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

August 1, 2006

Elizabeth H. Lankenau, AICP
Planner
Kise Straw & Kolodner Inc.
123 South Broad Street, Suite 1270
Philadelphia, PA 19109

RE: **EM-CING-078-156-107-101-060717** - New Cingular Wireless PCS, LLC notice of intent to modify existing telecommunications facilities located at 1298 Storrs Road, Mansfield; 1 Burwell Road, West Haven; South Orange Center Road, Orange; and 15 (aka 8) Dwight Street, North Haven, Connecticut.

Dear Ms. Lankenau:

At a public meeting held on June 27, 2006, the Connecticut Siting Council (Council) acknowledged your notice to modify the Mansfield, West Haven, and Orange telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies, with the condition that a revised structural for the Mansfield site (taking into account Verizon Wireless' proposal) is submitted to the Council prior to construction and any recommendations by the structural engineer are implemented prior to the antenna installation. The Council tabled the North Haven proposal until the structural analysis report for that site is received.

The proposed modifications are to be implemented as specified here and in your notice dated July 13, 2006, including the placement of all necessary equipment and shelters within the tower compounds. 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 existing facility sites that would not increase tower heights, extend the boundaries of the tower sites, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power densities measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

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 any of these facilities 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,

Colin C. Tait for

Colin C. Tait
Chairman

CCT/laf

c: See List Attachment.

G:\EM\CINGULAR\Mansfield\dc072706(multiplesites)-NoHaventabled.DOC

CSC
CONNECTICUT SITING COUNCIL

List Attachment.

c: The Honorable Kevin J. Kopetz, First Selectman, Town of North Haven
Arthur Hausman, Zoning Enforcement Officer, Town of North Haven
The Honorable James M. Zeoli, First Selectman, Town of Orange
Paul Dinice, Zoning Enforcement Officer, Town of Orange
The Honorable John M. Picard, Mayor, City of West Haven
Edwin Selden, City Planner, City of West Haven
The Honorable Elizabeth Patterson, Mayor, Town of Mansfield
Martin H. Berliner, Town Manager, Town of Mansfield
Gregory Padick, Town Planner, Town of Mansfield
Karen L. Couture, Site Acquisition Specialist
Thomas F. Flynn III, Esq., Sprint-Nextel Communications
Kenneth C. Baldwin, Esq., Robinson & Cole LLP
Christine Farrell, T-Mobile
Christopher B. Fisher, Esq., Cuddy & Feder LLP
Michele G. Briggs, New Cingular Wireless PCS, LLC
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels, LLP
George L. Davis, Tower Manager

Kise Straw & Kolodner

Architects Planners Historians Archaeologists

James Bennett Straw, AIA

Harvey D. Kolodner, MBA

EM-CING-078-156-107-101-060717

ORIGINAL

13 July 2006

Mr. Colin C. Tait, Chairman, and
Members of the Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification –Four (4) Existing Telecommunications Tower Facilities

Site 1: 1298 Storrs Road, Mansfield, Tolland County
Site 2: 1 Burwell Road, West Haven, New Haven County
Site 3: S. Orange Center Road, Orange, New Haven County
Site 4: 15 (aka 8) Dwight Street, North Haven, New Haven County

Dear Chairman Tait and Members of the Council:

Kise Straw & Kolodner Inc., in association with Network Building & Consulting, LLC, submits this notice of intent to modify existing telecommunications facilities. New Cingular Wireless PCS, LLC ("Cingular") proposes to remove and replace telecommunications antennas and associated equipment located on an existing facility in the above-referenced municipalities. Cingular operates under licenses issued by the Federal Communications Commission (FCC) to provide cellular and PCS mobile telephone service in the areas to be served by the proposed installations.

Please accept this letter and attachments as notification to the Council, pursuant to Regulations of Connecticut State Agencies (RCSA) Section 16-50j-73. This submission will demonstrate that the proposed changes fall within the limits of an exempt modification as described under the RCSA Section 16-50j-72(b)(2).

In accordance with RCSA Section 16-50j-73, the chief elected officials will receive notification of the work proposed at locations within their jurisdiction.

Attached you will find summary sheets detailing the planned changes, including power density calculations reflecting the change in the effect of Cingular's operations at each site. Also included is documentation of the structural sufficiency of each tower to accommodate the revised antenna configuration.

The planned changes to these facilities fall within those activities explicitly provided for in RCSA Section 16-50j-72(b)(2). As such, the proposed work does not result in any substantial adverse environmental effect:

James Bennett Straw, AIA
Harvey D. Kolodner, MBA

James Nelson Kise, AIA/AICP/PP
Scott W. Killinger, AIA

John R. Gibbons, AIA/AICP
Philip E. Scott, EA

Suzanna Barucco
Katherine Bottom, LEED
LaVern Browne
Johnette Davies
Petar D. Glumac, Ph.D
Douglas S. Heckrotte, RA/LEED
Jody Holton, AICP
Marian Maxfield Hull, AICP/PP

Kise Straw & Kolodner Inc.
123 South Broad St.
Suite 1270
Philadelphia, PA 19109
(215) 790-1050 FAX (215) 790-0215
www.kskl.com

1. The proposed work does not affect the height of the structure.

2. The proposed changes do not affect the existing property boundaries. All proposed work will occur on the property controlled by Cingular.

3. The proposed work will not increase noise levels at the site boundary by six (6) decibels or more.

4. Addition of the UMTS broadcasts will not increase the exposure to radio frequency electromagnetic energy, measured at the base of the tower, to or above the standard adopted by the state of Connecticut and the FCC. The power density tables provided for each facility summarize the cumulative results for a point of interest at the tower's base of the "worst-case" exposure calculations resulting from all carriers co-located on this tower. The calculations are in accordance with the Federal Communications Commission's Office of Engineering and Technology Bulletin No. 65 (1997), and for simplicity, an assumption is made that the antennas are all pointed down, thus focusing their energy at the tower's base.

For the foregoing reasons, Cingular respectfully submits that proposed changes at the these facilities constitute an exempt modification under RCSA Section 16-50j-72(b)(2).

Please do not hesitate to call me at 215.790.1050 ext. 138 with questions concerning this notice. Thank you for your consideration of this matter.

Sincerely,

Elizabeth H. Lankenau, AICP
Planner

Attachments

cc: Honorable Elizabeth C. Patterson, Mayor, Town of Mansfield
Honorable John M. Picard, Mayor, City of West Haven
Honorable James Zeoli, First Selectman, Town of Orange
Honorable Kevin J. Kopetz, First Selectman, Town of North Haven

1298 Storrs Road, Mansfield, CT

Summary Sheet
Project Location Map
Site Plan and Elevation
Structural Analysis
Elected Official Letter

CINGULAR WIRELESS
Proposed Modifications

Site Address: 1298 Storrs Road, Mansfield, CT; *Project Location Map* attached

Coordinates: Lat: 41.81392; Long: 72.25952

Site Owner: University of Connecticut

Type of Existing Facility: 290' tower and an equipment shelter within an irregularly shaped compound

Antenna Configuration: Center line – 185' above ground level; remove existing antennas and replace with six (6) Powerwave 7770 units; *specification attached*

TMA Configuration: Existing units to be removed and add twelve (12) new LGP 214nn units; *specification attached*

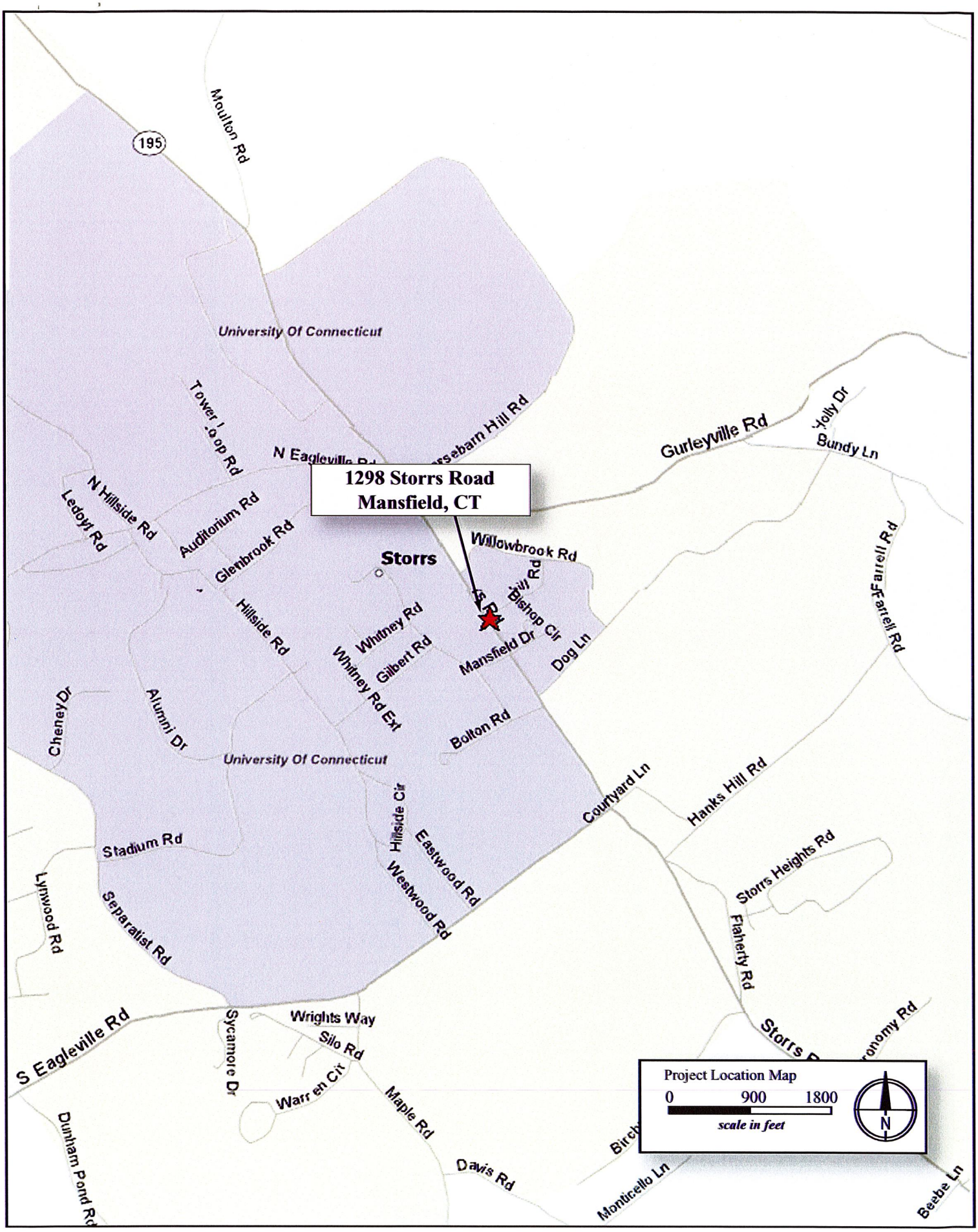
Coaxial Cables: Existing 1 5/8" diameter coaxial cables to remain and add one (1) of the same diameter

