

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](mailto:siting.council@ct.gov)  
[www.ct.gov/csc](http://www.ct.gov/csc)

May 29, 2012

H. Karina Fournier  
Real Estate Consultant  
New Cingular Wireless PCS, LLC  
960 Turnpike Street, Suite 28  
Canton, MA 02021

RE: **EM-CING-064-120508** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 11 Mountain Road, Hartford, Connecticut.

Dear Ms. Fournier:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Not less than 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated May 8, 2012. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies



Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

A handwritten signature in cursive script that reads "Linda Roberts".

Linda Roberts  
Executive Director

LR/cm

- c: The Honorable Pedro E. Segarra, Mayor, City of Hartford
- David B. Panagore, Chief Operating Officer, City of Hartford
- Roger J. O'Brien, Director of Planning, City of Hartford



**New Cingular Wireless PCS, LLC**  
960 Turnpike Street, Suite 28  
Canton, MA 02021  
Phone: (860) 796-3988  
Fax: (617) 249-0819

**H. Karina Fournier**  
Real Estate Consultant

ORIGINAL

May 8, 2012

Honorable Robert Stein, Chairman,  
and Members of the Connecticut Siting Council  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

RECEIVED  
MAY - 8 2012  
CONNECTICUT  
SITING COUNCIL

RE: Request by New Cingular Wireless PCS, LLC of an approval for an exempt modification application 11 Mountain Road Hartford, CT

Dear Chairman Stein and Members of the Siting Council:

In order to accommodate technological changes, implement Long Term Evolution ("LTE") capabilities, 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 as notification pursuant to R.C.S.A. §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16-50j-72(b) (2).

LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

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

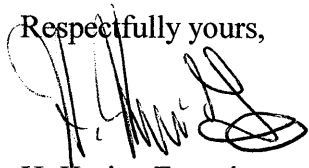
The planned modifications to this facility fall within the activities explicitly provided for in R.C.S.A. §16-50j-72(b)(2).

1. The proposed modification will not result in any increase in the overall height of the existing structure.

2. The proposed modification will not affect ground-mounted equipment and will not require the extension of the site boundaries.
3. The proposed modification will not increase noise levels at the facility by six decibels or more.
4. LTE will utilize additional radio frequencies newly licensed by the FCC for cellular mobile communications. 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).

Respectfully yours,

A handwritten signature in black ink, appearing to read 'H. Karina Fournier', with a large, stylized flourish at the end.

H. Karina Fournier  
Real Estate Consultant

Enclosures



## Exhibit 1



at&t

SITE NUMBER: CT1011

SITE NAME: HARTFORD SOUTH

**PROJECT INFORMATION**

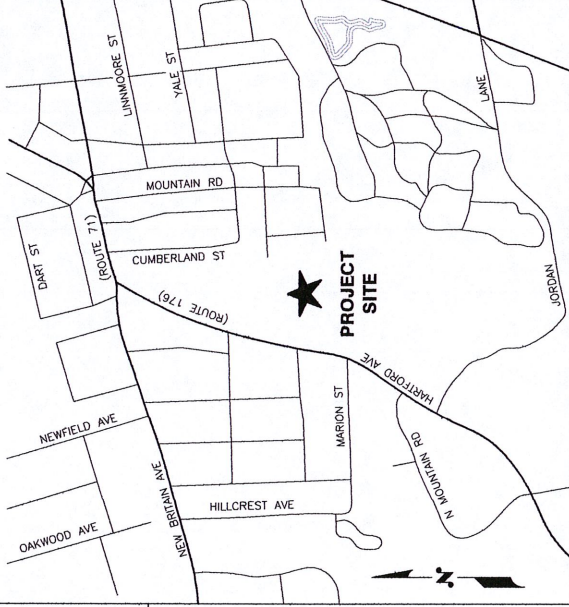
**SCOPE OF WORK:** UNMANNED TELECOMMUNICATIONS FACILITY MODIFICATIONS  
**SITE ADDRESS:** 11 MOUNTAIN ROAD, HARTFORD, CT 06106  
**LONGITUDE:** 41° 43' 35.89" N  
**LONGITUDE:** 72° 42' 29.41" W  
**JURISDICTION:** NATIONAL, STATE & LOCAL CODES OR ORDINANCES  
**CURRENT USE:** TELECOMMUNICATIONS FACILITY  
**PROPOSED USE:** TELECOMMUNICATIONS FACILITY

**DRAWING INDEX**

	REV
T-1 TITLE SHEET	0
GN-1 GENERAL NOTES	0
A-1 EQUIPMENT & COMPOUND PLAN	0
A-2 ELEVATION PLAN	0
A-3 DETAILS	0
G-1 PLUMBING DIAGRAM & GROUNDING DETAILS	0

**VICINITY MAP**

**DIRECTIONS TO SITE:**  
 START OUT GOING NORTHEAST ON ENTERPRISE DR TOWARD CAPITOL BLVD. 0.4 MI. TURN LEFT INTO CAPITAL BLVD. ON THE LEFT TURN LEFT ONTO ENTERPRISE DR. 0.2 MI. TURN LEFT ONTO AIRPORT RD. 0.5 MI. TURN LEFT ONTO BRAINARD RD. 0.2 MI. TURN LEFT ONTO AIRPORT RD. 0.6 MI. AIRPORT RD BECOMES BROWN ST. 0.9 MI. BROWN ST BECOMES LINNMOORE ST. 0.7 MI. TURN LEFT ONTO HARVARD ST. 0.4 MI. TURN LEFT ONTO MOUNTAIN ST. 0.2 MI. MOUNTAIN RD IS ON THE LEFT.



**GENERAL NOTES**

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. THE DESIGN AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY FOR USE BY AT&T PERSONNEL. THE FACILITY IS NOT TO BE OPEN TO THE PUBLIC. BEFORE WORKING ON THIS FACILITY, YOU MUST OBTAIN PERMISSION FROM AT&T. BEFORE WORKING ON THIS FACILITY, YOU MUST OBTAIN PERMISSION FROM AT&T. BEFORE WORKING ON THIS FACILITY, YOU MUST OBTAIN PERMISSION FROM AT&T. BEFORE WORKING ON THIS FACILITY, YOU MUST OBTAIN PERMISSION FROM AT&T.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T REPRESENTATIVE IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL  
 BEFORE YOU DIG  
 CALL TOLL FREE 800-922-4455



UNDERGROUND SERVICE ALERT

**SITE NUMBER:** CT1011  
**SITE NAME:** HARTFORD SOUTH  
 11 MOUNTAIN ROAD  
 HARTFORD, CT 06106  
 HARTFORD COUNTY

**MEXLINK**  
 GLOBAL SERVICES  
 a Unitek GLOBAL SERVICES company  
 800 MARSHALL PHELPS ROAD UNIT # 2A  
 WINDSOR, CT 06095

**Hudson Design Group**  
 140 OSCAR STREET  
 N. ANDOVER, MA 01845  
 TEL: (978) 452-5416  
 FAX: (978) 334-5358

**at&t**  
 500 ENTERPRISE DRIVE, SUITE 3A  
 ROCKY HILL, CT 06067

NO.	DATE	ISSUED FOR REVIEW	DESIGNED BY: RP	DRWN BY: RP
0	04/06/12	ISSUED FOR REVIEW	RP	DC (DPL)
REVISIONS				BY CHK:RPD
SCALE: AS SHOWN				DESIGNED BY: RP
JOB NUMBER: 1011.01				DRWING NUMBER: T-1
TITLE SHEET (L.T.E.)				0



**GROUNDING NOTES**

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPED BY THE AHJ), THE SITE-SPECIFIC LUL, LPI, OR NPFA LIGHTNING PROTECTION CODE, AND GENERAL STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER (ESES)) SHALL BE BONDED TOGETHER AT OR BELOW GRADE BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BITS EQUIPMENT.
5. EACH BITS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES. 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BITS 2 AWG STRANDED COPPER FOR OUTDOOR BITS.
6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER C/JAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING EXCESS THE CONDUIT WITH # 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG, SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50.

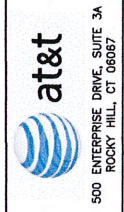
**GENERAL NOTES**

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
  - CONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
  - OWNER - AT&T MOBILITY
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL APPLICABLE REGULATIONS. THE SUBCONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT MUST BE PROVIDED BY THE SUBCONTRACTOR. THE COST OF SUCH MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR ADD NEW TRAYS, AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNERS DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. ALL CONCRETE REPAIRS WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE REPAIRS WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE A572 GR 50 UNLESS OTHERWISE NOTED. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH LIMITS SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T MOBILITY SITES."
17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COMPLETED PRIOR TO THE START OF ANY WORK. ALL WORK SHOULD BE COMPLETED WITHIN AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN TO PROTECT THE PUBLIC AND THE OPERATING EQUIPMENT FROM RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:
  - SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (LAHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED SHALL GOVERN THE DESIGN.
  - BUILDING CODE: 2003 IBC WITH 2005 CT SUPPLEMENT & 2009 CT AMENDMENTS
  - ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
  - LIGHTNING CODE: REFER TO ELECTRICAL DRAWINGS

**ABBREVIATIONS**


AGL	ABOVE GRADE LEVEL	G.C.	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
AWG	AMERICAN WIRE GAUGE	MCB	MASTER GROUND BUS		TO BE DETERMINED
BCW	BARE COPPER WIRE	MIN	MINIMUM	TBD	TO BE REMOVED
BITS	BASE TRANSMITTER STATION	PROPOSED	NEW	TBR	TO BE REMOVED
EG	EXISTING	N.T.S.	NOT TO SCALE	TBR	TO BE REMOVED AND REPLACED
EQ	EQUIPMENT GROUND	REF	REFERENCE	TYP	TYPICAL
EGR	EQUIPMENT GROUND RING	REQ	REQUIRED		

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS FOR CONSTRUCTION, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.



500 ENTERPRISE DRIVE, SUITE 3A  
ROCKY HILL, CT 08067

**SITE NUMBER: CT1011**  
**SITE NAME: HARTFORD SOUTH**  
11 MOUNTAIN ROAD  
HARTFORD, CT 06106  
HARTFORD COUNTY



a Unitek GLOBAL SERVICES company  
800 MARSHALL PHELPS ROAD UNIT# 2A  
WINDSOR, CT 06095

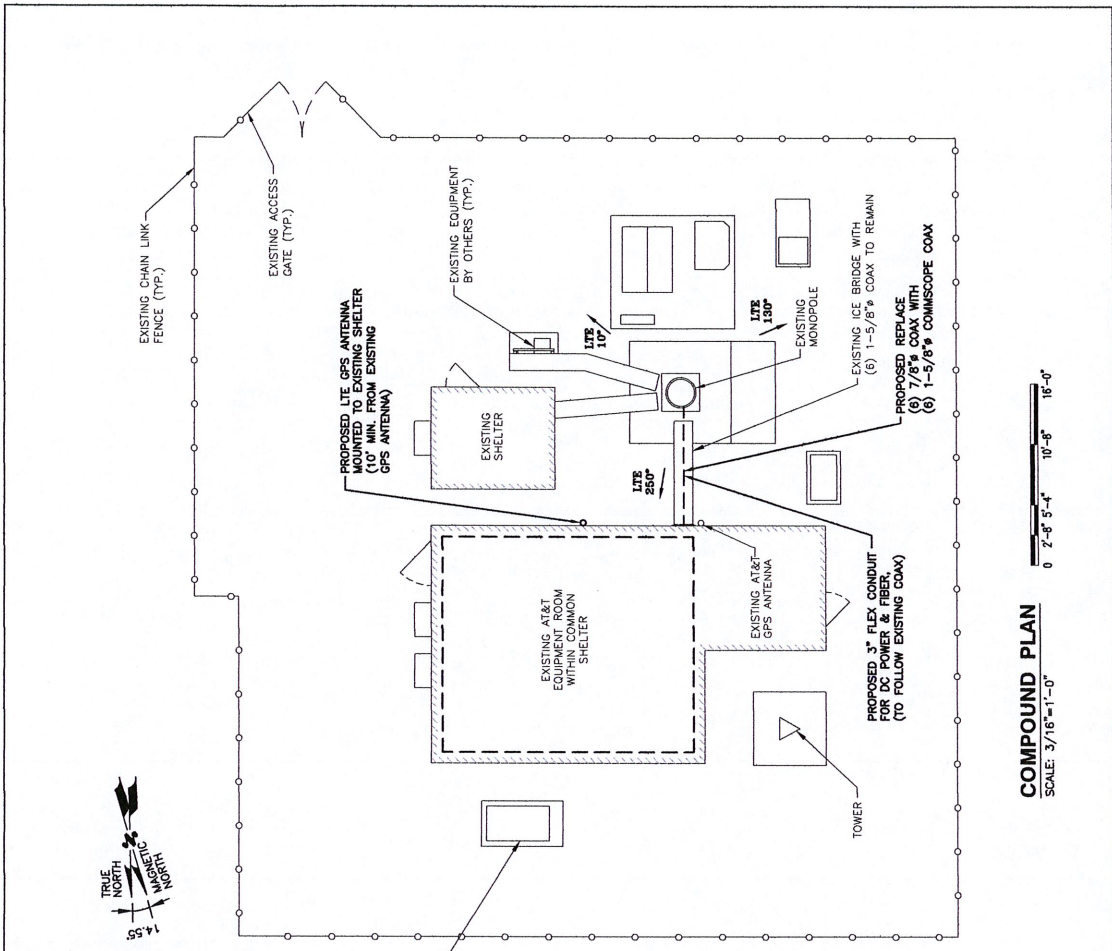


DESIGN GROUP  
BUILDING QUALITY, LIVE 240  
N. ANDOVER, MA 01846  
TEL: (978) 557-5553  
FAX: (978) 334-5586

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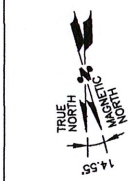
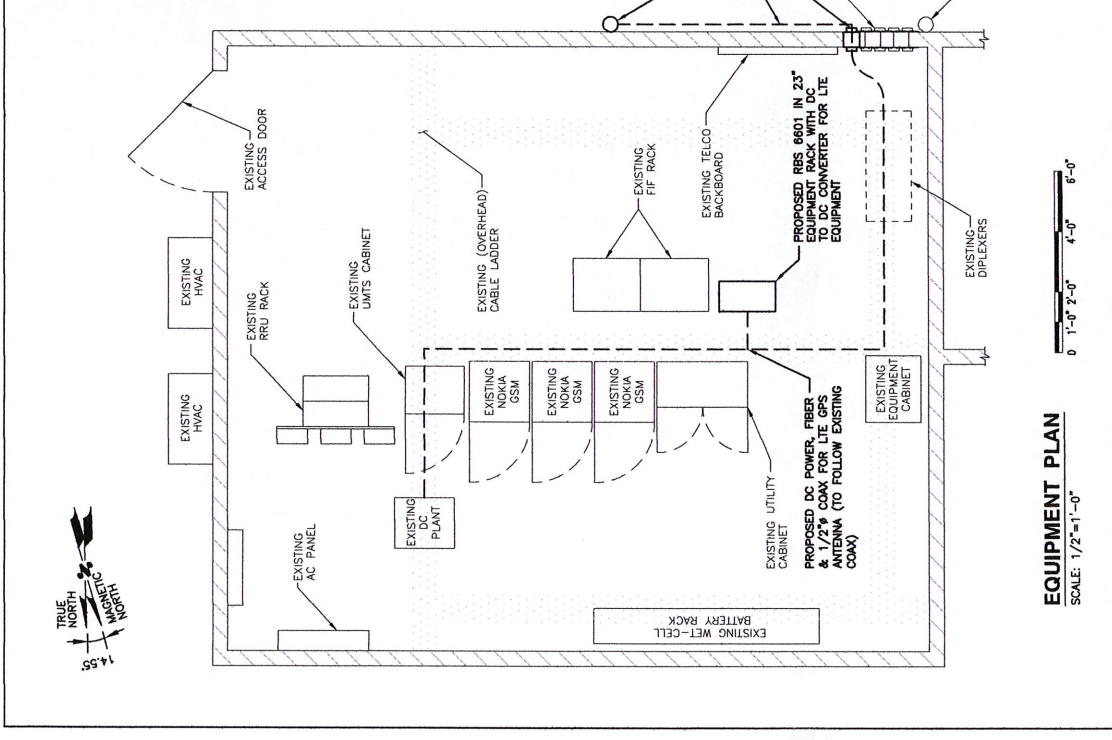
AT&T  
GENERAL NOTES  
(LTC)





**NOTE:**  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

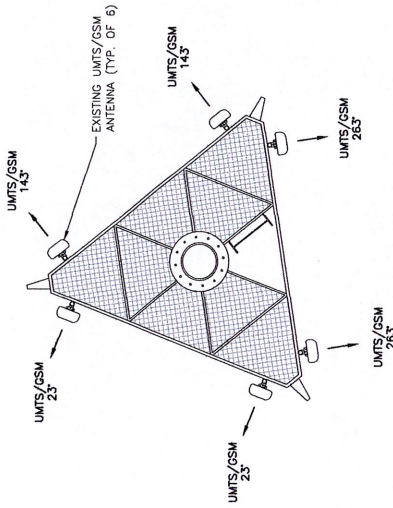
**NOTE:**  
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.



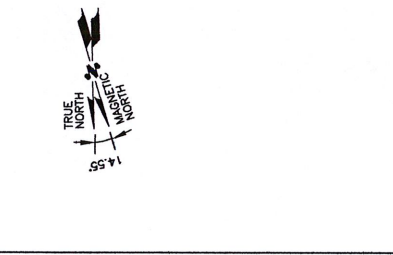
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<b>SITE NUMBER: CT1011</b> <b>SITE NAME: HARTFORD SOUTH</b> 11 MOUNTAIN ROAD HARTFORD, CT 06106 HARTFORD COUNTY		<b>AT&amp;T</b> <b>EQUIPMENT &amp; COMPOUND PLAN (LTE)</b>		<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>REVISIONS</th> <th>BY</th> <th>CHK</th> <th>APP'D</th> </tr> <tr> <td>0</td> <td>03/09/12</td> <td>ISSUED FOR REVIEW</td> <td>RP</td> <td>DC</td> <td>DPH</td> </tr> <tr> <td colspan="3">SCALE: AS SHOWN</td> <td>DESIGNED BY: RP</td> <td>DRAWN BY: RP</td> <td></td> </tr> </table>		NO.	DATE	REVISIONS	BY	CHK	APP'D	0	03/09/12	ISSUED FOR REVIEW	RP	DC	DPH	SCALE: AS SHOWN			DESIGNED BY: RP	DRAWN BY: RP	
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**NOTE:**  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

**NOTE:**  
AN ANALYSIS FOR THE CAPACITY OF THE PROPOSED ANTENNAS TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.



**EXISTING UMTS/GSM ANTENNA PLAN**  
SCALE: N.T.S.



**PROPOSED LTE ANTENNA PLAN**  
SCALE: N.T.S.



**SOUTH ELEVATION**  
SCALE: 1/8"=1'-0"



500 ENTERPRISE DRIVE, SUITE 3A  
ROCKY HILL, CT 06067

**SITE NUMBER: CT1011**  
**SITE NAME: HARTFORD SOUTH**  
11 MOUNTAIN ROAD  
HARTFORD, CT 06106  
HARTFORD COUNTY

**MEXLINK**  
GLOBAL SERVICES  
a Unitek GLOBAL SERVICES company  
800 MARSHALL PHELPS ROAD UNIT# 2A  
WINDSOR, CT 06095

**Hudson**  
Design Group  
1100 GORDON STREET  
N. ANDOVER, MA 01851  
TEL: (978) 552-6455  
FAX: (978) 334-2839

NO.	DATE	REVISIONS	DESIGNED BY: RP	DRAWN BY: RP
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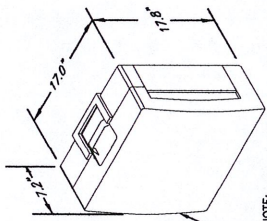
AT&T  
ELEVATION PLAN  
(LITE)

SCALE	AS SHOWN	
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**NOTE:**  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

**NOTE:**  
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.

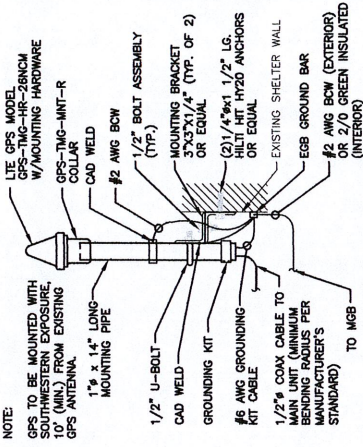


PROPOSED RRH DIMENSIONS: H17.8" x W17.8" x D7.2"

**NOTE:**  
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

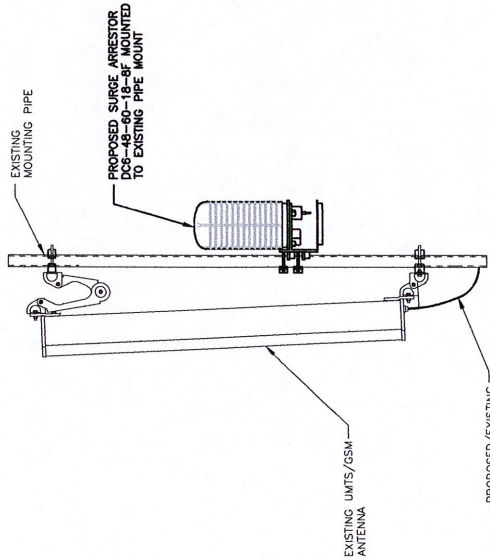
**RRH DETAIL**

SCALE: N.T.S.



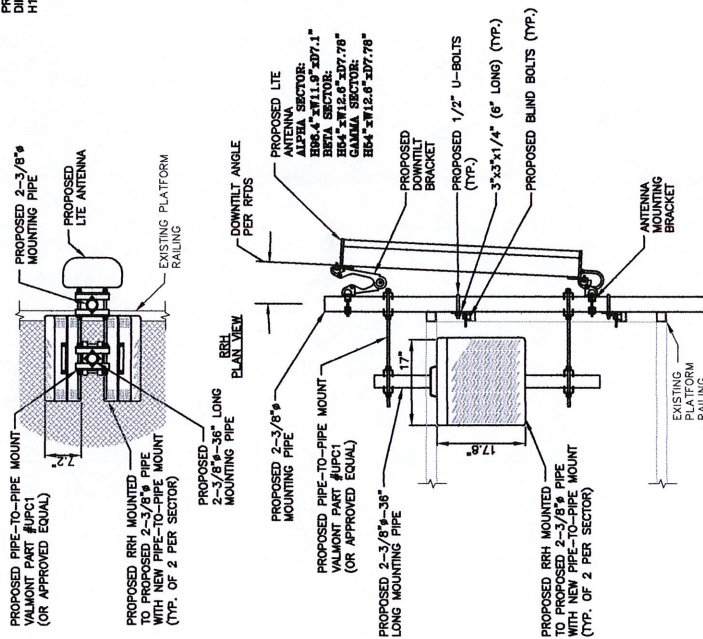
**GPS MOUNTING DETAIL**

SCALE: N.T.S.



**PROPOSED LTE ANTENNA MOUNTING DETAIL**

SCALE: N.T.S.



**PROPOSED RRH & SURGE ARRESTER MOUNTING DETAIL**

SCALE: N.T.S.

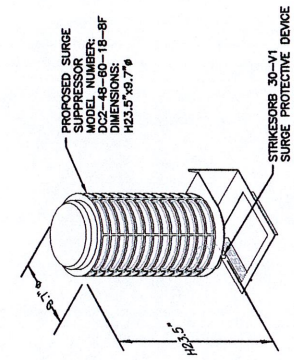
**NOTE:**  
GPS TO BE MOUNTED WITH SOUTHWESTERN EXPOSURE, 10' (MIN.) FROM EXISTING GPS ANTENNA.

**NOTE:**  
GPS TO BE MOUNTED WITH SOUTHWESTERN EXPOSURE, 10' (MIN.) FROM EXISTING GPS ANTENNA.

**NOTE:**  
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

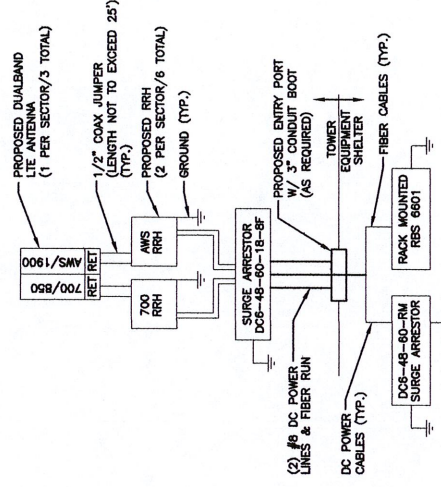
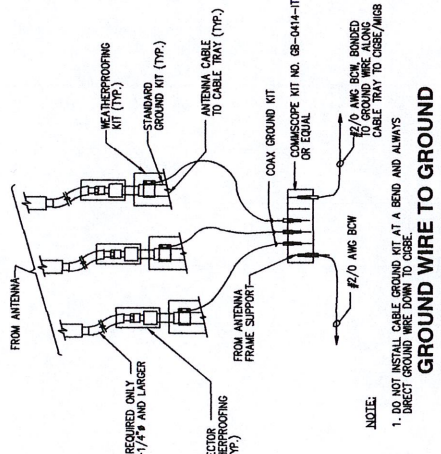
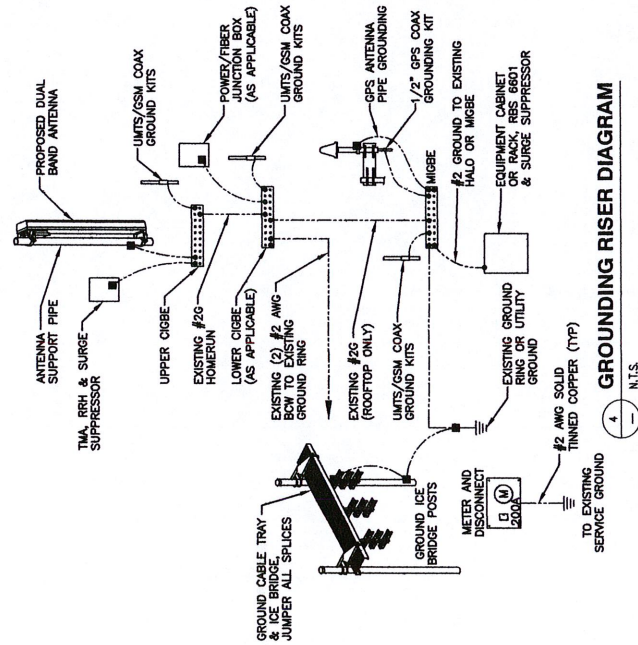
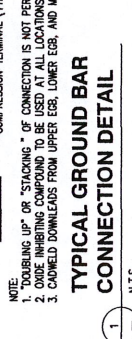
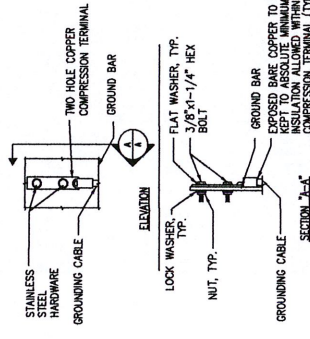
**DC SURGE SUPPRESSOR DETAIL**

SCALE: N.T.S.



