METROPCS MASSACHUSETTS, LLC NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 77 SPRINGBROOK ROAD, OLD SAYBROOK, CONNECTICUT

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. Seq. ("PUESA"), and Sections 16-50j-72(b) and 16-50j-73 of the Regulations of Connecticut State Agencies ("R.C.S.A") adopted pursuant to the PUESA, Metro PCS, Inc., by and through its agent MetroPCS Massachusetts, LLC ("MetroPCS") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 77 Springbrook Road, Old Saybrook, CT, Connecticut. The telecommunications facility is owned by Crossroads Communications of Old Saybrook, LLC and leased to MetroPCS.

MetroPCS' Proposed Wireless Modifications

MetroPCS achieved an initial exempt modification approval from the Siting Council to install antennas and related ground equipment on March 2, 2009. The facility consists of a One-Hundred and seventy five (175') foot high Monopole telecommunications tower (the "Tower") within a fenced compound. MetroPCS now intends to modify the facility as shown on the enclosed plans prepared by Advanced Engineering Group and annexed hereto as Exhibit 1. The modifications will consist of removing three (3) exiting antennas and replacing them with six (6) new antennas at an AGL of 163'. A structural analysis has been completed for the site. Please see report attached in exhibit 3.

In accordance with R.C.S.A Section 16-50j-73, a copy of this submission is being sent to the Town of Old Saybrook. A copy of this submission is also being sent to Crossroads Communications of Old Saybrook, LLC, the property owner on which the tower is located.

MetroPCS' Proposed Wireless Modifications Constitutes An "Exempt Modification"

The proposed modification to the Old Saybrook, CT Facility constitutes an exempt modification of an existing facility provided for in R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

- 1) The proposed modifications will be to swap the existing MetroPCS antennas at the same AGL of 163'. This installation will not result in an increase in the height of the existing tower.
- 2) The proposed modifications will not require expansion of the site boundaries.
- 3) The proposed modifications will not increase noise levels at the facility by six decibels or more.
- 4) MetroPCS' proposed facility will not increase the cumulative radio frequency electromagnetic radiation power density at the Tower site's boundary to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. A cumulative General

Power Density table for MetroPCS' proposed modified facility is included as Exhibit 2.

For all the foregoing reasons, MetroPCS' respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A Section 16-50j-72(b)(2)

Respectfully submitted,

<u>Karlo Hunno</u> Karla Hanna (978) 852-7520

On behalf of MetroPCS Massachusetts, LLC

c/o Tower Resource Management, Inc.

16 Chestnut Street, Suite 220

Foxboro, MA 02035

cc: Town of Old Saybrook, CT

Crossroads Communications of Old Saybrook, LLC

Exhibit 1

Site Plan

PROJECT INFORMATION

SCOPE OF WORK: UNMANNED TELECOMMUNICATIONS FACILITY MODIFICATIONS

SITE ADDRESS: 77 SPRINGBROOK ROAD

OLD SAYBROOK, CT 06475

LATITUDE: 41.313889 LONGITUDE: -72.364167

JURISDICTION: NATIONAL, STATE & LOCAL CODES OR ORDINANCES

CURRENT USE: TELECOMMUNICATIONS FACILITY
PROPOSED USE: TELECOMMUNICATIONS FACILITY

DESIGN GUIDELINE: 5A

SITE NAME: CROWN OLD SAYBROOK MONOPOLE

77 SPRINGBROOK ROAD
OLD SAYBROOK, CT 06475
MIDDLESEX COUNTY

SITE NUMBER: NLD0012B (CTHA540)

	DRAWING INDEX	REV
T-1	TITLE SHEET	0
GN-1	GENERAL NOTES	o
A-1	COMPOUND & EQUIPMENT PLAN	0
A-2	ELEVATION & ANTENNA PLAN	o
A-3	DETAILS	o
G-1	GROUNDING, ONE-LINE DIAGRAM & DETAILS	o
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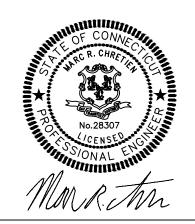
SIGNATURES

DATE

CONSTRUCTION DATE OF RF ENGINEERING DATE LA

OPERATIONS DATE

LAND OWNER DATE





LOCUS MAP

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE NORTHEAST, LLC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.

GENERAL NOTES

- 2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
- 3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE T-MOBILE REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



CALL

BEFORE YOU DIG

CALL TOLL FREE 811 OR 888-DIG-SAFE

UNDERGROUND SERVICE ALERT



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285 BILLERICA ROAD THIRD FLOOR CHELMSFORD, MA 01824 TEL: (978) 244-7200 FAX: (978) 244-7240 SITE NUMBER: NLD0012B SITE NAME: CROWN OLD SAYBROOK MONOPOLE

77 SPRINGBROOK ROAD OLD SAYBROOK, CT 06475

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MetroPCS

TITLE SHEET

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GENERAL NOTES

- 1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS. AND ORDINANCES.
- 2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- 3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE LESEE/LICENSEE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE
- 4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
- 5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS / CONTRACT DOCUMENTS.
- 7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- 8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- 9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- 12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- 13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

- 14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- 15. THE CONTRACTOR SHALL NOTIFY THE LESEE/LICENSEE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESEE/LICENSEE REPRESENTATIVE
- 16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES. ETC. ON THE JOB.
- 17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72—HOURS PRIOR TO ANY EXCAVATION ACTIVITY: DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 1–888–344–7233 CALL BEFORE YOU DIG (CT): 1–800–922–4455
- 18. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS SHOWN HEREIN
- 19. ALL DIMENSIONS SHOWN THUS ± ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WHICH EFFECT THE CONTRACTORS WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH PROJECT OWNER PRIOR TO CONSTRUCTION.
- 20. NORTH ARROW SHOWN ON PLANS REFERS TO APPROXIMATE TRUE NORTH. PRIOR TO THE START OF CONSTRUCTION, ORDERING OR FABRICATING OF ANTENNA MOUNTS, CONTRACTOR SHALL CONSULT WITH PROJECT OWNER'S RF ENGINEER AND FIELD VERIFY ALL ANTENNA SECTOR LOCATIONS AND ANTENNA AZIMUTHS.
- 21. THE CONTRACTOR AND OR HIS SUB CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- 22. ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.
- 23. COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE PROVIDED BY THE PROJECT OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. A SCHEDULE OF PROJECT OWNER SUPPLIED MATERIALS IS ATTACHED TO THE BID DOCUMENTS (SEE EXHIBIT 3). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
- 24. WHEN "PAINT TO MATCH" IS SPECIFIED FOR ANTENNA CONCEALMENT, PAINT PRODUCT FOR ANTENNA RADOME SHALL BE SHERWIN WILLIAMS COROTHANE II. SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND PROJECT OWNER'S GUIDELINE'S.
- 25. COORDINATION, LAYOUT, AND FURNISHING OF CONDUIT, CABLE AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 26. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- 27. ALL (E)ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW

- 28. ALL (E)INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING. THE AREAS OF THE PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT. DRIVEWAY OR
- 29. GRAVEL, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED AND COVERED WITH MULCH UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROLS AT ALL TIMES
- 30. DURING CONSTRUCTION. PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS
- 31. FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. PROJECT OWNER RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.
- 32. APPLICABLE BUILDING CODES: SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:

2009 INTERNATIONAL BUILDING CODE 2005 CT STATE BUILDING CODE ELECTRICAL CODE: NEC 2014 LIGHTING CODE: NEC 2014

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL

ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

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

ELECTRICAL AND GROUNDING NOTES

- 1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- , 2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- 3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- 4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- 5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
- 6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- 7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THHN INSULATION.
- 8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
- 9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE AND GREENLEE CONDUIT MEASURING TAPE IN EACH INSTALLED TELCO CONDUIT.
- 10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
- 11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- 12. PPC SUPPLIED BY PROJECT OWNER.
- 13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".
- 14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.

- 15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- 16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- 17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
- 18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- 19. BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.
- 20. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS
- 21. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXISTING TOWER/ (E) MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
- 22. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MAXIMUM RESISTANCE REQUIRED.
- 23.CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.