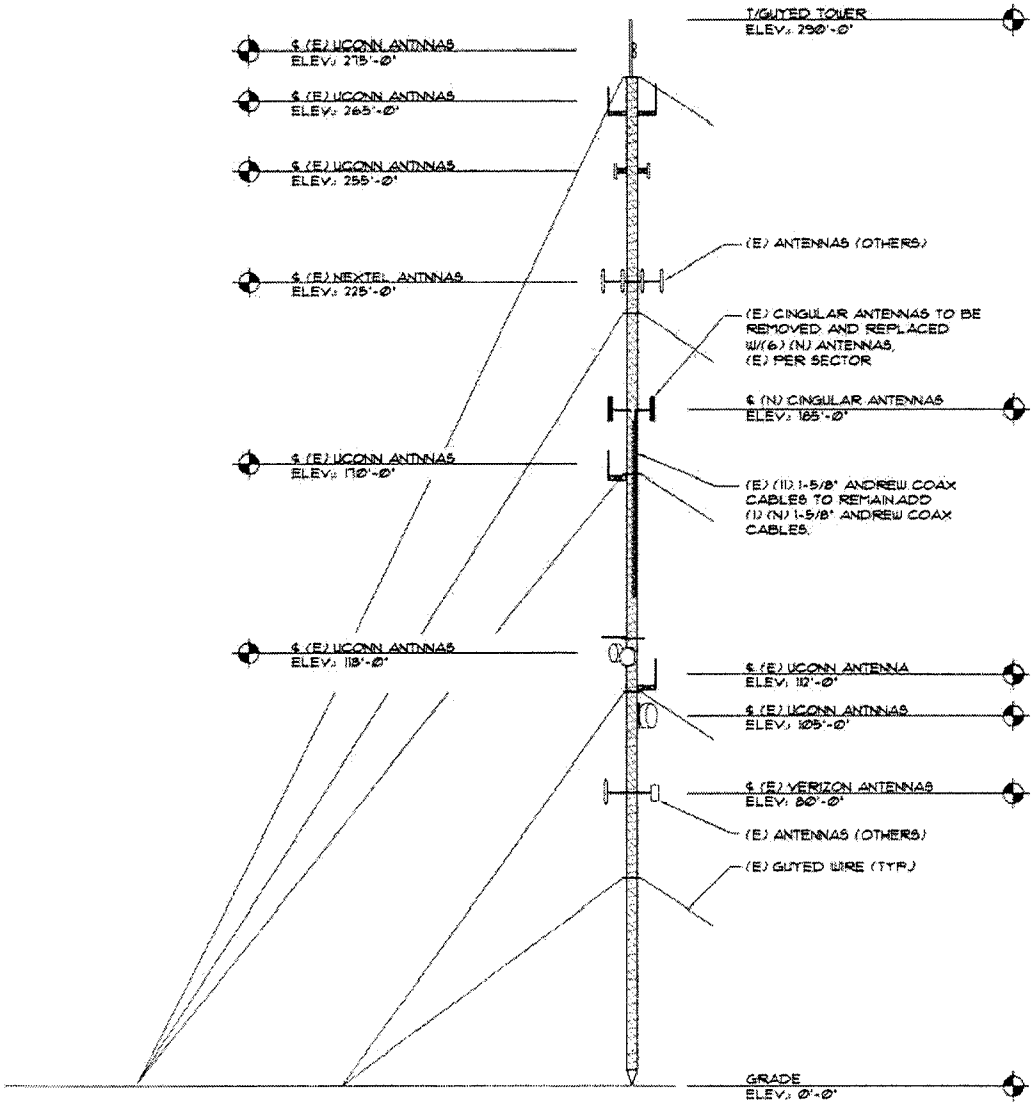
Power Density:

As the table demonstrates, the cumulative worst-case exposure would be approximately 42.12% of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from Cingular's use of the facility would be within applicable standards.

Site # 1077								
Carrier	Antenna Height (ft)	Freq. (MHz) For Limit	# of Channels	W ERP/Channel (ref 1/2-w dipole)	W EIRP/Sector	Power Density ($\mu W/cm^2$)	FCC Limit ($\mu W/cm^2$)	Percent of Limit (%)
Cingular UMTS	185	1935.0	1	500.0	820.0	5.3	1000	0.53%
Nextel	240	851.0	9	100.0	1476.0	5.6	567	0.99%
Uconn Police	180	866.0	3	197.0	969.2	6.6	577	1.14%
Unspecified antennas - data from previous CSC filing								14.12%
Cingular TDMA	185	880.0	16	100.0	2624.0	16.8	587	2.87%
Cingular 800	185	880.0	2	298.0	977.4	6.3	587	1.07%
Cingular 1900	185	1900.0	2	427.0	1400.6	9.0	1000	0.90%
Verizon 800	80	869.0	9	200.0	2952.0	101.2	579	17.46%
Verizon 1900	84	1900.0	3	200.0	984.0	30.6	1000	3.06%
TOTAL								**42.12%**

Structural Analysis: *Structural Analysis* attached.


1298 Storrs Road
Mansfield, CT
Storrs
University Of Connecticut
University Of Connecticut
195
Moulton Rd
Gurleyville Rd
Bundy Ln
Willowbrook Rd
Bishop Cir
Mansfield Dr
Dog Ln
Farrell Rd
Whitney Rd
Whitney Rd Ext
Gilbert Rd
Hillside Rd
Glenbrook Rd
Auditorium Rd
N Hillside Rd
Ledoyt Rd
Tower Loop Rd
Cheney Dr
Alumni Dr
Bolton Rd
Courtyard Ln
Hanks Hill Rd
Storrs Heights Rd
Flaherty Rd
Hillside Cir
Eastwood Rd
Westwood Rd
Stadium Rd
Separatist Rd
Lynwood Rd
S Eagleville Rd
Wrights Way
Silo Rd
Sycamore Dr
Warren Cir
Maple Rd
Davis Rd
Dunham Pond Rd
Monticello Ln
Beebe Ln
Project Location Map
0 900 1800
scale in feet
N



FINAL ANTENNA CONFIGURATION
(6) DIRECTIONAL ANTENNAS POWERWAVE # 7770
(12) 1-5/8" DIA. COAX CABLES
(12) TMAS

1 TOWER ELEVATION
1" = 50'-0"

cingular WIRELESS | ERICSSON

CH2M HILL
8619 WEST BRYN MAWR
CHICAGO, ILLINOIS 60631

NO.	DATE	REVISION DESCRIPTION	BY	CHK	APP'D
1	07-05-06	ISSUED FOR CSC REVIEW	FH	JZ	JZ

SCALE: 1" = 50'-0" | CHECKED BY: JZ | DRAWN BY: FH

CINGULAR WIRELESS
SITE #: 1077
SITE NAME: STORRS-UCONN
1298 STORRS RD, STORRS MANSFIELD, CT 06268
DRAWING NUMBER: 1077 | REV: 0

NATCOMM, LLC

Consulting Engineers

June 27, 2006

Mr. Thomas Sun, AIA
CH2M Hill Communications Group
8619 W. Bryn Mawr, Suite 615
Chicago, IL 60631

Re: Level 1 Structural Evaluation
Cingular Site #1077
North Eagleville Rd.,
Storrs, CT 06268

Natcomm Project No. 06500.1077

Dear Mr. Sun,

We have reviewed the proposed Cingular UMTS antenna upgrade at the above referenced site. The purpose of the review is to determine the adequacy of an existing 290 ft. guyed tower to support the proposed antennas. The review considered the effects of wind load, dead load, ice load and seismic forces in accordance with TIA/EIA-222-F and Connecticut State Building Code. Site assessment information obtained by Natcomm personnel on June 21, 2006 was used as reference material.

The existing antenna configuration is as follows:

- Uconn: One (1) FM antenna mast mounted at top of guyed tower at an elevation of 275' AGL.
- Uconn: Two (2) whip antennas mounted to standard side arm standoffs at elevation of 265' AGL.
- Uconn: Two (2) panel antennas mounted to standard side arm standoffs and one (1) whip antenna mounted to a standard sidearm standoff at an elevation of 255' AGL.
- Nextel: Twelve (12) DB844H90 antennas mounted on standard boom gate mounts at an elevation of 225' AGL.
- Cingular: Nine (9) panel antennas mounted on standard boom gate mounts and one (1) panel antenna mounted to an extension arm off boom gate at an elevation of 185' AGL.
- Uconn: One (1) whip antenna mounted to a standard side arm standoff at elevation of 170' AGL.
- Uconn: Two (2) 6'diameter dish antennas mounted to a standard side arm standoff at an elevation of 118' AGL.
- Uconn: One (1) whip antenna mounted to a standard side arm standoff at elevation of 112' AGL.
- Uconn: One (1) 6'diameter dish antenna mounted to a standard side arm standoff at an elevation of 105' AGL.
- Verizon: Three (3) standard panel antennas and three (3) Metawave panel antennas mounted on a standard platform at an elevation of 80' AGL.

The proposed modified antenna loading is as follows:

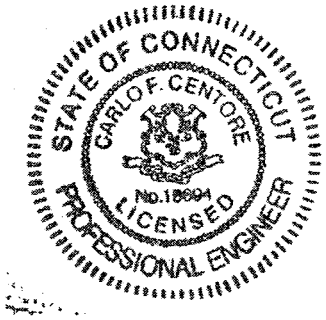
- Cingular: Six (6) Powerwave 7770.00 panel antennas w/ twelve (12) Powerwave LGP21401 TMA's on standard boom gate mounts in lieu of the existing ten (10) panel antennas at an elevation of 185' AGL.

Based on the information provided, and considering the reduced antenna loading, the existing structure meets all the requirements of the TIA/EIA-222-F Standard considering the basic wind speed (fastest mile) of 85 mph for Tolland County.

In conclusion, the existing 290 ft monopole is adequate to support the proposed Cingular UMTS antenna upgrade and related equipment. If there are any questions regarding this matter, please feel free to call.

Submitted by:

Carlo F. Centore, PE
Project Manager



10 July 2006

Honorable Elizabeth C. Patterson
Mayor, Town of Mansfield
Audrey P. Beck Municipal Building
4 South Eagleville Road
Mansfield, CT 06268

RE: Notice of Exempt Modification – Existing Cingular Telecommunications Tower Facility at 1298 Storrs Road, Mansfield, Connecticut

Dear Ms. Patterson:

New Cingular Wireless PCS, LLC ("Cingular") proposes to remove and replace telecommunications antennas and associated equipment located on an existing tower at the above-referenced location. The facility is now controlled and operated by Cingular whose corporate office is located at 500 Enterprise Drive, Rocky Hill, CT 06067.

Proposed Modifications

Cingular proposes to remove the existing antennas and replace them with a total of six (6) new antennas, located at an existing centerline height of approximately 185' above ground level. Cingular will keep the existing eleven (11) 1 5/8" diameter coaxial cables and add one (1) more of the same dimension. It proposes to remove the existing tower mounted amplifiers and replace them with twelve (12) new units, located at the same height as the antennas.

In summary, the final antenna configuration at 1298 Storrs Road will include:

- 6 antennas,
- 12 coaxial cables, and
- 12 tower mounted amplifiers.

A structural evaluation has demonstrated that the tower will be structurally capable of supporting the proposed Cingular telecommunications equipment once the proposed modifications are complete.

Kise Straw & Kolodner Inc.
123 South Broad St.
Suite 1270
Philadelphia, PA 19109
(215) 790-1050 FAX (215) 790-0215
www.ksk1.com

Statutory Considerations

The proposed work will not affect the height of the existing structure, nor will it alter the existing property boundaries. Furthermore, the proposed work will not increase noise levels at the facility's site boundary by six (6) decibels or more. Operation of additional antennas will not increase the radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the Federal Communications Commission.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council (CSC) as required by the Regulations of Connecticut State Agencies (RCSA), Section 16-50j-73. Please accept this letter as notification to the Town of Mansfield under Section 16-50j-73 that the proposed work constitutes an exempt modification pursuant to RCSA Section 16-50j-72(b)(2).

Should you have any questions or require additional information about the plans or the CSC's procedures, please do not hesitate to contact me (215.790.1050 ext. 138) or Mr. Derek Phelps, Executive Director, Connecticut Siting Council (860.827.2935).