<p>1800 GARDNER STREET, SUITE 201 N. ANDOVER, MA 01845 TEL: 978 653-6558 FAX: 978 336-6558</p>		<p>UNITEK GLOBAL SERVICES company 800 MARSHALL PHELPS ROAD UNIT# 2A WINDSOR, CT 06095</p>		<p>SITE NUMBER: CT1011 SITE NAME: HARTFORD SOUTH 111 MOUNTAIN ROAD HARTFORD, CT 06106 HARTFORD COUNTY</p>		<p>500 ENTERPRISE DRIVE, SUITE 3A ROCKY HILL, CT 06067</p>		<p>AT&amp;T</p>	
NO.	DATE	ISSUED FOR	REVIEW	BY	CHK/APP	DESIGNED BY	RP	DRAWN BY	RP
0	03/09/12	ISSUED FOR	REVIEW	RP	DC	DPH			
1	10/11/01								
<p>SCALE: AS SHOWN</p>		<p>SCALE: N.T.S.</p>		<p>SCALE: N.T.S.</p>		<p>SCALE: N.T.S.</p>		<p>SCALE: N.T.S.</p>	
<p>DC NUMBER: 1011.01</p>		<p>DC NUMBER: 1011.01</p>		<p>DC NUMBER: 1011.01</p>		<p>DC NUMBER: 1011.01</p>		<p>DC NUMBER: 1011.01</p>	
<p>DETAILS (L.T.E.)</p>		<p>DETAILS (L.T.E.)</p>		<p>DETAILS (L.T.E.)</p>		<p>DETAILS (L.T.E.)</p>		<p>DETAILS (L.T.E.)</p>	
<p>DRIVING NUMBER: A-4</p>		<p>DRIVING NUMBER: A-4</p>		<p>DRIVING NUMBER: A-4</p>		<p>DRIVING NUMBER: A-4</p>		<p>DRIVING NUMBER: A-4</p>	





WIRELESS SOLUTIONS INC.

NO.	REQ.	PART NO.	DESCRIPTION
1	1	HLSB-0420-S	SOLID GND. BAR (20"x4"x1/4")
2	2		WALL MTS. BRKT.
3	2		INSULATORS
4	4		5/8"x11"x1" H.H.C.S.
5	4		5/8" LOCKWASHER



EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

- SECTION "P" - SURGE PRODUCERS
- CABLE ENTRY PORTS (HATCH PLATES) (#2)
  - GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
  - TELCO GROUND BAR
  - COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
  - +24V POWER SUPPLY RETURN BAR (#2)
  - RECEIVER FRAMES
- SECTION "A" - SURGE ABSORBERS
- INTERIOR GROUND RING (#2)
  - INTERNAL APERTURE GROUND RING (BURIED GROUND RING) (#2)
  - METALLIC COOLING WATER PIPE (IF AVAILABLE) (#2)
  - BUILDING STEEL (IF AVAILABLE) (#2)

1802 GARDEN STREET, SUITE 2-101  
N. ANDOVER, MA 01845  
TEL: (978) 552-8563  
FAX: (978) 338-2558

UnitTek GLOBAL SERVICES company  
800 MARSHALL PHELPS ROAD UNIT# 2A  
WINDSOR, CT 06095

SITE NUMBER: CT-1011  
SITE NAME: HARTFORD SOUTH  
MOUNTAIN ROAD  
HARTFORD, CT 06106  
HARTFORD COUNTY

500 ENTERPRISE DRIVE, SUITE 3A  
ROCKY HILL, CT 06067

PLUMBING DIAGRAM & GROUNDING DETAILS (LIE)

JOB NUMBER: 1011.01

DRAWING NUMBER: G-1

AT&T

DESIGNED BY: RP

SCALE: AS SHOWN

REVISED BY: RP

ISSUED FOR REVIEW: 03/09/12

DATE: 03/09/12

BY: CHM/PTD

REVISIONS:

DC: DPH

RF: DC



## Exhibit 2



**AMERICAN TOWER®**  
CORPORATION

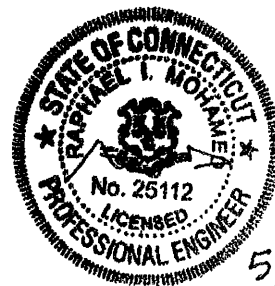
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## Structural Analysis Report

**Structure** : 110 ft ITT Meyer Monopole  
**ATC Site Name** : Hrfr South CT  
**ATC Site Number** : 302481  
**Proposed Carrier** : AT&T Mobility  
**Carrier Site Name** : N/A  
**Carrier Site Number** : N/A  
**County** : Hartford  
**Eng. Number** : 49286821  
**Date** : May 1, 2012  
**Usage** : 79%  
**Portholes Required** : No  
**Result** : Pass

Submitted by:  
Joseph R. Johnston  
Project Engineer

American Tower Engineering Services  
400 Regency Forest Drive  
Cary, NC 27518  
Phone: 919-468-0112



5/1/12



**AMERICAN TOWER®**  
CORPORATION

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## Structural Analysis Report

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Submitted by:  
Joseph R. Johnston  
Project Engineer

**American Tower Engineering Services**  
400 Regency Forest Drive  
Cary, NC 27518  
Phone: 919-468-0112

**Introduction**

The purpose of this report is to summarize results of the structural analysis performed on the 110 ft Monopole located off Mountain Road, Harford, CT 06106, Hartford County (ATC site #302481). The tower was originally designed and manufactured by ITT Meyer (AT-8935 Type D standards, dated April 13, 1984). Tower dimensions have been verified via a structural mapping completed by Smith Cullum, Inc. (Acquisition # CT-0017(A), dated June 6, 2001). The tower has been modified per design by ATC (Job #42719232, dated January 12, 2009 and Job # 43595333, dated July 1, 2009). The tower has also been modified per design by ATC (Job #43930034, dated September 15, 2009) with changes specified on redlined As-Built drawings dated October 30, 2009). Additional recent modifications per design by ATC (Job #44662232, dated March 30, 2010) have also been completed and were considered in this analysis.

**Analysis**

The tower was analyzed using Semaan Engineering Solutions, Inc., Software.

Basic Wind Speed: 95 mph (3-Second Gust)  
 Radial Ice: 50 mph (3-Second Gust) w/ 1-1/4" ice  
 Code: ANSI/TIA-222-G / 2003 IBC with 2005 CT Supplements and 2008 CT Amendments

**Antenna Loads**

The following antenna loads were used in the tower analysis.

**Existing Antennas**

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
110.0	3	Argus LLPX310R	Side Arms	(1) 2 Conduit (3) 1/2 (6) 5/16	Clearwire
	2	DragonWave A-ANT-11G-2.5-C			
	1	DragonWave A-ANT-23G-1-C			
	3	DragonWave Horizon Compact			
	3	NextNet BTS-2500			
87.0	6	CCI DTMA-1819-DD-12-N	Low Profile Platform	(18) 1 5/8	T-Mobile
	3	RFS APX16DWV-16DWV-S-E-ACU			
	3	RFS APXV18-206516S-C			
77.0	6	Antel LPA-185063/8CF 2	T-Arms	(12) 1 5/8	Verizon
	6	Antel LPA-80063/4CF			
75.0	1	Scala 840 10212	Flush	(1) 7/8	Town of W. Hartford
	1	TX RX Systems 421-86A-10-18-12	Flush		
70.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8	Youghioghney
60.0	1	Radio Waves SP2-2.4	Dish	(2) 3/8 (1) 7/8	Town of W. Hartford
	1	Radio/ODU	Flush		
	1	Scala 840 10212	Flush		

**Proposed Antennas**

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
100.0	1	Andrew SBNH-1D6565C	Platform w/ Handrails	(12) 1 5/8 (1) 10 mm (2) 19.7 mm (1) 3 Conduit	AT&T Mobility
	6	Ericsson RRUS 11			
	6	Kathrein 860-10025			
	2	KMW AM-X-CD-16-65-00T-RET			
	6	Powerwave 7770.00			
	6	Powerwave LGP21401			
	3	Powerwave TT19-08BP111-001			
	1	Raycap DC6-48-60-18-8F			

Install proposed coax inside monopole.

**Results**

The maximum structure usage is: 79%

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports **may not** be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Current Analysis Reactions
Moment (ft-kips)	1,403.3
Shear (kips)	18.9

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required. These calculations are located after the software output within this analysis.

**Conclusion**

Based on the analysis results, the structure meets the requirements per ANSI/TIA-222-G, 2003 IBC with 2005 CT Supplements and 2008 CT Amendments standards. The tower and foundation can support the existing and proposed antennas with the TX line distribution as described in this report.

If you have any questions or require additional information, please call 919-466-5030.

## **Standard Conditions**

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

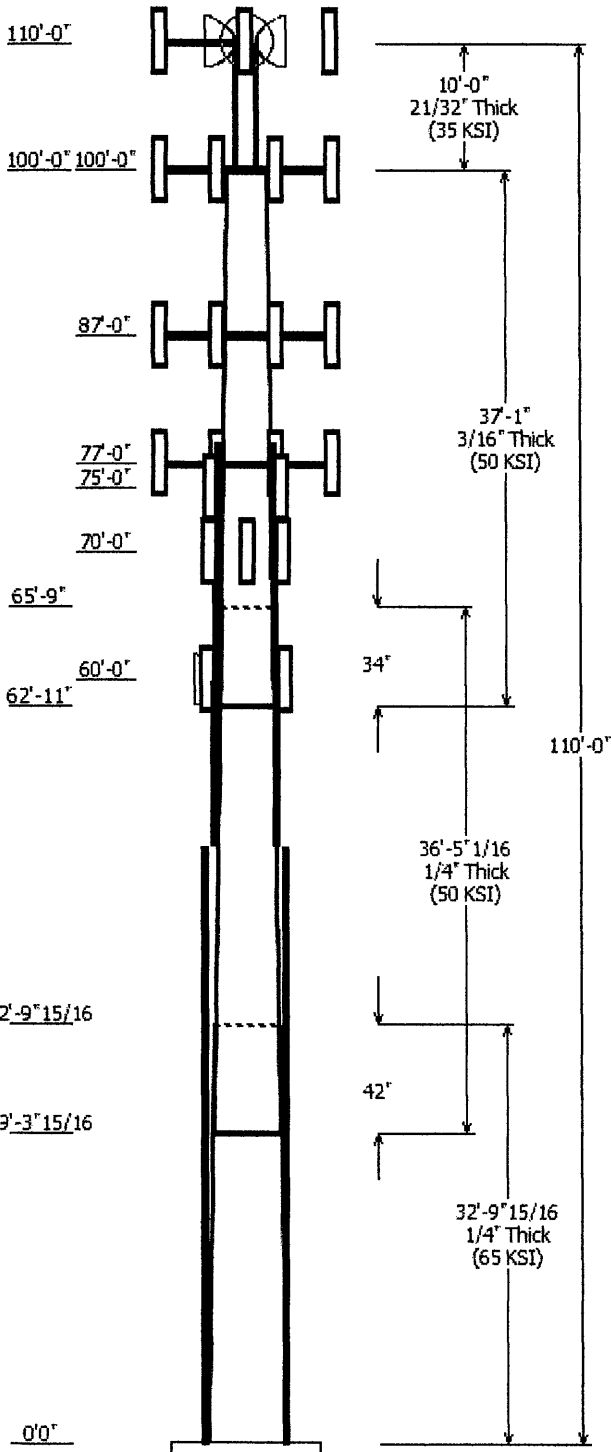
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Job Information			
Pole :	302481	Code :	ANSI/TIA-222 Rev G
Description :	110' ITT Meyer Monopole	Struct Class :	II
Client :	AT&T Mobility	Exposure :	B
Location :	Hrfr South CT	Topo :	1
Shape :	12 Sides	Base Elev (ft):	0.00
Height :	110.00 (ft)	Taper :	0.163751(in/ft)

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Overlap Length (in)	Steel Taper (in/ft)	Steel Grade (ksi)
		Across Top	Flats Bottom				
1	32.830	24.62	30.00	0.250	0.000	0.163751	65
2	36.420	19.73	25.69	0.250 Slip Joint	42.000	0.163751	50
3	37.083	14.50	20.57	0.188 Slip Joint	34.000	0.163751	50
4	10.000	7.650	7.650	0.664 Butt Joint	0.000	0.000000	35

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
110.000	110.000	1	DragonWave A-ANT-23G-1-C	
110.000	110.000	1	Side Arms	
110.000	110.000	3	Argus LLPX310R	
110.000	110.000	3	NextNet BTS-2500	
110.000	110.000	2	DragonWave A-ANT-11G-2.5-C	
110.000	110.000	3	DragonWave Horizon Compact	
100.000	100.000	6	Powerwave 7770.00	
100.000	100.000	1	Andrew SBNH-1D6565C	
100.000	100.000	1	Raycap DC6-48-60-18-8F	
100.000	100.000	2	KMW AM-X-CD-16-65-00T-RET	
100.000	100.000	6	Kathrein 860-10025	
100.000	100.000	6	Ericsson RRUS 11	
100.000	102.000	1	Flat Platform w/ Handrails	
100.000	100.000	3	Powerwave TT19-08BP111-001	
100.000	100.000	6	Powerwave LGP21401	
87.000	87.000	3	RFS APX16DWV-16DWV-S-E	
87.000	87.000	6	CCI DTMA-1819-DD-12-N	
87.000	87.000	3	RFS APXV18-206516S-C	
87.000	87.000	1	Flat Low Profile Platform	
77.000	77.000	6	Antel LPA-80063/4CF	
77.000	77.000	6	Antel LPA-185063/8CF_2	
77.000	77.000	3	Flat T-Arms	
75.000	75.000	1	Scala 840 10212	
75.000	75.000	1	TX RX Systems 421-86A-10-18-	
70.000	70.000	3	RFS APXV18-206517S-C	
60.000	60.000	1	Radio/ODU	
60.000	60.000	1	Radio Waves SP2-2.4	
60.000	60.000	1	Scala 840 10212	

Linear Appurtenance			
Elev (ft)	From To		Exposed To Wind
	From	To	
87.000	110.0	2" Conduit	Yes
5.000	60.000	3/8" Coax	Yes
5.000	60.000	7/8" Coax	Yes
5.000	70.000	1 5/8" Coax	Yes
5.000	75.000	7/8" Coax	Yes
5.000	77.000	1 5/8" Coax	Yes
5.000	87.000	1 5/8" Coax	Yes
5.000	87.000	2" Conduit	Yes
5.000	100.0	1 5/8" Coax	No
5.000	100.0	10 mm Cable	No
5.000	100.0	19.7 mm Cable	No
5.000	100.0	3" Conduit	No



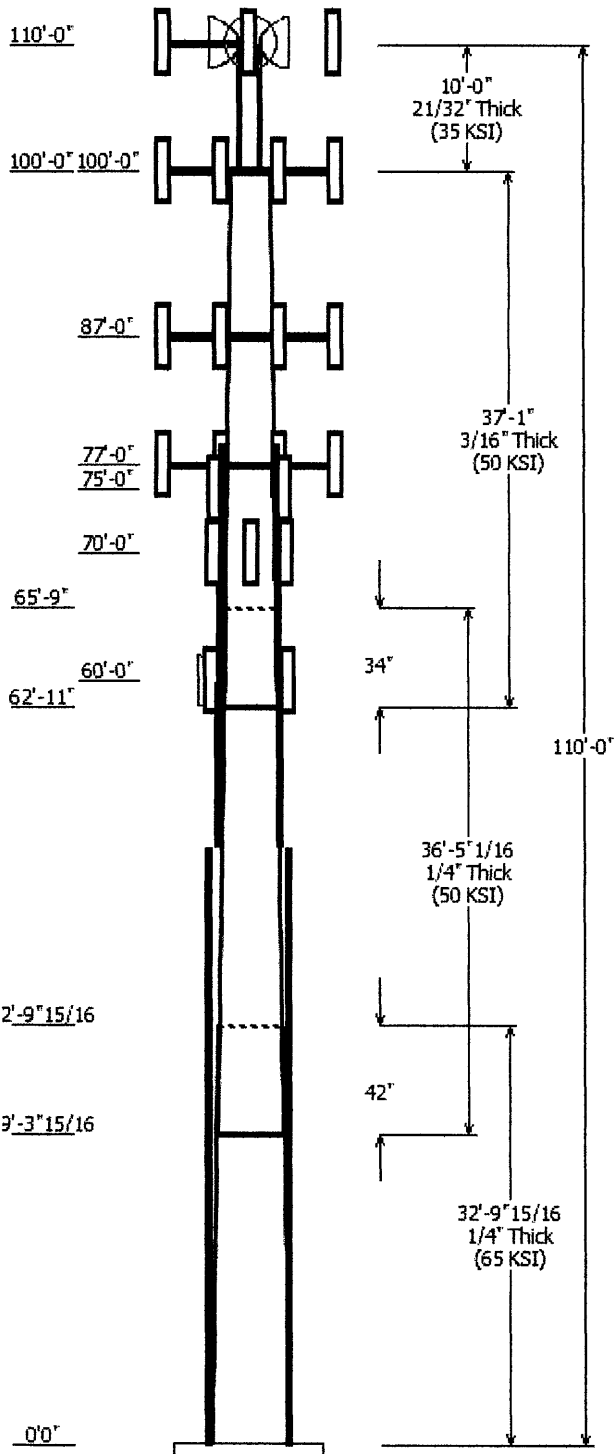


5.000	110.0	1/2" Coax	Yes
5.000	110.0	5/16" Coax	No
0.000	81.000	#20 Dywidag	Yes

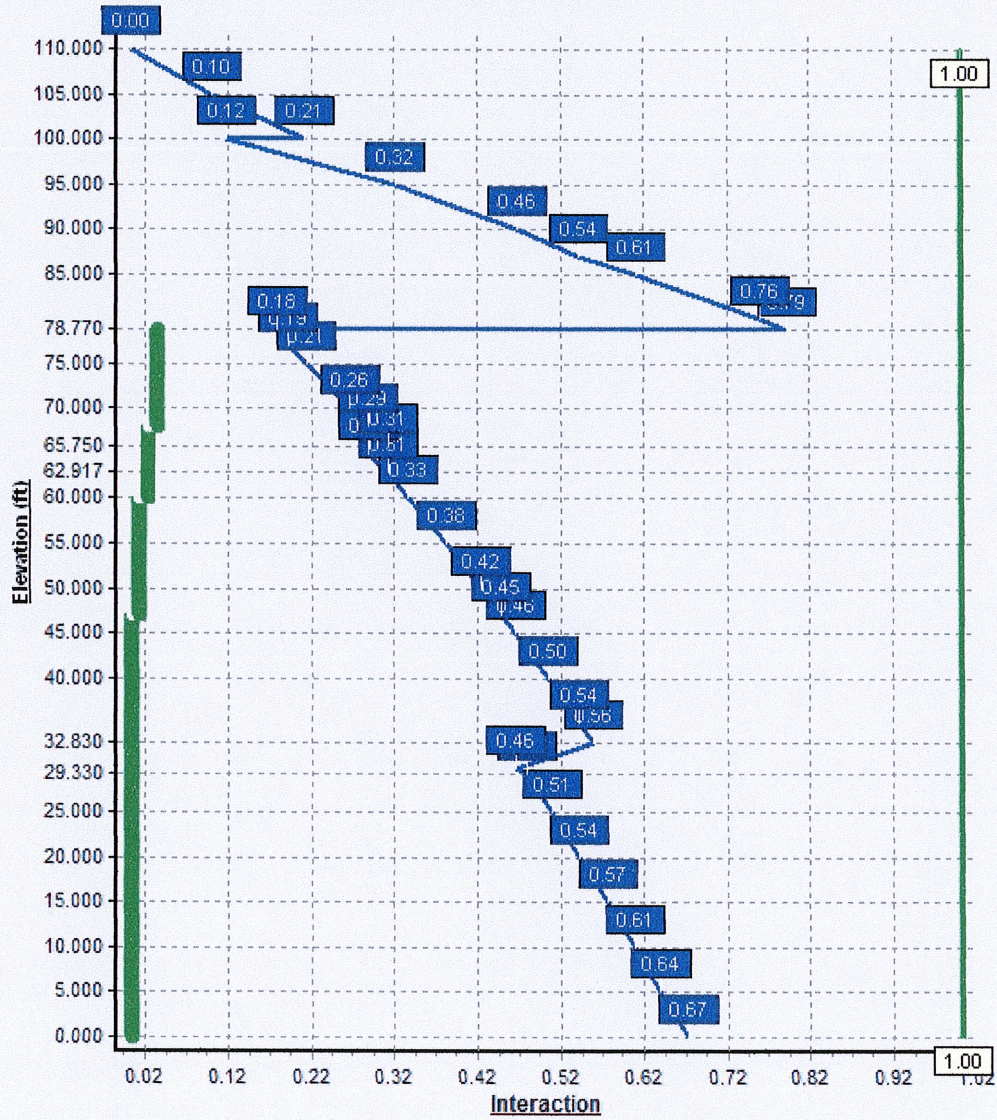
Load Cases	
1.2D + 1.6W	95.00 mph with No Ice
0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice
1.0D + 1.0W	60.00 mph Serviceability

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W	1403.34	18.90	25.87
0.9D + 1.6W	1380.28	18.79	20.71
1.2D + 1.0Di + 1.0Wi	425.43	5.25	69.88
1.0D + 1.0W	352.15	4.82	22.48

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	60.00	5.604	0.827
1.0D + 1.0W	110.00	17.182	1.348
1.0D + 1.0W	110.00	17.182	1.348



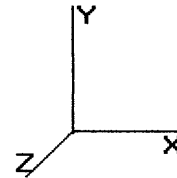
**Load Case : 1.2D + 1.6W**  
**Max Ratio 78.94% at 78.8ft**



Pole : 302481  
 Location : Hrr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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 Page: 1



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### Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Bottom						Top								
						Weight (lb)	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)	
1-12	32.830	0.2500	65		0.00	2,434	30.00	0.00	23.95	2705.5	29.47	120.00	24.62	32.83	19.62	1487.9	23.71	98.50	0.163751	
2-12	36.420	0.2500	50	Slip	42.00	2,241	25.69	29.33	20.49	1693.2	24.86	102.79	19.73	65.75	15.68	759.9	18.47	78.93	0.163751	
3-12	37.083	0.1875	50	Slip	34.00	1,322	20.57	62.92	12.31	652.8	26.72	109.72	14.50	100.00	8.64	225.9	18.04	77.33	0.163751	
4-12	10.000	0.6643	35	Butt	0.00	508	7.650	100.00	14.94	93.1	0.41	11.52	7.650	110.00	14.94	93.1	0.41	11.52	0.000000	
Shaft Weight						6,505														

### Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
110.00	Argus LLPX310R	3	28.60	4.830	0.63	229.34	5.807	0.65	0.000	0.000
110.00	DragonWave A-ANT-11G-2.5-	2	66.10	8.670	0.90	352.77	11.467	0.90	0.000	0.000
110.00	DragonWave A-ANT-23G-1-C	1	15.00	1.610	0.90	72.20	2.836	0.90	0.000	0.000
110.00	DragonWave Horizon	3	10.60	0.430	0.33	72.23	0.903	0.33	0.000	0.000
110.00	NextNet BTS-2500	3	35.00	2.120	0.33	144.63	2.770	0.33	0.000	0.000
110.00	Side Arms	1	40.00	8.500	1.00	94.14	20.005	1.00	0.000	0.000
100.00	Andrew SBNH-1D6565C	1	66.10	11.440	0.84	535.15	14.152	0.84	0.000	0.000
100.00	Ericsson RRUS 11	6	55.00	2.940	0.67	203.05	3.612	0.67	0.000	0.000
100.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	4,279.16	76.033	1.00	0.000	2.000
100.00	Kathrein 860-10025	6	1.10	0.140	0.50	22.73	0.495	0.50	0.000	0.000
100.00	KMW AM-X-CD-16-65-00T-	2	48.50	8.020	0.79	388.18	10.173	0.79	0.000	0.000
100.00	Powerwave 7770.00	6	35.00	5.880	0.77	281.72	7.272	0.77	0.000	0.000
100.00	Powerwave LGP21401	6	14.10	1.290	0.67	81.34	1.896	0.67	0.000	0.000
100.00	Powerwave TT19-08BP111-	3	16.00	0.640	0.50	72.13	1.155	0.50	0.000	0.000
100.00	Raycap DC6-48-60-18-8F	1	31.80	1.470	1.00	201.46	3.302	1.00	0.000	0.000
87.00	CCI DTMA-1819-DD-12-N	6	14.30	0.710	0.33	64.90	1.253	0.33	0.000	0.000
87.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	2,524.67	56.295	1.00	0.000	0.000
87.00	RFS APX16DWV-16DWV-S-E-	3	39.60	6.700	0.60	273.95	7.844	0.62	0.000	0.000
87.00	RFS APXV18-206516S-C	3	18.70	3.620	0.66	184.80	5.183	0.67	0.000	0.000
77.00	Antel LPA-185063/8CF_2	6	9.00	2.960	0.76	179.22	4.353	0.79	0.000	0.000
77.00	Antel LPA-80063/4CF	6	20.00	7.000	0.76	370.77	7.821	0.77	0.000	0.000
77.00	Flat T-Arms	3	250.00	12.900	0.67	576.53	25.677	0.67	0.000	0.000
75.00	Scala 840 10212	1	6.70	2.530	1.00	121.27	3.264	1.00	0.000	0.000
75.00	TX RX Systems 421-86A-10-	1	15.00	2.590	1.00	109.82	3.225	1.00	0.000	0.000
70.00	RFS APXV18-206517S-C	3	26.40	5.160	0.80	238.27	7.137	0.80	0.000	0.000
60.00	Radio Waves SP2-2.4	1	90.00	3.960	1.00	290.64	5.726	1.00	0.000	0.000
60.00	Radio/ODU	1	30.00	1.870	1.00	139.28	2.459	1.00	0.000	0.000
60.00	Scala 840 10212	1	6.70	2.530	1.00	117.70	3.237	1.00	0.000	0.000
Totals		81	6196.20			22,565.39			Number of Loadings :	28