ABBREVIATIONS ABOVE GRADE LEVEL GENERAL CONTRACTOR RF RADIO FREQUENCY MGB MASTER GROUND BUS AWG AMERICAN WIRE GAUGE BARE COPPER WIRE MIN MINIMUM TBD TO BE DETERMINED BTS BASE TRANSCEIVER STATION PROPOSED/NEW TBR TO BE REMOVED (E) TBRR TO BE REMOVED EXISTING N.T.S. NOT TO SCALE AND REPLACED EG EQUIPMENT GROUND REFERENCE REF TYPICAL TYP EQUIPMENT GROUND RING REQ REQUIRED (F) **FUTURE**



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285 BILLERICA ROAD THIRD FLOOR CHELMSFORD, MA 01824 TEL: (978) 244-7200 SITE NUMBER: NLD0012B SITE NAME: CROWN OLD SAYBROOK MONOPOLE

77 SPRINGBROOK ROAD OLD SAYBROOK, CT 06475

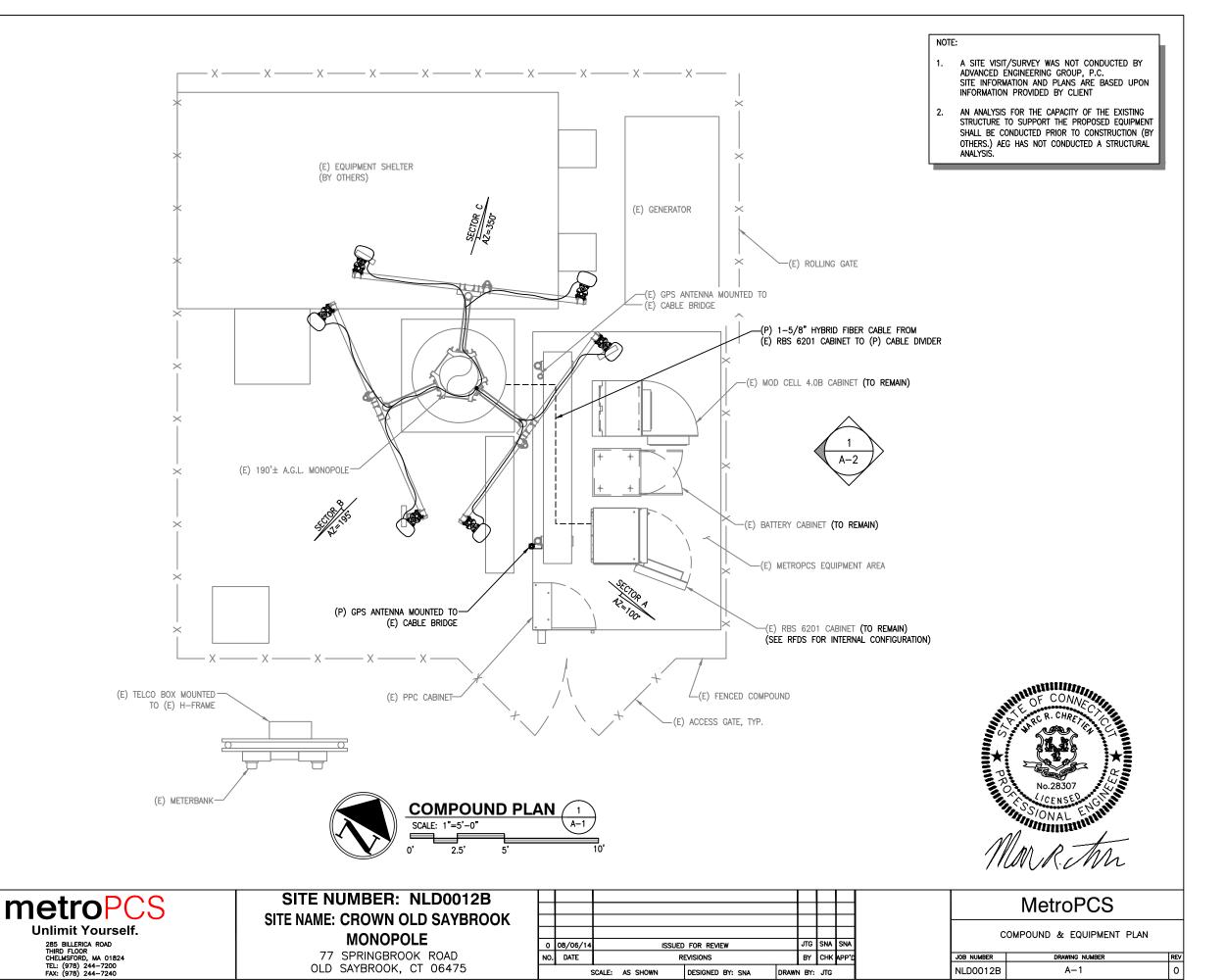
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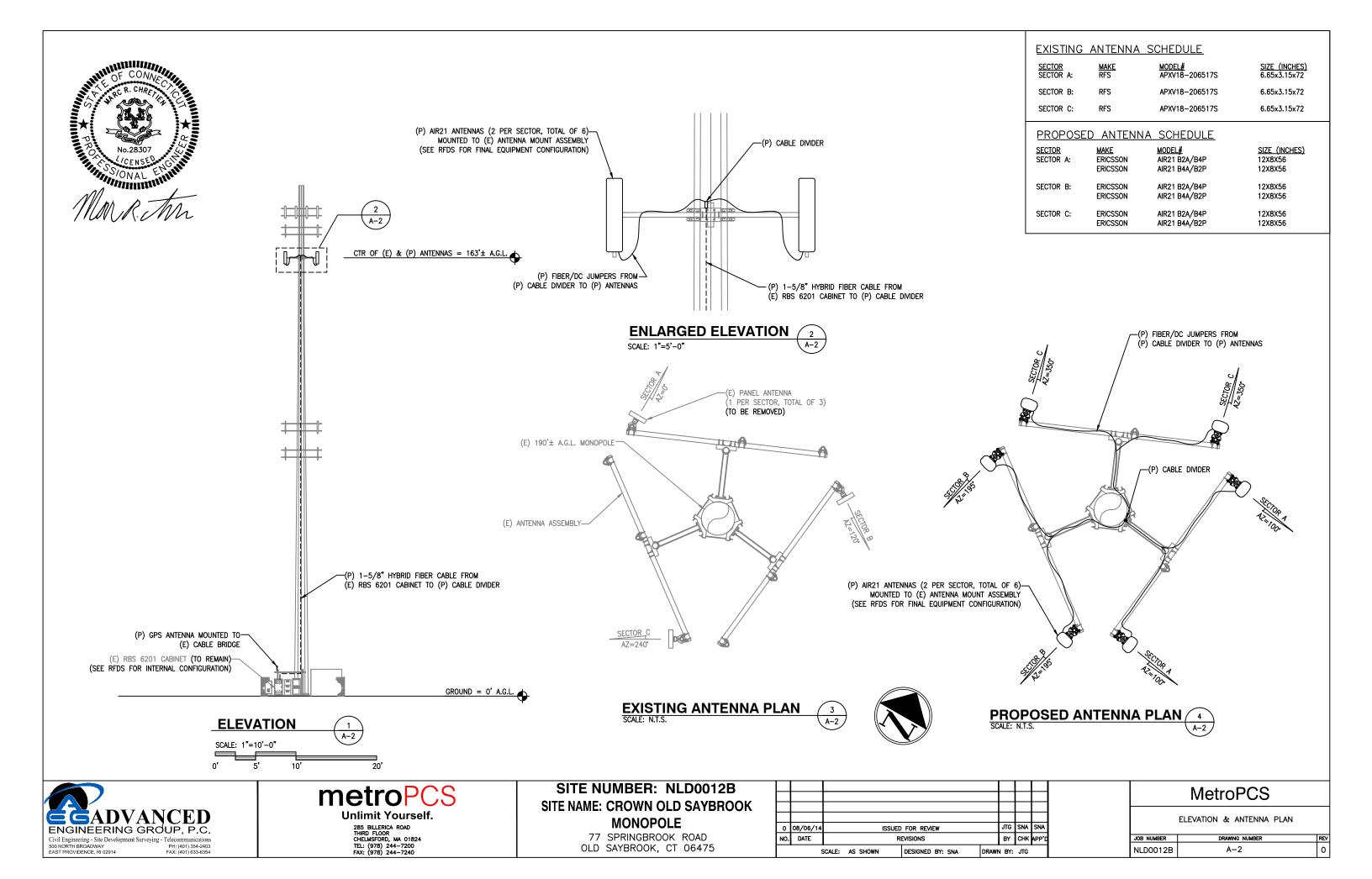
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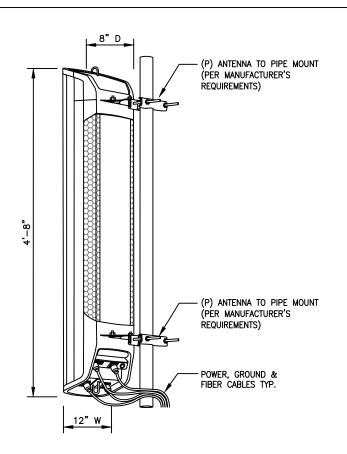
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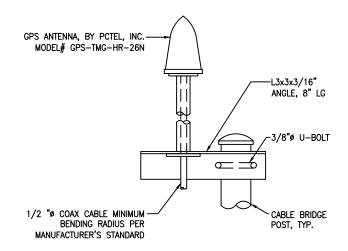
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ENGINEERING GROUP, P.C.





