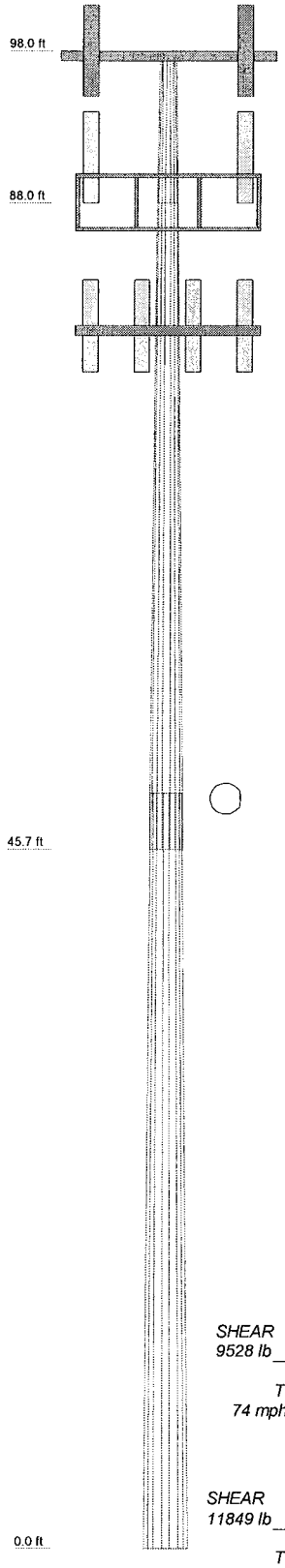
APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware 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 APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

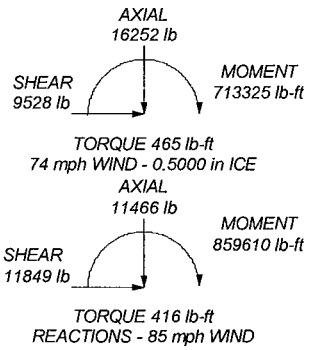
Appendix A

Tower Schematic

Section	1	2	3
Length (ft)	10.00	42.33	49.34
Number of Sides	18	18	18
Thickness (in)	0.1875	0.1875	0.2500
Lap Splice (ft)		3.67	
Top Dia (in)	12.7500	16.5000	24.0349
Bot Dia (in)	16.5000	25.1600	34.0000
Grade	A572-65		
Weight (lb)	292.4	1769.5	3832.2

Total Weight (lb): 5894.1





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) DR65-19-00DPQ	98	(2) LGP21903 Diplexer	88
(2) DR65-19-00DPQ	98	(2) LGP21903 Diplexer	88
(2) DR65-19-00DPQ	98	(2) LGP21903 Diplexer	88
14' low-profile platform	98	(2) 7020.00 RET-RCU	88
8' x 2" omni whip	90	(2) 7020.00 RET-RCU	88
(2) 7750.00	88	(2) 7020.00 RET-RCU	88
(2) 7750.00	88	12' platform w/rails	88
(2) 7750.00	88	(4) DB844G45ZAXY	80
(2) LGP2140X TMA	88	(4) DB844G45ZAXY	80
(2) LGP2140X TMA	88	(4) DB844G45ZAXY	80
(2) LGP2140X TMA	88	12' T-arm	80

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

All-Points Technology Corporation
P.O. Box 1491
North Conway, NH 03860
Phone: (603) 496-5853
FAX: (603) 356-5214

Job:	***88' EEI Monopole with 10' Extension***		
Project:	***CT198740 New Haven***		
Client: HDG; AT&T Site #2037	Drawn by: Rob Adair	App'd:	
Code: TIA/EIA-222-F	Date: 12/10/08	Scale: NTS	
Path: C:\Documents and Settings\Rob Adair\My Documents\Jobs\CT156740 New Haven (Guyton)\CT156740 New Haven.eri		Dwg No. E-1	