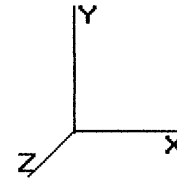
### Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
5.00	110.00	(3) 1/2" Coax	0.00	Y
5.00	110.00	(6) 5/16" Coax	0.00	N
87.00	110.00	(1) 2" Conduit	2.38	Y
5.00	100.00	(12) 1 5/8" Coax	0.00	N
5.00	100.00	(1) 10 mm Cable	0.00	N

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:29 PM  
 Page: 2



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5.00	100.00	(2)	19.7 mm Cable	0.00	N
5.00	100.00	(1)	3" Conduit	0.00	N
5.00	87.00	(18)	1 5/8" Coax	9.90	Y
5.00	87.00	(1)	2" Conduit	0.00	Y
0.00	81.00	(4)	#20 Dywidag	0.00	Y
5.00	77.00	(12)	1 5/8" Coax	3.96	Y
5.00	75.00	(1)	7/8" Coax	0.00	Y
5.00	70.00	(6)	1 5/8" Coax	0.00	Y
5.00	60.00	(2)	3/8" Coax	0.00	Y
5.00	60.00	(1)	7/8" Coax	0.00	Y

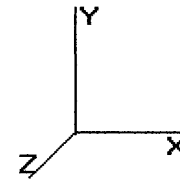
### Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	— Intermediate Connections —		Connectors	Continuation?	
						Description	Spacing (in)			Len (in)
0.00	47.00	4	SOL #20 All Thread	80	2.22	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	No
47.00	60.00	4	SOL #20 All Thread	80	2.22	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes
60.00	68.00	4	SOL #20 All Thread	80	2.22	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes
68.00	78.77	4	SOL #20 All Thread	80	2.22	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes

Pole : 302481  
 Location : Hfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
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Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
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 Base Elev : 0.000 (ft)

5/1/2012 2:37:29 PM  
 Page: 3



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**Segment Properties** (Max Len : 5 ft)

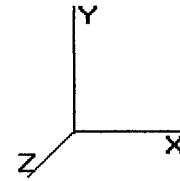
Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	S (in3)	Weight (lb)	Additional Reinforcing		
											Area (in^2)	Ix (in^4)	Weight (lb)
0.00		0.2500	30.000	23.949	2,705.5	29.47	120.00	72.6	174.2	0.0	19.64	3,357	0.0
5.00		0.2500	29.181	23.290	2,488.2	28.60	116.72	73.5	164.7	401.9	19.64	3,210	334.0
10.00		0.2500	28.362	22.631	2,282.9	27.72	113.45	74.5	155.5	390.6	19.64	3,067	334.0
15.00		0.2500	27.544	21.971	2,089.2	26.84	110.17	75.4	146.5	379.4	19.64	2,927	334.0
20.00		0.2500	26.725	21.312	1,906.7	25.96	106.90	76.4	137.8	368.2	19.64	2,790	334.0
25.00		0.2500	25.906	20.653	1,735.2	25.09	103.62	77.4	129.4	357.0	19.64	2,656	334.0
29.33	Bot - Section 2	0.2500	25.197	20.083	1,595.3	24.33	100.79	78.2	122.3	300.1	19.64	2,543	289.2
30.00		0.2500	25.087	19.994	1,574.4	24.21	100.35	78.3	121.2	92.3	19.64	2,605	44.8
32.83	Top - Section 1	0.2500	25.124	20.024	1,581.3	24.25	100.50	62.7	121.6	385.4	19.64	2,531	189.0
35.00		0.2500	24.769	19.738	1,514.5	23.87	99.07	63.0	118.1	146.8	19.64	2,476	145.0
40.00		0.2500	23.950	19.078	1,367.8	22.99	95.80	63.0	110.3	330.2	19.64	2,350	334.0
45.00		0.2500	23.131	18.419	1,230.9	22.11	92.52	63.0	102.8	319.0	19.64	2,227	334.0
47.00	Reinf. Top Reinf	0.2500	22.804	18.156	1,178.8	21.76	91.21	63.0	99.9	124.5	19.64	2,179	133.6
50.00		0.2500	22.312	17.760	1,103.4	21.23	89.25	63.0	95.5	183.3	19.64	2,108	200.4
55.00		0.2500	21.494	17.101	985.1	20.36	85.97	63.0	88.5	296.6	19.64	1,992	334.0
60.00	Reinf. Top Reinf	0.2500	20.675	16.442	875.5	19.48	82.70	63.0	81.8	285.4	19.64	1,879	334.0
62.92	Bot - Section 3	0.2500	20.197	16.058	815.5	18.97	80.79	63.0	78.0	161.3	19.64	1,815	194.8
65.00		0.2500	19.856	15.783	774.4	18.60	79.42	63.0	75.3	199.4	19.64	1,820	139.2
65.75	Top - Section 2	0.1875	20.108	12.027	609.2	26.06	107.24	61.4	58.5	70.9	19.64	1,803	50.1
68.00	Reinf. Top Reinf	0.1875	19.740	11.805	576.0	25.53	105.28	61.8	56.4	91.2	19.64	1,755	150.3
70.00		0.1875	19.412	11.607	547.6	25.06	103.53	62.1	54.5	79.7	19.64	1,712	133.6
75.00		0.1875	18.594	11.113	480.5	23.89	99.17	63.0	49.9	193.3	19.64	1,608	334.0
77.00		0.1875	18.266	10.915	455.3	23.42	97.42	63.0	48.2	75.0	19.64	1,567	133.6
78.77	Reinf. Top	0.1875	17.976	10.740	433.8	23.01	95.87	63.0	46.6	65.2	19.64	1,531	118.2
80.00		0.1875	17.775	10.618	419.2	22.72	94.80	63.0	45.6	44.7			
85.00		0.1875	16.956	10.124	363.4	21.55	90.43	63.0	41.4	176.5			
87.00		0.1875	16.629	9.926	342.5	21.08	88.69	63.0	39.8	68.2			
90.00		0.1875	16.137	9.630	312.7	20.38	86.07	63.0	37.4	99.8			
95.00		0.1875	15.319	9.135	267.0	19.21	81.70	63.0	33.7	159.6			
100.0	Top - Section 3	0.1875	14.500	8.641	225.9	18.04	77.33	63.0	30.1	151.2			
100.0	Bot - Section 4	0.6643	7.650	14.943	93.1	0.41	11.52	44.1	23.5				
105.0		0.6643	7.650	14.943	93.1	0.41	11.52	44.1	23.5	254.2			
110.0		0.6643	7.650	14.943	93.1	0.41	11.52	44.1	23.5	254.2			
										6,505.0	5,261.8		



Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:29 PM  
 Page: 4



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<b>Load Case:</b> 1.2D + 1.6W	95.00 mph with No Ice	23 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

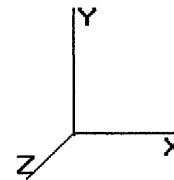
**Shaft Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	205.71	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	200.10	1.000	0.000	5.00	12.764	12.76	345.2	0.0	816.2
10.00		1.00	0.70	15.364	16.90	194.48	1.200 *	0.000	5.00	12.411	14.89	402.7	0.0	802.8
15.00		1.00	0.70	15.364	16.90	188.87	1.200 *	0.000	5.00	12.058	14.47	391.3	0.0	789.3
20.00		1.00	0.70	15.364	16.90	183.25	1.200 *	0.000	5.00	11.705	14.05	379.8	0.0	775.9
25.00		1.00	0.70	15.364	16.90	177.64	1.200 *	0.000	5.00	11.352	13.62	368.4	0.0	762.4
29.33	Bot - Section 2	1.00	0.70	15.364	16.90	172.78	1.200 *	0.000	4.33	9.545	11.45	309.7	0.0	649.3
30.00		1.00	0.70	15.377	16.91	172.10	1.200 *	0.000	0.67	1.482	1.78	48.1	0.0	155.5
32.83	Top - Section 1	1.00	0.71	15.778	17.35	171.11	1.200 *	0.000	2.83	6.190	7.43	206.3	0.0	651.5
35.00		1.00	0.73	16.070	17.67	173.69	1.200 *	0.000	2.17	4.670	5.60	158.5	0.0	321.1
40.00		1.00	0.76	16.694	18.36	171.19	1.200 *	0.000	5.00	10.508	12.61	370.5	0.0	730.2
45.00		1.00	0.78	17.266	18.99	168.14	1.200 *	0.000	5.00	10.155	12.19	370.3	0.0	716.8
47.00	Reinf. Top Reinf Bottom	1.00	0.79	17.482	19.23	166.79	1.200 *	0.000	2.00	3.963	4.76	146.3	0.0	282.9
50.00		1.00	0.81	17.793	19.57	164.65	1.200 *	0.000	3.00	5.838	7.01	219.4	0.0	420.4
55.00		1.00	0.83	18.285	20.11	160.78	1.200 *	0.000	5.00	9.448	11.34	364.9	0.0	689.9
60.00	Reinf. Top Reinf	1.00	0.85	18.745	20.61	156.59	1.200 *	0.000	5.00	9.095	10.91	360.1	0.0	676.4
62.92	Bot - Section 3	1.00	0.86	19.001	20.90	154.01	1.200 *	0.000	2.92	5.142	6.17	206.4	0.0	388.3
65.00		1.00	0.87	19.179	21.09	152.12	1.200 *	0.000	2.08	3.667	4.40	148.5	0.0	378.4
65.75	Top - Section 2	1.00	0.87	19.242	21.16	151.43	1.200 *	0.000	0.75	1.305	1.57	53.0	0.0	135.2
68.00	Reinf. Top Reinf Bottom	1.00	0.88	19.427	21.37	152.21	1.200 *	0.000	2.25	3.868	4.64	158.7	0.0	259.8
70.00	Appertunance(s)	1.00	0.89	19.589	21.54	150.30	1.200 *	0.000	2.00	3.378	4.05	139.7	0.0	229.2
75.00	Appertunance(s)	1.00	0.91	19.979	21.97	145.39	1.200 *	0.000	5.00	8.197	9.84	345.9	0.0	565.9
77.00	Appertunance(s)	1.00	0.91	20.130	22.14	143.37	1.200 *	0.000	2.00	3.180	3.82	135.2	0.0	223.5
78.77	Reinf. Top	1.00	0.92	20.261	22.28	141.55	1.200 *	0.000	1.77	2.767	3.32	118.4	0.0	196.5
80.00		1.00	0.92	20.351	22.38	140.27	1.200 *	0.000	1.23	1.897	2.28	81.5	0.0	53.6
85.00		1.00	0.94	20.706	22.77	134.98	1.200 *	0.000	5.00	7.491	8.99	327.6	0.0	211.7
87.00	Appertunance(s)	1.00	0.95	20.844	22.92	132.81	1.200 *	0.000	2.00	2.897	3.48	127.6	0.0	81.9
90.00		1.00	0.95	21.047	23.15	129.51	1.121 *	0.000	3.00	4.240	4.75	176.1	0.0	119.8
95.00		1.00	0.97	21.375	23.51	123.89	1.138 *	0.000	5.00	6.785	7.72	290.6	0.0	191.6
100.0	Top - Section 3	1.00	0.98	21.690	23.86	118.13	1.163 *	0.000	5.00	6.431	7.48	285.4	0.0	181.5
105.0		1.00	1.00	21.995	24.19	62.765	1.200 *	0.000	5.00	3.300	3.96	153.3	0.0	305.1
110.0	Appertunance(s)	1.00	1.01	22.289	24.51	63.183	1.200 *	0.000	5.00	3.300	3.96	155.3	0.0	305.1
* = Cf Adjusted By Linear Load Ra Effect								Totals:	110.00			7,344.7	0.0	13,067.8

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:30 PM  
 Page: 5



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<b>Load Case:</b> 1.2D + 1.6W	<b>95.00 mph with No Ice</b>	<b>23 Iterations</b>
<b>Gust Response Factor:</b> 1.10		<b>Wind Importance Factor:</b> 1.00
<b>Dead Load Factor:</b> 1.20		
<b>Wind Load Factor:</b> 1.60		

**Discrete Appurtenance Segment Forces (Factored)**

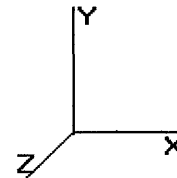
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
60.00	Radio Waves SP2-2.4	1	18.745	20.619	1.00	1.00	3.96	0.000	0.000	130.64	0.00	0.00	108.00
60.00	Radio/ODU	1	18.745	20.619	1.00	1.00	1.87	0.000	0.000	61.69	0.00	0.00	36.00
60.00	Scala 840 10212	1	18.745	20.619	1.00	1.00	2.53	0.000	0.000	83.46	0.00	0.00	8.04
70.00	RFS APXV18-206517S-	3	19.589	21.548	0.80	1.00	12.38	0.000	0.000	426.96	0.00	0.00	95.04
75.00	Scala 840 10212	1	19.979	21.977	1.00	1.00	2.53	0.000	0.000	88.96	0.00	0.00	8.04
75.00	TX RX Systems 421-86	1	19.979	21.977	1.00	1.00	2.59	0.000	0.000	91.07	0.00	0.00	18.00
77.00	Antel LPA-185063/8CF	6	20.130	22.143	0.61	0.80	10.80	0.000	0.000	382.56	0.00	0.00	64.80
77.00	Antel LPA-80063/4CF	6	20.130	22.143	0.61	0.80	25.54	0.000	0.000	904.70	0.00	0.00	144.00
77.00	Flat T-Arms	3	20.130	22.143	0.50	0.75	19.45	0.000	0.000	688.97	0.00	0.00	900.00
87.00	CCI DTMA-1819-DD-12-	6	20.844	22.929	0.26	0.80	1.12	0.000	0.000	41.26	0.00	0.00	102.96
87.00	Flat Low Profile Pla	1	20.844	22.929	1.00	1.00	26.10	0.000	0.000	957.51	0.00	0.00	1,800.00
87.00	RFS APX16DWV-	3	20.844	22.929	0.48	0.80	9.65	0.000	0.000	353.95	0.00	0.00	142.56
87.00	RFS APXV18-206516S-	3	20.844	22.929	0.53	0.80	5.73	0.000	0.000	210.36	0.00	0.00	67.32
100.0	Andrew SBNH-	1	21.690	23.860	0.63	0.75	7.21	0.000	0.000	275.14	0.00	0.00	79.32
100.0	Ericsson RRUS 11	6	21.690	23.860	0.50	0.75	8.86	0.000	0.000	338.39	0.00	0.00	396.00
100.0	Flat Platform w/ Han	1	21.814	23.995	1.00	1.00	42.40	0.000	2.000	1,627.81	0.00	3,255.62	2,400.00
100.0	Kathrein 860-10025	6	21.690	23.860	0.38	0.75	0.31	0.000	0.000	12.03	0.00	0.00	7.92
100.0	KMW AM-X-CD-16-65-	2	21.690	23.860	0.59	0.75	9.50	0.000	0.000	362.81	0.00	0.00	116.40
100.0	Powerwave 7770.00	6	21.690	23.860	0.58	0.75	20.37	0.000	0.000	777.79	0.00	0.00	252.00
100.0	Powerwave LCP21401	6	21.690	23.860	0.50	0.75	3.89	0.000	0.000	148.48	0.00	0.00	101.52
100.0	Powerwave TT19-	3	21.690	23.860	0.38	0.75	0.72	0.000	0.000	27.49	0.00	0.00	57.60
100.0	Raycap DC6-48-60-18-	1	21.690	23.860	0.75	0.75	1.10	0.000	0.000	42.09	0.00	0.00	38.16
110.0	Argus LLPX310R	3	22.289	24.518	0.50	0.80	7.30	0.000	0.000	286.49	0.00	0.00	102.96
110.0	DragonWave A-ANT-	2	22.289	24.518	0.72	0.80	12.48	0.000	0.000	489.77	0.00	0.00	158.64
110.0	DragonWave A-ANT-	1	22.289	24.518	0.72	0.80	1.16	0.000	0.000	45.47	0.00	0.00	18.00
110.0	DragonWave Horizon	3	22.289	24.518	0.26	0.80	0.34	0.000	0.000	13.36	0.00	0.00	38.16
110.0	NextNet BTS-2500	3	22.289	24.518	0.26	0.80	1.68	0.000	0.000	65.87	0.00	0.00	126.00
110.0	Side Arms	1	22.289	24.518	1.00	1.00	8.50	0.000	0.000	333.45	0.00	0.00	48.00
										<b>9,268.51</b>			<b>7,435.44</b>



Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:30 PM  
 Page : 6



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**Load Case:** 1.2D + 1.6W      95.00 mph with No Ice      23 Iterations

**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00

**Dead Load Factor:** 1.20

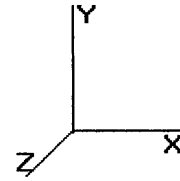
**Wind Load Factor:** 1.60

**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.000	0.000	0.00	0.00
10.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	2.70
10.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.465	0.000	66.93	88.55
10.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	21.90
10.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.465	0.000	53.54	59.03
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	1.98
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	29.52
10.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	0.96
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	1.98
15.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	2.70
15.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.479	0.000	66.93	88.55
15.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	21.90
15.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.479	0.000	53.54	59.03
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	1.98
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	29.52
15.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	0.96
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	1.98
20.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	2.70
20.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.493	0.000	66.93	88.55
20.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	21.90
20.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.493	0.000	53.54	59.03
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	1.98
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	29.52
20.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	0.96
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	1.98
25.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	2.70
25.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.509	0.000	66.93	88.55
25.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	21.90
25.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.509	0.000	53.54	59.03
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	1.98
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	29.52
25.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	0.96
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	1.98
29.33	(3) 1/2" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	2.34
29.33	(18) 1 5/8" Coax	Yes	4.33	0.600	9.90	3.57	2.14	15.364	0.524	0.000	57.96	76.68
29.33	(1) 2" Conduit	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	18.96
29.33	(4) #20 Dywidag	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	0.00
29.33	(12) 1 5/8" Coax	Yes	4.33	1.200	3.96	1.43	1.71	15.364	0.524	0.000	46.37	51.12
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	1.71
29.33	(6) 1 5/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	25.56
29.33	(2) 3/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	0.83
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	1.71
30.00	(3) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.36
30.00	(18) 1 5/8" Coax	Yes	0.67	0.600	9.90	0.55	0.33	15.377	0.532	0.000	8.98	11.87
30.00	(1) 2" Conduit	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	2.94
30.00	(4) #20 Dywidag	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	0.67	1.200	3.96	0.22	0.27	15.377	0.532	0.000	7.18	7.91

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:30 PM  
 Page: 7

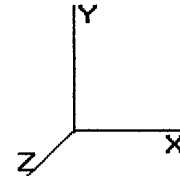
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<b>Load Case: 1.2D + 1.6W</b>	<b>95.00 mph with No Ice</b>	<b>23 Iterations</b>
<b>Gust Response Factor : 1.10</b>		<b>Wind Importance Factor : 1.00</b>
<b>Dead Load Factor : 1.20</b>		
<b>Wind Load Factor : 1.60</b>		

30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.27
30.00	(6) 1 5/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	3.96
30.00	(2) 3/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.13
30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.27
32.83	(3) 1/2" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	1.53
32.83	(18) 1 5/8" Coax	Yes	2.83	0.600	9.90	2.33	1.40	15.778	0.539	0.000	38.90	50.12
32.83	(1) 2" Conduit	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	12.39
32.83	(4) #20 Dywidag	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	0.00
32.83	(12) 1 5/8" Coax	Yes	2.83	1.200	3.96	0.93	1.12	15.778	0.539	0.000	31.12	33.41
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	1.12
32.83	(6) 1 5/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	16.71
32.83	(2) 3/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	0.54
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	1.12
35.00	(3) 1/2" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	1.17
35.00	(18) 1 5/8" Coax	Yes	2.17	0.600	9.90	1.79	1.07	16.070	0.537	0.000	30.38	38.43
35.00	(1) 2" Conduit	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	9.51
35.00	(4) #20 Dywidag	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.00
35.00	(12) 1 5/8" Coax	Yes	2.17	1.200	3.96	0.72	0.86	16.070	0.537	0.000	24.30	25.62
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.86
35.00	(6) 1 5/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	12.81
35.00	(2) 3/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.42
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.86
40.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	2.70
40.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	16.694	0.550	0.000	72.72	88.55
40.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	21.90
40.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	0.00
40.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	16.694	0.550	0.000	58.18	59.03
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	1.98
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	29.52
40.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	0.96
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	1.98
45.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	2.70
45.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	17.266	0.569	0.000	75.21	88.55
45.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	21.90
45.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	0.00
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.266	0.569	0.000	60.17	59.03
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	1.98
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	29.52
45.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	0.96
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	1.98
47.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	1.08
47.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	17.482	0.583	0.000	30.46	35.42
47.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	8.76
47.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.00
47.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	17.482	0.583	0.000	24.37	23.61
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.79
47.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	11.81
47.00	(2) 3/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.38
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.79
50.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	1.62
50.00	(18) 1 5/8" Coax	Yes	3.00	0.600	9.90	2.47	1.48	17.793	0.593	0.000	46.51	53.13
50.00	(1) 2" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	13.14
50.00	(4) #20 Dywidag	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	0.00
50.00	(12) 1 5/8" Coax	Yes	3.00	1.200	3.96	0.99	1.19	17.793	0.593	0.000	37.20	35.42
50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	1.19
50.00	(6) 1 5/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	17.71
50.00	(2) 3/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	0.58

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:30 PM  
 Page: 8

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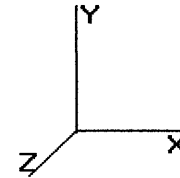
<b>Load Case: 1.2D + 1.6W</b>	<b>95.00 mph with No Ice</b>	<b>23 Iterations</b>
<b>Gust Response Factor : 1.10</b>		<b>Wind Importance Factor : 1.00</b>
<b>Dead Load Factor : 1.20</b>		
<b>Wind Load Factor : 1.60</b>		

50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	1.19
55.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	2.70
55.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	18.285	0.611	0.000	79.65	88.55
55.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	21.90
55.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	0.00
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	18.285	0.611	0.000	63.72	59.03
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	1.98
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	29.52
55.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	0.96
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	1.98
60.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	2.70
60.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	18.745	0.635	0.000	81.65	88.55
60.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	21.90
60.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	18.745	0.635	0.000	65.32	59.03
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	1.98
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	29.52
60.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	0.96
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	1.98
62.92	(3) 1/2" Coax	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	1.57
62.92	(18) 1 5/8" Coax	Yes	2.92	0.600	9.90	2.41	1.44	19.001	0.655	0.000	48.28	51.65
62.92	(1) 2" Conduit	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	12.77
62.92	(4) #20 Dywidag	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	0.00
62.92	(12) 1 5/8" Coax	Yes	2.92	1.200	3.96	0.96	1.15	19.001	0.655	0.000	38.62	34.43
62.92	(1) 7/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	1.15
62.92	(6) 1 5/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	17.22
65.00	(3) 1/2" Coax	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	1.13
65.00	(18) 1 5/8" Coax	Yes	2.08	0.600	9.90	1.72	1.03	19.179	0.668	0.000	34.81	36.90
65.00	(1) 2" Conduit	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	9.13
65.00	(4) #20 Dywidag	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	0.00
65.00	(12) 1 5/8" Coax	Yes	2.08	1.200	3.96	0.69	0.83	19.179	0.668	0.000	27.85	24.60
65.00	(1) 7/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	0.83
65.00	(6) 1 5/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	12.30
65.75	(3) 1/2" Coax	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	0.40
65.75	(18) 1 5/8" Coax	Yes	0.75	0.600	9.90	0.62	0.37	19.242	0.676	0.000	12.57	13.28
65.75	(1) 2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	3.28
65.75	(4) #20 Dywidag	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	0.00
65.75	(12) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.25	0.30	19.242	0.676	0.000	10.06	8.85
65.75	(1) 7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	0.30
65.75	(6) 1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	4.43
68.00	(3) 1/2" Coax	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	1.22
68.00	(18) 1 5/8" Coax	Yes	2.25	0.600	9.90	1.86	1.11	19.427	0.672	0.000	38.08	39.85
68.00	(1) 2" Conduit	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	9.86
68.00	(4) #20 Dywidag	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	0.00
68.00	(12) 1 5/8" Coax	Yes	2.25	1.200	3.96	0.74	0.89	19.427	0.672	0.000	30.47	26.57
68.00	(1) 7/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	0.89
68.00	(6) 1 5/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	13.28
70.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	1.08
70.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	19.589	0.684	0.000	34.13	35.42
70.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	8.76
70.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	0.00
70.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	19.589	0.684	0.000	27.31	23.61
70.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	0.79
70.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	11.81
75.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	2.70
75.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	19.979	0.705	0.000	87.03	88.55
75.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	21.90

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:30 PM  
 Page: 9



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**Load Case:** 1.2D + 1.6W                      95.00 mph with No Ice                      23 Iterations