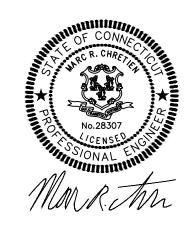


GPS MOUNTING DETAILS

SCALE: N.T.S.

AIR21 ANTENNA TYP.
SCALE: N.T.S.







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285 BILLERICA ROAD THIRD FLOOR CHELMSFORD, MA 01824 TEL: (978) 244-7200 FAX: (978) 244-7240 SITE NUMBER: NLD0012B SITE NAME: CROWN OLD SAYBROOK MONOPOLE

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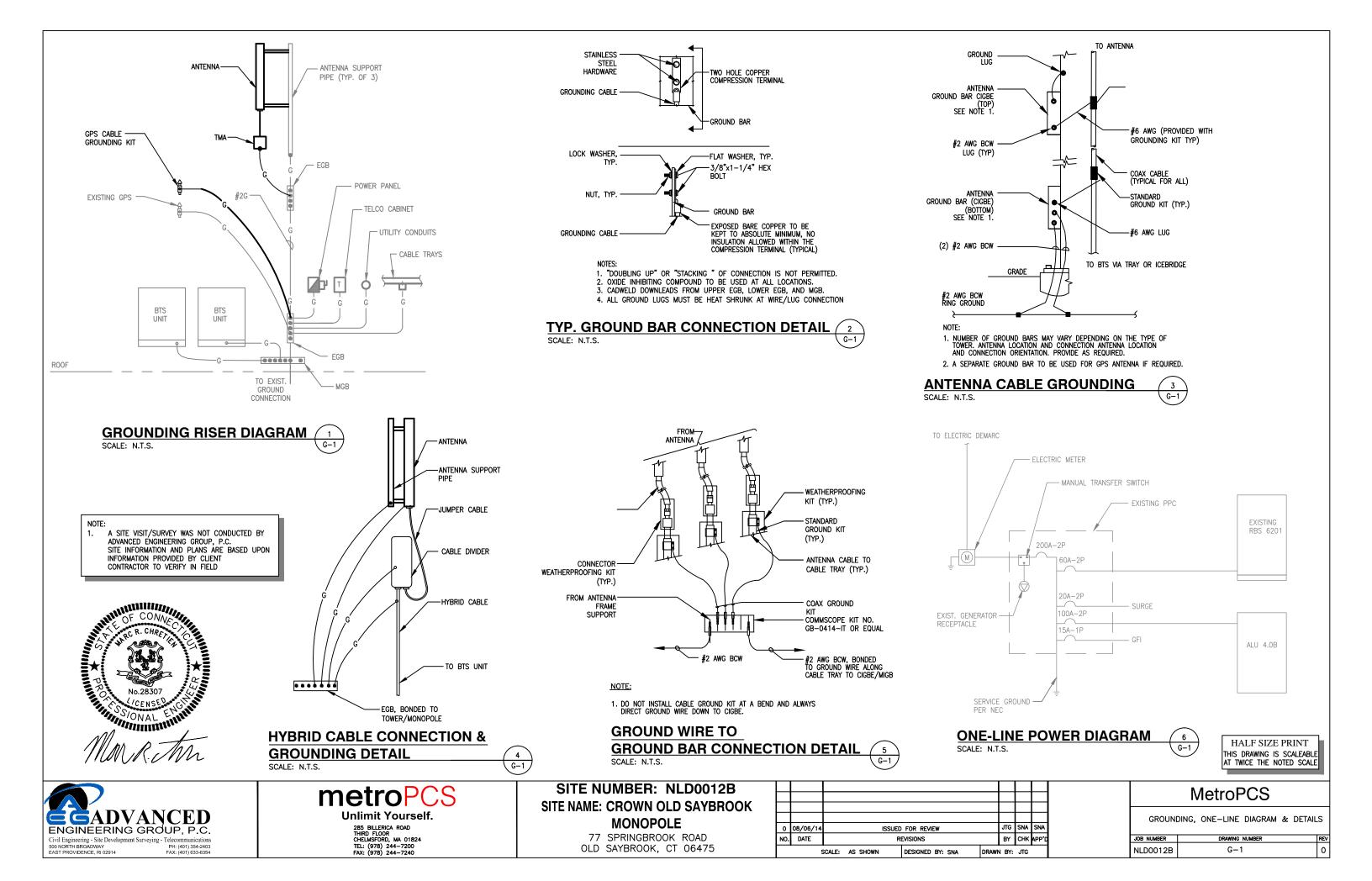


Exhibit 2

Power Density Calculation



RADIO FREQUENCY EMISSIONS ANALYSIS REPORT EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

MetroPCS Existing Facility

Site ID: CTHA540A

Crown Old Saybrook Monopole

77 Springbrook Road Old Saybrook, CT 06475

August 14, 2014

EBI Project Number: 62144272



August 14, 2014

MetroPCS USA Attn: Jason Overbey, RF Manager 35 Griffin Road South Bloomfield, CT 06002

Re: Emissions Values for Site: CTHA540A - Crown Old Saybrook Monopole

EBI Consulting was directed to analyze the proposed MetroPCS facility located at **77 Springbrook Road**, **Old Saybrook**, **CT**, for the purpose of determining whether the emissions from the Proposed MetroPCS Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μ W/cm2). The number of μ W/cm2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (μ W/cm2). The general population exposure limit for the cellular band is 567 μ W/cm2, and the general population exposure limit for the PCS and AWS bands is 1000 μ W/cm2. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed MetroPCS Wireless antenna facility located at **77 Springbrook Road, Old Saybrook, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since MetroPCS is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, the actual antenna pattern gain value in the direction of the sample area was used. For this report the sample point is a 6 foot person standing at the base of the tower

For all calculations, all equipment was calculated using the following assumptions:

- 1) 2 GSM channels (1935.000 MHz—to 1945.000 MHz) were considered for each sector of the proposed installation.
- 2) 2 UMTS channels (2110.000 MHz to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation.
- 3) 2 LTE channels (2110.000 MHz to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation.
- 4) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 5) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
- 6) The antenna used in this modeling is the Ericsson AIR21 for LTE, UMTS and GSM. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.6 dBd gain value at its main lobe. Actual antenna gain values were used for all calculations as per the manufacturers specifications.



- 7) The antenna mounting height centerline of the proposed antennas is **162 feet** above ground level (AGL).
- 8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

	17700		
	4.00	100	100
	3.00	252	
	*****	1111	55.00
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: 6	22.45		15.50
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	S	363	O
100	1.0	100	3.3
433	0	-	-
3.	CTHA540A - Crown Old Saybrook Monopole	77 Springbrook Road, Old Saybrook, CT 06475	Monopole
33	0	1900	100
333	100	-	
20	0.00	100	
324	100	130	
327			
2.1	0.00	œ	3565
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20	100		10000
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10	3.00	1,000	1855
-3			50.00
	2,729		3.59
92	0.99	226515	1502.5
-33	25.5	100	11
12	1.50	2500	99.03
-23	21.7.25	33.00	917.0
23	37	2200	1535
33.5	-		
100	18 (50)	215.00	1533
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	01	441	-
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23	34.873	Site Address	1600
9.	28.83	~ 1	
7.5	1.5%	315.13	2463.4
	50.00	CHARLES A	Acres in