Appendix B

Photographs

HUDSON DESIGN GROUP, LLC
98' MONOPOLE TOWER
NEW HAVEN, CONNECTICUT
AT&T SITE #2037

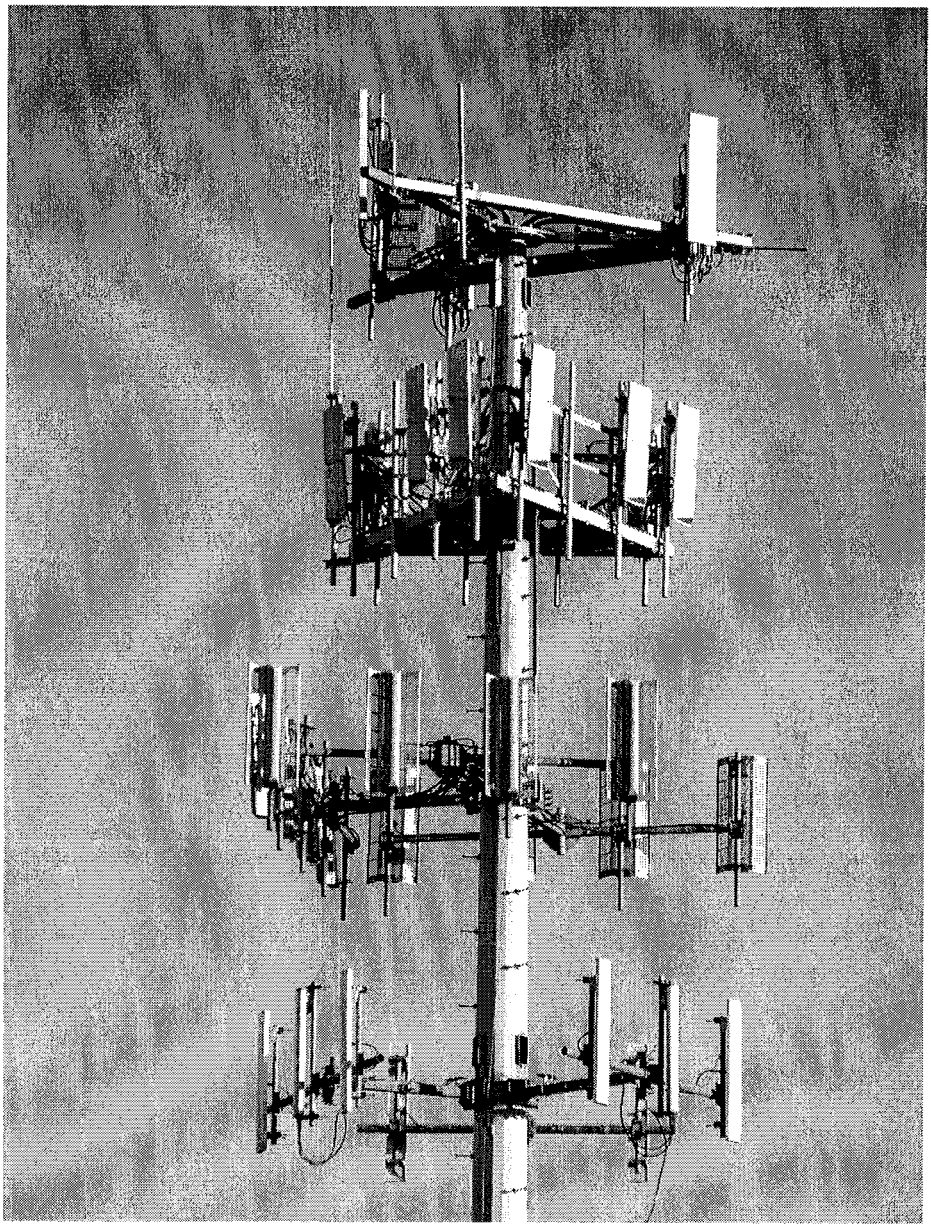


Photo of existing antennas on 98' monopole tower.

Photo taken by All-Points Technology Corporation, P.C. on November 21, 2006

HUDSON DESIGN GROUP, LLC
98' MONOPOLE TOWER
NEW HAVEN, CONNECTICUT
AT&T SITE #2037

A recent photograph of the existing antennas currently installed.

Photo provided by Hudson Design Group, LLC.

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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

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Attachments

NEW CINGULAR WIRELESS
Equipment Modification

69 Wheeler Street, New Haven
Site Number 2037
Exempt Modifications approved 5/99 and 8/02

Tower Owner/Manager: Laydon Construction

Equipment Configuration: Monopole

Current and/or Approved: Nine CSS DUO-1417-8686 panel antennas @ 90 ft
Six TMA's and three diplexers @ 90 ft
Nine runs 1 5/8 inch coax cable
Equipment Shelter

Planned Modifications: Remove all existing antennas, TMA's, and diplexers @ 90ft
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Remove all "old" AT&T equipment & mount @ 70 ft

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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 55.2 % 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 45.5 % of the standard.