Gust Response Factor : 1.10                      Wind Importance Factor : 1.00

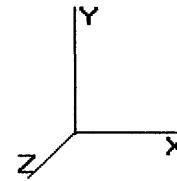
Dead Load Factor : 1.20

Wind Load Factor : 1.60

75.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	0.00
75.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	19.979	0.705	0.000	69.62	59.03
75.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	1.98
77.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	20.130	0.726	0.000	0.00	1.08
77.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	20.130	0.726	0.000	35.07	35.42
77.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	20.130	0.726	0.000	0.00	8.76
77.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	20.130	0.726	0.000	0.00	0.00
77.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	20.130	0.726	0.000	28.06	23.61
78.77	(3) 1/2" Coax	Yes	1.77	0.000	0.00	0.00	0.00	20.261	0.528	0.000	0.00	0.96
78.77	(18) 1 5/8" Coax	Yes	1.77	0.600	9.90	1.46	0.88	20.261	0.528	0.000	31.24	31.34
78.77	(1) 2" Conduit	Yes	1.77	0.000	0.00	0.00	0.00	20.261	0.528	0.000	0.00	7.75
78.77	(4) #20 Dywidag	Yes	1.77	0.000	0.00	0.00	0.00	20.261	0.528	0.000	0.00	0.00
80.00	(3) 1/2" Coax	Yes	1.23	0.000	0.00	0.00	0.00	20.351	0.535	0.000	0.00	0.66
80.00	(18) 1 5/8" Coax	Yes	1.23	0.600	9.90	1.01	0.61	20.351	0.535	0.000	21.81	21.78
80.00	(1) 2" Conduit	Yes	1.23	0.000	0.00	0.00	0.00	20.351	0.535	0.000	0.00	5.39
80.00	(4) #20 Dywidag	Yes	1.23	0.000	0.00	0.00	0.00	20.351	0.535	0.000	0.00	0.00
85.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.551	0.000	0.00	2.70
85.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	20.706	0.551	0.000	90.20	88.55
85.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.551	0.000	0.00	21.90
85.00	(4) #20 Dywidag	Yes	1.00	0.000	0.00	0.00	0.00	20.706	0.551	0.000	0.00	0.00
87.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	20.844	0.569	0.000	0.00	1.08
87.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	20.844	0.569	0.000	36.32	35.42
87.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	20.844	0.569	0.000	0.00	8.76
90.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	21.047	0.140	1.121	0.00	1.62
90.00	(1) 2" Conduit	Yes	3.00	0.000	2.38	0.60	0.00	21.047	0.140	1.121	0.00	13.14
95.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.375	0.146	1.138	0.00	2.70
95.00	(1) 2" Conduit	Yes	5.00	0.000	2.38	0.99	0.00	21.375	0.146	1.138	0.00	21.90
100.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.154	1.163	0.00	2.70
100.0	(1) 2" Conduit	Yes	5.00	0.000	2.38	0.99	0.00	21.690	0.154	1.163	0.00	21.90
105.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.301	0.000	0.00	2.70
105.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	0.99	1.19	21.995	0.301	0.000	46.07	21.90
110.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.301	0.000	0.00	2.70
110.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	0.99	1.19	22.289	0.301	0.000	46.68	21.90
<b>Totals:</b>											<b>2,216.49</b>	<b>3,262.65</b>

Pole : 302481  
 Location : Hfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:30 PM  
 Page: 10

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<b>Load Case:</b> 1.2D + 1.6W	95.00 mph with No Ice	23 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

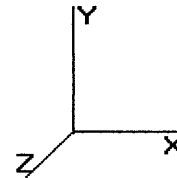
**Applied Segment Forces Summary**

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	345.16	816.22	0.00	0.00
10.00	523.20	1,123.02	0.00	0.00
15.00	511.74	1,109.56	0.00	0.00
20.00	500.28	1,096.10	0.00	0.00
25.00	488.82	1,082.65	0.00	0.00
29.33	414.05	926.68	0.00	0.00
30.00	64.30	198.44	0.00	0.00
32.83	276.31	832.71	0.00	0.00
35.00	213.20	460.12	0.00	0.00
40.00	501.39	1,050.50	0.00	0.00
45.00	505.67	1,037.04	0.00	0.00
47.00	201.15	411.05	0.00	0.00
50.00	303.12	612.54	0.00	0.00
55.00	508.23	1,010.13	0.00	0.00
60.00	782.84	1,148.71	0.00	0.00
62.92	293.26	573.44	0.00	0.00
65.00	211.20	510.66	0.00	0.00
65.75	75.66	182.80	0.00	0.00
68.00	227.25	402.59	0.00	0.00
70.00	628.14	451.16	0.00	0.00
75.00	682.57	879.76	0.00	0.00
77.00	2,174.55	1,446.67	0.00	0.00
78.77	149.64	276.76	0.00	0.00
80.00	103.35	109.43	0.00	0.00
85.00	417.79	438.53	0.00	0.00
87.00	1,726.95	2,285.43	0.00	0.00
90.00	176.07	202.72	0.00	0.00
95.00	290.58	329.79	0.00	0.00
100.0	3,897.44	3,768.62	0.00	3,255.62
105.0	199.36	331.30	0.00	0.00
110.0	1,436.43	823.06	0.00	0.00
<b>Totals:</b>	<b>18,829.68</b>	<b>25,928.20</b>	<b>0.00</b>	<b>3,255.62</b>

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:30 PM  
 Page: 11



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<b>Load Case: 1.2D + 1.6W</b>	<b>95.00 mph with No Ice</b>	<b>23 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

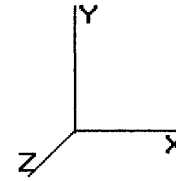
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-25.87	-18.90	0.00	-1,403.34	0.00	1,403.34	1,564.13	782.07	1,919.99	948.21	0.00	0.00	0.670
5.00	-24.96	-18.69	0.00	-1,308.82	0.00	1,308.82	1,541.15	770.57	1,839.28	908.35	0.17	-0.32	0.638
10.00	-23.74	-18.29	0.00	-1,215.36	0.00	1,215.36	1,517.03	758.51	1,758.81	868.61	0.68	-0.63	0.606
15.00	-22.54	-17.89	0.00	-1,123.90	0.00	1,123.90	1,491.77	745.88	1,678.72	829.05	1.51	-0.94	0.573
20.00	-21.36	-17.48	0.00	-1,034.47	0.00	1,034.47	1,465.38	732.69	1,599.10	789.74	2.66	-1.25	0.540
25.00	-20.21	-17.06	0.00	-947.09	0.00	947.09	1,437.85	718.92	1,520.08	750.71	4.13	-1.55	0.506
29.33	-19.25	-16.67	0.00	-873.22	0.00	873.22	1,413.09	706.55	1,452.23	717.20	5.66	-1.81	0.477
30.00	-19.03	-16.63	0.00	-862.05	0.00	862.05	1,409.19	704.59	1,441.78	712.04	5.92	-1.85	0.463
32.83	-18.16	-16.37	0.00	-814.98	0.00	814.98	1,130.07	565.03	1,157.93	571.86	7.06	-2.01	0.557
35.00	-17.66	-16.20	0.00	-779.46	0.00	779.46	1,119.12	559.56	1,130.16	558.15	8.00	-2.13	0.539
40.00	-16.56	-15.73	0.00	-698.44	0.00	698.44	1,081.75	540.87	1,055.58	521.31	10.37	-2.39	0.501
45.00	-15.50	-15.23	0.00	-619.77	0.00	619.77	1,044.38	522.19	983.54	485.73	13.02	-2.65	0.462
47.00	-15.06	-15.04	0.00	-589.31	0.00	589.31	1,029.43	514.72	955.43	471.85	14.15	-2.74	0.446
47.00	-15.06	-15.04	0.00	-589.31	0.00	589.31	1,029.43	514.72	955.43	471.85	14.15	-2.74	0.446
50.00	-14.42	-14.76	0.00	-544.18	0.00	544.18	1,007.01	503.50	914.04	451.41	15.92	-2.89	0.422
55.00	-13.38	-14.25	0.00	-470.39	0.00	470.39	969.64	484.82	847.09	418.35	19.07	-3.11	0.379
60.00	-12.24	-13.44	0.00	-399.16	0.00	399.16	932.27	466.13	782.69	386.54	22.44	-3.32	0.335
60.00	-12.24	-13.44	0.00	-399.16	0.00	399.16	932.27	466.13	782.69	386.54	22.44	-3.32	0.335
62.92	-11.66	-13.13	0.00	-359.97	0.00	359.97	910.47	455.23	746.30	368.57	24.50	-3.44	0.309
65.00	-11.16	-12.90	0.00	-332.62	0.00	332.62	894.90	447.45	720.83	355.99	26.02	-3.51	0.285
65.75	-10.97	-12.82	0.00	-322.95	0.00	322.95	864.38	432.19	684.54	342.42	26.58	-3.54	0.310
68.00	-10.56	-12.58	0.00	-294.11	0.00	294.11	832.27	418.10	648.77	328.14	28.26	-3.62	0.286
68.00	-10.56	-12.58	0.00	-294.11	0.00	294.11	832.27	418.10	648.77	328.14	28.26	-3.62	0.286
70.00	-10.13	-11.95	0.00	-268.94	0.00	268.94	800.47	403.97	614.97	314.83	29.79	-3.69	0.264
75.00	-9.28	-11.22	0.00	-209.22	0.00	209.22	629.79	314.89	477.45	235.80	33.74	-3.84	0.211
77.00	-7.97	-8.96	0.00	-186.77	0.00	186.77	618.88	309.44	460.75	227.55	35.36	-3.89	0.190
78.77	-7.70	-8.80	0.00	-170.91	0.00	170.91	608.96	304.48	446.02	220.27	36.81	-3.93	0.177
78.77	-7.70	-8.80	0.00	-170.91	0.00	170.91	608.96	304.48	446.02	220.27	36.81	-3.93	0.177
80.00	-7.56	-8.72	0.00	-160.08	0.00	160.08	602.06	301.03	435.93	215.29	37.82	-3.96	0.167
85.00	-7.11	-8.31	0.00	-116.47	0.00	116.47	574.04	287.02	396.08	195.61	42.23	-4.43	0.609
87.00	-4.94	-6.43	0.00	-99.84	0.00	99.84	562.82	281.41	380.67	188.00	44.13	-4.60	0.540
90.00	-4.73	-6.26	0.00	-80.56	0.00	80.56	546.01	273.00	358.14	176.87	47.09	-4.83	0.465
95.00	-4.40	-5.96	0.00	-49.27	0.00	49.27	517.98	258.99	322.11	159.08	52.31	-5.12	0.319
100.00	-1.00	-1.74	0.00	-16.22	0.00	16.22	489.95	244.98	288.00	142.23	57.78	-5.31	0.116
100.00	-1.00	-1.74	0.00	-16.22	0.00	16.22	593.08	296.54	157.41	77.74	57.78	-5.31	0.210
105.00	-0.68	-1.51	0.00	-7.54	0.00	7.54	593.08	296.54	157.41	77.74	63.37	-5.38	0.098
110.00	0.00	-1.44	0.00	0.00	0.00	0.00	593.08	296.54	157.41	77.74	69.04	-5.44	0.000

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:30 PM  
 Page: 12



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<b>Load Case:</b> 0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)	23 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

**Shaft Segment Forces (Factored)**

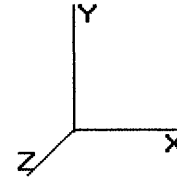
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	205.71	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	200.10	1.000	0.000	5.00	12.764	12.76	345.2	0.0	695.7
10.00		1.00	0.70	15.364	16.90	194.48	1.200	* 0.000	5.00	12.411	14.89	402.7	0.0	685.6
15.00		1.00	0.70	15.364	16.90	188.87	1.200	* 0.000	5.00	12.058	14.47	391.3	0.0	675.5
20.00		1.00	0.70	15.364	16.90	183.25	1.200	* 0.000	5.00	11.705	14.05	379.8	0.0	665.4
25.00		1.00	0.70	15.364	16.90	177.64	1.200	* 0.000	5.00	11.352	13.62	368.4	0.0	655.3
29.33	Bot - Section 2	1.00	0.70	15.364	16.90	172.78	1.200	* 0.000	4.33	9.545	11.45	309.7	0.0	559.3
30.00		1.00	0.70	15.377	16.91	172.10	1.200	* 0.000	0.67	1.482	1.78	48.1	0.0	127.8
32.83	Top - Section 1	1.00	0.71	15.778	17.35	171.11	1.200	* 0.000	2.83	6.190	7.43	206.3	0.0	535.9
35.00		1.00	0.73	16.070	17.67	173.69	1.200	* 0.000	2.17	4.670	5.60	158.5	0.0	277.1
40.00		1.00	0.76	16.694	18.36	171.19	1.200	* 0.000	5.00	10.508	12.61	370.5	0.0	631.2
45.00		1.00	0.78	17.266	18.99	168.14	1.200	* 0.000	5.00	10.155	12.19	370.3	0.0	621.1
47.00	Reinf. Top Reinf Bottom	1.00	0.79	17.482	19.23	166.79	1.200	* 0.000	2.00	3.963	4.76	146.3	0.0	245.6
50.00		1.00	0.81	17.793	19.57	164.65	1.200	* 0.000	3.00	5.838	7.01	219.4	0.0	365.4
55.00		1.00	0.83	18.285	20.11	160.78	1.200	* 0.000	5.00	9.448	11.34	364.9	0.0	600.9
60.00	Reinf. Top Reinf	1.00	0.85	18.745	20.61	156.59	1.200	* 0.000	5.00	9.095	10.91	360.1	0.0	590.8
62.92	Bot - Section 3	1.00	0.86	19.001	20.90	154.01	1.200	* 0.000	2.92	5.142	6.17	206.4	0.0	340.0
65.00		1.00	0.87	19.179	21.09	152.12	1.200	* 0.000	2.08	3.667	4.40	148.5	0.0	318.6
65.75	Top - Section 2	1.00	0.87	19.242	21.16	151.43	1.200	* 0.000	0.75	1.305	1.57	53.0	0.0	113.9
68.00	Reinf. Top Reinf Bottom	1.00	0.88	19.427	21.37	152.21	1.200	* 0.000	2.25	3.868	4.64	158.7	0.0	232.4
70.00	Appertunance(s)	1.00	0.89	19.589	21.54	150.30	1.200	* 0.000	2.00	3.378	4.05	139.7	0.0	205.3
75.00	Appertunance(s)	1.00	0.91	19.979	21.97	145.39	1.200	* 0.000	5.00	8.197	9.84	345.9	0.0	507.9
77.00	Appertunance(s)	1.00	0.91	20.130	22.14	143.37	1.200	* 0.000	2.00	3.180	3.82	135.2	0.0	201.1
78.77	Reinf. Top	1.00	0.92	20.261	22.28	141.55	1.200	* 0.000	1.77	2.767	3.32	118.4	0.0	176.9
80.00		1.00	0.92	20.351	22.38	140.27	1.200	* 0.000	1.23	1.897	2.28	81.5	0.0	40.2
85.00		1.00	0.94	20.706	22.77	134.98	1.200	* 0.000	5.00	7.491	8.99	327.6	0.0	158.8
87.00	Appertunance(s)	1.00	0.95	20.844	22.92	132.81	1.200	* 0.000	2.00	2.897	3.48	127.6	0.0	61.4
90.00		1.00	0.95	21.047	23.15	129.51	1.000	* 0.000	3.00	4.240	4.24	157.1	0.0	89.8
95.00		1.00	0.97	21.375	23.51	123.89	1.000	* 0.000	5.00	6.785	6.78	255.2	0.0	143.7
100.0	Top - Section 3	1.00	0.98	21.690	23.86	118.13	1.000	* 0.000	5.00	6.431	6.43	245.5	0.0	136.1
105.0		1.00	1.00	21.995	24.19	62.765	1.200	* 0.000	5.00	3.300	3.96	153.3	0.0	228.8
110.0	Appertunance(s)	1.00	1.01	22.289	24.51	63.183	1.200	* 0.000	5.00	3.300	3.96	155.3	0.0	228.8
* = Cf Adjusted By Linear Load Ra Effect								Totals:	110.00			7,250.4	0.0	11,116.3



Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:31 PM  
 Page: 13



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**Load Case:** 0.9D + 1.6W      95.00 mph with No Ice (Reduced DL)      23 Iterations

Gust Response Factor : 1.10      Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

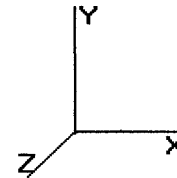
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
60.00	Radio Waves SP2-2.4	1	18.745	20.619	1.00	1.00	3.96	0.000	0.000	130.64	0.00	0.00	81.00
60.00	Radio/ODU	1	18.745	20.619	1.00	1.00	1.87	0.000	0.000	61.69	0.00	0.00	27.00
60.00	Scala 840 10212	1	18.745	20.619	1.00	1.00	2.53	0.000	0.000	83.46	0.00	0.00	6.03
70.00	RFS APXV18-206517S-	3	19.589	21.548	0.80	1.00	12.38	0.000	0.000	426.96	0.00	0.00	71.28
75.00	Scala 840 10212	1	19.979	21.977	1.00	1.00	2.53	0.000	0.000	88.96	0.00	0.00	6.03
75.00	TX RX Systems 421-86	1	19.979	21.977	1.00	1.00	2.59	0.000	0.000	91.07	0.00	0.00	13.50
77.00	Antel LPA-185063/8CF	6	20.130	22.143	0.61	0.80	10.80	0.000	0.000	382.56	0.00	0.00	48.60
77.00	Antel LPA-80063/4CF	6	20.130	22.143	0.61	0.80	25.54	0.000	0.000	904.70	0.00	0.00	108.00
77.00	Flat T-Arms	3	20.130	22.143	0.50	0.75	19.45	0.000	0.000	688.97	0.00	0.00	675.00
87.00	CCI DTMA-1819-DD-12-	6	20.844	22.929	0.26	0.80	1.12	0.000	0.000	41.26	0.00	0.00	77.22
87.00	Flat Low Profile Pla	1	20.844	22.929	1.00	1.00	26.10	0.000	0.000	957.51	0.00	0.00	1,350.00
87.00	RFS APX16DWV-	3	20.844	22.929	0.48	0.80	9.65	0.000	0.000	353.95	0.00	0.00	106.92
87.00	RFS APXV18-206516S-	3	20.844	22.929	0.53	0.80	5.73	0.000	0.000	210.36	0.00	0.00	50.49
100.0	Andrew SBNH-	1	21.690	23.860	0.63	0.75	7.21	0.000	0.000	275.14	0.00	0.00	59.49
100.0	Ericsson RRUS 11	6	21.690	23.860	0.50	0.75	8.86	0.000	0.000	338.39	0.00	0.00	297.00
100.0	Flat Platform w/ Han	1	21.814	23.995	1.00	1.00	42.40	0.000	2.000	1,627.81	0.00	3,255.62	1,800.00
100.0	Kathrein 860-10025	6	21.690	23.860	0.38	0.75	0.31	0.000	0.000	12.03	0.00	0.00	5.94
100.0	KMW AM-X-CD-16-65-	2	21.690	23.860	0.59	0.75	9.50	0.000	0.000	362.81	0.00	0.00	87.30
100.0	Powerwave 7770.00	6	21.690	23.860	0.58	0.75	20.37	0.000	0.000	777.79	0.00	0.00	189.00
100.0	Powerwave LGP21401	6	21.690	23.860	0.50	0.75	3.89	0.000	0.000	148.48	0.00	0.00	76.14
100.0	Powerwave TT19-	3	21.690	23.860	0.38	0.75	0.72	0.000	0.000	27.49	0.00	0.00	43.20
100.0	Raycap DC6-48-60-18-	1	21.690	23.860	0.75	0.75	1.10	0.000	0.000	42.09	0.00	0.00	28.62
110.0	Argus LLPX310R	3	22.289	24.518	0.50	0.80	7.30	0.000	0.000	286.49	0.00	0.00	77.22
110.0	DragonWave A-ANT-	2	22.289	24.518	0.72	0.80	12.48	0.000	0.000	489.77	0.00	0.00	118.98
110.0	DragonWave A-ANT-	1	22.289	24.518	0.72	0.80	1.16	0.000	0.000	45.47	0.00	0.00	13.50
110.0	DragonWave Horizon	3	22.289	24.518	0.26	0.80	0.34	0.000	0.000	13.36	0.00	0.00	28.62
110.0	NextNet BTS-2500	3	22.289	24.518	0.26	0.80	1.68	0.000	0.000	65.87	0.00	0.00	94.50
110.0	Side Arms	1	22.289	24.518	1.00	1.00	8.50	0.000	0.000	333.45	0.00	0.00	36.00
										9,268.51			5,576.58

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
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Code: ANSI/TIA-222 Rev G  
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5/1/2012 2:37:31 PM  
 Page: 14



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**Load Case:** 0.9D + 1.6W      95.00 mph with No Ice (Reduced DL)      23 Iterations

Gust Response Factor : 1.10      Wind Importance Factor : 1.00

Dead Load Factor : 0.90

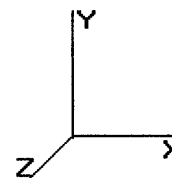
Wind Load Factor : 1.60

**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.000	0.000	0.00	0.00
10.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	2.03
10.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.465	0.000	66.93	66.41
10.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	16.42
10.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.465	0.000	53.54	44.27
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	1.49
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	22.14
10.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	0.72
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.465	0.000	0.00	1.49
15.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	2.03
15.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.479	0.000	66.93	66.41
15.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	16.42
15.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.479	0.000	53.54	44.27
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	1.49
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	22.14
15.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	0.72
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.479	0.000	0.00	1.49
20.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	2.03
20.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.493	0.000	66.93	66.41
20.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	16.42
20.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.493	0.000	53.54	44.27
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	1.49
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	22.14
20.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	0.72
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.493	0.000	0.00	1.49
25.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	2.03
25.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	15.364	0.509	0.000	66.93	66.41
25.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	16.42
25.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	15.364	0.509	0.000	53.54	44.27
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	1.49
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	22.14
25.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	0.72
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.509	0.000	0.00	1.49
29.33	(3) 1/2" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	1.75
29.33	(18) 1 5/8" Coax	Yes	4.33	0.600	9.90	3.57	2.14	15.364	0.524	0.000	57.96	57.51
29.33	(1) 2" Conduit	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	14.22
29.33	(4) #20 Dywidag	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	0.00
29.33	(12) 1 5/8" Coax	Yes	4.33	1.200	3.96	1.43	1.71	15.364	0.524	0.000	46.37	38.34
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	1.29
29.33	(6) 1 5/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	19.17
29.33	(2) 3/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	0.62
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	15.364	0.524	0.000	0.00	1.29
30.00	(3) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.27
30.00	(18) 1 5/8" Coax	Yes	0.67	0.600	9.90	0.55	0.33	15.377	0.532	0.000	8.98	8.90
30.00	(1) 2" Conduit	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	2.20
30.00	(4) #20 Dywidag	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	0.67	1.200	3.96	0.22	0.27	15.377	0.532	0.000	7.18	5.93

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:31 PM  
 Page: 15

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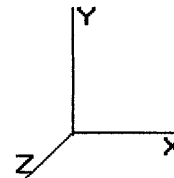
<b>Load Case: 0.9D + 1.6W</b>	<b>95.00 mph with No Ice (Reduced DL)</b>	<b>23 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.20
30.00	(6) 1 5/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	2.97
30.00	(2) 3/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.10
30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	15.377	0.532	0.000	0.00	0.20
32.83	(3) 1/2" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	1.15
32.83	(18) 1 5/8" Coax	Yes	2.83	0.600	9.90	2.33	1.40	15.778	0.539	0.000	38.90	37.59
32.83	(1) 2" Conduit	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	9.30
32.83	(4) #20 Dywidag	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	0.00
32.83	(12) 1 5/8" Coax	Yes	2.83	1.200	3.96	0.93	1.12	15.778	0.539	0.000	31.12	25.06
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	0.84
32.83	(6) 1 5/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	12.53
32.83	(2) 3/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	0.41
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	15.778	0.539	0.000	0.00	0.84
35.00	(3) 1/2" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.88
35.00	(18) 1 5/8" Coax	Yes	2.17	0.600	9.90	1.79	1.07	16.070	0.537	0.000	30.38	28.82
35.00	(1) 2" Conduit	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	7.13
35.00	(4) #20 Dywidag	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.00
35.00	(12) 1 5/8" Coax	Yes	2.17	1.200	3.96	0.72	0.86	16.070	0.537	0.000	24.30	19.22
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.64
35.00	(6) 1 5/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	9.61
35.00	(2) 3/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.31
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	16.070	0.537	0.000	0.00	0.64
40.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	2.03
40.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	16.694	0.550	0.000	72.72	66.41
40.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	16.42
40.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	0.00
40.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	16.694	0.550	0.000	58.18	44.27
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	1.49
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	22.14
40.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	0.72
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.550	0.000	0.00	1.49
45.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	2.03
45.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	17.266	0.569	0.000	75.21	66.41
45.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	16.42
45.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	0.00
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.266	0.569	0.000	60.17	44.27
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	1.49
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	22.14
45.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	0.72
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.266	0.569	0.000	0.00	1.49
47.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.81
47.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	17.482	0.583	0.000	30.46	26.56
47.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	6.57
47.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.00
47.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	17.482	0.583	0.000	24.37	17.71
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.59
47.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	8.85
47.00	(2) 3/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.29
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	17.482	0.583	0.000	0.00	0.59
50.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	1.22
50.00	(18) 1 5/8" Coax	Yes	3.00	0.600	9.90	2.47	1.48	17.793	0.593	0.000	46.51	39.85
50.00	(1) 2" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	9.85
50.00	(4) #20 Dywidag	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	0.00
50.00	(12) 1 5/8" Coax	Yes	3.00	1.200	3.96	0.99	1.19	17.793	0.593	0.000	37.20	26.56
50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	0.89
50.00	(6) 1 5/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	13.28
50.00	(2) 3/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	0.43

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:31 PM  
 Page: 16



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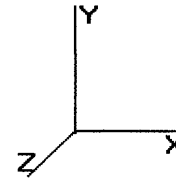
<b>Load Case: 0.9D + 1.6W</b>	<b>95.00 mph with No Ice (Reduced DL)</b>	<b>23 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	17.793	0.593	0.000	0.00	0.89
55.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	2.03
55.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	18.285	0.611	0.000	79.65	66.41
55.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	16.42
55.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	0.00
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	18.285	0.611	0.000	63.72	44.27
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	1.49
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	22.14
55.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	0.72
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.285	0.611	0.000	0.00	1.49
60.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	2.03
60.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	18.745	0.635	0.000	81.65	66.41
60.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	16.42
60.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	18.745	0.635	0.000	65.32	44.27
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	1.49
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	22.14
60.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	0.72
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.635	0.000	0.00	1.49
62.92	(3) 1/2" Coax	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	1.18
62.92	(18) 1 5/8" Coax	Yes	2.92	0.600	9.90	2.41	1.44	19.001	0.655	0.000	48.28	38.74
62.92	(1) 2" Conduit	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	9.58
62.92	(4) #20 Dywidag	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	0.00
62.92	(12) 1 5/8" Coax	Yes	2.92	1.200	3.96	0.96	1.15	19.001	0.655	0.000	38.62	25.83
62.92	(1) 7/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	0.87
62.92	(6) 1 5/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	19.001	0.655	0.000	0.00	12.91
65.00	(3) 1/2" Coax	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	0.84
65.00	(18) 1 5/8" Coax	Yes	2.08	0.600	9.90	1.72	1.03	19.179	0.668	0.000	34.81	27.67
65.00	(1) 2" Conduit	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	6.84
65.00	(4) #20 Dywidag	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	0.00
65.00	(12) 1 5/8" Coax	Yes	2.08	1.200	3.96	0.69	0.83	19.179	0.668	0.000	27.85	18.45
65.00	(1) 7/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	0.62
65.00	(6) 1 5/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	19.179	0.668	0.000	0.00	9.22
65.75	(3) 1/2" Coax	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	0.30
65.75	(18) 1 5/8" Coax	Yes	0.75	0.600	9.90	0.62	0.37	19.242	0.676	0.000	12.57	9.96
65.75	(1) 2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	2.46
65.75	(4) #20 Dywidag	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	0.00
65.75	(12) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.25	0.30	19.242	0.676	0.000	10.06	6.64
65.75	(1) 7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	0.22
65.75	(6) 1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	19.242	0.676	0.000	0.00	3.32
68.00	(3) 1/2" Coax	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	0.91
68.00	(18) 1 5/8" Coax	Yes	2.25	0.600	9.90	1.86	1.11	19.427	0.672	0.000	38.08	29.89
68.00	(1) 2" Conduit	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	7.39
68.00	(4) #20 Dywidag	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	0.00
68.00	(12) 1 5/8" Coax	Yes	2.25	1.200	3.96	0.74	0.89	19.427	0.672	0.000	30.47	19.92
68.00	(1) 7/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	0.67
68.00	(6) 1 5/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	19.427	0.672	0.000	0.00	9.96
70.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	0.81
70.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	19.589	0.684	0.000	34.13	26.56
70.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	6.57
70.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	0.00
70.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	19.589	0.684	0.000	27.31	17.71
70.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	0.59
70.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	19.589	0.684	0.000	0.00	8.85
75.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	2.03
75.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	19.979	0.705	0.000	87.03	66.41
75.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	16.42