g t

	Site Type	77 Springbrook	Road, Old Say Monopole	77 Springbrook Road, Old Saybrook, CT 06475 Monopole													
							3	Sector 1									
Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite	Antenna Gain in direction of sample	Antenna Haiaht (ft)	analysis haioht	5 8 8 8	Cable Loss	Additional		Power Density	Power Density
Ţa	Ericsson	AIR21 84A/82P	Active	AWS - 2100 MHz	TLE	99	2	120	-3.95	162		None	ļ		77	0.713901	0.07139%
1b	Ericsson	AIR21 84A/82P	Not Used		-			0	-3.95	162	156	None	0		-		%000000
Za	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	09	-3.95	162	156	1-5/8"	0	0	24.163022 0.356951	0.356951	0.03570%
2B	Ericsson	AIR21 82A / 84P	Passive	AWS - 2100 MHz	UMTS	30	2	09	-3.95	162	156	1-5/8"	0	0	24.163022 0.356951	0.356951	0.03570%
												Sector tota	Sector total Power Density Value:	ısıty Value:	0.143%		
							Se	Sector 2									
Antenna Number /	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)		Number of Composite Channels Power	Antenna Gain in direction of sample point (d8d)	Antenna Heleht (ft)	analysis	Cable Size	Cable Loss Additional	Additional	a a	Power Density	Power Density
1a	Ericsson	AIR21 84A/82P	Active	AWS - 2100 MHz	317	9	2	120		162		None	lo	ď	14.4	0 713901	0.07139%
1b	Ericsson	AIR21 B4A/B2P	Not Used	c	,			0	-3.95	162	156	None	°	0		0	%000000
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	- 60	-3.95	162	156	1-5/8"	0	0	24.163022 0.356951	0.356951	0.03570%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	162	156	1-5/8"	0	0	24.163022	0.356951	0.03570%
1												Sector tota	Sector total Power Density Value:	nsity Value:	0.143%		
							Se	Sector 3									
Antenna Number 7	Antenna Number Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain In direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss	Additional		Power Density Value	Power Density
13	Ericsson	AIR21 84A/82P	Active	AWS - 2100 MHz	317	09	2	120	-3.95	162		None	0	0	44	0.713901	0.07139%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-				0	-3.95	162	156	None	o	0	-	0	0.00000%
28	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	69	368-	162	156	1-5/8"	0	0	24.163022	0.356951	0.03570%
<u>ئ</u>	Caiocoan	akal Acateain	Date	ANN 0010 3444	STANT	20	,	0.0	200	(,,	,			·		-	

12.598%	Total Site MPE %
12.170%	Verizon Wireless
0.428%	MetroPCS
MPE %	Carrier
Site Composite MPE %	Site C



Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public exposure to RF Emissions.

The anticipated Maximum Composite contributions from the MetroPCS facility are **0.428%** (**0.143% from each sector**) of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is 12.598% of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

Tel: (781) 273.2500

Fax: (781) 273.3311

Scott Heffernan

RF Engineering Director

EBI Consulting

21 B Street

Burlington, MA 01803

Exhibit 3

Structural Calculations



Structural Analysis Report

Structure

: 175 ft Monopole

ATC Site Name

: Old Saybrook, CT

ATC Site Number

: 370625

Engineering Number

: 59131621

Proposed Carrier

: Metro PCS

Carrier Site Name

: Old Saybrook

Carrier Site Number

: CTHA540A

Site Location

: 77 Springbrook Road

Old Saybrook, CT 06475-0000

41.313833,-72.364028

County

: Middlesex

Date

: June 23, 2014

Max Usage

: 73%

Result

: Pass

Igor Palyvoda E.I.

Lyon Palgroom



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Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion	1
Existing and Reserved Equipment	. 2
Equipment to be Removed	2
Proposed Equipment	2
Structure Usages	3
Foundations	3
Deflection, Twist, and Sway	. 3
Standard Conditions	4
Calculations	Attached



<u>Introduction</u>

The purpose of this report is to summarize results of a structural analysis performed on the 175 ft monopole to reflect the change in loading by Metro PCS.

Supporting Documents

Tower Drawings	DaVinci, Valmont Job #08242-1120, dated April 17, 2008
Foundation Drawing	DaVinci, Valmont Job #08242-1120, dated April 17, 2008
Geotechnical Report	JGI Eastern Project #J2085121, dated March 12, 2008

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	115 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
Structure Class:	11
Exposure Category:	С
Topographic Category:	1

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



Existing and Reserved Equipment

Elevation	on¹ (ft)	Ot	Autono	N.A T	1:	Carrier
Mount	RAD	Qty	Antenna	Mount Type	Lines	Carrier
		3	Alcatel-Lucent RRH2x40-AWS			
		3	Antel BXA-171085-12BF-EDIN-X			
173.0	173.0	3	Antel BXA-171063/12CF	Diotria was sur/ Llaw dunila	(18) 1 5/8" Coax	Maniage
1/3.0	1/3.0	1	RFS DB-T1-6Z-8AB-0Z	Platform w/ Handrails	(1) 1 5/8" Fiber	Verizon
		3	Antel BXA-70063-6CF-EDIN-2			
		3	Andrew LNX-8513DS-VTM			
162.0	-	-	-	T-Arms	(6) 1 5/8" Coax	Metro PCS
152.0	152.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8" Coax	T-Mobile
100.0	100.0	1	Andrew DB589	Side Arm	(1) 7/8" Coax	American Messaging
15.0	15.0	1	4' Dish w/ Radome	Flush	(1) 0.28" RG6	Services

Equipment to be Removed

Elevation	levation1 (ft) Qty		Antenna	Mount Type	Linos	Carrior
Mount	RAD	Qty	Ancina	Mount Type	Lines	Carrier
162.0	162.0	6	Kathrein Scala 742 351	-	(6) 1 5/8" Coax	Metro PCS

Proposed Equipment

Elevation ¹ (ft)		Оt	Antonna	Mount Time	linos	Comies		
Mount	RAD	Qty	Antenna	Mount Type	Lines	Carrier		
162.0	162.0	3	Ericsson AIR 21, 1.3M, B2A B4P	T A 4400.0	/1\ 1 E /O!! 1 k de wift ex	Matura DCC		
162.0	102.0	3	Ericsson AIR 21, 1.3M, B4A B2P	T-Arms	(1) 1 5/8" Hybriflex	Metro PCS		

¹Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Install proposed coax inside the pole shaft.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	48%	Pass
Shaft	73%	Pass
Base Plate	38%	Pass

Foundations

Reaction Component	Original Design Reactions	Analysis Reactions	% of Design
Moment (Kips-Ft)	5,400.0	4,315.7	80%
Shear (Kips)	48.0	39.3	82%

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Deflection (ft)	Sway (Rotation) (°)
162.0	1.379	1.077

^{*}Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G



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:

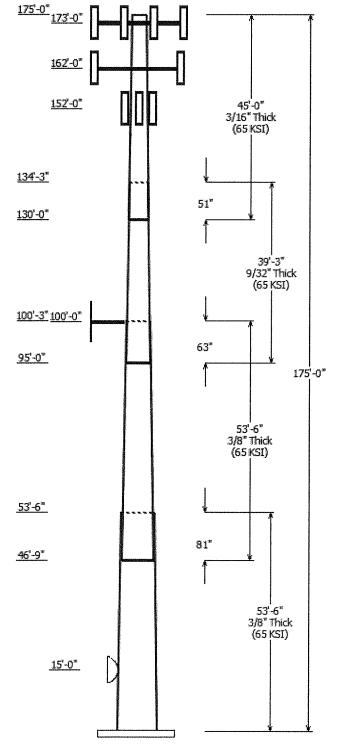
- -- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements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

It is the responsibility of the client to ensure that the information provided to ATC Tower Services, Inc. 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.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. 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.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Tower Services, Inc. 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: 370625

Code: ANSI/TIA-222 Rev G

Description: 175 ft Monopole

Client: Metro PCS

Location: Old Saybrook, CT

Shape: 18 Sides

Exposure: C

Struct Class: II

Height: 175.00 (ft)

Base Elev (ft): 0.00 Taper: 0.26501((in/ft) Topo: 1

	Sections Properties													
Diameter (in)								Steel						
Shaft	Length	Accro	ss Flats	Thick	Joint	Length	Taper	Grade						
Section	(†t)	Тор	Bottom	(in)	Type	(in)	(in/ft)	(ksi)						
1	53.500	50.51	64.69	0.375		0.000	0.265010	65						
2	53.500	38.87	53.05	0.375	Slip Joint	81.000	0.265010	65						
3	39.250	30.42	40.82	0.281	Slip Joint	63.000	0.265010	65						
4	45.000	20.00	31.92	0.188	Slip Joint	51.000	0.265010	65						

	Discrete Appurtenance										
Attach Elev (ft)	Force Elev (ft)	Qty	Description								
173.000	173.000	3	Andrew LNX-8513DS-VTM								
173.000	173.000	3	Antel BXA-70063-6CF-EDIN-2								
173.000	173.000	1	RFS DB-T1-6Z-8AB-0Z								
173.000	173.000	3	Antel BXA-171063/12CF								
173.000	173.000	3	Antel BXA-171085-12BF-EDIN-X								
173.000	173.000	3	Alcatel-Lucent RRH2x40-AWS								
173.000	173.000	1	Flat Platform w/ Handrails								
162.000	162.000	3	Ericsson AIR 21, 1.3M, B2A B4P								
162.000	162.000	3	Ericsson AIR 21, 1.3M, B4A B2P								
162.000	162.000	3	Round T-Arm								
152.000	152.000	3	RFS APXV18-206517S-C								
100.000	100.000	1	Andrew DB589								
100.000	100.000	1	Round Side Arm								
15.000	15.000	1	4' Dish w/ Radome								