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69 WHEELER ST.

Prepared for
Hudson Design Group, LLC

AT&T Site #2037

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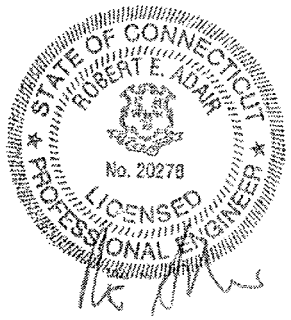

APT Project #CT198740

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The TIA/EIA standard permits a one-third increase in allowable stresses for towers less than 700-feet tall. Allowable stresses of tower members were increased by one-third when computing the tower capacity values shown below.

ANALYSIS RESULTS:

Our analysis indicates the tower requires base plate reinforcement to support the proposed extension and 6-panel antenna array. The following table summarizes the capacity of the pole:

Elevation	Capacity
88'-98'	18%
46'-88'	93%
0'-46'	91%

The base foundation, reportedly a 26' by 18' by 3'-3" thick mat and pier, was evaluated from dimensions provided in the Tectonic structural analysis report. The foundation was found to meet the required safety factor with the proposed changes.

Base reactions imposed with the proposed antenna changes were calculated to be as follows:

Compression:	11.5 kips
Total Shear:	11.8 kips
Overturning Moment:	860 ft-kips

CONCLUSIONS AND SUGGESTIONS:

As detailed above, our analysis indicates that the existing 98' monopole tower located at 69 Wheeler Street in New Haven, Connecticut meets the requirements of the Connecticut State Building Code with AT&T Mobility's proposed antenna and associated equipment changes.

LIMITATIONS:

This report is based on the following:

1. Tower is properly installed and maintained.
2. All members are in new condition.
3. All bolts are in place and are properly tightened.
4. Tower is in plumb condition.
5. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
6. Record drawings accurately reflect tower dimensions and height.

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Adding or relocating antennas.
2. Installing antenna mounts or waveguide cables.
3. Reinforcing tower in any manner.
4. Extending tower.

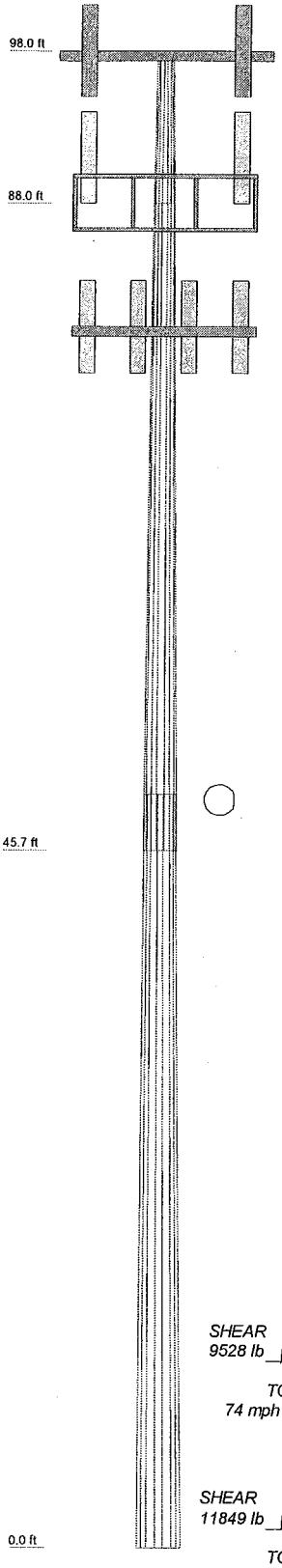
APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware 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 APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

Appendix A

Tower Schematic

Section	1	2	3
Length (ft)	10.00	42.33	49.34
Number of Sides	18	18	18
Thickness (in)	0.1875	0.1875	0.2500
Lap Splice (ft)		3.67	
Top Dia (in)	12.7500	16.5000	24.0349
Bot Dia (in)	16.5000	25.1600	34.0000
Grade	A572-65		
Weight (lb)	292.4	1769.5	3832.2