Sincerely,

Elizabeth H. Lankenau, AICP
Planner

1 Burwell Road, West Haven, CT

Summary Sheet
Project Location Map
Site Plan and Elevation
Structural Analysis
Elected Official Letter

CINGULAR WIRELESS
Proposed Modifications

Site Address: 1 Burwell Road, West Haven, CT; *Project Location Map* attached

Site Owner: Ground: Rodney Burwell and Joanne Hollis

Type of Existing Facility: 160' lattice tower and a 25' x 25' equipment shelter in a 83'8" x 61' compound that is surrounded by a chain link fence

Antenna Configuration: Center line – 152' above ground level; remove existing CSS DUO4- 8670 antennas and replace with six (6) Powerwave 7770 units; *specification attached*

TMA Configuration: Existing units to be removed and replaced with twelve (12) new LGP 214nn units; *specification attached*

Coaxial Cables: Existing cables to be removed and replaced with twelve (12) new 1 5/8" diameter cables

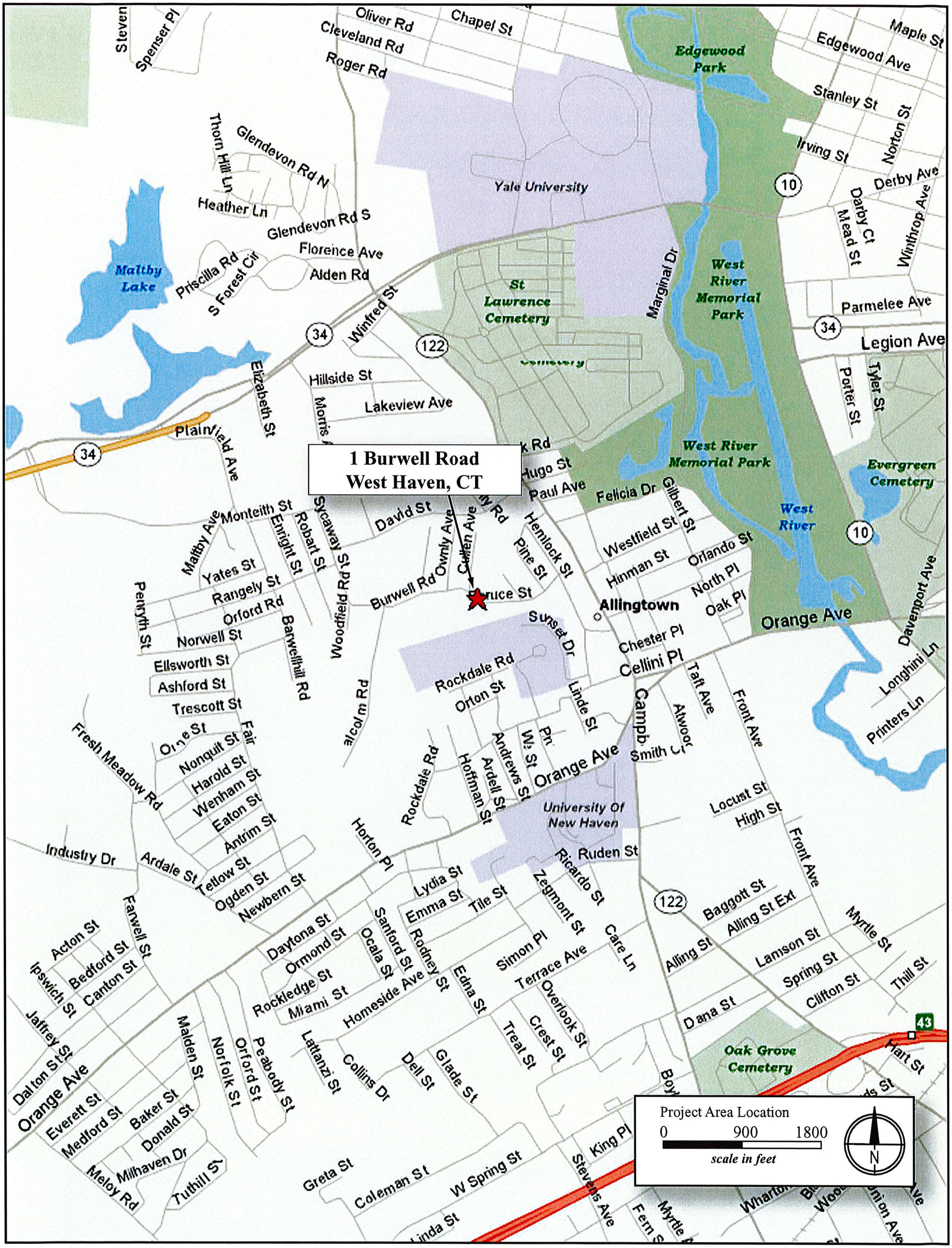
Other Work: Add one (1) Ericsson RBS 3206 equipment cabinet inside the existing shelter

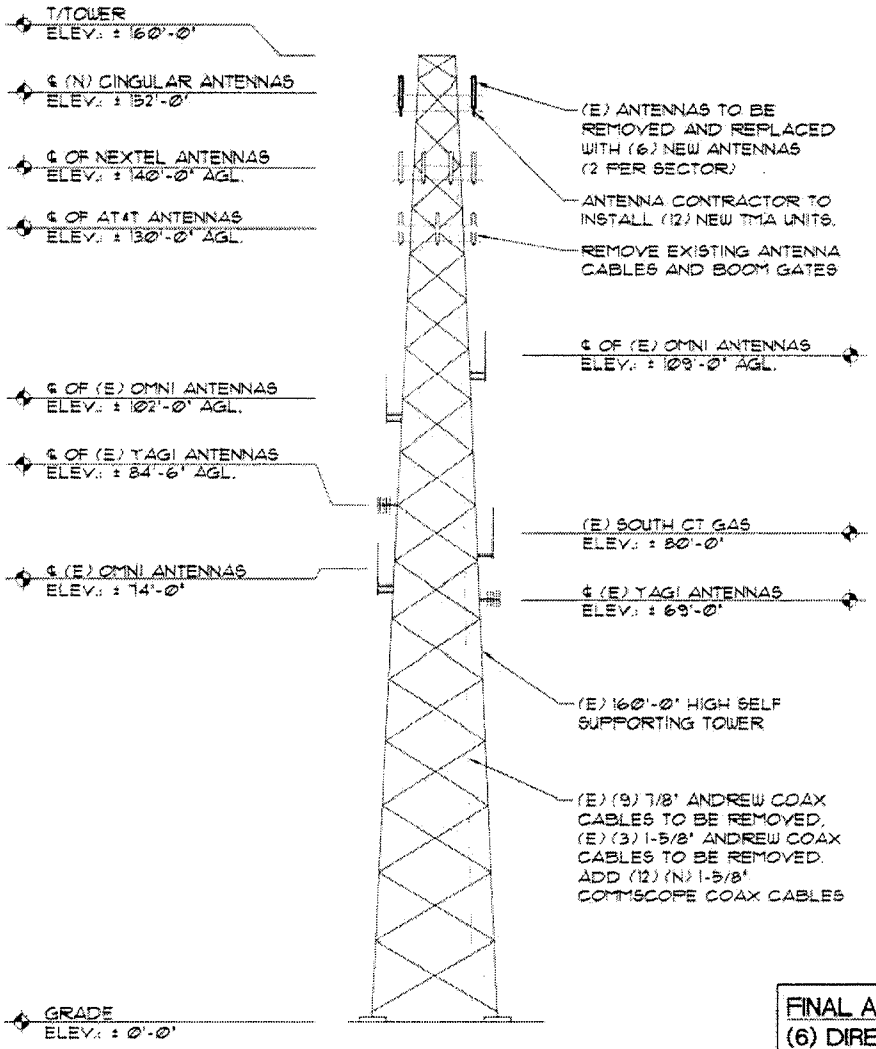
Power Density:

As the table demonstrates, the cumulative worst-case exposure would be approximately 29.98% of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from Cingular's use of the facility would be within applicable standards.

Site # 2064								
Carrier	Antenna Height (ft)	Freq. (MHz) For Limit	# of Channels	W ERP/Channel (ref 1/2-w dipole)	W EIRP/Sector	Power Density ($\mu W/cm^2$)	FCC Limit ($\mu W/cm^2$)	Percent of Limit (%)
Cingular UMTS	152	1935.0	1	500.0	820.0	7.8	1000	0.78%
Cingular 800	152	869.0	20	100.0	3280.0	31.1	579	5.37%
Cingular Omni	152	150.0	1	500.0	820.0	7.8	200	3.89%
Nextel	140	851.0	8	100.0	1312.0	14.7	567	2.59%
AT&T	130	1900.0	8	100.0	1312.0	17.0	1000	1.70%
W.H. Police	88	460.0	3	147.0	723.2	20.5	307	6.68%
S. CT Gas	88	450.0	1	200.0	328.0	9.3	300	3.10%
S. CT Gas	70	150.0	2	80.0	262.4	11.7	200	5.87%
TOTAL								**29.98%**

Structural Analysis: *Structural Analysis* attached.


1 Burwell Road
West Haven, CT
Project Area Location
0
900
1800
scale in feet
N
Yale University
Edgewood Park
West River Memorial Park
West River
St Lawrence Cemetery
Evergreen Cemetery
Oak Grove Cemetery
University Of New Haven
Maltby Lake
Allingtown
Orange Ave
Legion Ave
Cellini Pl
Burwell Rd
Bruce St
Rockdale Rd
Plainfield Ave
Monteith St
David St
Cullen Ave
Ownly Ave
Sycaway St
Woodfield Rd
Robart St
Enright St
Hemlock St
Pine St
Paul Ave
Hugo St
Felicia Dr
Gilbert St
Westfield St
Hinman St
Orlando St
North Pl
Oak Pl
Chester Pl
Sunset Dr
Linde St
Orton St
Andrews St
Ardell St
Hoffman St
Campbell Ave
Taft Ave
Front Ave
Locust St
High St
Ruden St
Ricardo St
Zegmont St
Tile St
Lydia St
Emma St
Horton Pl
Daytona St
Ormond St
Rockledge St
Miami St
Homeside Ave
Sanford St
Ocala St
Rodney St
Edna St
Simon Pl
Terrace Ave
Overlook St
Crest St
Treat St
Care Ln
Alling St
Alling St Ext
Baggott St
Lamson St
Spring St
Clifton St
Myrtle St
Thill St
Dana St
Hart St
Glade St
Dell St
Collins Dr
Lattanzi St
Peabody St
Orford St
Norfolk St
Malden St
Baker St
Donald St
Milhaven Dr
Tuthill St
Meloy Rd
Medford St
Everett St
Dalton St
Jaffrey St
Ipswich St
Acton St
Bedford St
Canton St
Farwell St
Industry Dr
Ardale St
Tetlow St
Ogden St
Newbern St
Antrim St
Eaton St
Wenham St
Harold St
Nonquit St
Trescott St
Ashford St
Ellsworth St
Norwell St
Orford Rd
Rangely St
Yates St
Maltby Ave
Penryth St
Barwellhill Rd
Fresh Meadow Rd
Greta St
Coleman St
W Spring St
Linda St
King Pl
Stevens Ave
Elizabeth St
Hillside St
Lakeview Ave
Winfred St
Alden Rd
Florence Ave
Glendevon Rd S
Glendevon Rd N
Heather Ln
Thorn Hill Ln
Priscilla Rd
S Forest Cir
Spenser Pl
Oliver Rd
Chapel St
Cleveland Rd
Roger Rd
Marginal Dr
Edgewood Ave
Maple St
Stanley St
Irving St
Norton St
Derby Ave
Darby Ct
Mead St
Winthrop Ave
Parmelee Ave
Porter St
Tyler St
Davenport Ave
Longhini Ln
Printers Ln
10
34
122
43



FINAL ANTENNA CONFIGURATION
(6) DIRECTIONAL ANTENNAS POWERWAVE # 7770
(12) 1-5/8" DIA. COAX CABLES
(12) TMAS

1 TOWER ELEVATION
1" = 30'-0"

cingular WIRELESS | ERICSSON

CH2M HILL
8619 WEST BRYN MAWR
CHICAGO, ILLINOIS 60631

NO	DATE	REVISION DESCRIPTION	BY	CHK	APP'D
3	07-11-06	ISSUED FOR CSC SUBMITTAL	FH	JZ	JZ
2	05-31-06	ISSUED FOR CSC REVIEW	RR	JZ	JZ
1	03-19-06	SCOPING REVIEW	FH	JZ	JZ