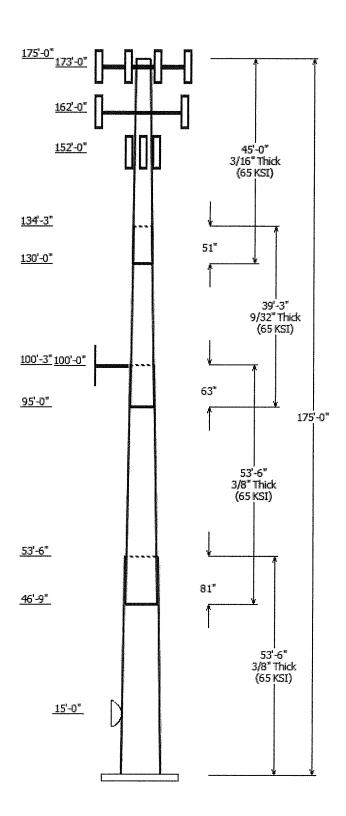
	Linear Appurtenance											
Elev	(ft)		Exposed									
From	То	Description	To Wind									
0.000	15.000	0.28" RG6	No	ko (pekanan mananaka termini kesekan manen kanan k								
0.000	100.0	7/8" Coax	Yes									
0.000	152.0	1 5/8" Coax	No									
0.000	162.0	1 5/8" Coax	No									
0.000	162.0	1 5/8" Hybriflex	No									
0.000	173.0	1 5/8" Coax	No									
0.000	173.0	1 5/8" Fiber	No									

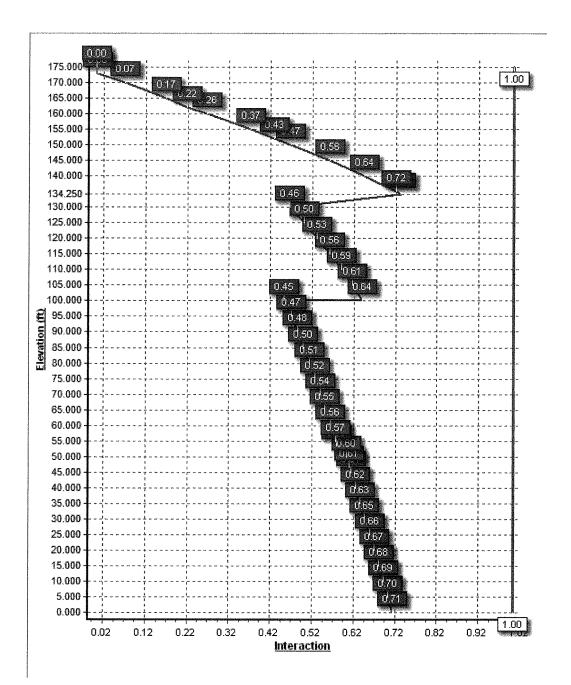
Load Cases								
1.2D + 1.6W	115.00 mph with No Ice							
0.9D + 1.6W	115.00 mph with No Ice (Reduced DL)							
1.2D + 1.0Di + 1.0Wi	50.00 mph with 0.75 in Radial Ice							
1.0D + 1.0W	60.00 mph Serviceability							

Reactions										
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)							
1.2D + 1.6W	4315.71	39.27	44.96							
0.9D + 1.6W	4284.87	39.25	33.71							
1.2D + 1.0Di + 1.0Wi	888.28	8.31	65.88							

1.0D + 1.0W 731.57 6.68 37.51

Dish Deflections									
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)						
1.0D + 1.0W	15.00	0.122	0.077						





Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in)

Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)

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Page: 1

Shaft Section Properties Slip				NASCONISTA	ikinaansaanppysinsi/sasi	- Bot	ttom			Mind and Company		— Т	op -		outenesses and the second				
Sect Info	Length (ft)				Joint Len (in)	Weight (lb)	Dia (in)	Ele v (ft)	Area (sqin)	lx (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	lx (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	53.500	0.3750	65		0.00	12,399	64.69	0.00	76.55	40004.8	29.01	172.51	50.51	53.50	59.67	18951.8	22.34	134.70	0.265010
2-18	53.500	0.3750	65	Slip	81.00	9,878	53.05	46.75	62.69	21978.9	23.53	141.47	38.87	100.25	45.82	8579.8	16.87	103.66	0.265010
3-18	39.250	0.2813	65	Slip	63.00	4,214	40.82	95.00	36.19	7517.2	24.19	145.16	30.42	134.25	26.91	3089.0	17.66	108.18	0.265010
4-18	45.000	0.1875	65	Slip	51.00	2,349	31.92	130.00	18.89	2403.9	28.61	170.27	20.00	175.00	11.79	584.8	17.40	106.67	0.265010
Shaft Weight 28,840																			

Discrete Appurtenance Properties

Attach Elev (ft)		Qty	Weight (lb)	— No Ice EPAa (sf)	Orientation Factor	Weight (lb)	– Ice EPAa (sf)	Orientation Factor	Distance From Face (ft)	Vert Ecc (ft)
173.00	Alcatel-Lucent RRH2x40-AWS	3	44.00	2.160	0.67	118.87	2.814	0.67	0.000	0.000
173.00	Andrew LNX-8513DS-VTM	3	26.30	8.170	0.83	233.23	9.498	0.83	0.000	0.000
173.00	Antel BXA-171063/12CF	3	15.00	4.790	0.88	137.54	6.033	0.88	0.000	0.000
173.00	Antel BXA-171085-12BF-EDIN-	3	15.00	4.730	0.88	136.59	5.975	0.88	0.000	0.000
173.00	Antel BXA-70063-6CF-EDIN-2	3	17.00	7.570	0.77	194.32	8.855	0.77	0.000	0.000
173.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	3,444.54	63.717	1.00	0.000	0.000
173.00	RFS DB-T1-6Z-8AB-0Z	1	44.00	4.800	0.67	190.17	5.687	0.67	0.000	0.000
162.00	Ericsson AIR 21, 1.3M, B2A	3	91.50	6.040	0.85	260.15	7.141	0.85	0.000	0.000
162.00	Ericsson AIR 21, 1.3M, B4A	3	90.40	6.080	0.85	259.82	7.185	0.85	0.000	0.000
162.00	Round T-Arm	3	250.00	9.700	0.67	461.04	18.025	0.67	0.000	0.000
152.00	RFS APXV18-206517S-C	3	26.40	5.170	0.80	144.26	6.411	0.80	0.000	0.000
100.00	Andrew DB589	1	11.50	1.380	1.00	90.22	4.467	1.00	0.000	0.000
100.00	Round Side Arm	1	150.00	5.200	1.00	220.39	7.814	1.00	0.000	0.000
15.00	4' Dish w/ Radome	1	120.00	10.850	1.00	374.12	12.120	1.00	0.000	0.000
	Totals	32	4052.30		10,15	56.89		Number	of Loadings:	14

Linear Appurtenance Properties

Elev From (ft)	Elev To (π)	Description	Exposed Width (in)	Exposed To Wind
0.00	173.00	(18) 1 5/8" Coax	0.00	N
0.00	173.00	(1) 1 5/8" Fiber	0.00	N
0.00	162.00	(6) 1 5/8" Coax	0.00	N
0.00	162.00	(1) 1 5/8" Hybriflex	0.00	N
0.00	152.00	(6) 1 5/8" Coax	0.00	N
0.00	100.00	(1) 7/8" Coax	1.09	Υ
0.00	15.00	(1) 0.28" RG6	0.00	N

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in)

Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

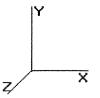
Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)