Total Weight: 5894.1



AXIAL
16252 lb

SHEAR
9528 lb

MOMENT
713325 lb-ft

TORQUE 465 lb-ft
74 mph WIND - 0.5000 in ICE

AXIAL
11466 lb

SHEAR
11849 lb

MOMENT
859610 lb-ft

TORQUE 416 lb-ft
REACTIONS - 85 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) DR65-19-00DPQ	98	(2) LGP21903 Diplexer	88
(2) DR65-19-00DPQ	98	(2) LGP21903 Diplexer	88
(2) DR65-19-00DPQ	98	(2) LGP21903 Diplexer	88
14' low-profile platform	98	(2) 7020.00 RET-RCU	88
8' x 2" omni whip	90	(2) 7020.00 RET-RCU	88
(2) 7750.00	88	(2) 7020.00 RET-RCU	88
(2) 7750.00	88	12' platform w/rails	88
(2) 7750.00	88	(4) DB844G45ZAXY	80
(2) LGP2140X TMA	88	(4) DB844G45ZAXY	80
(2) LGP2140X TMA	88	(4) DB844G45ZAXY	80
(2) LGP2140X TMA	88	12' T-arm	80

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

All-Points Technology Corporation
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North Conway, NH 03860
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FAX: (603) 356-5214

Job: *88' EEI Monopole with 10' Extension*			
Project: *CT198740 New Haven*			
Client: HDG; AT&T Site #2037	Drawn by: Rob Adair	App'd:	
Code: TIA/EIA-222-F	Date: 12/10/08	Scale: NTS	
Path: C:\Documents and Settings\Rob Adair\My Documents\Jobs\CT198740 New Haven & Ayden\CT198740 New Haven.eri		Dwg No. E-1	