SCALE: 1" = 30'-0" | CHECKED BY: JZ | DRAWN BY: FH

CINGULAR WIRELESS
SITE #: 2064
SITE NAME: WEST HAVEN
1 BURWELL ROAD, WEST HAVEN, CT 06516

DRAWING NUMBER	REV
2064	0

DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF EXISTING 155' SELF SUPPORTING LATTICE TOWER FOR NEW ANTENNA ARRANGEMENT

Cingular Site #2064
1 Burwell Road
West Haven, Connecticut

prepared for

CH2MHILL
8619 West Bryn Mawr, Suite 615
Chicago, IL 60631

cingular WIRELESS

Cingular Wireless
580 Main Street
Bolton, MA 01740

prepared by

URS

URS CORPORATION
500 ENTERPRISE DR, SUITE 3B
ROCKY HILL, CT 06067
TEL. 860-529-8882

36922926.00008
CH2-016

July 10, 2006

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3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS
4. FINDINGS AND EVALUATION
5. CONCLUSIONS AND RECOMMENDATIONS
6. DRAWINGS AND DATA

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- RISA TOWER FEEDLINE DISTRIBUTION
- RISA TOWER DETAILED OUTPUT
- ANCHOR BOLT ANALYSIS
- FOUNDATION ANALYSIS

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the existing 155' self supporting lattice tower located at 1 Burwell Road in West Haven, Connecticut. The analysis was conducted in accordance with the 2005 Connecticut State Building Code and the TIA/EIA-222-F standard for wind velocity of 90 mph (fastest mile) and 78 mph (fastest mile) concurrent with ½" ice. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined in the Introduction Section of this report. The proposed Cingular modification is as follows:

Proposed Antenna and Mount	Carrier	Antenna Center Elevation
Remove: **(9) existing antennas (9) existing 1 5/8" coax cables and (3) existing T-Arms.**	**Cingular Blue (Existing)**	**@ 127'**
Remove: **(9) existing antennas (12) existing 1 1/4" coax cables and (3) Boom Gates.** **Install:** **(3) Powerwave 7770.00 antennas and** **(6) Powerwave LGP21401 TMA's on** **(3) Flush Mounts with** **(6) new 1 5/8" coax cables.**	**Cingular (Proposed)**	**@ 155'**

The results of the analysis indicate that the tower structure, anchor bolts and tower foundation are in compliance with the proposed loading conditions. **Therefore, the tower is considered structurally adequate with the wind load classification specified above and all the existing and proposed antenna loading.**

The installation of (6) Powerwave 7770.00 antennas and (12) Powerwave LGP21401 TMA's on the existing (3) Boom Gates with (12) new 1 5/8" coax cables was also investigated. The tower and anchor bolts were found to be adequate. The foundation was found to comply with Section 3108.4.2 of the 2005 Connecticut State Building Code.

This analysis is based on:

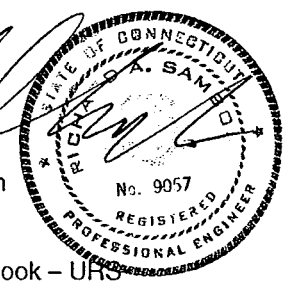
1) The tower structure's theoretical capacity, not including any assessment of the condition of the tower.
2) Tower geometry and structural member sizes taken from a tower report prepared by Stainless, Inc, job number 2940-3, dated August 14, 1981.
3) Foundation information taken from a Foundation Mapping Report prepared by Stegman Engineering dated July 3, 2006.
4) Antenna and mount configuration as specified on the following page of this report.

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 as well as the physical condition of the tower and connections. Notify the engineer in writing immediately if any of the information in this report is found to be other than specified.

If you should have any questions, please call.

Sincerely,

URS Corporation



Richard A. Sambor, P.E.
Manager Facilities Design

RAS/jek

cc: AA, DR, IA, CF/Book – URS

2. INTRODUCTION

The subject tower is located at 1 Burwell Road in West Haven, Connecticut. The structure is a 155' self supporting lattice tower designed and manufactured Stainless, Inc.

The inventory is summarized in the table below:

Antenna Type	*Carrier*	*Mount*	*Antenna Centerline Elevation*	*Cable*
(1) 10' omni antenna	(existing)	Flush Mount	155'	---
(3) Powerwave 7770.00 antennas and (6) Powerwave LGP21401 TMA's	**Cingular (proposed)**	**(3) Flush Mounts**	**155'**	**(6) new 1 5/8" coax cables**
(12) DB844H90 antennas	Nextel (existing)	(3) T-Arms	138'	(12) 1 5/8" coax cables
(1) 9' Omni antenna	(existing)	Standoff Mount	109'	(1) 1 1/4" coax cable
(1) 8' Omni antenna	(existing)	Standoff Mount	102'	(1) 7/8" coax cable
(1) Yagi antenna	(existing)	Direct Mount	84.5'	(1) 1/2" coax cable
(1) 4-Bay Dipole antenna	(existing)	Standoff Mount	79'	(1) 1/2" coax cable
(1) 8' Omni antenna	(existing)	Standoff Mount	74'	(1) 7/8" coax cable
(2) Yagi antennas	(existing)	Standoff Mount	69'	(1) 1/2" coax cable

*Omni/Whip antenna elevations are at the base of the antenna.

This structural analysis of the communications tower was performed by URS Corporation (URS) for CH2Mhill/Cingular Wireless. The purpose of this analysis was to investigate the structural integrity of the existing tower with its existing and proposed antenna loads. This analysis was conducted to evaluate 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

The structural analysis was done in accordance with the 2005 Connecticut State Building Code, TIA/EIA-222-F—Structural Standard for Steel Antenna Towers and Antenna Supporting Structures, and the American Institute of Steel Construction (AISC) Manual of Steel Construction—Allowable Stress Design (ASD).

The analysis was conducted using RISA Tower 4.5. Two load conditions were evaluated as shown below which were compared to allowable stresses according to AISC and TIA/EIA.

Load Condition 1 = 90 mph (fastest mile) Wind Load (without ice) + Tower Dead Load
Load Condition 2 = 78 mph (fastest mile) Wind Load (with ice) + Ice Load + Tower Dead Load

Please note that wind pressure is a function of velocity squared. Under Load Condition 2, a 25 percent reduction in wind pressure is allowed by code to account for the unlikelihood of the full wind pressure and ice load occurring at the same time. The same results may be achieved by utilizing a lower wind pressure without taking the 25 percent reduction, as shown above.

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

4. FINDINGS AND EVALUATION

Stresses on the tower structure were evaluated to compare with allowable stresses in accordance with AISC. The calculated stresses under the proposed loading were within the allowable stresses. Detailed analysis and calculations for the proposed load condition are provided in section 6 of this report. The anchor bolts were also found to be within allowable limits. The foundation was found to comply with Section 3108.4.2 of the 2005 Connecticut State Building Code.

5. CONCLUSIONS AND RECOMMENDATIONS

The results of the analysis indicate that the tower structure, anchor bolts and tower foundation are in compliance with the proposed loading conditions. **Therefore, the tower is considered structurally adequate with the wind load classification specified above and all the existing and proposed antenna loading.**

The installation of (6) Powerwave 7770.00 antennas and (12) Powerwave LGP21401 TMA's on the existing (3) Boom Gates with (12) new 1 5/8" coax cables was also investigated. The tower and anchor bolts were found to be adequate. The tower foundation was found to comply with Section 3108.4.2 of the 2005 Connecticut State Building Code.

Limitations/Assumptions:

This report is based on the following:

1. Tower inventory as listed in this report.
2. Tower is properly installed and maintained.
3. All members are as specified in the original design documents and are in good condition.
4. All required members are in place.
5. All bolts are in place and are properly tightened.
6. Tower is in plumb condition.
7. All member protective coatings are in good condition.
8. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
9. Foundations were properly constructed to support original design loads as specified in the original design documents.
10. All coaxial cable is installed as specified in Section 6 of this report.

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. Adding antennas
B. Removing/replacing antennas
C. Adding coaxial cables

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:

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.

The owner shall refer to TIA/EIA-222-F 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 be 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.

10 July 2006

Honorable John M. Picard
Mayor, City of West Haven
355 Main Street
West Haven, CT 06516

RE: Notice of Exempt Modification – Existing Cingular Telecommunications Tower Facility at 1 Burwell Road, West Haven, Connecticut

Dear Mr. Picard:

New Cingular Wireless PCS, LLC ("Cingular") proposes to remove and replace telecommunications antennas and associated equipment located on an existing tower at the above-referenced location. The facility is now controlled and operated by Cingular whose corporate office is located at 500 Enterprise Drive, Rocky Hill, CT 06067.

Proposed Modifications

Cingular proposes to remove the existing antennas and replace them with a total of six (6) new antennas, located at an existing centerline height of approximately 152' above ground level. Cingular will remove the existing coaxial cables and replace them with twelve (12) new 1 5/8" diameter coaxial cables. It proposes to remove the existing tower mounted amplifiers and replace them with twelve (12) new units, located at the same height as the antennas.

In summary, the final antenna configuration at 1 Burwell Road will include:

- 6 antennas,
- 12 coaxial cables, and
- 12 tower mounted amplifiers.

A structural evaluation has demonstrated that the tower will be structurally capable of supporting the proposed Cingular telecommunications equipment once the proposed modifications are complete.

Kise Straw & Kolodner Inc.
123 South Broad St.
Suite 1270
Philadelphia, PA 19109
(215) 790-1050 FAX (215) 790-0215
www.ksk1.com

Statutory Considerations

The proposed work will not affect the height of the existing structure, nor will it alter the existing property boundaries. Furthermore, the proposed work will not increase noise levels at the facility's site boundary by six (6) decibels or more. Operation of additional antennas will not increase the radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the Federal Communications Commission.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council (CSC) as required by the Regulations of Connecticut State Agencies (RCSA), Section 16-50j-73. Please accept this letter as notification to the City of West Haven under Section 16-50j-73 that the proposed work constitutes an exempt modification pursuant to RCSA Section 16-50j-72(b)(2).

Should you have any questions or require additional information about the plans or the CSC's procedures, please do not hesitate to contact me (215.790.1050 ext. 138) or Mr. Derek Phelps, Executive Director, Connecticut Siting Council (860.827.2935).

Sincerely,

Elizabeth H. Lankenau, AICP
Planner

South Orange Center Road, Orange, CT

Summary Sheet
Project Location Map
Site Plan and Elevation
Structural Analysis
Elected Official Letter

CINGULAR WIRELESS
Proposed Modifications

Site Address: South Orange Center Road, Orange, CT; *Project Location Map* attached

Coordinates: Lat: 41' 15' 10.95; Long: 73' 00' 39.2"

Site Owner: Town of Orange

Type of Existing Facility: 180' high monopole and an equipment shelter in a 79'6"' x 54'10"' compound

Antenna Configuration: Center line – 177' above ground level; remove existing antennas and replace with six (6) Powerwave 7770 units; *specification attached*

TMA Configuration: Existing units to be removed and replaced with six (6) new LGP 214nn units; *specification attached*