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Page: 2

Segn	nent Properties	(Max Le	n: 5f	t)							
Seg To	op		Flat								
Elev	•	Thick	Dia	Area	lx	W/t	D/t	Fу	S	Weight	
(ft)	Description	(in)	(in)	(in^2)	(in^4)	Ratio	Ratio		(in3)	(lb)	
0.00		0.3750 6	4 600	76 5/12	40,004.8	29.01	172.51	673	1240	0.0	
5.00		0.3750 6			37,582.8	28.38	168.97			1,289.0	
10.00		0.3750 6			35,260.6	27.76	165.44			1,262.1	
15.00		0.3750 6			33,036.1	27.14	161.91			1,235.3	
20.00		0.3750 5			30,907.1	26.51	158.37	70.2	1025.	1,208.5	
25.00		0.3750 5	8.065		28,871.7	25.89	154.84			1,181.6	
30.00		0.3750 5	6.740		26,927.6	25.27	151.31			1,154.8	
35.00		0.3750 5		65.509	25,072.8	24.65	147.77			1,128.0	
40.00		0.3750 5	4.090	63.932	23,305.2	24.02	144.24	73.1	848.6	1,101.1	
45.00		0.3750 5	2.765		21,622.7	23.40	140.71			1,074.3	
46.75	Bot - Section 2	0.3750 5			21,053.5	23.18	139.47			369.7	
50.00		0.3750 5			20,023.2	22.78	137.17	-		1,365.5	
53.50	Top - Section 1	0.3750 5			19,815.1	22.69	136.70			1,445.2	
55.00		0.3750 5			19,354.3	22.51	135.64			307.9	
60.00		0.3750 4			17,870.2	21.88	132.11			1,009.0	
65.00		0.3750 4			16,463.9	21.26	128.57			982.2	
70.00		0.3750 4			15,133.4	20.64	125.04			955.3	
75.00		0.3750 4			13,876.6	20.01	121.50			928.5	
80.00		0.3750 4			12,691.3	19.39	117.97			901.7	
85.00		0.3750 4			11,575.6	18.77	114.44			874.8	
90.00	Bot - Section 3	0.3750 4			10,527.2	18.14	110.90			848.0	
95.00 100.0	Dot - Section 3	0.3750 40 0.3750 3		47.476 45.899	9,544.2 8,624.3	17.52	107.37			821.2	
100.0	Top - Section 2	0.3730 3		34.951	6,769.6	16.90 23.31	103.84 140.21			1,400.1 68.8	
105.2	10p - Section 2	0.2813 3		33.827	6,137.5	22.52	135.74			555.8	
110.0		0.2813 3		32.645	5,515.9	21.69	131.03			565.5	
115.0		0.2813 3		31.462	4,937.8	20.86	126.32			545.3	
120.0		0.2813 34		30.279	4,401.6	20.03	121.60			525.2	
125.0		0.2813 3		29.096	3,905.6	19.20	116.89			505.1	
130.0	Bot - Section 4	0.2813 3		27.913	3,448.4	18.37	112.18			485.0	
134.2	Top - Section 3	0.1875 3		18.218	2,156.9	27.55	164.27			664.7	
135.0	-	0.1875 30	0.601	18.099	2,115.2	27.37	163.21	69.2	136.1	46.3	
140.0		0.1875 29	9.276	17.311	1,850.6	26.12	156.14	70.7	124.5	301.2	
145.0		0.1875 27	7.951	16.522	1,609.1	24.87	149.07	72.1	113.4	287.8	
150.0		0.1875 20		15.734	1,389.5	23.63	142.01		102.8	274.4	
152.0		0.1875 20		15.418	1,307.6	23.13	139.18		98.7	106.0	
155.0		0.1875 2		14.945	1,190.9	22.38	134.94		92.7	155.0	
160.0		0.1875 23		14.157	1,012.1	21.14	127.87		83.1	247.6	
162.0		0.1875 23		13.841	946.0	20.64	125.04		79.5	95.3	
165.0		0.1875 22		13.368	852.3	19.89	120.80		74.1	138.9	
170.0		0.1875 2		12.580	710.2	18.64	113.74		65.6	220.7	
173.0		0.1875 20		12.106	633.0	17.90	109.50		60.7	126.0	
175.0		0.1875 20	0.007	11.791	584.8	17.40	106.67	80.9	57.6	81.3	
										28,839.7	

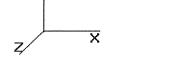
Pole: 370625 Code: ANSI/TIA-222 Rev G

Location :Old Saybrook, CTStruct Class :IIHeight :175.0 (ft)Exposure Category :CBase Dia :64.69 (in)Topographic Category :1

Top Dia: 20.00 (in) Base Elev: 0.000 (ft)

Shape: 18 Sides Taper: 0.265010 (in/ft)

Faper:0.265010 (in/ft)© 2007 - 2014 by ATC IP LLC. All rights reserved.



6/23/2014 7:54:18 AM

Page: 3

Load Case: 1.2D + 1.6W 115.00 mph with No Ice 25 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 To	OD	•	•		ice		Wind	Dead	Tot Dead
Elev	•		qz	gzGh C	Thick Tributary Ap	EPAs	Force X	Load Ice	Load
(ft)	Description	Kzt		(psf) (mph-ft) Cf	(in) (ft) (sf)	(sf)	(lb)	(lb)	(lb)
0.00		1.00	0.85 27.339	30.07 580.37 0.650	0.000 0.00 0.000	0.00	0.0	0.0	0.0
5.00		1.00		30.07 568.49 0.650	0.000 5.00 27.090	17.61	847.2	0.0	1,546.8
10.00		1.00		30.07 556.60 0.650	0.000 5.00 26.529	17.24	829.7	0.0	1,514.6
15.00	Appertunance(s)	1.00	0.85 27.339	30.07 544.71 0.650	0.000 5.00 25.968	16.88	812.2	0.0	1,482.4
20.00		1.00		31.90 548.84 0.650	0.000 5.00 25.408	16.52	843.1	0.0	1,450.2
25.00		1.00	0.94 30.403	33.44 549.35 0.650	0.000 5.00 24.847	16.15	864.2	0.0	1,418.0
30.00		1.00	0.98 31.592	34.75 547.22 0.650	0.000 5.00 24.287	15.79	877.8	0.0	1,385.8
35.00		1.00	1.01 32.634	35.89 543.18 0.650	0.000 5.00 23.726	15.42	885.8	0.0	1,353.6
40.00		1.00		36.92 537.70 0.650	0.000 5.00 23.165	15.06	889.5	0.0	1,321.4
45.00		1.00	1.07 34.408	37.84 531.07 0.650	0.000 5.00 22.605	14.69	889.8	0.0	1,289.2
46.75	Bot - Section 2		1.07 34.685	38.15 528.52 0.650	0.000 1.75 7.779	5.06	308.7	0.0	443.6
50.00		1.00	1.09 35.179	38.69 523.51 0.650	0.000 3.25 14.471	9.41	582.4	0.0	1,638.6
53.50	Top - Section 1		1.10 35.684	39.25 517.74 0.650	0.000 3.50 15.319	9.96	625.4	0.0	1,734.2
55.00			1.11 35.892	39.48 522.87 0.650	0.000 1.50 6.481	4.21	266.1	0.0	369.5
60.00			1.13 36.556	40.21 513.94 0.650	0.000 5.00 21.240	13.81	888.3	0.0	1,210.8
65.00 70.00		1.00	1.15 37.177 1.17 37.762	40.89 504.42 0.650 41.53 494.40 0.650	0.000 5.00 20.680	13.44	879.5	0.0	1,178.6
75.00			1.19 38.314	42.14 483.93 0.650	0.000 5.00 20.119 0.000 5.00 19.558	13.08 12.71	869.1 857.3	0.0	1,146.4
80.00			1.20 38.838	42.72 473.06 0.650	0.000 5.00 18.998	12.71	844.1	0.0 0.0	1,114.2 1,082.0
85.00			1.22 39.337	43.27 461.83 0.650	0.000 5.00 18.437	11.98	829.7	0.0	1,062.0
90.00		1.00	1.23 39.813	43.79 450.27 0.650	0.000 5.00 17.876	11.62	814.2	0.0	1,049.6
95.00	Bot - Section 3		1.25 40.269	44.29 438.41 0.650	0.000 5.00 17.316	11.26	797.7	0.0	985.4
100.0	Appertunance(s)	1.00	1.26 40.706	44.77 426.28 0.650	0.000 5.00 16.993	11.05	791.3	0.0	1.680.1
100.2	Top - Section 2		1.26 40.728	44.80 425.67 0.650	0.000 0.25 0.835	0.54	38.9	0.0	82.5
105.0	·	1.00	1.27 41.127	45.23 420.09 0.650	0.000 4.75 15.598	10.14	733.9	0.0	667.0
110.0		1.00	1.29 41.531	45.68 407.50 0.650	0.000 5.00 15.872	10.32	754.1	0.0	678.6
115.0		1.00	1.30 41.922	46.11 394.69 0.650	0.000 5.00 15.311	9.95	734.3	0.0	654.4
120.0			1.31 42.299	46.52 381.67 0.650	0.000 5.00 14.751	9.59	713.8	0.0	630.3
125.0		1.00	1.32 42.664	46.93 368.46 0.650	0.000 5.00 14.190	9.22	692.6	0.0	606.1
130.0	Bot - Section 4	1.00	1.33 43.018	47.32 355.08 0.650	0.000 5.00 13.629	8.86	670.7	0.0	582.0
134.2	Top - Section 3		1.34 43.310	47.64 343.56 0.650	0.000 4.25 11.279	7.33	558.8	0.0	797.7
135.0			1.34 43.361	47.69 345.76 0.650	0.000 0.75 1.948	1.27	96.6	0.0	55.6
140.0			1.35 43.694	48.06 332.05 0.650	0.000 5.00 12.667	8.23	633.2	0.0	361.5
145.0		1.00	1.36 44.018	48.42 318.20 0.650	0.000 5.00 12.106	7.87	609.6	0.0	345.4
150.0	A		1.37 44.334	48.76 304.20 0.650	0.000 5.00 11.546	7.50	585.6	0.0	329.3
152.0 155.0	Appertunance(s)		1.38 44.457 1.38 44.641	48.90 298.56 0.650 49.10 290.06 0.650	0.000 2.00 4.461	2.90	226.9	0.0	127.2
160.0			1.39 44.940		0.000 3.00 6.524	4.24	333.2	0.0	186.0
162.0	Appertunance(s)		1.40 45.058	49.43 275.79 0.650 49.56 270.04 0.650	0.000 5.00 10.424 0.000 2.00 4.013	6.78 2.61	535.9 206.8	0.0 0.0	297.1 114.3
165.0	Appel tulialice(3)		1.40 45.036	49.75 261.39 0.650	0.000 2.00 4.013	3.80	302.8	0.0	114.3
170.0			1.41 45.517	50.06 246.87 0.650	0.000 5.00 9.303	6.05	302.6 484.4	0.0	264.9
173.0	Appertunance(s)		1.42 45.685	50.25 238.11 0.650	0.000 3.00 5.313	3.45	277.7	0.0	264.9 151.2
175.0	, ipportunitios(s)	1.00	1.42 45.796	50.37 232.24 0.650	0.000 2.00 3.430	2.23	179.7	0.0	97.6
					175.00	££.U	26,462.6	0.0	34,607.7
				Totals:	173.00		20,402.0	0.0	34,007.7