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:31 PM  
 Page: 17



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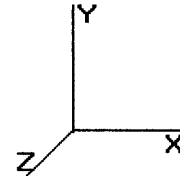
<b>Load Case: 0.9D + 1.6W</b>	<b>95.00 mph with No Ice (Reduced DL)</b>	<b>23 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

75.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	0.00
75.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	19.979	0.705	0.000	69.62	44.27
75.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.705	0.000	0.00	1.49
77.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	20.130	0.726	0.000	0.00	0.81
77.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	20.130	0.726	0.000	35.07	26.56
77.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	20.130	0.726	0.000	0.00	6.57
77.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	20.130	0.726	0.000	0.00	0.00
77.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	20.130	0.726	0.000	28.06	17.71
78.77	(3) 1/2" Coax	Yes	1.77	0.000	0.00	0.00	0.00	20.261	0.528	0.000	0.00	0.72
78.77	(18) 1 5/8" Coax	Yes	1.77	0.600	9.90	1.46	0.88	20.261	0.528	0.000	31.24	23.51
78.77	(1) 2" Conduit	Yes	1.77	0.000	0.00	0.00	0.00	20.261	0.528	0.000	0.00	5.81
78.77	(4) #20 Dywidag	Yes	1.77	0.000	0.00	0.00	0.00	20.261	0.528	0.000	0.00	0.00
80.00	(3) 1/2" Coax	Yes	1.23	0.000	0.00	0.00	0.00	20.351	0.535	0.000	0.00	0.50
80.00	(18) 1 5/8" Coax	Yes	1.23	0.600	9.90	1.01	0.61	20.351	0.535	0.000	21.81	16.34
80.00	(1) 2" Conduit	Yes	1.23	0.000	0.00	0.00	0.00	20.351	0.535	0.000	0.00	4.04
80.00	(4) #20 Dywidag	Yes	1.23	0.000	0.00	0.00	0.00	20.351	0.535	0.000	0.00	0.00
85.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.551	0.000	0.00	2.03
85.00	(18) 1 5/8" Coax	Yes	5.00	0.600	9.90	4.13	2.47	20.706	0.551	0.000	90.20	66.41
85.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.551	0.000	0.00	16.42
85.00	(4) #20 Dywidag	Yes	1.00	0.000	0.00	0.00	0.00	20.706	0.551	0.000	0.00	0.00
87.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	20.844	0.569	0.000	0.00	0.81
87.00	(18) 1 5/8" Coax	Yes	2.00	0.600	9.90	1.65	0.99	20.844	0.569	0.000	36.32	26.56
87.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	20.844	0.569	0.000	0.00	6.57
90.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	21.047	0.140	1.121	0.00	1.22
90.00	(1) 2" Conduit	Yes	3.00	0.000	2.38	0.60	0.00	21.047	0.140	1.121	0.00	9.85
95.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.375	0.146	1.138	0.00	2.03
95.00	(1) 2" Conduit	Yes	5.00	0.000	2.38	0.99	0.00	21.375	0.146	1.138	0.00	16.42
100.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.154	1.163	0.00	2.02
100.0	(1) 2" Conduit	Yes	5.00	0.000	2.38	0.99	0.00	21.690	0.154	1.163	0.00	16.42
105.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.301	0.000	0.00	2.03
105.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	0.99	1.19	21.995	0.301	0.000	46.07	16.43
110.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.301	0.000	0.00	2.03
110.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	0.99	1.19	22.289	0.301	0.000	46.68	16.42
<b>Totals:</b>											<b>2,216.49</b>	<b>2,446.99</b>

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:31 PM  
 Page: 18



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**Load Case:** 0.9D + 1.6W      95.00 mph with No Ice (Reduced DL)      23 Iterations

Gust Response Factor : 1.10      Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

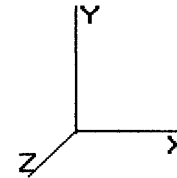
**Applied Segment Forces Summary**

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	345.16	695.67	0.00	0.00
10.00	523.20	925.76	0.00	0.00
15.00	511.74	915.67	0.00	0.00
20.00	500.28	905.58	0.00	0.00
25.00	488.82	895.49	0.00	0.00
29.33	414.05	767.32	0.00	0.00
30.00	64.30	160.02	0.00	0.00
32.83	276.31	671.79	0.00	0.00
35.00	213.20	381.33	0.00	0.00
40.00	501.39	871.37	0.00	0.00
45.00	505.67	861.28	0.00	0.00
47.00	201.15	341.69	0.00	0.00
50.00	303.12	509.50	0.00	0.00
55.00	508.23	841.09	0.00	0.00
60.00	782.84	945.03	0.00	0.00
62.92	293.26	478.79	0.00	0.00
65.00	211.20	417.79	0.00	0.00
65.75	75.66	149.62	0.00	0.00
68.00	227.25	339.52	0.00	0.00
70.00	628.14	371.77	0.00	0.00
75.00	682.57	743.32	0.00	0.00
77.00	2,174.55	1,118.40	0.00	0.00
78.77	149.64	237.12	0.00	0.00
80.00	103.35	82.08	0.00	0.00
85.00	417.79	328.90	0.00	0.00
87.00	1,726.95	1,714.07	0.00	0.00
90.00	157.07	152.04	0.00	0.00
95.00	255.23	247.35	0.00	0.00
100.0	3,857.53	2,826.46	0.00	3,255.62
105.0	199.36	248.48	0.00	0.00
110.0	1,436.43	617.30	0.00	0.00
<b>Totals:</b>	<b>18,735.42</b>	<b>20,761.60</b>	<b>0.00</b>	<b>3,255.62</b>

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:31 PM  
 Page: 19



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**Load Case:** 0.9D + 1.6W      95.00 mph with No Ice (Reduced DL)      23 Iterations

Gust Response Factor : 1.10      Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

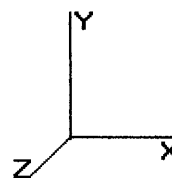
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-20.71	-18.79	0.00	-1,380.28	0.00	1,380.28	1,564.13	782.07	1,919.99	948.21	0.00	0.00	0.657
5.00	-19.91	-18.55	0.00	-1,286.32	0.00	1,286.32	1,541.15	770.57	1,839.28	908.35	0.17	-0.31	0.626
10.00	-18.90	-18.13	0.00	-1,193.55	0.00	1,193.55	1,517.03	758.51	1,758.81	868.61	0.66	-0.62	0.594
15.00	-17.89	-17.70	0.00	-1,102.92	0.00	1,102.92	1,491.77	745.88	1,678.72	829.05	1.48	-0.93	0.561
20.00	-16.91	-17.27	0.00	-1,014.44	0.00	1,014.44	1,465.38	732.69	1,599.10	789.74	2.61	-1.23	0.528
25.00	-15.94	-16.83	0.00	-928.11	0.00	928.11	1,437.85	718.92	1,520.08	750.71	4.06	-1.52	0.495
29.33	-15.15	-16.43	0.00	-855.23	0.00	855.23	1,413.09	706.55	1,452.23	717.20	5.56	-1.77	0.466
30.00	-14.96	-16.39	0.00	-844.22	0.00	844.22	1,409.19	704.59	1,441.78	712.04	5.81	-1.81	0.453
32.83	-14.26	-16.13	0.00	-797.84	0.00	797.84	1,130.07	565.03	1,157.93	571.86	6.93	-1.97	0.544
35.00	-13.83	-15.95	0.00	-762.84	0.00	762.84	1,119.12	559.56	1,130.16	558.15	7.86	-2.09	0.526
40.00	-12.92	-15.47	0.00	-683.11	0.00	683.11	1,081.75	540.87	1,055.58	521.31	10.18	-2.35	0.489
45.00	-12.03	-14.96	0.00	-605.77	0.00	605.77	1,044.38	522.19	983.54	485.73	12.78	-2.59	0.460
47.00	-11.67	-14.77	0.00	-575.84	0.00	575.84	1,029.43	514.72	955.43	471.85	13.88	-2.69	0.435
47.00	-11.67	-14.77	0.00	-575.84	0.00	575.84	1,029.43	514.72	955.43	471.85	13.88	-2.69	0.435
50.00	-11.13	-14.48	0.00	-531.53	0.00	531.53	1,007.01	503.50	914.04	451.41	15.62	-2.83	0.411
55.00	-10.26	-13.96	0.00	-459.15	0.00	459.15	969.64	484.82	847.09	418.35	18.71	-3.05	0.369
60.00	-9.33	-13.16	0.00	-389.32	0.00	389.32	932.27	466.13	782.69	386.54	22.01	-3.25	0.325
60.00	-9.33	-13.16	0.00	-389.32	0.00	389.32	932.27	466.13	782.69	386.54	22.01	-3.25	0.325
62.92	-8.85	-12.85	0.00	-350.95	0.00	350.95	910.47	455.23	746.30	368.57	24.03	-3.37	0.300
65.00	-8.43	-12.62	0.00	-324.18	0.00	324.18	894.90	447.45	720.83	355.99	25.52	-3.44	0.277
65.75	-8.27	-12.55	0.00	-314.71	0.00	314.71	864.38	332.19	545.54	269.42	26.06	-3.47	0.301
68.00	-7.93	-12.31	0.00	-286.49	0.00	286.49	832.19	328.10	528.77	261.14	27.71	-3.54	0.277
68.00	-7.93	-12.31	0.00	-286.49	0.00	286.49	832.19	328.10	528.77	261.14	27.71	-3.54	0.277
70.00	-7.58	-11.67	0.00	-261.87	0.00	261.87	808.81	324.40	513.97	253.83	29.21	-3.61	0.256
75.00	-6.86	-10.95	0.00	-203.51	0.00	203.51	629.79	314.89	477.45	235.80	33.07	-3.76	0.204
77.00	-5.88	-8.72	0.00	-181.60	0.00	181.60	618.88	309.44	460.75	227.55	34.66	-3.81	0.184
78.77	-5.65	-8.55	0.00	-166.18	0.00	166.18	608.96	304.48	446.02	220.27	36.08	-3.85	0.171
78.77	-5.65	-8.55	0.00	-166.18	0.00	166.18	608.96	304.48	446.02	220.27	36.08	-3.85	0.171
80.00	-5.54	-8.47	0.00	-155.66	0.00	155.66	602.06	301.03	435.93	215.29	37.08	-3.88	0.733
85.00	-5.20	-8.06	0.00	-113.30	0.00	113.30	574.04	287.02	396.08	195.61	41.39	-4.34	0.589
87.00	-3.60	-6.22	0.00	-97.19	0.00	97.19	562.82	281.41	380.67	188.00	43.24	-4.50	0.524
90.00	-3.44	-6.06	0.00	-78.54	0.00	78.54	546.01	273.00	358.14	176.87	46.14	-4.72	0.451
95.00	-3.19	-5.80	0.00	-48.23	0.00	48.23	517.98	258.99	322.11	159.08	51.24	-5.01	0.310
100.00	-0.71	-1.71	0.00	-15.98	0.00	15.98	489.95	244.98	288.00	142.23	56.59	-5.19	0.114
100.00	-0.71	-1.71	0.00	-15.98	0.00	15.98	489.95	244.98	288.00	142.23	56.59	-5.19	0.114
105.00	-0.48	-1.49	0.00	-7.44	0.00	7.44	593.08	296.54	157.41	77.74	62.06	-5.26	0.096
110.00	0.00	-1.44	0.00	0.00	0.00	0.00	593.08	296.54	157.41	77.74	67.60	-5.32	0.000

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:31 PM  
 Page: 20



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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice	23 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

**Shaft Segment Forces (Factored)**

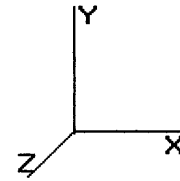
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.682	0.000	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	4.256	4.682	0.000	1.200	2.070	5.00	14.489	17.39	81.4	418.4	1,234.6
10.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.219	5.00	14.260	17.11	80.1	438.7	1,241.5
15.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.310	5.00	13.983	16.78	78.6	445.9	1,235.2
20.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.378	5.00	13.686	16.42	76.9	447.3	1,223.2
25.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.432	5.00	13.378	16.05	75.2	445.3	1,207.7
29.33	Bot - Section 2	1.00	0.70	4.256	4.682	0.000	1.200 *	2.471	4.33	11.328	13.59	63.6	382.5	1,031.9
30.00		1.00	0.70	4.260	4.686	0.000	1.200 *	2.476	0.67	1.759	2.11	9.9	60.2	215.7
32.83	Top - Section 1	1.00	0.71	4.371	4.808	0.000	1.200 *	2.499	2.83	7.369	8.84	42.5	252.4	903.9
35.00		1.00	0.73	4.451	4.897	0.000	1.200 *	2.515	2.17	5.580	6.70	32.8	192.4	513.5
40.00		1.00	0.76	4.625	5.087	0.000	1.200 *	2.549	5.00	12.632	15.16	77.1	436.3	1,166.6
45.00		1.00	0.78	4.783	5.261	0.000	1.200 *	2.579	5.00	12.304	14.76	77.7	428.3	1,145.1
47.00	Reinf. Top Reinf Bottom	1.00	0.79	4.843	5.327	0.000	1.200 *	2.590	2.00	4.826	5.79	30.9	169.9	452.9
50.00		1.00	0.81	4.929	5.422	0.000	1.200 *	2.606	3.00	7.141	8.57	46.5	251.7	672.0
55.00		1.00	0.83	5.065	5.572	0.000	1.200 *	2.631	5.00	11.641	13.97	77.8	409.9	1,099.8
60.00	Reinf. Top Reinf	1.00	0.85	5.193	5.712	0.000	1.200 *	2.654	5.00	11.307	13.57	77.5	399.8	1,076.2
62.92	Bot - Section 3	1.00	0.86	5.263	5.790	0.000	1.200 *	2.667	2.92	6.438	7.73	44.7	229.6	618.0
65.00		1.00	0.87	5.313	5.844	0.000	1.200 *	2.675	2.08	4.596	5.52	32.2	164.9	543.3
65.75	Top - Section 2	1.00	0.87	5.330	5.863	0.000	1.200 *	2.678	0.75	1.640	1.97	11.5	59.1	194.3
68.00	Reinf. Top Reinf Bottom	1.00	0.88	5.382	5.920	0.000	1.200 *	2.687	2.25	4.876	5.85	34.6	175.1	434.9
70.00	Appertunance(s)	1.00	0.89	5.426	5.969	0.000	1.200 *	2.695	2.00	4.276	5.13	30.6	153.9	383.0
75.00	Appertunance(s)	1.00	0.91	5.534	6.088	0.000	1.200 *	2.714	5.00	10.459	12.55	76.4	373.2	939.1
77.00	Appertunance(s)	1.00	0.91	5.576	6.134	0.000	1.200 *	2.721	2.00	4.087	4.90	30.1	147.4	371.0
78.77	Reinf. Top	1.00	0.92	5.612	6.174	0.000	1.200 *	2.727	1.77	3.572	4.29	26.5	129.0	325.5
80.00		1.00	0.92	5.637	6.201	0.000	1.200 *	2.731	1.23	2.457	2.95	18.3	88.9	142.6
85.00		1.00	0.94	5.736	6.309	0.000	1.200 *	2.748	5.00	9.781	11.74	74.1	349.3	561.1
87.00	Appertunance(s)	1.00	0.95	5.774	6.351	0.000	1.200 *	2.754	2.00	3.816	4.58	29.1	137.8	219.6
90.00		1.00	0.95	5.830	6.413	0.000	1.200 *	2.764	3.00	5.622	6.75	43.3	202.2	321.9
95.00		1.00	0.97	5.921	6.513	0.000	1.200 *	2.779	5.00	9.100	10.92	71.1	324.3	515.8
100.0	Top - Section 3	1.00	0.98	6.008	6.609	0.000	1.200 *	2.793	5.00	8.759	10.51	69.5	311.4	492.8
105.0		1.00	1.00	6.093	6.702	0.000	1.200 *	2.807	5.00	5.639	6.77	45.4	188.5	493.6
110.0	Appertunance(s)	1.00	1.01	6.174	6.792	0.000	1.200 *	2.820	5.00	5.650	6.78	46.0	189.6	494.7
* = Cf Adjusted By Linear Load Ra Effect								Totals:	110.00			1,611.8	8,403.2	21,471.0



Pole : 302481  
 Location : Hfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:32 PM  
 Page: 21



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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice	23 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

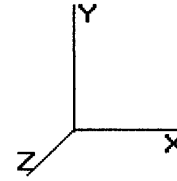
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
60.00	Radio Waves SP2-2.4	1	5.193	5.712	1.00	1.00	5.73	0.000	0.000	32.70	0.00	0.00	270.64
60.00	Radio/ODU	1	5.193	5.712	1.00	1.00	2.46	0.000	0.000	14.05	0.00	0.00	145.28
60.00	Scala 840 10212	1	5.193	5.712	1.00	1.00	3.24	0.000	0.000	18.49	0.00	0.00	119.04
70.00	RFS APXV18-206517S-	3	5.426	5.969	0.80	1.00	17.13	0.000	0.000	102.24	0.00	0.00	730.66
75.00	Scala 840 10212	1	5.534	6.088	1.00	1.00	3.26	0.000	0.000	19.87	0.00	0.00	122.61
75.00	TX RX Systems 421-86	1	5.534	6.088	1.00	1.00	3.22	0.000	0.000	19.63	0.00	0.00	112.82
77.00	Antel LPA-185063/8CF	6	5.576	6.134	0.63	0.80	16.51	0.000	0.000	101.25	0.00	0.00	1,086.09
77.00	Antel LPA-80063/4CF	6	5.576	6.134	0.62	0.80	28.91	0.000	0.000	177.30	0.00	0.00	2,248.65
77.00	Flat T-Arms	3	5.576	6.134	0.50	0.75	38.71	0.000	0.000	237.42	0.00	0.00	1,687.58
87.00	CCI DTMA-1819-DD-12-	6	5.774	6.351	0.26	0.80	1.99	0.000	0.000	12.61	0.00	0.00	406.57
87.00	Flat Low Profile Pla	1	5.774	6.351	1.00	1.00	56.29	0.000	0.000	357.55	0.00	0.00	2,624.67
87.00	RFS APX16DWV-	3	5.774	6.351	0.50	0.80	11.67	0.000	0.000	74.13	0.00	0.00	845.60
87.00	RFS APXV18-206516S-	3	5.774	6.351	0.54	0.80	8.33	0.000	0.000	52.93	0.00	0.00	565.61
100.0	Andrew SBNH-	1	6.008	6.609	0.63	0.75	8.92	0.000	0.000	58.93	0.00	0.00	548.37
100.0	Ericsson RRUS 11	6	6.008	6.609	0.50	0.75	10.89	0.000	0.000	71.97	0.00	0.00	1,284.30
100.0	Flat Platform w/ Han	1	6.043	6.647	1.00	1.00	76.03	0.000	2.000	505.38	0.00	1,010.76	4,229.16
100.0	Kathrein 860-10025	6	6.008	6.609	0.38	0.75	1.11	0.000	0.000	7.36	0.00	0.00	137.72
100.0	KMW AM-X-CD-16-65-	2	6.008	6.609	0.59	0.75	12.06	0.000	0.000	79.68	0.00	0.00	795.76
100.0	Powerwave 7770.00	6	6.008	6.609	0.58	0.75	25.20	0.000	0.000	166.54	0.00	0.00	1,732.31
100.0	Powerwave LGP21401	6	6.008	6.609	0.50	0.75	5.72	0.000	0.000	37.79	0.00	0.00	504.94
100.0	Powerwave TT19-	3	6.008	6.609	0.38	0.75	1.30	0.000	0.000	8.59	0.00	0.00	226.00
100.0	Raycap DC6-48-60-18-	1	6.008	6.609	0.75	0.75	2.48	0.000	0.000	16.37	0.00	0.00	207.82
110.0	Argus LLPX310R	3	6.174	6.792	0.52	0.80	9.06	0.000	0.000	61.53	0.00	0.00	705.17
110.0	DragonWave A-ANT-	2	6.174	6.792	0.72	0.80	16.51	0.000	0.000	112.15	0.00	0.00	630.18
110.0	DragonWave A-ANT-	1	6.174	6.792	0.72	0.80	2.04	0.000	0.000	13.87	0.00	0.00	65.10
110.0	DragonWave Horizon	3	6.174	6.792	0.26	0.80	0.72	0.000	0.000	4.86	0.00	0.00	223.06
110.0	NextNet BTS-2500	3	6.174	6.792	0.26	0.80	2.19	0.000	0.000	14.90	0.00	0.00	454.87
110.0	Side Arms	1	6.174	6.792	1.00	1.00	20.01	0.000	0.000	135.87	0.00	0.00	92.14
										2,515.95			22,802.73

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:32 PM  
 Page: 22



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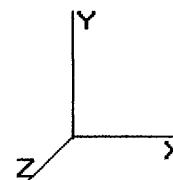
<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice	23 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.000	0.000	0.00	117.11
10.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.465	0.000	0.00	49.57
10.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	5.97	7.17	4.256	0.465	0.000	33.56	455.57
10.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.465	0.000	0.00	74.87
10.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.465	0.000	0.00	126.78
10.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.50	4.20	4.256	0.465	0.000	19.66	313.74
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.465	0.000	0.00	41.95
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.465	0.000	0.00	171.90
10.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.465	0.000	0.00	38.78
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.465	0.000	0.00	41.95
15.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.479	0.000	0.00	52.79
15.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.05	7.26	4.256	0.479	0.000	33.99	470.83
15.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.479	0.000	0.00	78.26
15.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.479	0.000	0.00	132.89
15.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.58	4.29	4.256	0.479	0.000	20.09	324.76
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.479	0.000	0.00	44.88
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.479	0.000	0.00	178.68
15.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.479	0.000	0.00	41.64
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.479	0.000	0.00	44.88
20.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.493	0.000	0.00	55.21
20.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.11	7.33	4.256	0.493	0.000	34.31	482.11
20.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.493	0.000	0.00	80.81
20.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.493	0.000	0.00	137.45
20.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.63	4.36	4.256	0.493	0.000	20.40	332.92
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.493	0.000	0.00	47.10
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.493	0.000	0.00	183.73
20.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.493	0.000	0.00	43.80
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.493	0.000	0.00	47.10
25.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.509	0.000	0.00	57.18
25.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.15	7.38	4.256	0.509	0.000	34.56	491.12
25.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.509	0.000	0.00	82.89
25.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.509	0.000	0.00	141.11
25.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.68	4.41	4.256	0.509	0.000	20.65	339.46
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.509	0.000	0.00	48.90
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.509	0.000	0.00	187.79
25.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.509	0.000	0.00	45.56
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.509	0.000	0.00	48.90
29.33	(3) 1/2" Coax	Yes	4.33	0.000	0.00	0.00	0.00	4.256	0.524	0.000	0.00	50.78
29.33	(18) 1 5/8" Coax	Yes	4.33	1.200	9.90	5.36	6.43	4.256	0.524	0.000	30.08	431.02
29.33	(1) 2" Conduit	Yes	4.33	0.000	0.00	0.00	0.00	4.256	0.524	0.000	0.00	73.11
29.33	(4) #20 Dywidag	Yes	4.33	0.000	0.00	0.00	0.00	4.256	0.524	0.000	0.00	124.53
29.33	(12) 1 5/8" Coax	Yes	4.33	1.200	3.96	3.21	3.85	4.256	0.524	0.000	18.04	298.11
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	4.256	0.524	0.000	0.00	43.51
29.33	(6) 1 5/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	4.256	0.524	0.000	0.00	165.20
29.33	(2) 3/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	4.256	0.524	0.000	0.00	40.59
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	4.256	0.524	0.000	0.00	43.51
30.00	(3) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	4.260	0.532	0.000	0.00	7.89
30.00	(18) 1 5/8" Coax	Yes	0.67	1.200	9.90	0.83	1.00	4.260	0.532	0.000	4.66	66.83
30.00	(1) 2" Conduit	Yes	0.67	0.000	0.00	0.00	0.00	4.260	0.532	0.000	0.00	11.34
30.00	(4) #20 Dywidag	Yes	0.67	0.000	0.00	0.00	0.00	4.260	0.532	0.000	0.00	19.32
30.00	(12) 1 5/8" Coax	Yes	0.67	1.200	3.96	0.50	0.60	4.260	0.532	0.000	2.80	46.23

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
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5/1/2012 2:37:32 PM  
 Page: 23