Coaxial Cables: Existing 1 5/8" diameter coaxial cables to remain

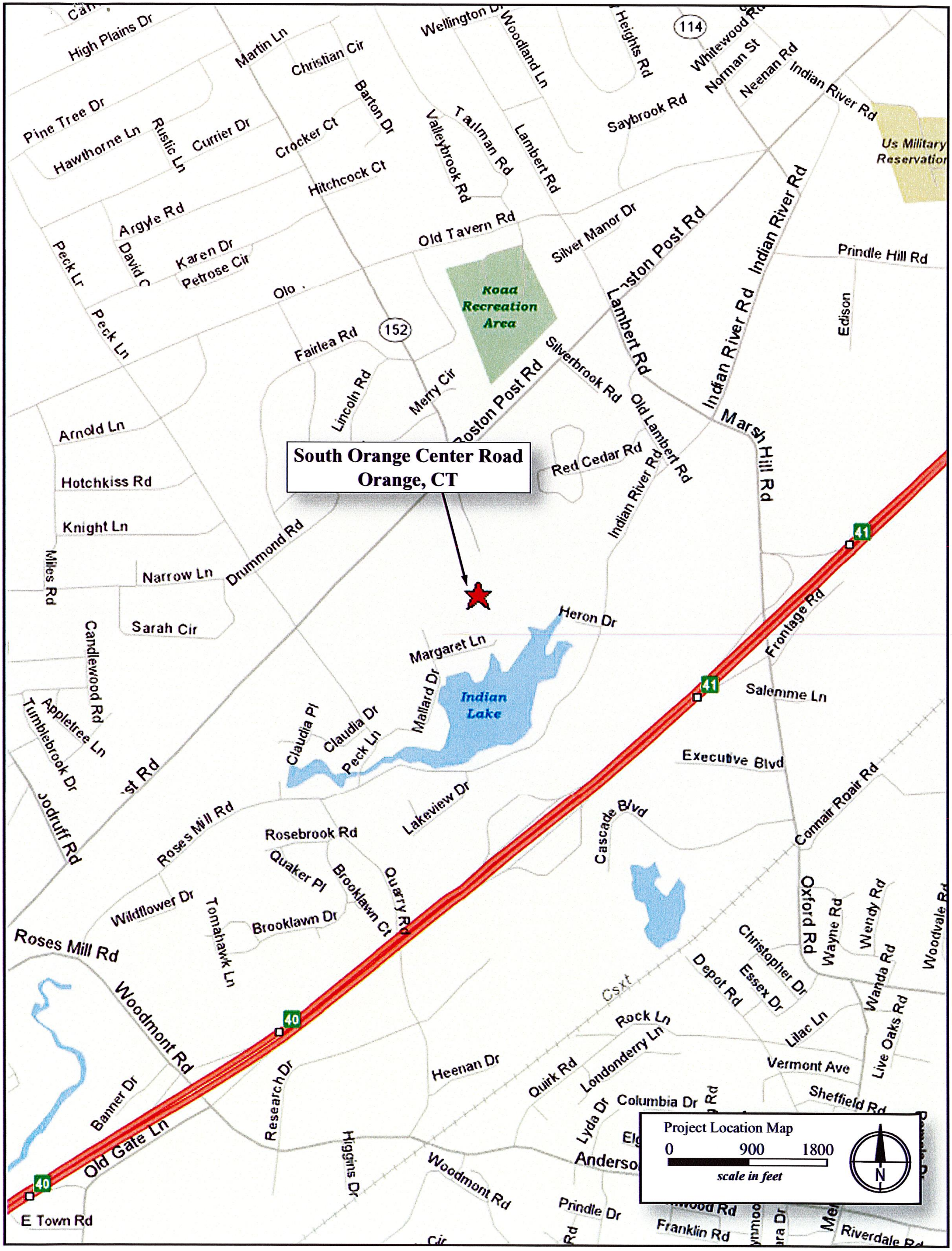
Other Work: Add one (1) Ericsson RBS 3106 equipment cabinet inside an existing shelter

Power Density:

As the table demonstrates, the cumulative worst-case exposure would be approximately 33.79% of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from Cingular's use of the facility would be within applicable standards.

Site # 5101								
Carrier	Antenna Height (ft)	Freq. (MHz) For Limit	# of Channels	W ERP/Channel (ref 1/2-w dipole)	W EIRP/Sector	Power Density ($\mu W/cm^2$)	FCC Limit ($\mu W/cm^2$)	Percent of Limit (%)
Cingular UMTS	177	1935.0	1	500.0	820.0	5.7	1000	0.57%
Cingular 800	177	880.0	6	296.0	2912.6	20.4	587	3.48%
Cingular 1900	177	1900.0	3	427.0	2100.8	14.7	1000	1.47%
T-Mobile	148	1900.0	8	134.6	1765.7	17.7	1000	1.77%
Nextel	137	851.0	12	100.0	1968.0	23.0	567	4.05%
Sprint	127	1900.0	11	568.4	10253.9	139.4	1000	13.94%
Verizon 800	117	880.0	19	100.0	3116.0	49.9	587	8.51%
TOTAL								**33.79%**

Structural Analysis: *Structural Analysis* attached.


South Orange Center Road
Orange, CT
Project Location Map
0
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scale in feet
N
Road Recreation Area
Indian Lake
Us Military Reservation
Boston Post Rd
Indian River Rd
Marsh Hill Rd
Lambert Rd
Old Lambert Rd
Silverbrook Rd
Red Cedar Rd
Heron Dr
Margaret Ln
Mallard Dr
Claudia Pl
Claudia Dr
Peck Ln
Lakeview Dr
Roses Mill Rd
Rosebrook Rd
Quaker Pl
Brooklawn Ct
Brooklawn Dr
Quarry Rd
Wildflower Dr
Tomahawk Ln
Woodmont Rd
Old Gate Ln
E Town Rd
Banner Dr
Research Dr
Higgins Dr
Heenan Dr
Quirk Rd
Londonderry Ln
Rock Ln
Columbia Dr
Lyda Dr
Prindle Dr
Franklin Rd
Riverdale Rd
Vermont Ave
Sheffield Rd
Live Oaks Rd
Lilac Ln
Depot Rd
Essex Dr
Christopher Dr
Oxford Rd
Wayne Rd
Wendy Rd
Wanda Rd
Woodvale Rd
Cascade Blvd
Commair Rd
Executive Blvd
Salemme Ln
Frontage Rd
Csxt
Drummond Rd
Narrow Ln
Sarah Cir
Knight Ln
Hotchkiss Rd
Arnold Ln
Miles Rd
Candlewood Rd
Appletree Ln
Tumblebrook Dr
Jodruff Rd
Fairlea Rd
Lincoln Rd
Merry Cir
Old Tavern Rd
Silver Manor Dr
Prindle Hill Rd
Edison
Peck Ln
Peck Ln
Karen Dr
Petrose Cir
Argyle Rd
Hitchcock Ct
Crocker Ct
Currier Dr
Rustic Ln
Hawthorne Ln
Pine Tree Dr
High Plains Dr
Martin Ln
Christian Cir
Barton Dr
Valleybrook Rd
Tallman Rd
Lambert Rd
Wellington Dr
Woodland Ln
Heights Rd
Whitewood Rd
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Neenan Rd
Indian River Rd
Saybrook Rd
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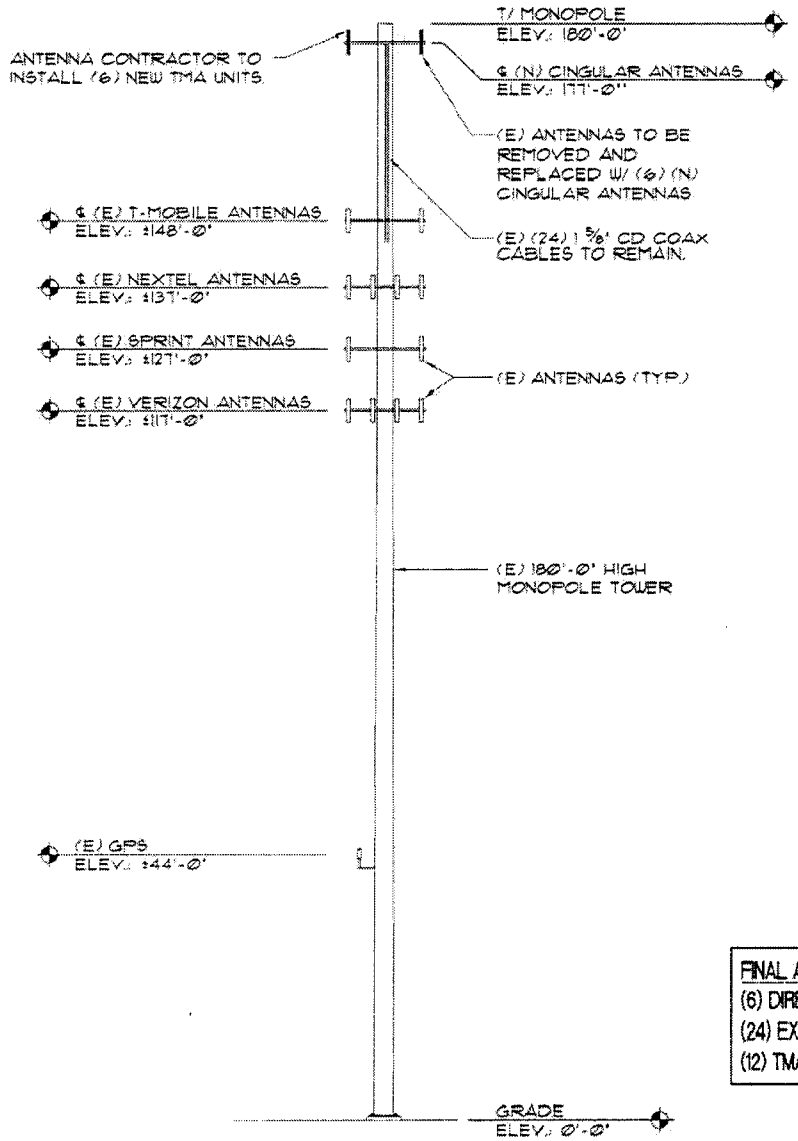

FINAL ANTENNA CONFIGURATION
(6) DIRECTIONAL ANTENNAS POWERWAVE # 7770
(24) EXISTING 1-5/8" DIA. COAX CABLES
(12) TMAS

1 TOWER ELEVATION
SCALE: 1"=30'-0"

cingular WIRELESS | ERICSSON

CH2M HILL
8619 WEST BRYN MAWR
CHICAGO, ILLINOIS 60631

NO.	DATE	REVISION DESCRIPTION	BY	CHK	APP'D
2	04-21-06	ISSUED FOR CSC REVIEW			
1	03-21-06	SCOPING REVIEW / TOWER ELEVATION	GB	JZ	JZ

SCALE: 1"=30'-0" | CHECKED BY: JZ | DRAWN BY: GB

CINGULAR WIRELESS
SITE #: 5101
SITE NAME: ORANGE TRANSFER STATION
617 S. ORANGE CENTER RD. ORANGE CT 06477

DRAWING NUMBER	REV
5101	0

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

Cingular Site #5101
Orange Transfer Station
South Orange Center Road
Orange, Connecticut

prepared for

CH2MHILL
8619 West Bryn Mawr, Suite 615
Chicago, IL 60631

cingular WIRELESS

Cingular Wireless
580 Main Street
Bolton, MA 01740

prepared by

URS

URS CORPORATION
500 ENTERPRISE DR, SUITE 3B
ROCKY HILL, CT 06067
TEL. 860-529-8882

36922934.00008
CH2-024

June 30, 2006

TABLE OF CONTENTS

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2. INTRODUCTION
3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS
4. FINDINGS AND EVALUATION
5. CONCLUSIONS
6. DRAWINGS AND DATA

- RISA TOWER INPUT / OUTPUT SUMMARY
- RISA TOWER DETAILED OUTPUT
- ANCHOR BOLT AND BASE PLATE ANALYSIS

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the existing 180' steel monopole structure located at the Orange Transfer Station on South Orange Center Road in Orange, Connecticut. The analysis was conducted in accordance with the 2005 Connecticut State Building Code and the TIA/EIA-222-F standard for wind velocity of 90 mph and 78 mph concurrent with ½" ice. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined in the Introduction Section of this report. The proposed Cingular modification is as follows:

Proposed Antenna and Mount	Carrier	Antenna Center Elevation
Remove: **(6) EMS RR90-17-02DP antennas** **(3) Decibel 779QNB120EXM antennas** **(12) 1 5/8" coax cables** **(3) 1/2" coax cables** **Install:** **(6) Powerwave 7770.00 antennas** **(12) Powerwave LGP21401 TMA's** **on the existing low-profile platform with** **(12) existing 1 5/8" coax cables within the monopole.**	**Cingular (Proposed)**	**@ 178'**

The results of the analysis indicate that the tower structure is in compliance with the proposed loading conditions. **The tower and its foundation are considered structurally adequate with the wind load classification specified above and all the existing and proposed antenna loading.**

This analysis is based on:

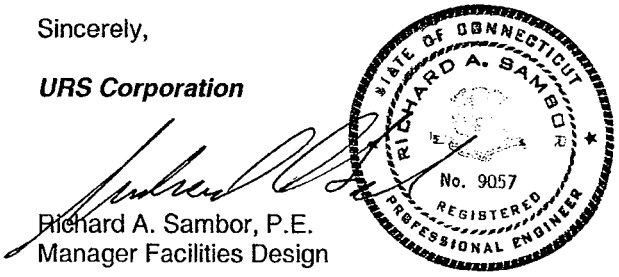
1) The tower structure's theoretical capacity, not including any assessment of the condition of the tower.
2) Tower geometry and structural member sizes taken from a structural analysis (PJF Job No. 31205-0019-Rev1) prepared by Paul J. Ford and Company, signed and sealed July 12, 2005.
3) Antenna and mount configuration as specified on the following page of this report.