Location: Old Saybrook, CT

Height: 175.0 (ft)

Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:18 AM

Page: 4

Load Case: 1.2D + 1.6W 115.00 mph with No Ice

Gust Response Factor: 1.10 Dead Load Factor: 1.20

Wind Load Factor: 1.60

25 Iterations

Wind Importance Factor: 1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orie ntat Factor	ion Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	De ad Loaq (Ib)
15.00	4' Dish w/ Radome	1	27.339	30.073	1.00	1.00	10.85	0.000	0.000	522.06	0.00	0.00	144.00
100.0	Round Side Arm	1	40.706	44.777	1.00	1.00	5.20	0.000	0.000	372.54	0.00	0.00	180.00
100.0	Andrew DB589	1	40.706	44.777	1.00	1.00	1.38	0.000	0.000	98.87	0.00	0.00	13.80
152.0	RFS APXV18-206517S-	3	44.457	48.903	0.80	1.00	12.41	0.000	0.000	970.87	0.00	0.00	95.04
162.0	Round T-Arm	3	45.058	49.564	0.67	0.75	14.62	0.000	0.000	1,159.60	0.00	0.00	900.00
162.0	Ericsson AIR 21, 1.3	3	45.058	49.564	0.85	0.80	12.40	0.000	0.000	983.60	0.00	0.00	325.44
162.0	Ericsson AIR 21, 1.3	3	45.058	49.564	0.85	0.80	12.32	0.000	0.000	977.13	0.00	0.00	329.40
173.0	Flat Platform w/ Han	1	45.685	50.254	1.00	1.00	42.40	0.000	0.000	3,409.22	0.00	0.00	2,400.00
173.0	Alcatel-Lucent RRH2x	3	45.685	50.254	0.67	0.75	3.26	0.000	0.000	261.82	0.00	0.00	158.40
173.0	Antel BXA-171085-12B	3	45.685	50.254	0.88	0.75	9.37	0.000	0.000	753.04	0.00	0.00	54.00
173.0	Antel BXA-171063/12C	3	45.685	50.254	0.88	0.75	9.48	0.000	0.000	762.59	0.00	0.00	54.00
173.0	RFS DB-T1-6Z-8AB-0Z	1	45.685	50.254	0.67	0.75	2.41	0.000	0.000	193.94	0.00	0.00	52.80
173.0	Antel BXA-70063-6CF-	3	45.685	50.254	0.77	0.75	13.12	0.000	0.000	1,054.53	0.00	0.00	61.20
173.0	Andrew LNX-8513DS-	3	45.685	50.254	0.83	0.75	15.26	0.000	0.000	1,226.80	0.00	0.00	94.68
										12,746.59			4,862.76

Location: Old Saybrook, CT

Height: 175.0 (ft)

Base Dia: 64.69 (in)

Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C

Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:18 AM

Page: 5

Load Case: 1.2D + 1.6W

115.00 mph with No Ice

25 Iterations

Gust Response Factor: 1.10

Dead Load Factor: 1.20

Wind Importance Factor: 1.00

Wind Load Factor: 1.60

Linear	Annurtenance	Segment Forces	(Factored)
	<i>r</i> wpuite ilailee	oeginent i orces	(i actoreu)

Seg To Elev (ft)	p 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	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	27.339	0.017	0.000	0.00	1.98
10.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	27.339	0.017	0.000	0.00	1.98
15.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	27.339	0.017	0.000	0.00	1.98
20.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	29.008	0.018	0.000	0.00	1.98
25.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	30.403	0.018	0.000	0.00	1.98
30.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	31.592	0.019	0.000	0.00	1.98
35.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	32.634	0.019	0.000	0.00	1.98
10.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	33.565	0.020	0.000	0.00	1.98
45.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	34.408	0.020	0.000	0.00	1.98
46.75	(1) 7/8" Coax	Yes	1.75 0.000	1.09	0.16	0.00	34.685	0.020	0.000	0.00	0.69
50.00	(1) 7/8" Coax	Yes	3.25 0.000	1.09	0.30	0.00	35.179	0.021	0.000	0.00	1.29
53.50	(1) 7/8" Coax	Yes	3.50 0.000	1.09	0.32	0.00	35.684	0.021	0.000	0.00	1.39
55.00	(1) 7/8" Coax	Yes	1.50 0.000	1.09	0.14	0.00	35.892	0.021	0.000	0.00	0.59
00.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	36.556	0.021	0.000	0.00	1.98
65.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	37.177	0.022	0.000	0.00	1.98
70.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	37.762	0.023	0.000	0.00	1.98
75.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	38.314	0.023	0.000	0.00	1.98
00.08	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	38.838	0.024	0.000	0.00	1.98
35.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	39.337	0.025	0.000	0.00	1.98
00.06	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	39.813	0.025	0.000	0.00	1.98
95.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	40.269	0.026	0.000	0.00	1.98
100.0	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	40.706	0.027	0.000	0.00	1.98
									Totals:	0.00	39.60

Location: Old Saybrook, CT Height: 175.0 (ft)

Base Dia: 64.69 (in)

Top Dia: 20.00 (in) Shape: 18 Sides

Taper: 0.265010 (in/ft)

Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:18 AM

Page: 6

Load Case: 1.2D + 1.6W

115.00 mph with No Ice

25 Iterations

Gust Response Factor: 1.10 Dead Load Factor: 1.20

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Applied Segment Forces Summary

Seg		Lateral	Axial	Torsion	Moment	
Elev		FX (-)	FY (-)	MY	MZ	
(ft)		(lb)	(lb)	(lb-ft)	(lb-ft)	
0.00	nianiania and a page of the problem of the anti-section of the ant	0.00	0.00	0.00	0.00	
5.00		847.24	1,713.97	0.00	0.00	
10.00		829.71	1,681.77	0.00	0.00	
15.00		1,334.24	1,793.58	0.00	0.00	
20.00		843.15	1,617.20	0.00	0.00	
25.00		864.20	1,585.00	0.00	0.00	
30.00		877.76	1,552.81	0.00	0.00	
35.00		885.78	1,520.61	0.00	0.00	
40.00		889.51	1,488.41	0.00	0.00	
45.00		889.77	1,456.21	0.00	0.00	
46.75		308.68	502.07	0.00	0.00	
50.00		582.39	1,747.16	0.00	0.00	
53.50		625.38	1,851.13	0.00	0.00	
55.00		266.13	419.63	0.00	0.00	
60.00		888.26	1,377.84	0.00	0.00	
65.00		879.51	1,345.64	0.00	0.00	
70.00		869.12	1,313.44	0.00	0.00	
75.00		857.27	1,281.24	0.00	0.00	
80.00		844.09	1,249.04	0.00	0.00	
85.00		829.70	1,216.84	0.00	0.00	
90.00		814.21	1,184.65	0.00	0.00	
95.00		797.70	1,152.45	0.00	0.00	
100.0		1,262.75	2,040.91	0.00	0.00	
100.2		38.90	90.78	0.00	0.00	
105.0		733.85	823.81	0.00	0.00	
110.0		754.11	843.63	0.00	0.00	
115.0		734.31	819.48	0.00	0.00	
120.0		713.79	795.33	0.00	0.00	
125.0		692.59	771.18	0.00	0.00	
130.0		670.74	747.03	0.00	0.00	
134.2		558.85	937.96	0.00	0.00	
135.0		96.65	80.37	0.00	0.00	
140.0		633.17	526.54	0.00	0.00	
145.0		609.64	510.44	0.00	0.00	
150.0		585.57	494.34	0.00	0.00	
152.0		1,197.76	288.27	0.00	0.00	
155.0		333.16	267.30	0.00	0.00	
160.0		535.93	432.62	0.00	0.00	
162.0		3,327.17	1,723.38	0.00	0.00	
165.0		302.76	225.59	0.00	0.00	
170.0		484.43	363.10	0.00	0.00	
173.0		7,939.60	3,085.21	0.00	0.00	
175.0		179.69	97.58	0.00	0.00	
	Totals:	39,209.21	45,015.53	0.00	0.00	