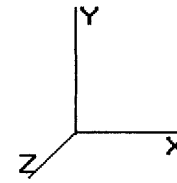
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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice	23 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	4.260	0.532	0.000	0.00	6.76
30.00	(6) 1 5/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	4.260	0.532	0.000	0.00	25.62
30.00	(2) 3/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	4.260	0.532	0.000	0.00	6.31
30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	4.260	0.532	0.000	0.00	6.76
32.83	(3) 1/2" Coax	Yes	2.83	0.000	0.00	0.00	0.00	4.371	0.539	0.000	0.00	33.79
32.83	(18) 1 5/8" Coax	Yes	2.83	1.200	9.90	3.51	4.22	4.371	0.539	0.000	20.27	284.38
32.83	(1) 2" Conduit	Yes	2.83	0.000	0.00	0.00	0.00	4.371	0.539	0.000	0.00	48.41
32.83	(4) #20 Dywidag	Yes	2.83	0.000	0.00	0.00	0.00	4.371	0.539	0.000	0.00	82.49
32.83	(12) 1 5/8" Coax	Yes	2.83	1.200	3.96	2.11	2.53	4.371	0.539	0.000	12.19	196.78
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	4.371	0.539	0.000	0.00	28.98
32.83	(6) 1 5/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	4.371	0.539	0.000	0.00	109.18
32.83	(2) 3/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	4.371	0.539	0.000	0.00	27.06
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	4.371	0.539	0.000	0.00	28.98
35.00	(3) 1/2" Coax	Yes	2.17	0.000	0.00	0.00	0.00	4.451	0.537	0.000	0.00	26.17
35.00	(18) 1 5/8" Coax	Yes	2.17	1.200	9.90	2.70	3.24	4.451	0.537	0.000	15.86	219.25
35.00	(1) 2" Conduit	Yes	2.17	0.000	0.00	0.00	0.00	4.451	0.537	0.000	0.00	37.40
35.00	(4) #20 Dywidag	Yes	2.17	0.000	0.00	0.00	0.00	4.451	0.537	0.000	0.00	63.74
35.00	(12) 1 5/8" Coax	Yes	2.17	1.200	3.96	1.63	1.95	4.451	0.537	0.000	9.55	151.76
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	4.451	0.537	0.000	0.00	22.47
35.00	(6) 1 5/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	4.451	0.537	0.000	0.00	84.26
35.00	(2) 3/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	4.451	0.537	0.000	0.00	20.99
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	4.451	0.537	0.000	0.00	22.47
40.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.550	0.000	0.00	61.60
40.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.25	7.50	4.625	0.550	0.000	38.14	510.90
40.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.550	0.000	0.00	87.53
40.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.550	0.000	0.00	149.22
40.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.77	4.53	4.625	0.550	0.000	23.04	353.83
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.550	0.000	0.00	52.96
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.550	0.000	0.00	196.75
40.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.550	0.000	0.00	49.52
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.550	0.000	0.00	52.96
45.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.783	0.569	0.000	0.00	62.77
45.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.27	7.53	4.783	0.569	0.000	39.61	516.03
45.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.783	0.569	0.000	0.00	88.75
45.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	4.783	0.569	0.000	0.00	151.34
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.80	4.56	4.783	0.569	0.000	23.98	357.56
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.783	0.569	0.000	0.00	54.03
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.783	0.569	0.000	0.00	199.09
45.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.783	0.569	0.000	0.00	50.57
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.783	0.569	0.000	0.00	54.03
47.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	4.843	0.583	0.000	0.00	25.28
47.00	(18) 1 5/8" Coax	Yes	2.00	1.200	9.90	2.51	3.02	4.843	0.583	0.000	16.07	207.18
47.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	4.843	0.583	0.000	0.00	35.69
47.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	4.843	0.583	0.000	0.00	60.85
47.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	1.52	1.83	4.843	0.583	0.000	9.74	143.58
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	4.843	0.583	0.000	0.00	21.77
47.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	4.843	0.583	0.000	0.00	79.99
47.00	(2) 3/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	4.843	0.583	0.000	0.00	20.38
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	4.843	0.583	0.000	0.00	21.77
50.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	4.929	0.593	0.000	0.00	38.30
50.00	(18) 1 5/8" Coax	Yes	3.00	1.200	9.90	3.78	4.53	4.929	0.593	0.000	24.58	312.41
50.00	(1) 2" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	4.929	0.593	0.000	0.00	53.92
50.00	(4) #20 Dywidag	Yes	3.00	0.000	0.00	0.00	0.00	4.929	0.593	0.000	0.00	91.96
50.00	(12) 1 5/8" Coax	Yes	3.00	1.200	3.96	2.29	2.75	4.929	0.593	0.000	14.92	216.57
50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	4.929	0.593	0.000	0.00	33.01
50.00	(6) 1 5/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	4.929	0.593	0.000	0.00	120.73
50.00	(2) 3/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	4.929	0.593	0.000	0.00	30.92

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:32 PM  
 Page: 24

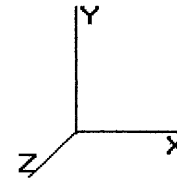
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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice	23 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	4.929	0.593	0.000	0.00	33.01
55.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.065	0.611	0.000	0.00	64.82
55.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.32	7.58	5.065	0.611	0.000	42.24	524.94
55.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.065	0.611	0.000	0.00	90.90
55.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	5.065	0.611	0.000	0.00	155.04
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.84	4.61	5.065	0.611	0.000	25.69	364.06
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.065	0.611	0.000	0.00	55.91
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.065	0.611	0.000	0.00	203.17
55.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.065	0.611	0.000	0.00	52.41
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.065	0.611	0.000	0.00	55.91
60.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.635	0.000	0.00	65.73
60.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.34	7.60	5.193	0.635	0.000	43.43	528.87
60.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.635	0.000	0.00	91.86
60.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.635	0.000	0.00	156.67
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.86	4.63	5.193	0.635	0.000	26.47	366.92
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.635	0.000	0.00	56.75
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.635	0.000	0.00	204.98
60.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.635	0.000	0.00	53.23
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.635	0.000	0.00	56.75
62.92	(3) 1/2" Coax	Yes	2.92	0.000	0.00	0.00	0.00	5.263	0.655	0.000	0.00	38.63
62.92	(18) 1 5/8" Coax	Yes	2.92	1.200	9.90	3.70	4.44	5.263	0.655	0.000	25.72	309.76
62.92	(1) 2" Conduit	Yes	2.92	0.000	0.00	0.00	0.00	5.263	0.655	0.000	0.00	53.89
62.92	(4) #20 Dywidag	Yes	2.92	0.000	0.00	0.00	0.00	5.263	0.655	0.000	0.00	91.91
62.92	(12) 1 5/8" Coax	Yes	2.92	1.200	3.96	2.26	2.71	5.263	0.655	0.000	15.69	214.95
62.92	(1) 7/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	5.263	0.655	0.000	0.00	33.38
62.92	(6) 1 5/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	5.263	0.655	0.000	0.00	120.14
65.00	(3) 1/2" Coax	Yes	2.08	0.000	0.00	0.00	0.00	5.313	0.668	0.000	0.00	27.74
65.00	(18) 1 5/8" Coax	Yes	2.08	1.200	9.90	2.65	3.18	5.313	0.668	0.000	18.57	221.90
65.00	(1) 2" Conduit	Yes	2.08	0.000	0.00	0.00	0.00	5.313	0.668	0.000	0.00	38.65
65.00	(4) #20 Dywidag	Yes	2.08	0.000	0.00	0.00	0.00	5.313	0.668	0.000	0.00	65.92
65.00	(12) 1 5/8" Coax	Yes	2.08	1.200	3.96	1.62	1.94	5.313	0.668	0.000	11.34	154.00
65.00	(1) 7/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	5.313	0.668	0.000	0.00	23.98
65.00	(6) 1 5/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	5.313	0.668	0.000	0.00	86.11
65.75	(3) 1/2" Coax	Yes	0.75	0.000	0.00	0.00	0.00	5.330	0.676	0.000	0.00	10.00
65.75	(18) 1 5/8" Coax	Yes	0.75	1.200	9.90	0.95	1.14	5.330	0.676	0.000	6.71	79.95
65.75	(1) 2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	5.330	0.676	0.000	0.00	13.93
65.75	(4) #20 Dywidag	Yes	0.75	0.000	0.00	0.00	0.00	5.330	0.676	0.000	0.00	23.76
65.75	(12) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.58	0.70	5.330	0.676	0.000	4.10	55.49
65.75	(1) 7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	5.330	0.676	0.000	0.00	8.65
65.75	(6) 1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	5.330	0.676	0.000	0.00	31.03
68.00	(3) 1/2" Coax	Yes	2.25	0.000	0.00	0.00	0.00	5.382	0.672	0.000	0.00	30.18
68.00	(18) 1 5/8" Coax	Yes	2.25	1.200	9.90	2.86	3.44	5.382	0.672	0.000	20.35	240.58
68.00	(1) 2" Conduit	Yes	2.25	0.000	0.00	0.00	0.00	5.382	0.672	0.000	0.00	41.97
68.00	(4) #20 Dywidag	Yes	2.25	0.000	0.00	0.00	0.00	5.382	0.672	0.000	0.00	71.58
68.00	(12) 1 5/8" Coax	Yes	2.25	1.200	3.96	1.75	2.10	5.382	0.672	0.000	12.43	167.00
68.00	(1) 7/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	5.382	0.672	0.000	0.00	26.10
68.00	(6) 1 5/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	5.382	0.672	0.000	0.00	93.43
70.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	5.426	0.684	0.000	0.00	26.95
70.00	(18) 1 5/8" Coax	Yes	2.00	1.200	9.90	2.55	3.06	5.426	0.684	0.000	18.25	214.37
70.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	5.426	0.684	0.000	0.00	37.43
70.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	5.426	0.684	0.000	0.00	63.85
70.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	1.56	1.87	5.426	0.684	0.000	11.16	148.83
70.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	5.426	0.684	0.000	0.00	23.31
70.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	5.426	0.684	0.000	0.00	83.29
75.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.705	0.000	0.00	68.13
75.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.39	7.66	5.534	0.705	0.000	46.66	539.13
75.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.705	0.000	0.00	94.37

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:32 PM  
 Page: 25

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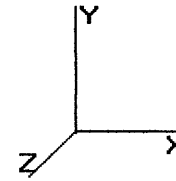
<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice	23 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

75.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.705	0.000	0.00	160.96
75.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.91	4.69	5.534	0.705	0.000	28.58	374.42
75.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.705	0.000	0.00	58.97
77.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	5.576	0.726	0.000	0.00	27.37
77.00	(18) 1 5/8" Coax	Yes	2.00	1.200	9.90	2.56	3.07	5.576	0.726	0.000	18.82	216.15
77.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	5.576	0.726	0.000	0.00	37.87
77.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	5.576	0.726	0.000	0.00	64.59
77.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	1.57	1.88	5.576	0.726	0.000	11.53	150.13
78.77	(3) 1/2" Coax	Yes	1.77	0.000	0.00	0.00	0.00	5.612	0.528	0.000	0.00	24.31
78.77	(18) 1 5/8" Coax	Yes	1.77	1.200	9.90	2.26	2.72	5.612	0.528	0.000	16.78	191.65
78.77	(1) 2" Conduit	Yes	1.77	0.000	0.00	0.00	0.00	5.612	0.528	0.000	0.00	33.61
78.77	(4) #20 Dywidag	Yes	1.77	0.000	0.00	0.00	0.00	5.612	0.528	0.000	0.00	57.32
80.00	(3) 1/2" Coax	Yes	1.23	0.000	0.00	0.00	0.00	5.637	0.535	0.000	0.00	16.94
80.00	(18) 1 5/8" Coax	Yes	1.23	1.200	9.90	1.57	1.89	5.637	0.535	0.000	11.72	133.38
80.00	(1) 2" Conduit	Yes	1.23	0.000	0.00	0.00	0.00	5.637	0.535	0.000	0.00	23.40
80.00	(4) #20 Dywidag	Yes	1.23	0.000	0.00	0.00	0.00	5.637	0.535	0.000	0.00	39.91
85.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.736	0.551	0.000	0.00	69.52
85.00	(18) 1 5/8" Coax	Yes	5.00	1.200	9.90	6.42	7.70	5.736	0.551	0.000	48.57	545.01
85.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.736	0.551	0.000	0.00	95.83
85.00	(4) #20 Dywidag	Yes	1.00	0.000	0.00	0.00	0.00	5.736	0.551	0.000	0.00	32.69
87.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	5.774	0.569	0.000	0.00	27.91
87.00	(18) 1 5/8" Coax	Yes	2.00	1.200	9.90	2.57	3.08	5.774	0.569	0.000	19.57	218.45
87.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	5.774	0.569	0.000	0.00	38.44
90.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	5.830	0.140	1.121	0.00	42.10
90.00	(1) 2" Conduit	Yes	3.00	0.000	2.38	1.98	0.00	5.830	0.140	1.121	0.00	57.90
95.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.921	0.146	1.138	0.00	70.79
95.00	(1) 2" Conduit	Yes	5.00	0.000	2.38	3.31	0.00	5.921	0.146	1.138	0.00	97.15
100.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.008	0.154	1.163	0.00	71.38
100.0	(1) 2" Conduit	Yes	5.00	0.000	2.38	3.32	0.00	6.008	0.154	1.163	0.00	97.77
105.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.093	0.301	0.000	0.00	71.95
105.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	3.33	4.00	6.093	0.301	0.000	26.79	98.37
110.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.174	0.301	0.000	0.00	72.49
110.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	3.34	4.01	6.174	0.301	0.000	27.23	98.94
<b>Totals:</b>											<b>1,059.15</b>	<b>23,448.60</b>

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:32 PM  
 Page: 26



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**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.25 in Radial Ice      23 Iterations

Gust Response Factor : 1.10      Ice Dead Load Factor : 1.00      Wind Importance Factor : 1.00

Dead Load Factor : 1.20      Ice Importance Factor : 1.00

Wind Load Factor : 1.00

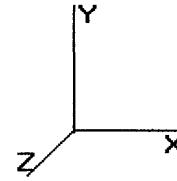
**Applied Segment Forces Summary**

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	81.40	1,351.72	0.00	0.00
10.00	133.33	2,670.22	0.00	0.00
15.00	132.63	2,718.48	0.00	0.00
20.00	131.60	2,747.04	0.00	0.00
25.00	130.37	2,764.27	0.00	0.00
29.33	111.77	2,400.65	0.00	0.00
30.00	17.35	428.01	0.00	0.00
32.83	74.97	1,808.26	0.00	0.00
35.00	58.20	1,211.38	0.00	0.00
40.00	138.29	2,795.45	0.00	0.00
45.00	141.27	2,792.89	0.00	0.00
47.00	56.65	1,114.83	0.00	0.00
50.00	85.96	1,671.05	0.00	0.00
55.00	145.76	2,780.57	0.00	0.00
60.00	212.64	3,306.56	0.00	0.00
62.92	86.15	1,546.91	0.00	0.00
65.00	62.14	1,208.95	0.00	0.00
65.75	22.34	434.15	0.00	0.00
68.00	67.41	1,156.86	0.00	0.00
70.00	162.29	1,757.20	0.00	0.00
75.00	191.14	2,584.20	0.00	0.00
77.00	576.41	5,934.84	0.00	0.00
78.77	43.24	672.57	0.00	0.00
80.00	30.00	384.15	0.00	0.00
85.00	122.62	1,417.76	0.00	0.00
87.00	545.88	4,992.34	0.00	0.00
90.00	43.27	490.13	0.00	0.00
95.00	71.13	797.41	0.00	0.00
100.0	1,022.07	10,441.99	0.00	1,010.76
105.0	72.14	665.52	0.00	0.00
110.0	416.45	2,838.27	0.00	0.00
<b>Totals:</b>	<b>5,186.86</b>	<b>69,884.63</b>	<b>0.00</b>	<b>1,010.76</b>

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:32 PM  
 Page: 27



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**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.25 in Radial Ice      23 Iterations

Gust Response Factor : 1.10      Ice Dead Load Factor : 1.00      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20      Ice Importance Factor : 1.00  
 Wind Load Factor : 1.00

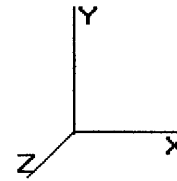
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-69.88	-5.25	0.00	-425.43	0.00	425.43	1,564.13	782.07	1,919.99	948.21	0.00	0.00	0.225
5.00	-68.52	-5.28	0.00	-399.19	0.00	399.19	1,541.15	770.57	1,839.28	908.35	0.05	-0.10	0.216
10.00	-65.84	-5.25	0.00	-372.79	0.00	372.79	1,517.03	758.51	1,758.81	868.61	0.21	-0.19	0.206
15.00	-63.11	-5.21	0.00	-346.55	0.00	346.55	1,491.77	745.88	1,678.72	829.05	0.46	-0.29	0.196
20.00	-60.36	-5.16	0.00	-320.49	0.00	320.49	1,465.38	732.69	1,599.10	789.74	0.81	-0.38	0.186
25.00	-57.59	-5.10	0.00	-294.68	0.00	294.68	1,437.85	718.92	1,520.08	750.71	1.26	-0.48	0.176
29.33	-55.19	-5.01	0.00	-272.61	0.00	272.61	1,413.09	706.55	1,452.23	717.20	1.73	-0.56	0.166
30.00	-54.76	-5.02	0.00	-269.26	0.00	269.26	1,409.19	704.59	1,441.78	712.04	1.81	-0.57	0.162
32.83	-52.94	-4.96	0.00	-255.06	0.00	255.06	1,130.07	565.03	1,157.93	571.86	2.17	-0.62	0.195
35.00	-51.73	-4.95	0.00	-244.29	0.00	244.29	1,119.12	559.56	1,130.16	558.15	2.46	-0.66	0.189
40.00	-48.93	-4.84	0.00	-219.55	0.00	219.55	1,081.75	540.87	1,055.58	521.31	3.19	-0.74	0.177
45.00	-46.13	-4.71	0.00	-195.33	0.00	195.33	1,044.38	522.19	983.54	485.73	4.01	-0.82	0.165
47.00	-45.02	-4.67	0.00	-185.91	0.00	185.91	1,029.43	514.72	955.43	471.85	4.36	-0.85	0.159
47.00	-45.02	-4.67	0.00	-185.91	0.00	185.91	1,029.43	514.72	955.43	471.85	4.36	-0.85	0.159
50.00	-43.34	-4.60	0.00	-171.91	0.00	171.91	1,007.01	503.50	914.04	451.41	4.91	-0.90	0.151
55.00	-40.56	-4.46	0.00	-148.92	0.00	148.92	969.64	484.82	847.09	418.35	5.89	-0.97	0.137
60.00	-37.25	-4.22	0.00	-126.63	0.00	126.63	932.27	466.13	782.69	386.54	6.93	-1.03	0.122
60.00	-37.25	-4.22	0.00	-126.63	0.00	126.63	932.27	466.13	782.69	386.54	6.93	-1.03	0.122
62.92	-35.70	-4.12	0.00	-114.33	0.00	114.33	910.47	455.23	746.30	368.57	7.58	-1.07	0.114
65.00	-34.50	-4.05	0.00	-105.74	0.00	105.74	894.90	447.45	720.83	355.99	8.05	-1.09	0.106
65.75	-34.06	-4.03	0.00	-102.70	0.00	102.70	664.38	332.19	545.54	269.42	8.22	-1.10	0.116
68.00	-32.90	-3.95	0.00	-93.64	0.00	93.64	656.20	328.10	528.77	261.14	8.75	-1.13	0.108
68.00	-32.90	-3.95	0.00	-93.64	0.00	93.64	656.20	328.10	528.77	261.14	8.75	-1.13	0.108
70.00	-31.15	-3.77	0.00	-85.73	0.00	85.73	648.81	324.40	513.97	253.83	9.23	-1.15	0.100
75.00	-28.57	-3.55	0.00	-66.87	0.00	66.87	629.79	314.89	477.45	235.80	10.46	-1.20	0.082
77.00	-22.64	-2.85	0.00	-59.78	0.00	59.78	618.88	309.44	460.75	227.55	10.96	-1.21	0.072
78.77	-21.97	-2.80	0.00	-54.73	0.00	54.73	608.96	304.48	446.02	220.27	11.42	-1.23	0.068
78.77	-21.97	-2.80	0.00	-54.73	0.00	54.73	608.96	304.48	446.02	220.27	11.42	-1.23	0.285
80.00	-21.58	-2.79	0.00	-51.29	0.00	51.29	602.06	301.03	435.93	215.29	11.73	-1.24	0.274
85.00	-20.17	-2.67	0.00	-37.34	0.00	37.34	574.04	287.02	396.08	195.61	13.11	-1.39	0.226
87.00	-15.19	-2.02	0.00	-32.00	0.00	32.00	562.82	281.41	380.67	188.00	13.71	-1.44	0.197
90.00	-14.69	-1.98	0.00	-25.94	0.00	25.94	546.01	273.00	358.14	176.87	14.64	-1.51	0.174
95.00	-13.90	-1.91	0.00	-16.02	0.00	16.02	517.98	258.99	322.11	159.08	16.28	-1.61	0.128
100.00	-3.49	-0.59	0.00	-5.46	0.00	5.46	489.95	244.98	288.00	142.23	18.00	-1.67	0.046
100.00	-3.49	-0.59	0.00	-5.46	0.00	5.46	489.95	244.98	288.00	142.23	18.00	-1.67	0.076
105.00	-2.82	-0.50	0.00	-2.50	0.00	2.50	593.08	296.54	157.41	77.74	19.77	-1.70	0.037
110.00	0.00	-0.42	0.00	0.00	0.00	0.00	593.08	296.54	157.41	77.74	21.55	-1.71	0.000

Pole : 302481  
 Location : Hfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:32 PM  
 Page: 28



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<b>Load Case: 1.0D + 1.0W</b>	<b>60.00 mph Serviceability</b>	<b>22 Iterations</b>
<b>Gust Response Factor : 1.10</b>		<b>Wind Importance Factor : 1.00</b>
<b>Dead Load Factor : 1.00</b>		
<b>Wind Load Factor : 1.00</b>		

**Shaft Segment Forces (Factored)**

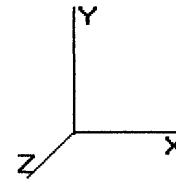
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	6.129	6.742	129.92	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	6.129	6.742	126.38	1.000	0.000	5.00	12.764	12.76	86.1	0.0	735.9
10.00		1.00	0.70	6.129	6.742	122.83	1.200 *	0.000	5.00	12.411	14.89	100.4	0.0	724.6
15.00		1.00	0.70	6.129	6.742	119.28	1.200 *	0.000	5.00	12.058	14.47	97.5	0.0	713.4
20.00		1.00	0.70	6.129	6.742	115.74	1.200 *	0.000	5.00	11.705	14.05	94.7	0.0	702.2
25.00		1.00	0.70	6.129	6.742	112.19	1.200 *	0.000	5.00	11.352	13.62	91.8	0.0	691.0
29.33	Bot - Section 2	1.00	0.70	6.129	6.742	109.12	1.200 *	0.000	4.33	9.545	11.45	77.2	0.0	589.3
30.00		1.00	0.70	6.134	6.747	108.69	1.200 *	0.000	0.67	1.482	1.78	12.0	0.0	137.1
32.83	Top - Section 1	1.00	0.71	6.294	6.923	108.07	1.200 *	0.000	2.83	6.190	7.43	51.4	0.0	574.4
35.00		1.00	0.73	6.410	7.051	109.70	1.200 *	0.000	2.17	4.670	5.60	39.5	0.0	291.8
40.00		1.00	0.76	6.659	7.325	108.12	1.200 *	0.000	5.00	10.508	12.61	92.4	0.0	664.2
45.00		1.00	0.78	6.887	7.576	106.19	1.200 *	0.000	5.00	10.155	12.19	92.3	0.0	653.0
47.00	Reinf. Top Reinf Bottom	1.00	0.79	6.973	7.671	105.34	1.200 *	0.000	2.00	3.963	4.76	36.5	0.0	258.1
50.00		1.00	0.81	7.098	7.807	103.99	1.200 *	0.000	3.00	5.838	7.01	54.7	0.0	383.7
55.00		1.00	0.83	7.294	8.023	101.54	1.200 *	0.000	5.00	9.448	11.34	91.0	0.0	630.6
60.00	Reinf. Top Reinf	1.00	0.85	7.477	8.225	98.903	1.200 *	0.000	5.00	9.095	10.91	89.8	0.0	619.3
62.92	Bot - Section 3	1.00	0.86	7.579	8.337	97.275	1.200 *	0.000	2.92	5.142	6.17	51.4	0.0	356.1
65.00		1.00	0.87	7.650	8.415	96.078	1.200 *	0.000	2.08	3.667	4.40	37.0	0.0	338.6
65.75	Top - Section 2	1.00	0.87	7.675	8.443	95.641	1.200 *	0.000	0.75	1.305	1.57	13.2	0.0	121.0
68.00	Reinf. Top Reinf Bottom	1.00	0.88	7.749	8.524	96.133	1.200 *	0.000	2.25	3.868	4.64	39.6	0.0	241.5
70.00	Appertunance(s)	1.00	0.89	7.814	8.595	94.931	1.200 *	0.000	2.00	3.378	4.05	34.8	0.0	213.3
75.00	Appertunance(s)	1.00	0.91	7.969	8.766	91.827	1.200 *	0.000	5.00	8.197	9.84	86.2	0.0	527.3
77.00	Appertunance(s)	1.00	0.91	8.030	8.833	90.550	1.200 *	0.000	2.00	3.180	3.82	33.7	0.0	208.6
78.77	Reinf. Top	1.00	0.92	8.082	8.890	89.403	1.200 *	0.000	1.77	2.767	3.32	29.5	0.0	183.4
80.00		1.00	0.92	8.118	8.930	88.597	1.200 *	0.000	1.23	1.897	2.28	20.3	0.0	44.7
85.00		1.00	0.94	8.260	9.086	85.251	1.200 *	0.000	5.00	7.491	8.99	81.7	0.0	176.5
87.00	Appertunance(s)	1.00	0.95	8.315	9.146	83.883	1.200 *	0.000	2.00	2.897	3.48	31.8	0.0	68.2
90.00		1.00	0.95	8.396	9.235	81.800	1.000 *	0.000	3.00	4.240	4.24	39.2	0.0	99.8
95.00		1.00	0.97	8.526	9.379	78.252	1.000 *	0.000	5.00	6.785	6.78	63.6	0.0	159.6
100.0	Top - Section 3	1.00	0.98	8.652	9.517	74.614	1.000 *	0.000	5.00	6.431	6.43	61.2	0.0	151.2
105.0		1.00	1.00	8.774	9.651	39.641	1.200 *	0.000	5.00	3.300	3.96	38.2	0.0	254.2
110.0	Appertunance(s)	1.00	1.01	8.891	9.780	39.905	1.200 *	0.000	5.00	3.300	3.96	38.7	0.0	254.2
* = Cf Adjusted By Linear Load Ra Effect						Totals:		110.00				1,807.6	0.0	11,766.8



Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:33 PM  
 Page: 29



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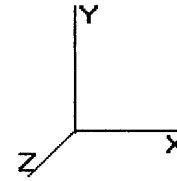
<b>Load Case:</b> 1.0D + 1.0W	<b>60.00 mph Serviceability</b>	<b>22 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
60.00	Radio Waves SP2-2.4	1	7.477	8.225	1.00	1.00	3.96	0.000	0.000	32.57	0.00	0.00	90.00
60.00	Radio/ODU	1	7.477	8.225	1.00	1.00	1.87	0.000	0.000	15.38	0.00	0.00	30.00
60.00	Scala 840 10212	1	7.477	8.225	1.00	1.00	2.53	0.000	0.000	20.81	0.00	0.00	6.70
70.00	RFS APXV18-206517S-	3	7.814	8.595	0.80	1.00	12.38	0.000	0.000	106.44	0.00	0.00	79.20
75.00	Scala 840 10212	1	7.969	8.766	1.00	1.00	2.53	0.000	0.000	22.18	0.00	0.00	6.70
75.00	TX RX Systems 421-86	1	7.969	8.766	1.00	1.00	2.59	0.000	0.000	22.70	0.00	0.00	15.00
77.00	Antel LPA-185063/8CF	6	8.030	8.833	0.61	0.80	10.80	0.000	0.000	95.37	0.00	0.00	54.00
77.00	Antel LPA-80063/4CF	6	8.030	8.833	0.61	0.80	25.54	0.000	0.000	225.55	0.00	0.00	120.00
77.00	Flat T-Arms	3	8.030	8.833	0.50	0.75	19.45	0.000	0.000	171.76	0.00	0.00	750.00
87.00	CCI DTMA-1819-DD-12-	6	8.315	9.146	0.26	0.80	1.12	0.000	0.000	10.29	0.00	0.00	85.80
87.00	Flat Low Profile Pla	1	8.315	9.146	1.00	1.00	26.10	0.000	0.000	238.71	0.00	0.00	1,500.00
87.00	RFS APX16DWV-	3	8.315	9.146	0.48	0.80	9.65	0.000	0.000	88.24	0.00	0.00	118.80
87.00	RFS APXV18-206516S-	3	8.315	9.146	0.53	0.80	5.73	0.000	0.000	52.44	0.00	0.00	56.10
100.0	Andrew SBNH-	1	8.652	9.517	0.63	0.75	7.21	0.000	0.000	68.59	0.00	0.00	66.10
100.0	Ericsson RRUS 11	6	8.652	9.517	0.50	0.75	8.86	0.000	0.000	84.36	0.00	0.00	330.00
100.0	Flat Platform w/ Han	1	8.701	9.571	1.00	1.00	42.40	0.000	2.000	405.83	0.00	811.65	2,000.00
100.0	Kathrein 860-10025	6	8.652	9.517	0.38	0.75	0.31	0.000	0.000	3.00	0.00	0.00	6.60
100.0	KMW AM-X-CD-16-65-	2	8.652	9.517	0.59	0.75	9.50	0.000	0.000	90.45	0.00	0.00	97.00
100.0	Powerwave 7770.00	6	8.652	9.517	0.58	0.75	20.37	0.000	0.000	193.91	0.00	0.00	210.00
100.0	Powerwave LGP21401	6	8.652	9.517	0.50	0.75	3.89	0.000	0.000	37.02	0.00	0.00	84.60
100.0	Powerwave TT19-	3	8.652	9.517	0.38	0.75	0.72	0.000	0.000	6.85	0.00	0.00	48.00
100.0	Raycap DC6-48-60-18-	1	8.652	9.517	0.75	0.75	1.10	0.000	0.000	10.49	0.00	0.00	31.80
110.0	Argus LLPX310R	3	8.891	9.780	0.50	0.80	7.30	0.000	0.000	71.42	0.00	0.00	85.80
110.0	DragonWave A-ANT-	2	8.891	9.780	0.72	0.80	12.48	0.000	0.000	122.10	0.00	0.00	132.20
110.0	DragonWave A-ANT-	1	8.891	9.780	0.72	0.80	1.16	0.000	0.000	11.34	0.00	0.00	15.00
110.0	DragonWave Horizon	3	8.891	9.780	0.26	0.80	0.34	0.000	0.000	3.33	0.00	0.00	31.80
110.0	NextNet BTS-2500	3	8.891	9.780	0.26	0.80	1.68	0.000	0.000	16.42	0.00	0.00	105.00
110.0	Side Arms	1	8.891	9.780	1.00	1.00	8.50	0.000	0.000	83.13	0.00	0.00	40.00
										2,310.71			6,196.20

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:33 PM  
 Page: 30

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<b>Load Case:</b> 1.0D + 1.0W	<b>60.00 mph Serviceability</b>	<b>22 Iterations</b>
<b>Gust Response Factor:</b> 1.10		<b>Wind Importance Factor:</b> 1.00
<b>Dead Load Factor:</b> 1.00		
<b>Wind Load Factor:</b> 1.00		

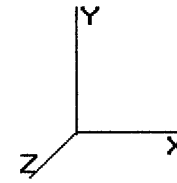
**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.000	0.000	0.00	0.00
10.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.465	0.000	0.00	2.25
10.00	(18) 1 5/8" Coax	Yes	5.00	0.927	9.90	4.13	3.82	6.129	0.465	0.000	25.78	73.79
10.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.465	0.000	0.00	18.25
10.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.465	0.000	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	6.129	0.465	0.000	13.35	49.19
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.465	0.000	0.00	1.65
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.465	0.000	0.00	24.60
10.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.465	0.000	0.00	0.80
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.465	0.000	0.00	1.65
15.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.479	0.000	0.00	2.25
15.00	(18) 1 5/8" Coax	Yes	5.00	0.927	9.90	4.13	3.82	6.129	0.479	0.000	25.78	73.79
15.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.479	0.000	0.00	18.25
15.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.479	0.000	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	6.129	0.479	0.000	13.35	49.19
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.479	0.000	0.00	1.65
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.479	0.000	0.00	24.60
15.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.479	0.000	0.00	0.80
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.479	0.000	0.00	1.65
20.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.493	0.000	0.00	2.25
20.00	(18) 1 5/8" Coax	Yes	5.00	0.927	9.90	4.13	3.82	6.129	0.493	0.000	25.78	73.79
20.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.493	0.000	0.00	18.25
20.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.493	0.000	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	6.129	0.493	0.000	13.35	49.19
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.493	0.000	0.00	1.65
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.493	0.000	0.00	24.60
20.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.493	0.000	0.00	0.80
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.493	0.000	0.00	1.65
25.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.509	0.000	0.00	2.25
25.00	(18) 1 5/8" Coax	Yes	5.00	0.927	9.90	4.13	3.82	6.129	0.509	0.000	25.78	73.79
25.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.509	0.000	0.00	18.25
25.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.509	0.000	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	6.129	0.509	0.000	13.35	49.19
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.509	0.000	0.00	1.65
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.509	0.000	0.00	24.60
25.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.509	0.000	0.00	0.80
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.509	0.000	0.00	1.65
29.33	(3) 1/2" Coax	Yes	4.33	0.000	0.00	0.00	0.00	6.129	0.524	0.000	0.00	1.95
29.33	(18) 1 5/8" Coax	Yes	4.33	0.927	9.90	3.57	3.31	6.129	0.524	0.000	22.33	63.90
29.33	(1) 2" Conduit	Yes	4.33	0.000	0.00	0.00	0.00	6.129	0.524	0.000	0.00	15.80
29.33	(4) #20 Dywidag	Yes	4.33	0.000	0.00	0.00	0.00	6.129	0.524	0.000	0.00	0.00
29.33	(12) 1 5/8" Coax	Yes	4.33	1.200	3.96	1.43	1.71	6.129	0.524	0.000	11.56	42.60
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	6.129	0.524	0.000	0.00	1.43
29.33	(6) 1 5/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	6.129	0.524	0.000	0.00	21.30
29.33	(2) 3/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	6.129	0.524	0.000	0.00	0.69
29.33	(1) 7/8" Coax	Yes	4.33	0.000	0.00	0.00	0.00	6.129	0.524	0.000	0.00	1.43
30.00	(3) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	6.134	0.532	0.000	0.00	0.30
30.00	(18) 1 5/8" Coax	Yes	0.67	0.927	9.90	0.55	0.51	6.134	0.532	0.000	3.46	9.89
30.00	(1) 2" Conduit	Yes	0.67	0.000	0.00	0.00	0.00	6.134	0.532	0.000	0.00	2.45
30.00	(4) #20 Dywidag	Yes	0.67	0.000	0.00	0.00	0.00	6.134	0.532	0.000	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	0.67	1.200	3.96	0.22	0.27	6.134	0.532	0.000	1.79	6.59

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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 Page: 31



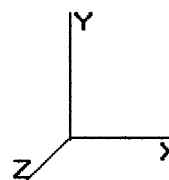
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<b>Load Case:</b> 1.0D + 1.0W	<b>60.00 mph Serviceability</b>	<b>22 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	6.134	0.532	0.000	0.00	0.22
30.00	(6) 1 5/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	6.134	0.532	0.000	0.00	3.30
30.00	(2) 3/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	6.134	0.532	0.000	0.00	0.11
30.00	(1) 7/8" Coax	Yes	0.67	0.000	0.00	0.00	0.00	6.134	0.532	0.000	0.00	0.22
32.83	(3) 1/2" Coax	Yes	2.83	0.000	0.00	0.00	0.00	6.294	0.539	0.000	0.00	1.27
32.83	(18) 1 5/8" Coax	Yes	2.83	0.915	9.90	2.33	2.14	6.294	0.539	0.000	14.79	41.76
32.83	(1) 2" Conduit	Yes	2.83	0.000	0.00	0.00	0.00	6.294	0.539	0.000	0.00	10.33
32.83	(4) #20 Dywidag	Yes	2.83	0.000	0.00	0.00	0.00	6.294	0.539	0.000	0.00	0.00
32.83	(12) 1 5/8" Coax	Yes	2.83	1.200	3.96	0.93	1.12	6.294	0.539	0.000	7.76	27.84
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	6.294	0.539	0.000	0.00	0.93
32.83	(6) 1 5/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	6.294	0.539	0.000	0.00	13.92
32.83	(2) 3/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	6.294	0.539	0.000	0.00	0.45
32.83	(1) 7/8" Coax	Yes	2.83	0.000	0.00	0.00	0.00	6.294	0.539	0.000	0.00	0.93
35.00	(3) 1/2" Coax	Yes	2.17	0.000	0.00	0.00	0.00	6.410	0.537	0.000	0.00	0.98
35.00	(18) 1 5/8" Coax	Yes	2.17	0.907	9.90	1.79	1.62	6.410	0.537	0.000	11.44	32.03
35.00	(1) 2" Conduit	Yes	2.17	0.000	0.00	0.00	0.00	6.410	0.537	0.000	0.00	7.92
35.00	(4) #20 Dywidag	Yes	2.17	0.000	0.00	0.00	0.00	6.410	0.537	0.000	0.00	0.00
35.00	(12) 1 5/8" Coax	Yes	2.17	1.200	3.96	0.72	0.86	6.410	0.537	0.000	6.06	21.35
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	6.410	0.537	0.000	0.00	0.72
35.00	(6) 1 5/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	6.410	0.537	0.000	0.00	10.68
35.00	(2) 3/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	6.410	0.537	0.000	0.00	0.35
35.00	(1) 7/8" Coax	Yes	2.17	0.000	0.00	0.00	0.00	6.410	0.537	0.000	0.00	0.72
40.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.550	0.000	0.00	2.25
40.00	(18) 1 5/8" Coax	Yes	5.00	0.889	9.90	4.13	3.67	6.659	0.550	0.000	26.88	73.79
40.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.550	0.000	0.00	18.25
40.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.550	0.000	0.00	0.00
40.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	6.659	0.550	0.000	14.50	49.19
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.550	0.000	0.00	1.65
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.550	0.000	0.00	24.60
40.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.550	0.000	0.00	0.80
40.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.550	0.000	0.00	1.65
45.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.887	0.569	0.000	0.00	2.25
45.00	(18) 1 5/8" Coax	Yes	5.00	0.875	9.90	4.13	3.61	6.887	0.569	0.000	27.33	73.79
45.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.887	0.569	0.000	0.00	18.25
45.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	6.887	0.569	0.000	0.00	0.00
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	6.887	0.569	0.000	15.00	49.19
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.887	0.569	0.000	0.00	1.65
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.887	0.569	0.000	0.00	24.60
45.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.887	0.569	0.000	0.00	0.80
45.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.887	0.569	0.000	0.00	1.65
47.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	6.973	0.583	0.000	0.00	0.90
47.00	(18) 1 5/8" Coax	Yes	2.00	0.869	9.90	1.65	1.43	6.973	0.583	0.000	11.00	29.52
47.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	6.973	0.583	0.000	0.00	7.30
47.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	6.973	0.583	0.000	0.00	0.00
47.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	6.973	0.583	0.000	6.08	19.68
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	6.973	0.583	0.000	0.00	0.66
47.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	6.973	0.583	0.000	0.00	9.84
47.00	(2) 3/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	6.973	0.583	0.000	0.00	0.32
47.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	6.973	0.583	0.000	0.00	0.66
50.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	7.098	0.593	0.000	0.00	1.35
50.00	(18) 1 5/8" Coax	Yes	3.00	0.862	9.90	2.47	2.13	7.098	0.593	0.000	16.65	44.27
50.00	(1) 2" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	7.098	0.593	0.000	0.00	10.95
50.00	(4) #20 Dywidag	Yes	3.00	0.000	0.00	0.00	0.00	7.098	0.593	0.000	0.00	0.00
50.00	(12) 1 5/8" Coax	Yes	3.00	1.200	3.96	0.99	1.19	7.098	0.593	0.000	9.28	29.52
50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	7.098	0.593	0.000	0.00	0.99
50.00	(6) 1 5/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	7.098	0.593	0.000	0.00	14.76
50.00	(2) 3/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	7.098	0.593	0.000	0.00	0.48

Pole : 302481  
 Location : Hrrr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:33 PM  
 Page: 32

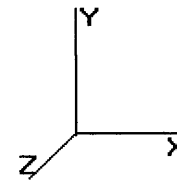
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<b>Load Case:</b> 1.0D + 1.0W	<b>60.00 mph Serviceability</b>	<b>22 Iterations</b>
<b>Gust Response Factor:</b> 1.10		<b>Wind Importance Factor:</b> 1.00
<b>Dead Load Factor:</b> 1.00		
<b>Wind Load Factor:</b> 1.00		

50.00	(1) 7/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	7.098	0.593	0.000	0.00	0.99
55.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.294	0.611	0.000	0.00	2.25
55.00	(18) 1 5/8" Coax	Yes	5.00	0.850	9.90	4.13	3.51	7.294	0.611	0.000	28.13	73.79
55.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.294	0.611	0.000	0.00	18.25
55.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	7.294	0.611	0.000	0.00	0.00
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	7.294	0.611	0.000	15.89	49.19
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.294	0.611	0.000	0.00	1.65
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.294	0.611	0.000	0.00	24.60
55.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.294	0.611	0.000	0.00	0.80
55.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.294	0.611	0.000	0.00	1.65
60.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.635	0.000	0.00	2.25
60.00	(18) 1 5/8" Coax	Yes	5.00	0.839	9.90	4.13	3.46	7.477	0.635	0.000	28.48	73.79
60.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.635	0.000	0.00	18.25
60.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.635	0.000	0.00	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	7.477	0.635	0.000	16.29	49.19
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.635	0.000	0.00	1.65
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.635	0.000	0.00	24.60
60.00	(2) 3/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.635	0.000	0.00	0.80
60.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.635	0.000	0.00	1.65
62.92	(3) 1/2" Coax	Yes	2.92	0.000	0.00	0.00	0.00	7.579	0.655	0.000	0.00	1.31
62.92	(18) 1 5/8" Coax	Yes	2.92	0.834	9.90	2.41	2.01	7.579	0.655	0.000	16.73	43.04
62.92	(1) 2" Conduit	Yes	2.92	0.000	0.00	0.00	0.00	7.579	0.655	0.000	0.00	10.65
62.92	(4) #20 Dywidag	Yes	2.92	0.000	0.00	0.00	0.00	7.579	0.655	0.000	0.00	0.00
62.92	(12) 1 5/8" Coax	Yes	2.92	1.200	3.96	0.96	1.15	7.579	0.655	0.000	9.63	28.70
62.92	(1) 7/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	7.579	0.655	0.000	0.00	0.96
62.92	(6) 1 5/8" Coax	Yes	2.92	0.000	0.00	0.00	0.00	7.579	0.655	0.000	0.00	14.35
65.00	(3) 1/2" Coax	Yes	2.08	0.000	0.00	0.00	0.00	7.650	0.668	0.000	0.00	0.94
65.00	(18) 1 5/8" Coax	Yes	2.08	0.830	9.90	1.72	1.43	7.650	0.668	0.000	12.00	30.75
65.00	(1) 2" Conduit	Yes	2.08	0.000	0.00	0.00	0.00	7.650	0.668	0.000	0.00	7.60
65.00	(4) #20 Dywidag	Yes	2.08	0.000	0.00	0.00	0.00	7.650	0.668	0.000	0.00	0.00
65.00	(12) 1 5/8" Coax	Yes	2.08	1.200	3.96	0.69	0.83	7.650	0.668	0.000	6.94	20.50
65.00	(1) 7/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	7.650	0.668	0.000	0.00	0.69
65.00	(6) 1 5/8" Coax	Yes	2.08	0.000	0.00	0.00	0.00	7.650	0.668	0.000	0.00	10.25
65.75	(3) 1/2" Coax	Yes	0.75	0.000	0.00	0.00	0.00	7.675	0.676	0.000	0.00	0.34
65.75	(18) 1 5/8" Coax	Yes	0.75	0.829	9.90	0.62	0.51	7.675	0.676	0.000	4.33	11.07
65.75	(1) 2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	7.675	0.676	0.000	0.00	2.74
65.75	(4) #20 Dywidag	Yes	0.75	0.000	0.00	0.00	0.00	7.675	0.676	0.000	0.00	0.00
65.75	(12) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.25	0.30	7.675	0.676	0.000	2.51	7.38
65.75	(1) 7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	7.675	0.676	0.000	0.00	0.25
65.75	(6) 1 5/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	7.675	0.676	0.000	0.00	3.69
68.00	(3) 1/2" Coax	Yes	2.25	0.000	0.00	0.00	0.00	7.749	0.672	0.000	0.00	1.01
68.00	(18) 1 5/8" Coax	Yes	2.25	0.825	9.90	1.86	1.53	7.749	0.672	0.000	13.05	33.21
68.00	(1) 2" Conduit	Yes	2.25	0.000	0.00	0.00	0.00	7.749	0.672	0.000	0.00	8.21
68.00	(4) #20 Dywidag	Yes	2.25	0.000	0.00	0.00	0.00	7.749	0.672	0.000	0.00	0.00
68.00	(12) 1 5/8" Coax	Yes	2.25	1.200	3.96	0.74	0.89	7.749	0.672	0.000	7.60	22.14
68.00	(1) 7/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	7.749	0.672	0.000	0.00	0.74
68.00	(6) 1 5/8" Coax	Yes	2.25	0.000	0.00	0.00	0.00	7.749	0.672	0.000	0.00	11.07
70.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	7.814	0.684	0.000	0.00	0.90
70.00	(18) 1 5/8" Coax	Yes	2.00	0.821	9.90	1.65	1.35	7.814	0.684	0.000	11.65	29.52
70.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	7.814	0.684	0.000	0.00	7.30
70.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	7.814	0.684	0.000	0.00	0.00
70.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	7.814	0.684	0.000	6.81	19.68
70.00	(1) 7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	7.814	0.684	0.000	0.00	0.66
70.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	7.814	0.684	0.000	0.00	9.84
75.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.705	0.000	0.00	2.25
75.00	(18) 1 5/8" Coax	Yes	5.00	0.813	9.90	4.13	3.35	7.969	0.705	0.000	29.40	73.79
75.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.705	0.000	0.00	18.25

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



5/1/2012 2:37:33 PM  
 Page: 33

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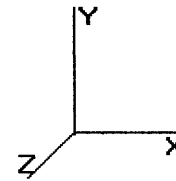
<b>Load Case: 1.0D + 1.0W</b>	<b>60.00 mph Serviceability</b>	<b>22 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

75.00	(4) #20 Dywidag	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.705	0.000	0.00	0.00
75.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	7.969	0.705	0.000	17.36	49.19
75.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.705	0.000	0.00	1.65
77.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	8.030	0.726	0.000	0.00	0.90
77.00	(18) 1 5/8" Coax	Yes	2.00	0.810	9.90	1.65	1.34	8.030	0.726	0.000	11.81	29.52
77.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	8.030	0.726	0.000	0.00	7.30
77.00	(4) #20 Dywidag	Yes	2.00	0.000	0.00	0.00	0.00	8.030	0.726	0.000	0.00	0.00
77.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	8.030	0.726	0.000	7.00	19.68
78.77	(3) 1/2" Coax	Yes	1.77	0.000	0.00	0.00	0.00	8.082	0.528	0.000	0.00	0.80
78.77	(18) 1 5/8" Coax	Yes	1.77	0.807	9.90	1.46	1.18	8.082	0.528	0.000	10.48	26.12
78.77	(1) 2" Conduit	Yes	1.77	0.000	0.00	0.00	0.00	8.082	0.528	0.000	0.00	6.46
78.77	(4) #20 Dywidag	Yes	1.77	0.000	0.00	0.00	0.00	8.082	0.528	0.000	0.00	0.00
80.00	(3) 1/2" Coax	Yes	1.23	0.000	0.00	0.00	0.00	8.118	0.535	0.000	0.00	0.55
80.00	(18) 1 5/8" Coax	Yes	1.23	0.806	9.90	1.01	0.82	8.118	0.535	0.000	7.30	18.15
80.00	(1) 2" Conduit	Yes	1.23	0.000	0.00	0.00	0.00	8.118	0.535	0.000	0.00	4.49
80.00	(4) #20 Dywidag	Yes	1.23	0.000	0.00	0.00	0.00	8.118	0.535	0.000	0.00	0.00
85.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.260	0.551	0.000	0.00	2.25
85.00	(18) 1 5/8" Coax	Yes	5.00	0.799	9.90	4.13	3.29	8.260	0.551	0.000	29.93	73.79
85.00	(1) 2" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	8.260	0.551	0.000	0.00	18.25
85.00	(4) #20 Dywidag	Yes	1.00	0.000	0.00	0.00	0.00	8.260	0.551	0.000	0.00	0.00
87.00	(3) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	8.315	0.569	0.000	0.00	0.90
87.00	(18) 1 5/8" Coax	Yes	2.00	0.796	9.90	1.65	1.31	8.315	0.569	0.000	12.01	29.52
87.00	(1) 2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	8.315	0.569	0.000	0.00	7.30
90.00	(3) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	8.396	0.140	1.121	0.00	1.35
90.00	(1) 2" Conduit	Yes	3.00	0.000	2.38	0.60	0.00	8.396	0.140	1.121	0.00	10.95
95.00	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.526	0.146	1.138	0.00	2.25
95.00	(1) 2" Conduit	Yes	5.00	0.000	2.38	0.99	0.00	8.526	0.146	1.138	0.00	18.25
100.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.652	0.154	1.163	0.00	2.25
100.0	(1) 2" Conduit	Yes	5.00	0.000	2.38	0.99	0.00	8.652	0.154	1.163	0.00	18.25
105.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.774	0.301	0.000	0.00	2.25
105.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	0.99	1.19	8.774	0.301	0.000	11.48	18.25
110.0	(3) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.891	0.301	0.000	0.00	2.25
110.0	(1) 2" Conduit	Yes	5.00	1.200	2.38	0.99	1.19	8.891	0.301	0.000	11.64	18.25
<b>Totals:</b>											<b>690.86</b>	<b>2,718.88</b>

Pole : 302481  
 Location : Hrr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:33 PM  
 Page: 34



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<b>Load Case:</b> 1.0D + 1.0W	60.00 mph Serviceability	22 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

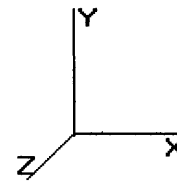
**Applied Segment Forces Summary**

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	86.05	735.85	0.00	0.00
10.00	139.54	991.51	0.00	0.00
15.00	136.68	980.30	0.00	0.00
20.00	133.82	969.09	0.00	0.00
25.00	130.97	957.87	0.00	0.00
29.33	111.10	820.44	0.00	0.00
30.00	17.25	172.83	0.00	0.00
32.83	73.98	725.43	0.00	0.00
35.00	57.02	407.60	0.00	0.00
40.00	133.75	931.08	0.00	0.00
45.00	134.65	919.87	0.00	0.00
47.00	53.55	364.81	0.00	0.00
50.00	80.62	543.85	0.00	0.00
55.00	134.98	897.44	0.00	0.00
60.00	203.29	1,012.92	0.00	0.00
62.92	77.80	510.34	0.00	0.00
65.00	55.98	448.75	0.00	0.00
65.75	20.06	160.68	0.00	0.00
68.00	60.21	360.54	0.00	0.00
70.00	159.74	398.23	0.00	0.00
75.00	177.88	788.80	0.00	0.00
77.00	545.19	1,227.83	0.00	0.00
78.77	40.00	250.33	0.00	0.00
80.00	27.63	91.19	0.00	0.00
85.00	111.60	365.44	0.00	0.00
87.00	433.50	1,904.52	0.00	0.00
90.00	39.16	168.93	0.00	0.00
95.00	63.63	274.83	0.00	0.00
100.0	961.71	3,140.52	0.00	811.65
105.0	49.70	276.09	0.00	0.00
110.0	358.11	685.88	0.00	0.00
<b>Totals:</b>	<b>4,809.15</b>	<b>22,483.80</b>	<b>0.00</b>	<b>811.65</b>

Pole : 302481  
 Location : Hrfr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:33 PM  
 Page: 35



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**Load Case: 1.0D + 1.0W**

60.00 mph Serviceability

22 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 1.00  
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