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 as well as the physical condition of the tower. Notify the engineer in writing immediately if any of the information in this report is found to be other than specified.

If you should have any questions, please call.

Sincerely,

URS Corporation



Richard A. Sambor, P.E.
Manager Facilities Design

RAS/jek

cc: AA, DR, IA, CF/Book – URS

2. INTRODUCTION

The subject tower is located at the Orange Transfer Station on South Orange Center Road in Orange, Connecticut. The structure is a 180' steel monopole designed and manufactured by Rohn Industries, Inc.

The tower geometry and structure member sizes were taken from a structural analysis (PJF Job No. 31205-0019-Rev1) prepared by Paul J. Ford and Company, signed and sealed July 12, 2005.

The inventory is summarized in the table below:

Antenna Type	*Carrier*	*Mount*	*Antenna Centerline Elevation*	*Cable*
(6) Powerwave 7770.00 antennas and (12) Powerwave LGP21401 TMA's	**Cingular (proposed)**	Low-Profile Platform	**178'**	(12) existing 1 5/8" coax cables (within monopole)
(9) RFS APX16PV-16PVL-X antennas and (6) TMA's	T-Mobile (existing)	Low-Profile Platform	148'	(24) 1 5/8" coax cables (within monopole)
(12) Decibel 844G45VTZASX antennas	Nextel (existing)	Low-Profile Platform	137'	(12) 1 5/8" coax cables (within monopole)
(12) Decibel DB980H65T2E-M antennas	Sprint (existing)	Low-Profile Platform	128'	(12) 1 5/8" coax cables (within monopole)
(6) Antel WPA-80090/4CF antennas and (6) Decibel DB950G40E-M antennas	Verizon (existing)	Low-Profile Platform	117'	(12) 1 5/8" coax cables (within monopole)
(1) GPS	Sprint (existing)	Standoff Mount	50'	(1) 1/2" coax cable (within monopole)

This structural analysis of the communications tower was performed by URS Corporation (URS) for CH2Mhill/Cingular Wireless. The purpose of this analysis was to investigate the structural integrity of the existing tower with its existing and proposed antenna loads. This analysis was conducted to evaluate 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

The structural analysis was done in accordance with the 2005 Connecticut State Building Code, TIA/EIA-222-F---Structural Standard for Steel Antenna Towers and Antenna Supporting Structures, and the American Institute of Steel Construction (AISC) 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.

Load Condition 1 = 90 mph (fastest mile) Wind Load (without ice) + Tower Dead Load
Load Condition 2 = 78 mph (fastest mile) Wind Load (with ice) + Ice Load + Tower Dead Load

Please note that wind pressure is a function of velocity squared. Under Load Condition 2, a 25 percent reduction in wind pressure is allowed by code to account for the unlikelihood of the full wind pressure and ice load occurring at the same time. The same results may be achieved by utilizing a lower wind pressure without taking the 25 percent reduction, as shown above.

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

4. FINDINGS AND EVALUATION

Combined axial and bending stresses on the monopole structure were evaluated to compare with allowable stresses in accordance with AISC. The calculated stresses under the proposed loading were below the allowable stresses. Detailed analysis and calculations for the proposed load condition are provided in section 6 of this report. The anchor bolts and base plate were found to be within allowable limits. No further analysis was conducted on the foundation since the shear and the moment at the top of the foundation were below the original design.

5. CONCLUSIONS

The results of the analysis indicate that the tower structure is in compliance with the proposed loading conditions. **The tower and its foundation are structurally adequate under the TIA/EIA-222-F wind load classification specified above and the proposed antenna loadings.**

Limitations/Assumptions:

This report is based on the following:

1. Tower inventory as listed in this report.
2. Tower is properly installed and maintained.
3. All members are as specified in the original design documents and are in good condition.
4. All required members are in place.
5. All bolts are in place and are properly tightened.
6. Tower is in plumb condition.
7. All member protective coatings are in good condition.
8. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
9. Foundations were properly constructed to support original design loads as specified in the original design documents.
10. All coaxial cable is installed within the monopole unless specified otherwise.

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. Adding antennas
B. Removing/replacing antennas
C. Adding coaxial cables

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:

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.

The owner shall refer to TIA/EIA-222-F 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 be 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.

10 July 2006

Honorable James Zeoli
First Selectman, Town of Orange
617 Orange Center Road
Orange, CT 06477

RE: Notice of Exempt Modification – Existing Cingular Telecommunications Tower Facility at South Orange Center Road, Orange, Connecticut

Dear Mr. Zeoli:

New Cingular Wireless PCS, LLC ("Cingular") proposes to remove and replace telecommunications antennas and associated equipment located on an existing tower at the above-referenced location. The facility is now controlled and operated by Cingular whose corporate office is located at 500 Enterprise Drive, Rocky Hill, CT 06067.

Proposed Modifications

Cingular proposes to remove the existing antennas and replace them with a total of six (6) new antennas, located at an existing centerline height of approximately 177' above ground level. Cingular will keep existing 1 5/8" diameter coaxial cables and remove the existing tower mounted amplifiers and replace them with six (6) new units, located at the same height as the antennas.

In summary, the final antenna configuration at South Orange Center Road will include:

- 6 antennas,
- 12 coaxial cables, and
- 12 tower mounted amplifiers.

A structural evaluation has demonstrated that the tower will be structurally capable of supporting the proposed Cingular telecommunications equipment once the proposed modifications are complete.

Kise Straw & Kolodner Inc.
123 South Broad St.
Suite 1270
Philadelphia, PA 19109
(215) 790-1050 FAX (215) 790-0215
www.kskl.com

Statutory Considerations

The proposed work will not affect the height of the existing structure, nor will it alter the existing property boundaries. Furthermore, the proposed work will not increase noise levels at the facility's site boundary by six (6) decibels or more. Operation of additional antennas will not increase the radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the Federal Communications Commission.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council (CSC) as required by the Regulations of Connecticut State Agencies (RCSA), Section 16-50j-73. Please accept this letter as notification to the Town of Orange under Section 16-50j-73 that the proposed work constitutes an exempt modification pursuant to RCSA Section 16-50j-72(b)(2).

Should you have any questions or require additional information about the plans or the CSC's procedures, please do not hesitate to contact me (215.790.1050 ext. 138) or Mr. Derek Phelps, Executive Director, Connecticut Siting Council (860.827.2935).

Sincerely,

Elizabeth H. Lankenau, AICP
Planner

15 (aka 8) Dwight Street, North Haven, CT

Summary Sheet
Project Location Map
Site Plan and Elevation
Structural Analysis
Elected Official Letter

CINGULAR WIRELESS
Proposed Modifications

Site Address: 15 Dwight Street (aka 8 Dwight Street), North Haven, CT; *Project Location Map* attached

Site Owner: Cingular

Type of Existing Facility: 150' high monopole and Cingular equipment room are located within a 54' x 50' compound that is surrounded by a chain link fence

Antenna Configuration: Center line – 153' above ground level; remove existing antennas and replace with six (6) Powerwave 7770 units; *specification attached*

TMA Configuration: Existing units to be replaced with twelve (12) new LGP 214nn units; *specification attached*

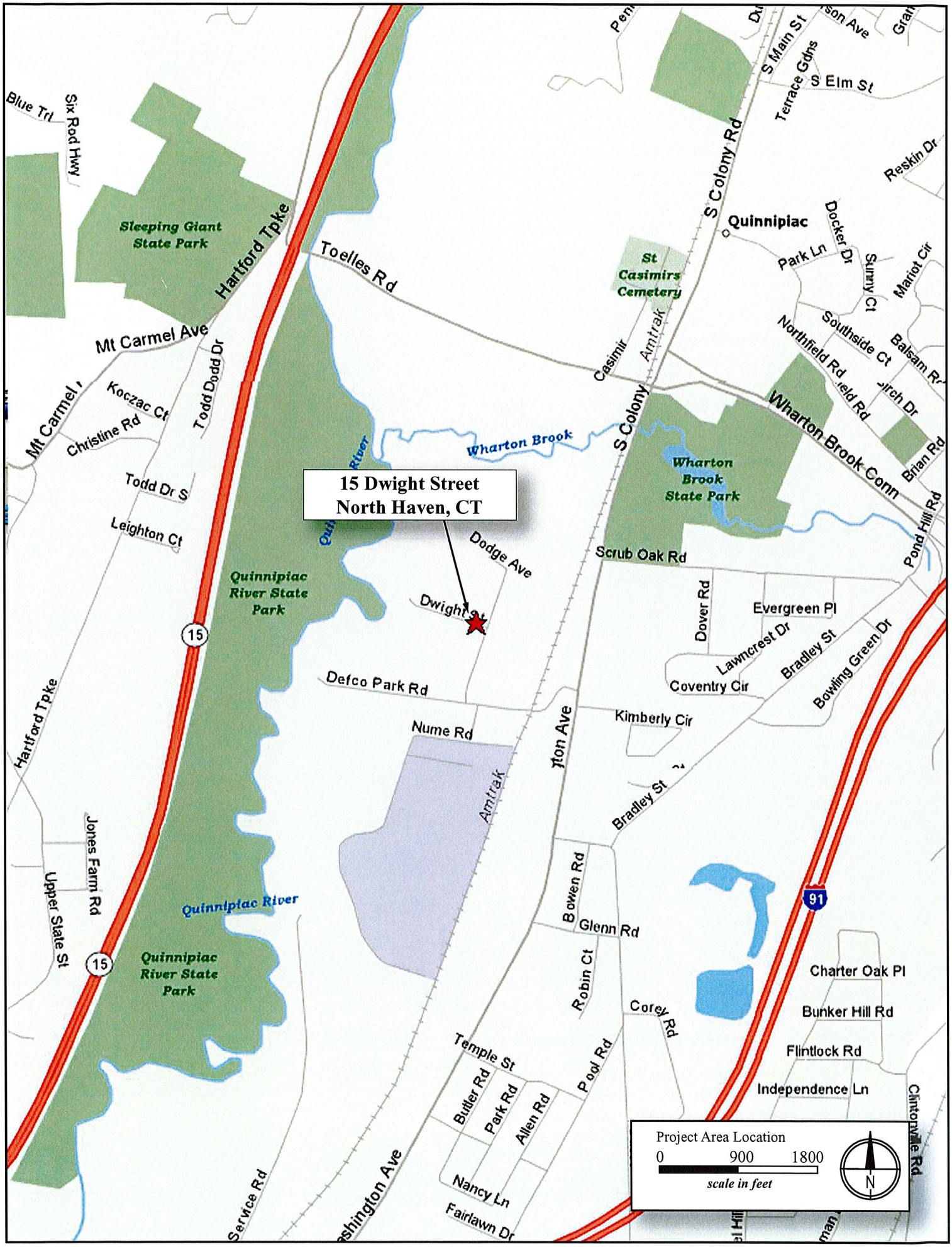
Coaxial Cables: Existing cables to be removed and replaced with twelve (12) 1 5/8" cables