Appendix B

Photographs

HUDSON DESIGN GROUP, LLC
98' MONOPOLE TOWER
NEW HAVEN, CONNECTICUT
AT&T SITE #2037

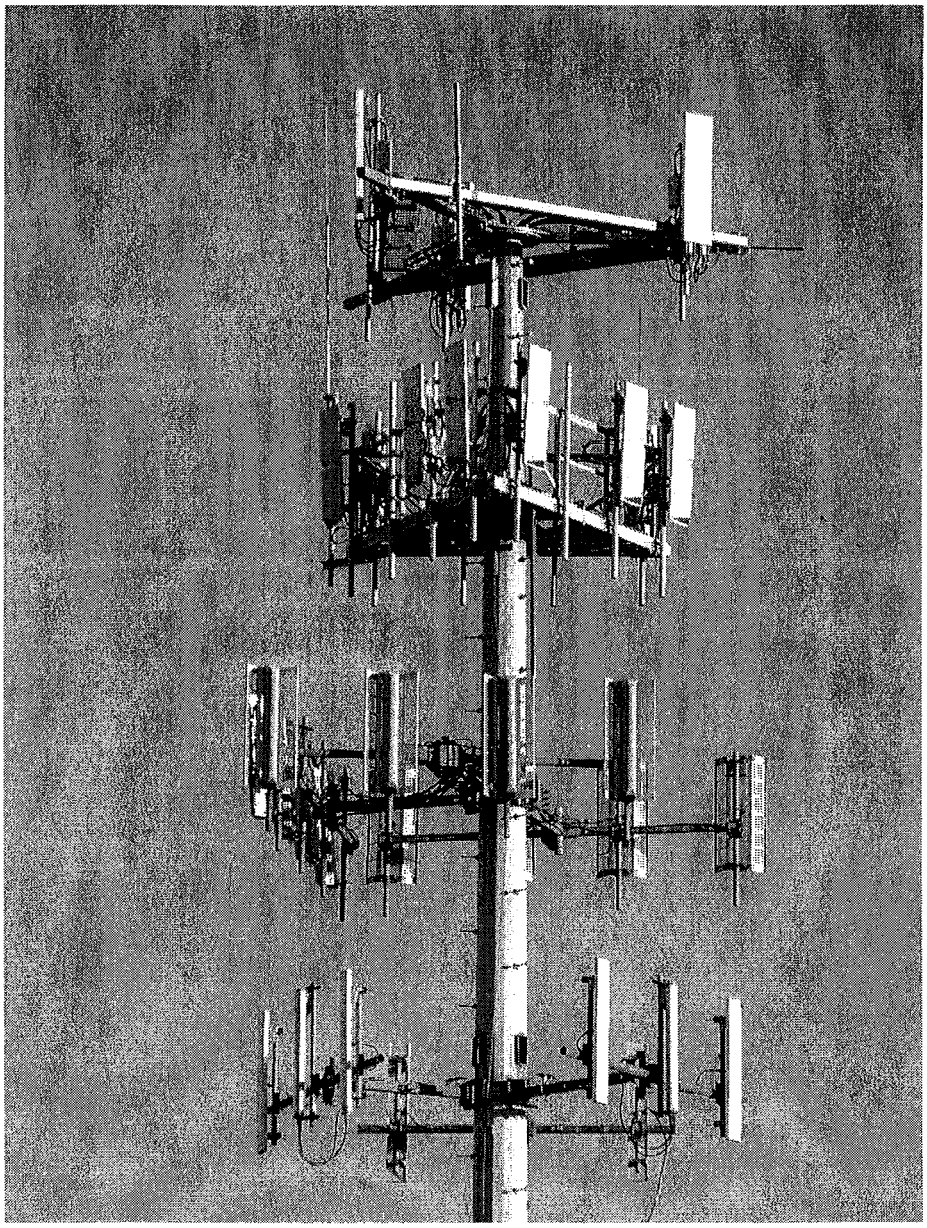
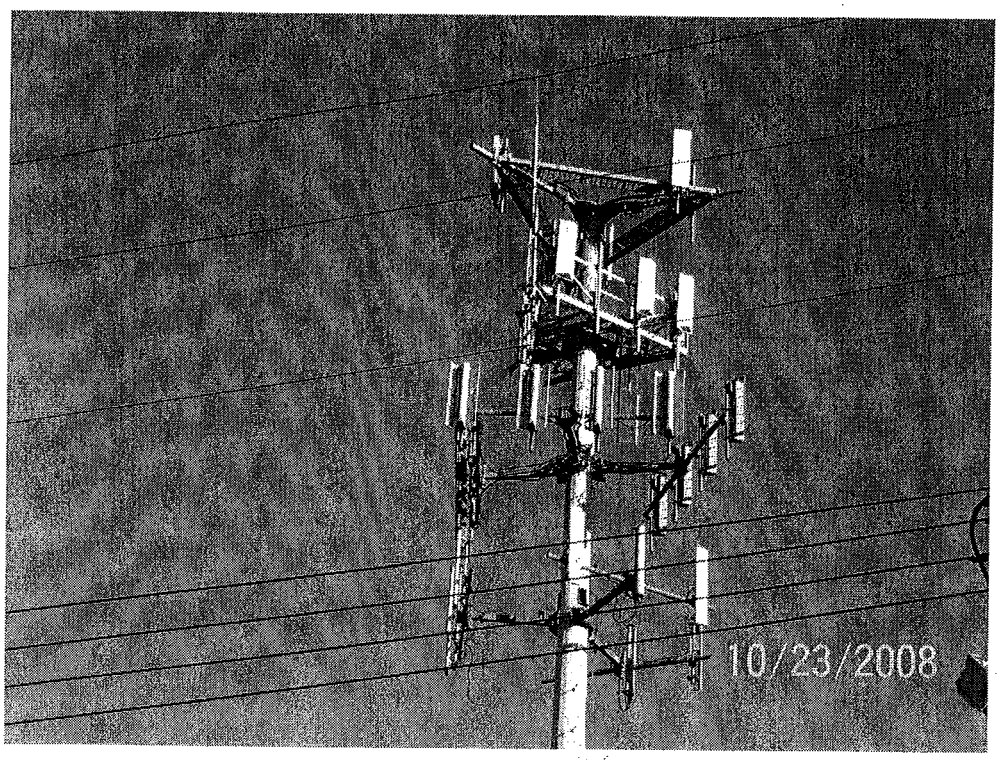


Photo of existing antennas on 98' monopole tower.

Photo taken by All-Points Technology Corporation, P.C. on November 21, 2006

HUDSON DESIGN GROUP, LLC
98' MONOPOLE TOWER
NEW HAVEN, CONNECTICUT
AT&T SITE #2037



A recent photograph of the existing antennas currently installed.

Photo provided by Hudson Design Group, LLC.