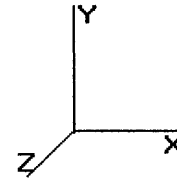
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-22.48	-4.82	0.00	-352.15	0.00	352.15	1,564.13	782.07	1,919.99	948.21	0.00	0.00	0.174
5.00	-21.74	-4.77	0.00	-328.03	0.00	328.03	1,541.15	770.57	1,839.28	908.35	0.04	-0.08	0.165
10.00	-20.74	-4.65	0.00	-304.19	0.00	304.19	1,517.03	758.51	1,758.81	868.61	0.17	-0.16	0.157
15.00	-19.75	-4.54	0.00	-280.91	0.00	280.91	1,491.77	745.88	1,678.72	829.05	0.38	-0.24	0.148
20.00	-18.78	-4.43	0.00	-258.21	0.00	258.21	1,466.38	732.69	1,599.10	789.74	0.67	-0.31	0.139
25.00	-17.82	-4.31	0.00	-236.07	0.00	236.07	1,437.85	718.92	1,520.08	750.71	1.04	-0.39	0.131
29.33	-17.00	-4.21	0.00	-217.40	0.00	217.40	1,413.09	706.55	1,452.23	717.20	1.42	-0.45	0.123
30.00	-16.82	-4.19	0.00	-214.58	0.00	214.58	1,409.19	704.59	1,441.78	712.04	1.48	-0.46	0.120
32.83	-16.09	-4.12	0.00	-202.71	0.00	202.71	1,130.07	565.03	1,157.93	571.86	1.77	-0.50	0.144
35.00	-15.68	-4.08	0.00	-193.76	0.00	193.76	1,119.12	559.56	1,130.16	558.15	2.00	-0.53	0.139
40.00	-14.75	-3.95	0.00	-173.37	0.00	173.37	1,081.75	540.87	1,055.58	521.31	2.59	-0.60	0.129
45.00	-13.83	-3.82	0.00	-153.62	0.00	153.62	1,044.38	522.19	983.54	485.73	3.25	-0.66	0.119
47.00	-13.46	-3.77	0.00	-145.98	0.00	145.98	1,029.43	514.72	955.43	471.85	3.54	-0.68	0.115
47.00	-13.46	-3.77	0.00	-145.98	0.00	145.98	1,029.43	514.72	955.43	471.85	3.54	-0.68	0.115
50.00	-12.92	-3.69	0.00	-134.69	0.00	134.69	1,007.01	503.50	914.04	451.41	3.98	-0.72	0.109
55.00	-12.02	-3.55	0.00	-116.24	0.00	116.24	969.64	484.82	847.09	418.35	4.76	-0.78	0.098
60.00	-11.00	-3.34	0.00	-98.48	0.00	98.48	932.27	466.13	782.69	386.54	5.60	-0.83	0.086
60.00	-11.00	-3.34	0.00	-98.48	0.00	98.48	932.27	466.13	782.69	386.54	5.60	-0.83	0.086
62.92	-10.49	-3.26	0.00	-88.72	0.00	88.72	910.47	455.23	746.30	368.57	6.12	-0.86	0.080
65.00	-10.05	-3.20	0.00	-81.93	0.00	81.93	894.90	447.45	720.83	355.99	6.50	-0.87	0.074
65.75	-9.88	-3.18	0.00	-79.53	0.00	79.53	664.38	332.19	545.54	269.42	6.63	-0.88	0.080
68.00	-9.52	-3.12	0.00	-72.37	0.00	72.37	656.20	328.10	528.77	261.14	7.05	-0.90	0.074
68.00	-9.52	-3.12	0.00	-72.37	0.00	72.37	656.20	328.10	528.77	261.14	7.05	-0.90	0.074
70.00	-9.13	-2.96	0.00	-66.13	0.00	66.13	648.81	324.40	513.97	253.83	7.44	-0.92	0.068
75.00	-8.34	-2.77	0.00	-51.34	0.00	51.34	629.79	314.89	477.45	235.80	8.42	-0.95	0.055
77.00	-7.12	-2.21	0.00	-45.80	0.00	45.80	618.88	309.44	460.75	227.55	8.82	-0.97	0.049
78.77	-6.87	-2.16	0.00	-41.90	0.00	41.90	608.96	304.48	446.02	220.27	9.18	-0.98	0.046
78.77	-6.87	-2.16	0.00	-41.90	0.00	41.90	608.96	304.48	446.02	220.27	9.18	-0.98	0.202
80.00	-6.78	-2.14	0.00	-39.24	0.00	39.24	602.06	301.03	435.93	215.29	9.43	-0.99	0.194
85.00	-6.41	-2.03	0.00	-28.53	0.00	28.53	574.04	287.02	396.08	195.61	10.53	-1.10	0.157
87.00	-4.52	-1.56	0.00	-24.47	0.00	24.47	562.82	281.41	380.67	188.00	11.00	-1.14	0.138
90.00	-4.35	-1.53	0.00	-19.77	0.00	19.77	546.01	273.00	358.14	176.87	11.74	-1.20	0.120
95.00	-4.07	-1.46	0.00	-12.14	0.00	12.14	517.98	258.99	322.11	159.08	13.03	-1.27	0.084
100.00	-0.95	-0.43	0.00	-4.02	0.00	4.02	489.95	244.98	288.00	142.23	14.39	-1.31	0.030
100.00	-0.95	-0.43	0.00	-4.02	0.00	4.02	489.95	244.98	288.00	142.23	14.39	-1.31	0.053
105.00	-0.68	-0.37	0.00	-1.87	0.00	1.87	593.08	296.54	157.41	77.74	15.78	-1.33	0.025
110.00	0.00	-0.36	0.00	0.00	0.00	0.00	593.08	296.54	157.41	77.74	17.18	-1.35	0.000

Pole : 302481  
 Location : Hrr South CT  
 Height : 110.0 (ft)  
 Base Dia : 30.00 (in)  
 Top Dia : 7.650 (in)  
 Shape : 12 Sides  
 Taper : 0.163751 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

5/1/2012 2:37:33 PM  
 Page: 36



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### Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	18.90	0.00	25.87	0.00	0.00	1403.34	78.77	0.79
0.9D + 1.6W	18.79	0.00	20.71	0.00	0.00	1380.28	78.77	0.76
1.2D + 1.0Di + 1.0Wi	5.25	0.00	69.88	0.00	0.00	425.43	78.77	0.28
1.0D + 1.0W	4.82	0.00	22.48	0.00	0.00	352.15	78.77	0.20

### Additional Steel Summary

Elev From (ft)	Elev To (ft)	(4) SOL-#20 All Thre Member	Intermediate Connectors			Upper Termination Connectors				Lower Termination Connectors				Max Member		
			VQ/l (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	MQ/l (kips)	phiVn (kips)	Num Reqd	Num Actual	MQ/l (kips)	phiVn (kips)	Num Reqd	Num Actual	Pu (kip)	phiPn (kip)	Ratio
0.00	47.0	(4) SOL-#20 All Thre	327.1	9.8	16.8	0.0	12.0	0	0	0.0	12.0	0	0	254.8	330.5	0.771
47.0	60.0	(4) SOL-#20 All Thre	334.0	10.0	16.8	0.0	12.0	0	0	0.0	12.0	0	0	155.7	330.5	0.471
60.0	68.0	(4) SOL-#20 All Thre	353.5	10.6	16.8	0.0	12.0	0	0	0.0	12.0	0	0	119.5	330.5	0.362
68.0	78.7	(4) SOL-#20 All Thre	353.5	10.6	16.8	63.8	12.0	6	8	0.0	12.0	0	0	100.8	330.5	0.305



Base/Flange Plate	Plate Type	<b>Baseplate</b>
	Pole Diameter	30 in
	Pole Thickness	0.25 in
	Plate Length	44 in
	Plate Thickness	2 in
	Plate Fy	60 ksi
	Weld Length	0.1875 in
	$\phi_s$ Resistance	1598.36 k-in
	Applied	1463.50 k-in
	Stiffeners	#

Code Rev. **G**

Moment **1403.3 k-ft**  
Axial **69.9 k**

Date **5/1/2012**  
Engineer **JOEJ**  
Site # **302481**  
Carrier **AT&T Mobility**

Bolts	#	<b>8</b>
	Bolt Circle (R)adial / (S)quare	44 in S
	Bolt Gap	6 in
	Diameter	2.25 in
	Hole Diameter	2.375 in
	Type	18J
	Fy	75 ksi
	Fu	100 ksi
	$\phi_s$ Resistance	259.82 k
	Applied	130.09 k
Reinforcement	#	<b>4</b>
	DYW. Circle	37.875 in
	Offset Angle	0°
	Type	#20
	Diameter	2.5 in
Fu	100 ksi	
Extra Bolts	#	0

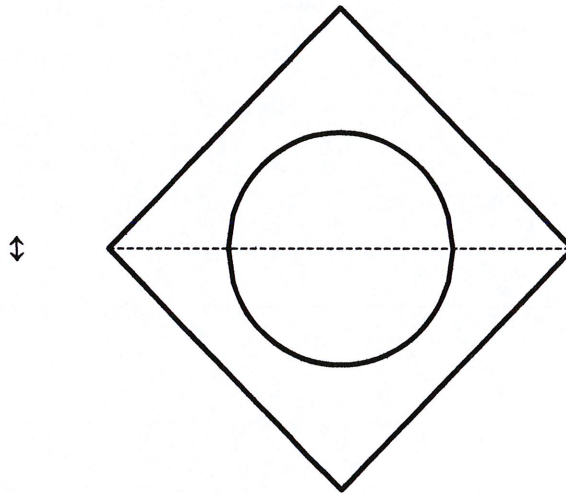


Plate Stress Ratio:  
**0.92** (Pass)

Bolt Stress Ratio:  
**0.50** (Pass)

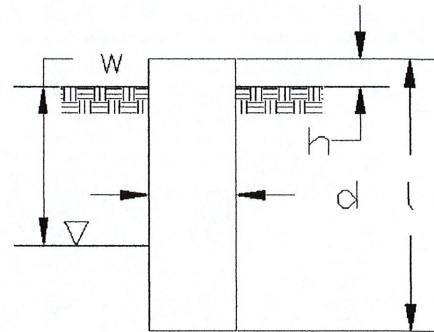
Site Name: Hrfr-South, CT  
 Site Number: 302481  
 Engineer: J. Johnston  
 Engineering Number: 49286821  
 Date: 05/01/12

Program Last 8/3/2011  
 American Tower Corporation

**Design Base Loads (Factored) - Analysis per TIA-222-G Standards**

Analyze or Design a Foundation? Analyze  
 Moment (M): 1403.3 k-ft  
 Shear/Leg (V): 18.9 k  
 Axial Load (P): 69.9 k  
 Uplift/Leg (U): 0.0 k  
 Tower Type (GT / SST / MP): MP

Diameter of Caisson (d): 10.0 ft  
 Caisson Embedment (L-h): 5.5 ft  
 Caisson Height Above Ground (h): 0.5 ft  
 Depth Below Ground Surface to Water Table (w): 50.0 ft  
 Unit Weight of Concrete: 150.0 pcf  
 Unit Weight of Water: 62.4 pcf  
 Tension Skin Friction/Compression Skin Friction: 1.00  
 Pullout Angle: 30.0 degrees



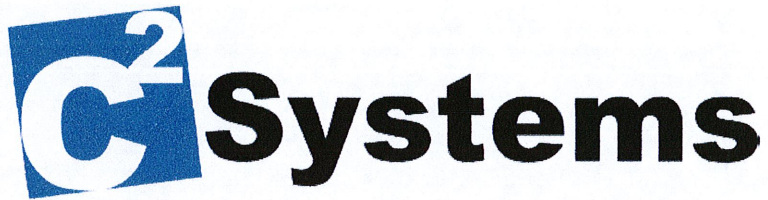
**Soil Mechanical Properties**

Depth (ft)		$\gamma_{soil}$ (pcf)	Cohesion (psf)	$\phi$ (degree)	Ultimate Skin Friction (psf)	Ultimate Bearing Pressure (psf)
Top	Bottom					
0.0	1.5	110	0	32	0	0
1.5	3.0	110	0	34	0	0
3.0	5.0	105	0	34	0	0
5.0	10.0	120	0	36	0	15000

Volume of Concrete: 471.2 ft<sup>3</sup> = 17.5 yd<sup>3</sup>  
 Weight of Concrete (Buoyancy Effect Considered): 70.7 k  
 Average Soil Unit Weight: 109.1 pcf  
 Skin Friction Resistance: 0.0 k  
 Compressive Bearing Resistance: 1178.1 k  
 Pullout Weight (Minus Concrete Weight): 36.3 k  
 Nominal Uplift Capacity per Leg ( $\phi_s T_n$ ): 27.2 k  
 Nominal Compressive Capacity per Leg ( $\phi_s P_n$ ): 883.6 k  
 $P_u$ : 91.1 k  
 $T_u / \phi_s T_n$ : 0.00 Result: OK  
 $P_u / \phi_s P_n$ : 0.10 Result: OK  
 Total Lateral Resistance: 148.0 k  
 Inflection Point (Below Ground Surface): 3.9 ft  
 Design Overturning Moment At Inflection Point ( $M_D$ ): 1486.9 k-ft  
 Nominal Moment Capacity ( $\phi_s M_n$ ): 3036.2 k-ft  
 $M_D / \phi_s M_n$ : 0.49 Result: OK  
 $\phi_s$ : 0.75

## Exhibit 3





C Squared Systems, LLC  
65 Dartmouth Drive, Unit A3  
Auburn, NH 03032  
(603) 644-2800  
support@csquaredsystems.com

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Calculated Radio Frequency Emissions



CT1011 (Hartford South)

11 Mountain Rd, Hartford, CT 06106

(aka: 289 Mountain St, Hartford, CT)

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March 23, 2012

## Table of Contents

1. Introduction.....	1
2. FCC Guidelines for Evaluating RF Radiation Exposure Limits.....	1
3. RF Exposure Prediction Methods.....	2
4. Calculation Results.....	3
5. Conclusion.....	4
6. Statement of Certification.....	4
Attachment A: References.....	5
Attachment B: FCC Limits for Maximum Permissible Exposure (MPE).....	6
Attachment C: AT&T Antenna Data Sheets and Electrical Patterns.....	8

## List of Tables

Table 1: Carrier Information.....	3
Table 2: FCC Limits for Maximum Permissible Exposure (MPE).....	6

## List of Figures

Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE).....	7
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## 1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modifications to the existing AT&T antenna arrays mounted on the monopole tower located at 11 Mountain Rd (aka 289 Mountain St) in Hartford, CT. The coordinates of the tower are 41-43-35.69 N, 72-42-29.41 W.

AT&T is proposing the following modifications:

- 1) Install three 700 MHz LTE antennas (one per sector);
- 2) Install three 700 MHz LTE Remote Radio Units (RRUs) (one per sector).

## 2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.



### 3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left( \frac{1.6^2 \times \text{EIRP}}{4\pi \times R^2} \right) \times \text{Off Beam Loss}$$

Where:

EIRP = Effective Isotropic Radiated Power

$$R = \text{Radial Distance} = \sqrt{(H^2 + V^2)}$$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Ground reflection factor of 1.6

Off Beam Loss is determined by the selected antenna pattern

These calculations assume that the antennas are operating at 100 percent capacity and power, and that all channels are transmitting simultaneously. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the finished modifications.

#### 4. Calculation Results

Table 1 below outlines the power density information for the site. Because the proposed AT&T antennas are directional in nature, the majority of the RF power is focused out towards the horizon. As a result, there will be less RF power directed below the antennas relative to the horizon, and consequently lower power density levels around the base of the tower. Please refer to Attachment C for the vertical pattern of the proposed AT&T antennas. The calculated results for AT&T in Table 1 include a nominal 10 dB off-beam pattern loss to account for the lower relative gain below the antennas.

Carrier	Antenna Height (Feet)	Operating Frequency (MHz)	Number of Trans.	ERP Per Transmitter (Watts)	Power Density (mw/cm <sup>2</sup> )	Limit	%MPE
<i>Cingular UMTS</i>	102	1935	1	500	0.0173	1.0000	1.73%
<i>Cingular GSM</i>	103	880	2	296	0.0201	0.5867	3.42%
<i>Cingular GSM</i>	103	1930	2	427	0.0289	1.0000	2.89%
Clearwire	110	2496	2	153	0.0091	1.0000	0.91%
Clearwire	110	11000	1	211	0.0063	1.0000	0.63%
Pocket	70	2130	3	631	0.1389	1.0000	13.89%
SNET Paging	110	N/A	N/A	N/A	0.0458	1.0000	4.58%
Town of W.Hfd	75	866.075	5	150	0.0479	0.5774	8.30%
T-Mobile GSM	87	1945	8	170	0.0646	1.0000	6.46%
T-Mobile UMTS	87	2100	2	741	0.0704	1.0000	7.04%
Verizon PCS	77	1970	3	552	0.1004	1.0000	10.04%
Verizon cellular	77	875	9	315	0.1719	0.5833	29.47%
AT&T UMTS	103	880	2	565	0.0383	0.5867	0.65%
AT&T UMTS	103	1900	2	875	0.0593	1.0000	0.59%
AT&T LTE	103	734	1	1375	0.0466	0.4893	0.95%
AT&T GSM	103	880	1	283	0.0096	0.5867	0.16%
AT&T GSM	103	1900	4	525	0.0712	1.0000	0.71%
						<b>Total</b>	<b>84.40%</b>

Table 1: Carrier Information<sup>12</sup>

<sup>1</sup> The existing CSC filing for Cingular should be removed and replaced with the updated AT&T technologies and values provided in Table 1. The power density information for carriers other than AT&T was taken directly from the CSC database dated 1/10/2012.

<sup>2</sup> In the case where antenna models are not uniform across all 3 sectors for the same frequency band, the antenna model with the highest gain was used for the calculations.



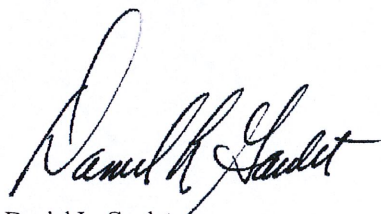
## 5. Conclusion

The above analysis verifies that emissions from the existing site will be below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Even when using conservative methods, the cumulative power density from the proposed transmit antennas at the existing facility is below the limits for the general public. The highest expected percent of Maximum Permissible Exposure at ground level is **84.40% of the FCC limit**.

As noted previously, obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the finished modifications.

## 6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.



Daniel L. Goulet  
C Squared Systems, LLC

March 23, 2012

Date

### **Attachment A: References**

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

ANSI C95.1-1982, American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz. IEEE-SA Standards Board

IEEE Std C95.3-1991 (Reaff 1997), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave. IEEE-SA Standards Board

**Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)**

**(A) Limits for Occupational/Controlled Exposure<sup>3</sup>**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

**(B) Limits for General Population/Uncontrolled Exposure<sup>4</sup>**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz \* Plane-wave equivalent power density

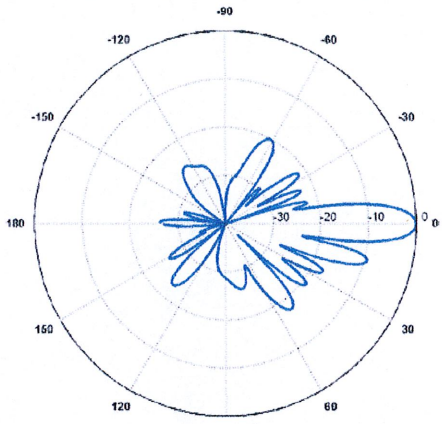
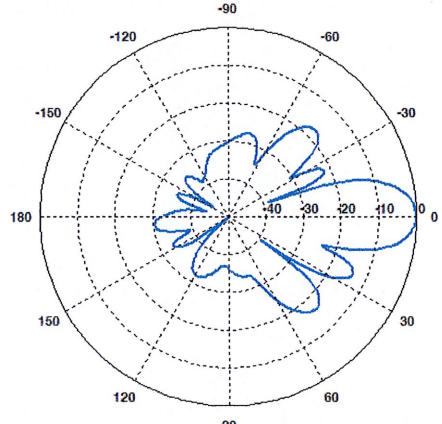
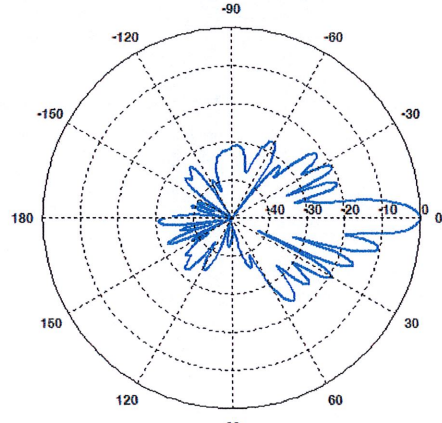
**Table 2: FCC Limits for Maximum Permissible Exposure (MPE)**

<sup>3</sup> Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure

<sup>4</sup> General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure



**Attachment C: AT&T Antenna Data Sheets and Electrical Patterns**

<p><b>700 MHz</b></p> <p>Manufacturer: Commscope            Model #: SBNH-1D6565C            Frequency Band: 698-806 MHz            Gain: 13.6 dBd            Vertical Beamwidth: 8.6°            Horizontal Beamwidth: 71°            Polarization: ± 45°            Size L x W x D: 96.4" x 11.9" x 7.1"</p>	
<p><b>850 MHz</b></p> <p>Manufacturer: Powerwave            Model #: 7770.00            Frequency Band: 824-896 MHz            Gain: 11.4 dBd            Vertical Beamwidth: 15°            Horizontal Beamwidth: 85°            Polarization: Dual Linear ±45°            Size L x W x D: 55.0" x 11.0" x 5.0"</p>	
<p><b>1900 MHz</b></p> <p>Manufacturer: Powerwave            Model #: 7770.00            Frequency Band: 1850-1990 MHz            Gain: 13.4 dBd            Vertical Beamwidth: 7°            Horizontal Beamwidth: 90°            Polarization: Dual Linear ±45°            Size L x W x D: 55.0" x 11.0" x 5.0"</p>	



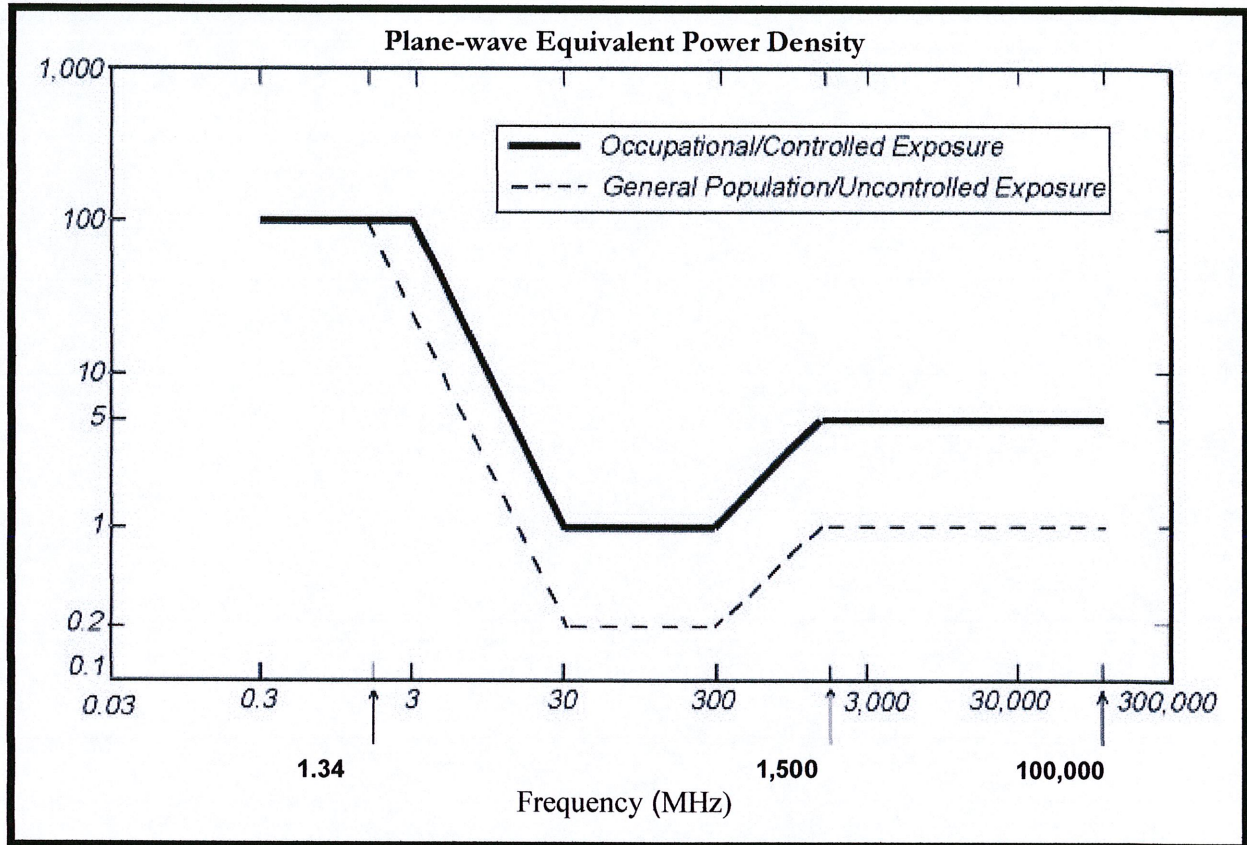


Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)



**New Cingular Wireless PCS, LLC**  
960 Turnpike Street, Suite 28  
Canton, MA 02021  
Phone: (860) 796-3988  
Fax: (617) 249-0819

**Karina Fournier**  
Real Estate Consultant

May 7, 2012

Mayor Pedron Segarra  
550 Main Street  
Hartford, CT 06114

**Re: Request by New Cingular Wireless PCS, LLC for an Order Approving an an Exempt Modification for 11 Mountain Road Hartford, CT**

Dear Mayor Segarra:

New Cingular Wireless PCS, LLC ("AT&T") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower at 39 Carmen Hill Road, Brookfield, CT. The tower is principally used as a radio tower.

The facility is owned and operated by American Tower Corporation.

Pursuant to Connecticut General Statutes Section 16-50j-73, Cingular has requested an order approving shared use of the tower from the Connecticut Siting Council.

The attached letter fully sets forth the AT&T proposal. However, if you have any questions or require any further information on the plans for the site or the Siting Council's procedures, please contact the Connecticut Siting Council, at (860) 827-2935.

Sincerely,

H. Karina Fournier  
Real Estate Consultant

Enclosure



# 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](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

May 8, 2012

The Honorable Pedro E. Segarra  
Mayor  
City of Hartford  
Municipal Building  
550 Main Street  
Hartford, CT 06103

RE: **EM-CING-064-120508** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 11 Mountain Road, Hartford, Connecticut.

Dear Mayor Segarra:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by May 22, 2012.

Thank you for your cooperation and consideration.

Very truly yours,

Linda Roberts  
Executive Director

LR/cm

Enclosure: Notice of Intent

c: David B. Panagore, Chief Operating Officer, City of Hartford  
Roger J. O'Brien, Director of Planning, City of Hartford