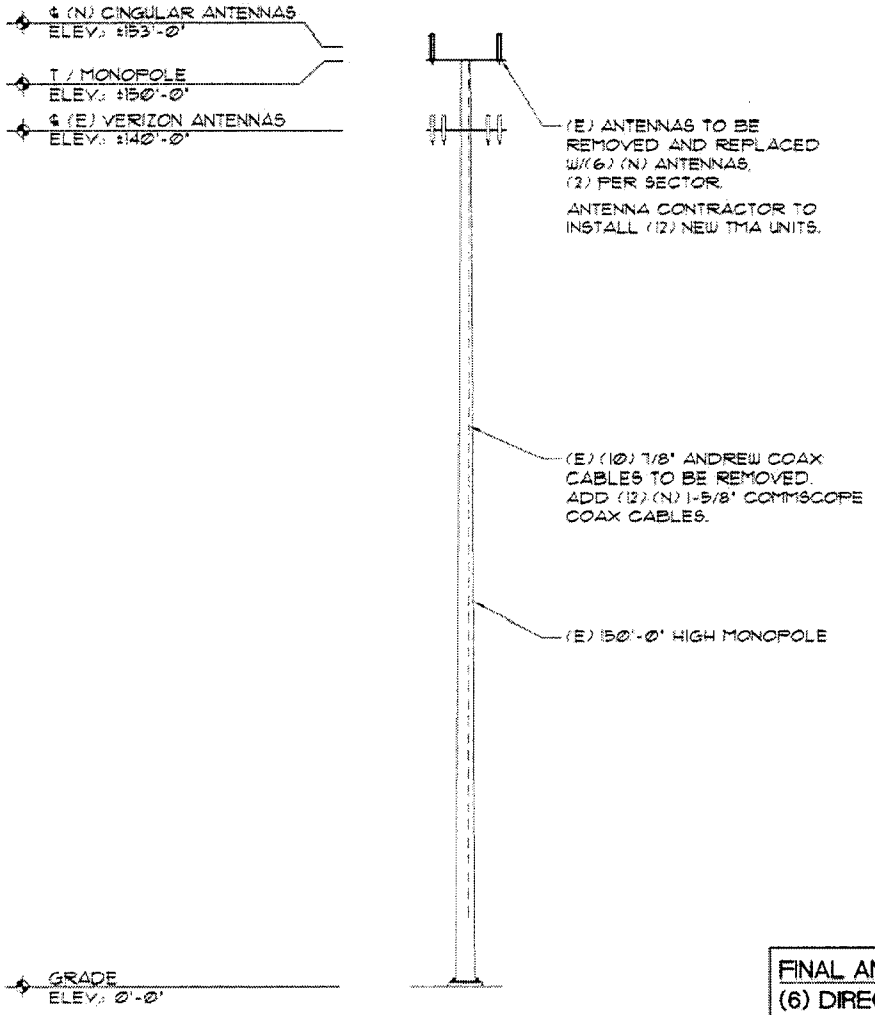
Power Density:

As the table demonstrates, the cumulative worst-case exposure would be approximately 14.55% of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from Cingular's use of the facility would be within applicable standards.

Site # 2012								
Carrier	Antenna Height (ft)	Freq. (MHz) For Limit	# of Channels	W ERP/Channel (ref 1/2-w dipole)	W EIRP/Sector	Power Density ($\mu W/cm^2$)	FCC Limit ($\mu W/cm^2$)	Percent of Limit (%)
Cingular UMTS	153	1935.0	1	500.0	820.0	7.7	1000	0.77%
Cingular TDMA	153	880.0	16	100.0	2624.0	24.6	587	4.19%
Cingular 800	153	880.0	2	296.0	970.9	9.1	587	1.55%
Cingular 1900	153	1900.0	2	427.0	1400.6	13.1	1000	1.31%
Verizon 800	140	880.0	9	200.0	2952.0	33.0	587	5.63%
Verizon 1900	140	1900.0	3	200.0	984.0	11.0	1000	1.10%
TOTAL								**14.55%**

Structural Analysis: *Structural Analysis* attached.


15 Dwight Street
North Haven, CT
Project Area Location
0 900 1800
scale in feet
N
Sleeping Giant State Park
Quinnipiac River State Park
Wharton Brook State Park
St Casimirs Cemetery
Quinnipiac River
Wharton Brook
Amtrak
Hartford Tpke
Toelles Rd
Mt Carmel Ave
S Colony Rd
Quinnipiac
Wharton Brook Conn
Scrub Oak Rd
Dodge Ave
Dwight St
Defco Park Rd
Nume Rd
Kimberly Cir
Bradley St
Coventry Cir
Evergreen Pl
Lawncrest Dr
Dover Rd
Bowling Green Dr
Glenn Rd
Bowen Rd
Robin Ct
Corey Rd
Pool Rd
Temple St
Butler Rd
Park Rd
Allen Rd
Nancy Ln
Fairlawn Dr
Charter Oak Pl
Bunker Hill Rd
Flintlock Rd
Independence Ln
Upper State St
Jones Farm Rd
Service Rd
Todd Dr S
Leighton Ct
Christine Rd
Koczac Ct
Todd Dodd Dr
Blue Trl
Six Rod Hwy
Park Ln
Docker Dr
Sunny Ct
Marriot Cir
Southside Ct
Northfield Rd
Brian Rd
Pond Hill Rd
Terrace Gdns
S Elm St
S Main St
Reskin Dr
Casimir
Amtrak
15
91



FINAL ANTENNA CONFIGURATION
(6) DIRECTIONAL ANTENNAS POWERWAVE # 7770
(12) 1-5/8" DIA. COAX CABLES
(12) TMAS

1 TOWER ELEVATION
1" = 30'-0"

cingular WIRELESS | ERICSSON | CH2M HILL
8619 WEST BRYN MAWR
CHICAGO, ILLINOIS 60631

NO.	DATE	REVISION DESCRIPTION	BY	CHK	APP'D
2	06-06-06	ISSUED FOR CSC REVIEW	RR	JZ	JZ
1	05-31-06	SCOPING REVIEW	ML	JZ	JZ

SCALE: 1" = 30'-0" | CHECKED BY: JZ | DRAWN BY: ML

CINGULAR WIRELESS
SITE #: 2012
SITE NAME: NORTH HAVEN
15 DWIGHT STREET NORTH HAVEN, CT 06473

DRAWING NUMBER	REV.
2012	0

10 July 2006

Honorable Kevin J. Kopetz
First Selectman, Town of North Haven
18 Church Street
North Haven, CT 06473

RE: Notice of Exempt Modification – Existing Cingular Telecommunications Tower Facility at 15 (aka 8) Dwight Street, North Haven, Connecticut

Dear Mr. Kopetz:

New Cingular Wireless PCS, LLC ("Cingular") proposes to remove and replace telecommunications antennas and associated equipment located on an existing tower at the above-referenced location. The facility is now controlled and operated by Cingular whose corporate office is located at 500 Enterprise Drive, Rocky Hill, CT 06067.

Proposed Modifications

Cingular proposes to remove the existing antennas and replace them with a total of six (6) new antennas, located at an existing centerline height of approximately 153' above ground level. Cingular will remove the existing cables and replace them with twelve (12) 1 5/8" diameter coaxial cables. Cingular will also remove the existing tower mounted amplifiers and replace them with twelve (12) new units, locating them at the same height as the antennas.

In summary, the final antenna configuration at 15 (aka 8) Dwight Street will include:

- 6 antennas,
- 12 coaxial cables, and
- 12 tower mounted amplifiers.

A structural evaluation has demonstrated that the monopole will be structurally capable of supporting the proposed Cingular telecommunications equipment once the proposed modifications are complete.

Kise Straw & Kolodner Inc.
123 South Broad St.
Suite 1270
Philadelphia, PA 19109
(215) 790-1050 FAX (215) 790-0215
www.ksk1.com

Statutory Considerations

The proposed work will not affect the height of the existing structure, nor will it alter the existing property boundaries. Furthermore, the proposed work will not increase noise levels at the facility's site boundary by six (6) decibels or more. Operation of additional antennas will not increase the radio frequency electromagnetic radiation power density, measured at the monopole base, to or above the standard adopted by the State of Connecticut and the Federal Communications Commission.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council (CSC) as required by the Regulations of Connecticut State Agencies (RCSA), Section 16-50j-73. Please accept this letter as notification to the Town of North Haven under Section 16-50j-73 that the proposed work constitutes an exempt modification pursuant to RCSA Section 16-50j-72(b)(2).

Should you have any questions or require additional information about the plans or the CSC's procedures, please do not hesitate to contact me (215.790.1050 ext. 138) or Mr. Derek Phelps, Executive Director, Connecticut Siting Council (860.827.2935).

Sincerely,

Elizabeth H. Lankenau, AICP
Planner

Specifications for Proposed New Equipment

Ericsson RBS Equipment Cabinet
Powerwave 7770 Antenna
Powerwave LGP 214nn Tower Mounted Amplifier

3 Dimensions

This section describes the physical characteristics of the RBS: dimensions, weight, and color.

Table 1 The RBS Dimensions

Unit	Dimensions (mm)
Height	1626
Width	1300
Depth	710
Depth including door	926

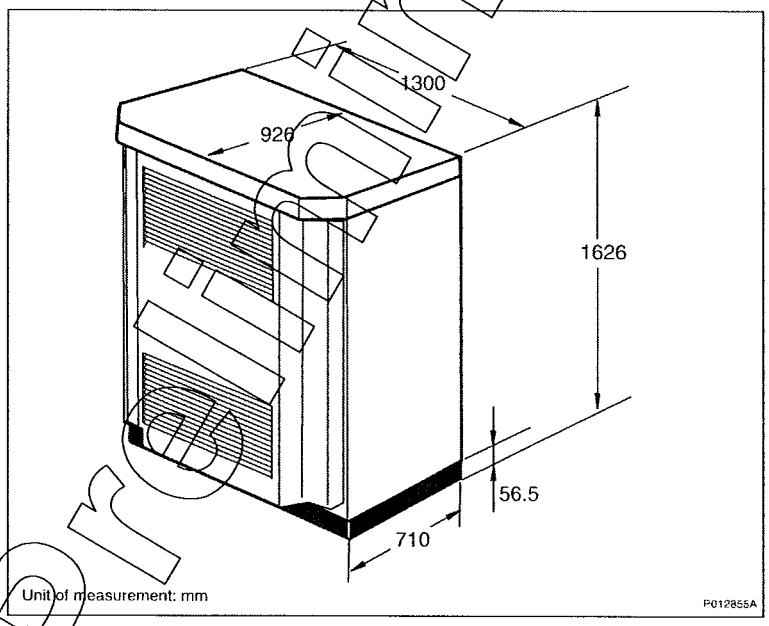


Figure 2 RBS 3106 Dimensions

The RBS weight is shown in the table below.

Table 2 The RBS Weight

Unit	Weight (kg)
RBS fully equipped excluding batteries	560
RBS fully equipped including batteries	850
RBS fully equipped including batteries and future expansion of hardware (not yet available)	875
Installation frame	12

The RBS color is shown in the table below.

Table 3 The RBS Color

Color	Color Standard
Grey	RAL 7035
Green	NCS 8010-G 10 Y

Dual Broadband Antenna

90° 1.4 m MET Antenna

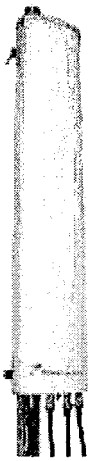
806-960/1710-2170 MHz

Part Number: 7770.00

Horizontal Beamwidth: 90°
Gain: 13.5/16 dBi

Electrical Downtilt: Adjustable
Connector Type: 7/16 female

The Powerwave dual band dual polarized broadband antenna has individual adjustable electrical downtilt per band (upgradeable to Remote Electrical Tilt (RET). Four connector ports allow separate tilts on each frequency band and ensure the use of diversity concepts. The phase shifter technology, based on a patented sliding dielectric, minimizes intermodulation distortion and maximizes efficiency. The slant +/- 45° dual polarization system provides the independent fading signals needed for achieving top-quality coverage via diversity concepts. The Powerwave Broadband antenna design is based on a patented stacked aperture-coupled patch technology, which provides high isolation performance and a wide VSWR bandwidth. The antennas have superior radiation patterns due to a unique reflector design which provides a very small variation of the –3dB horizontal beam width over the frequency band as well as a high front-to-back ratio.



Key Benefits

- Excellent broad- and multi-band capabilities
- Polarization purity makes good diversity gain
- Excellent pattern performance and high gain over frequency
- High passive intermodulation performance
- Light, slim and robust design

Preliminary

ANTENNA SYSTEMS

BASE STATION SYSTEMS

COVERAGE SYSTEMS

806-960/1710-2170 MHz

Dual Broadband Antenna

Electrical Specifications (Preliminary)

Frequency band (MHz)	806-960		1710-2170
Gain, ± 0.5dB (dBi)	13.5		16.0
Polarization		Dual linear ±45°	
Nominal Impedance (Ohm)		50	
VSWR	1.5:1		
VSWR			1.5:1
Isolation between inputs (dB)	30		
Isolation between inputs (dB)			30
Inter band isolation (dB)		40	
Horizontal -3 dB beamwidth	85 ± 5°		85 ± 5°
Tracking, Horizontal plane, ±60° (dB)	<2.0		
Tracking, Horizontal plane, ±60° (dB)			<2.0
Electrical downtilt range (adjustable)	0° to 10°		0° to 8°
Vertical -3 dB beamwidth	14.3 ± 2.0°		6.6 ± 1°
Sidelobe suppression, Vertical 1 st upper (dB)	>17,16,15 x=0, 5, 10° MET		> 17, 16,15 x=0, 4, 8° MET
Vertical beam squint	<0.8°		<0.5°
First null-fill (dB)	<-25		<-25
Front-to-back ratio (dB)	>25		>27
Front-to-back ratio, total power (dB)	>20		>23
IM3, 2Tx@43dBm (dBc)	<-153		
IM3, 2Tx@43dBm (dBc)			<-153
IM7, 2Tx@43dBm (dBc)			<-160
Power Handling, Average per input (W)	400		250
Power Handling, Average total (W)	800		500

All specifications are subject to change without notice.
Contact your Powerwave representative for complete performance data.

Mechanical Specifications

Connector Type	4 x 7/16 DIN female
Connector Position	Bottom
Dimensions, HxWxD	1408mm x 280mm x 125mm (55"x11"x5")
Weight Including Brackets	15.8 kg (35 lbs)
Wind Load, Frontal, 42m/s Cd=1	435N (98 lbf)
Survival Wind Speed (m/s)	70 (156mph)
Lightning Protection	DC grounded
Radome Material	GRP
Radome Color	Light Gray
Mounting	Pre-mounted Standard Brackets
Packing Size	1550mm x 355mm x 255mm (61"x14"x10")

Corporate Headquarters
Powerwave Technologies, Inc.
1801 East St. Andrew Place
Santa Ana, CA 92705 USA
Tel: 714-466-1000
Fax: 714-466-5800
www.powerwave.com

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SE-187 80 Täby
Sweden
Tel: +46 8 540 822 00
Fax: +46 8 540 823 40

Main Asia Pacific Office
23 F Tai Yau Building
181 Johnston Road
Wanchai, Hong Kong
Tel: +852 2512 6123
Fax: +852 2575 4860

Powerwave technologies

Tower Mounted Amplifier

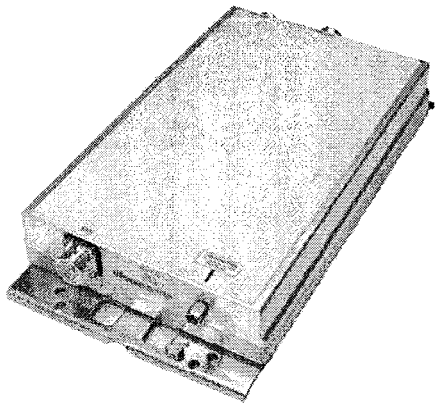
Dual Band 1900 MHz with 850 MHz Bypass

1900/850 MHz

Part Number:	Up-link: 1850-1910 MHz	Gain: 12 dB
LGP 214nn	Down-link: 1930-1990 MHz	Noise Figure: < 1.7 dB
	Bypass: 824-894 MHz	

The Powerwave® TMA-DD 1900/850 is a dual band Tower Mounted Amplifier (TMA) to be installed near the antenna. Deployed in an AMPS, GSM, GPRS, EDGE and CDMA network it will increase capacity and coverage as well as extend the battery life time for the handsets. The TMA System will provide enhanced coverage and improved up-link signal quality. Appropriate for new rollouts by optimizing coverage with a reduced number of BTSs or as an upgrade to existing BTSs for enhancing the existing coverage.

Extended band TMA facilitates simplified logistics, especially when the frequency bands are scattered. The unit comprises of high Q band-pass filters, dual balanced low noise amplifiers with circuits for active bias, supervision, alarms and lightning protection circuit. The Powerwave patented design with all active components integrated within the filter body provides an extremely reliable, compact and lightweight TMA solution. The vented enclosure design is employed to prevent the effect of condensation, thereby guaranteeing long, reliable, maintenance-free service in all environmental conditions. These TMAs offer an easy to install, maintenance free, cost effective solution for coverage enhancement and increased quality in mobile communication networks.



Key Benefits:

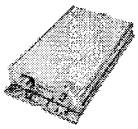
- 850 MHz Bypass
- Improved Network Quality
- Increased Coverage
- State of the Art Performance
- Excellent Power Handling
- Low Tx Loss
- Exceptional Reliability

ANTENNA SYSTEMS

BASE STATION SYSTEMS

COVERAGE SYSTEMS

Tower Mounted Amplifier



1900/850 MHz

Technical Specifications

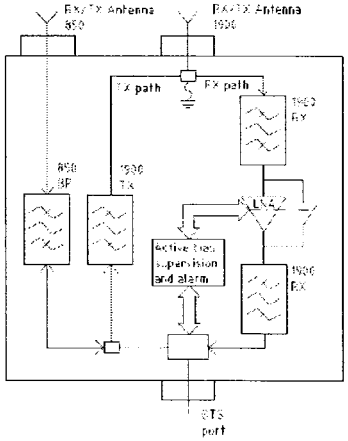
Product Number	LGP214nn	
850 MHz	Bypass (MHz)	824-894
	Return loss* (dB)	> 20
	Insertion loss* (dB)	< 0.3
1900 MHz		
Up-link	Frequency range, full band (60 MHz)	1850-1910
	Nominal gain (dB)	12
	Return loss* (dB)	> 20
	Noise figure* (dB)	< 1.7
	Output 3rd order Intercept Point* (dBm)	> +23
Down-link	Frequency range, full band (60 MHz)	1930-1990
	Insertion loss* (dB)	< 0.6
	Return loss* (dB)	> 20
Intermodulation	2 Tx@x43 dBm (dBc)	<-158
Alarm Functionality	Two levels,individually supervised LNAs	
Power Consumption	@12 VDC	1.2 W

* Typical

All specifications subject to change without notice. Please contact your Powerwave representative for complete performance data.

Mechanical Specifications

Size,W x H x D (without mounting plate)	235 x 366 x 66 mm (9.2 x 14.4 x 2.6 in)
Weight	6.4 kg (14.1 lbs)
Color	Off white (NCS 1502-R)
Housing	Aluminum
RF-connectors	DIN 7/16 female.
Mounting kit	Mounting kit for pole and wall is included
Temperature range	-40 °C to +65 °C (-40 °F to +149 °F)
MTBF	>1 million hours
Safety	UL 60 950
Ingress protection, IP 65	EN 60 529
Environmental	ETS 300 019
EMC	FCC Part 15



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Fax: +852 2575 4860

Powerwave technologies

CAPACITY AND DENSITY | TECHNOLOGY LEADERSHIP | GLOBAL PARTNER | INTEGRATED SOLUTIONS | QUALITY AND RELIABILITY

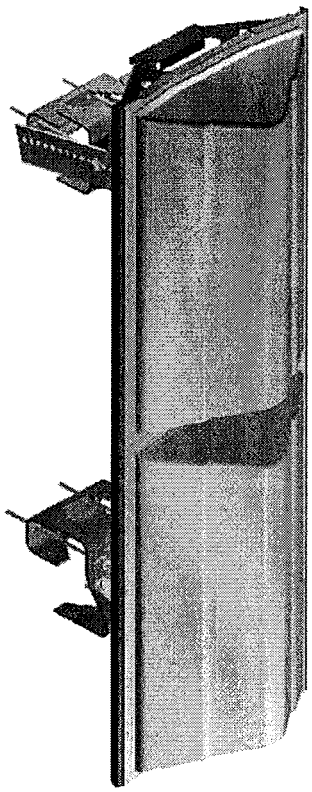
Specifications for Existing Antennas

DUO4-8670

CSS® Antenna

Directing our energies for you.

Dual Band Antenna
DUO1417-8686



86 & 86 Azimuth Beams

15 & 7 Elevation Beams

14.0 & 16.0 dBi Gain

- PCS & Cellular in One Package
- Independent Control of Electrical Beam Downtilt
- High Power Handling Capability
- Anti-Corrosion Design for Superb IM Performance
- Available With Optional Internal Dual Band Combiner

CSS Antenna, Inc. 2206-D Lakeside Blvd, Edgewood, MD 21040, Tel: 410-612-0080 Fax: 410-612-0336 www.cssantenna.com

Directing our energies for you.

Dual Band Antenna
DUO1417- 8686

Electrical Specifications

	Cellular	PCS
Frequency Range	806-900 MHz	1850-1990 MHz
Gain	14.0 dBi	16..0 dBi
Electrical Downtilt Options	0, 2, 4 or 6 Degrees	0 or 4 Degrees
VSWR	1.35:1 Maximum	1.35:1 Maximum
VSWR (with -i option)	1.40:1 Maximum	1.40:1 Maximum
Front-to-Back at Horizon	> 25 dB	> 30 dB
Upper Side Lobe Suppression	< -17 dB	< -18 dB
Elevation Beam (3-dB Points)	15 Degrees	7 Degrees
Azimuth Beam (3-dB Points)	86 Degrees	86 Degrees
Polarization	Vertical	Vertical
Impedance	50 Ohms	50 Ohms
Power Input Rating	500 CW	200 CW
Intermodulation Specification	<-110dBm at 2x10W	<-110dBm at 2x10W

Mechanical Specifications

Input Connectors (female)	Two Back Mounted 7/16 DIN (Silver Finish)
Antenna Dimensions	48.4 x 14 x 9 Inches (10.7" deep with option 'i')
Antenna Weight	20.3 lbs
Antenna Weight (w/opt. 'i')	32.0 lbs
Bracket Weight	10.5 lbs
Lightning Protection	Direct Ground
RF Distribution	Cellular: Silver Plated Brass PCS: Printed Microstrip Substrate
Radome	Ultra High-Strength Luran
Weatherability	UV Stabilized, ASTM D1925
Radome Water Absorption	ASTM D570, 0.45%
Environmental	MIL-STD-810E
Wind Survival	150 mph
Front Wind Load at 100 mph	124 lbs
Front Flat Plate Equivalent	2.54 sq-ft. (c=2)
Mounting Brackets	Fits 2.5 to 3 Inch Schedule 40 Pipe
Mechanical Downtilt Range	0-12 Degrees in 1 Degree Increments
Clamps/Bolts	Hot Dip Galvanized Steel/Stainless Steel

Ordering Information

Model	Options
DUO1417- 8686-xy	x=Electrical Downtilt at 800 MHz in Degrees (0, 2, 4 or 6) y=Electrical Downtilt at 1900 MHz in Degrees (0 or 4)
DUO1417-8686-xyi	i=Dual Band Combiner included as an internal device

CSS Antenna, Inc.
Tel:410-612-0080 Fax: 410-612-0336
www.cssantenna.com