Location: Old Saybrook, CT

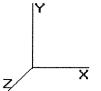
Height: 175.0 (ft) Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II **Exposure Category: C** Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:18 AM

Page: 7

Load Case: 1.2D + 1.6W

115.00 mph with No Ice

25 Iterations

Wind Importance Factor: 1.00

Gust Response Factor: 1.10 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
(/	(I)		(,,	/	((b.)		***************************************	Marian Company		**************************************	(409)	
0.00	-44.96	-39.27	0.00	-4,315.71	0.00	4,315.71	4,635.39	2,317.69	12,274.7	6,146.49	0.00	0.00	0.712
5.00	-43.15	-38.53	0.00	-4,119.36	0.00	4,119.36	4,589.33	2,294.67	11,900.9	5,959.31	0.08	-0.15	0.701
10.00	-41.37	-37.81	0.00	-3,926.70	0.00	3,926.70	4,541.20	2,270.60	11,526.9	5,772.03	0.32	-0.30	0.690
15.00	-39.48	-36.57	0.00	-3,737.66	0.00	3,737.66	4,490.98	2,245.49	11,153.0	5,584.80	0.72	-0.46	0.678
20.00	-37.78	-35.82	0.00	-3,554.81	0.00	3,554.81	4,438.68	2,219.34	10,779.6	5,397.81	1.28	-0.61	0.667
25.00	-36.10	-35.03	0.00	-3,375.74	0.00	3,375.74	4,384.31	2,192.15	10,406.9	5,211.21	2.01	-0.77	0.656
30.00	-34.47	-34.23	0.00	-3,200.57	0.00	3,200.57	4,327.85	2,163.92	10,035.4	5,025.19	2.91	-0.94	0.645
35.00	-32.87	-33.41	0.00	-3,029.41	0.00	3,029.41	4,269.31	2,134.66	9,665.47	4,839.92	3.98	-1.10	0.634
40.00	-31.30	-32.59	0.00	-2,862.35	0.00	2,862.35	4,208.69	2,104.35	9,297.30	4,655.56	5.22	-1.27	0.623
45.00	-29.80	-31.72	0.00	-2,699.42	0.00	2,699.42	4,146.00	2,073.00	8,931.29	4,472.28	6.64	-1.44	0.611
46.75	-29.26	-31.45	0.00	-2,643.91	0.00	2,643.91			8,803.77		7.18	-1.50	0.607
50.00	-27.47	-30.87	0.00	-2,541.71	0.00	2,541.71	4,081.22	2,040.61	8,567.81	4,290.27	8.24	-1.61	0.599
53.50	-25.59	-30.23	0.00	-2,433.66	0.00	2,433.66			8,519.31		9.47	-1.74	0.577
55.00	-25.12	-30.00	0.00	-2,388.31	0.00	2,388.31	4,052.46	2,026.23	8,410.93	4,211.71	10.02	-1.79	0.573
60.00	-23.68	-29.14	0.00	-2,238.29	0.00	2,238.29	3,984.70	1,992.35	8.051.64	4,031.81	11.99	-1.96	0.561
65.00	-22.28	-28.28	0.00	-2,092.58	0.00	2,092.58	3,914.86	1,957.43	7,695.71	3,853.57	14.13	-2.13	0.549
70.00	-20.92	-27.43	0.00	-1,951.17	0.00	1,951.17	3,842.93	1,921.47	7,343.46	3,677.19	16.46	-2.31	0.536
75.00	-19.59	-26.58	0.00	-1,814.04	0.00	1,814.04	3,768.93	1,884.47	6,995.24	3,502.82	18.97	-2.48	0.523
80.00	-18.30	-25.74	0.00	-1,681.14	0.00	1,681.14	3,692.85	1,846.43	6,651.41	3,330.65	21.67	-2.66	0.510
85.00	-17.05	-24.90	0.00	-1,552.46	0.00	1,552.46	3,614.69	1,807.34	6,312.28	3,160.83	24.56	-2.84	0.496
90.00	-15.83	-24.08	0.00	-1,427.95	0.00	1,427.95			5,978.22		27.63	-3.03	0.482
95.00	-14.65	-23.27	0.00	-1,307.54	0.00	1,307.54	3,452.12	1,726.06	5,649.56	2,828.98	30.90	-3.21	0.467
100.00	-12.64	-21.91	0.00	-1,191.20	0.00	1,191.20			5,326.65		34.37	-3.40	0.451
100.25	-12.52	-21.89	0.00	-1,185.72	0.00	1,185.72	2,327.13	1,163.56	3,746.51	1,876.04	34.54	-3.41	0.638
105.00	-11.67	-21.15	0.00	-1,081.75	0.00	1,081.75	2,280.57	1,140.28	3,552.67	1,778.98	38.02	-3.59	0.614
110.00	-10.79	-20.39	0.00	-976.01	0.00	976.01	2,229.53	1,114.77	3,350.83	1,677.90	41.91	-3.83	0.587
115.00	-9.94	-19.64	0.00	-874.08	0.00	874.08	2,176.42	1,088.21	3,151.57	1,578.13	46.04	-4.06	0.559
120.00	-9.12	-18.91	0.00	-775.88	0.00	775.88	2,121.22	1,060.61	2,955.25	1,479.82	50.42	-4.30	0.529
125.00	-8.33	-18.19	0.00	-681.35	0.00	681.35	2,063.94	1,031.97	2,762.20	1,383.16	55.05	-4.54	0.497
130.00	-7.58	-17.49	0.00	-590.39	0.00	590.39	2,004.58		2,572.77	1,288.30	59.92	-4.77	0.462
134.25	-6.65	-16.87	0.00	-516.06	0.00	516.06	1,131.19	565.59	1,425.34	713.73	64.25	-4.96	0.730
135.00	-6.53	-16.78	0.00	-503.41	0.00	503.41	1,127.42	563.71	1,411.32	706.71	65.04	-5.00	0.719
140.00	-5.98	-16.14	0.00	-419.49	0.00	419.49	1,101.14	550.57	1,317.99	659.98	70.43	-5.31	0.642
145.00	-5.45	-15.51	0.00	-338.80	0.00	338.80	1,072.77	536.39	1,225.18	613.50	76.15	-5.60	0.558
150.00	-4.97	-14.89	0.00	-261.25	0.00	261.25	1,042.33	521.16	1,133.21	567.45	82.15	-5.87	0.466
152.00	-4.78	-13.68	0.00	-231.47	0.00	231.47	1,029.57	514.78	1,096.74	549.18	84.62	-5.97	0.427
155.00	-4.51	-13.34	0.00	-190.43	0.00	190.43	1,009.80	504.90	1,042.44	521.99	88.41	-6.10	0.370
160.00	-4.11	-12.76	0.00	-123.75	0.00	123.75	975.19	487.60	953.20	477.31	94.90	-6.29	0.264
162.00	-2.76	-9.27	0.00	-98.22	0.00	98.22	960.77	480.38	918.02	459.69	97.54	-6.35	0.217
165.00	-2.55	-8.95	0.00	-70.41	0.00	70.41	938.51	469.25	865.85	433.57	101.56	-6.43	0.165
170.00	-2.24	-8.43	0.00	-25.66	0.00	25.66	899.74	449.87	780.71	390.94	108.33	-6.51	0.068
173.00	-0.08	-0.19	0.00	-0.38	0.00	0.38	875.48	437.74	730.84	365.96	112.41	-6.53	0.001
175.00	0.00	-0.18	0.00	0.00	0.00	0.00	858.89	429.45	698.14	349.59	115.14	-6.53	0.000

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

Code: ANSI/TIA-222 Rev G

Struct Class: II **Exposure Category: C**

Topographic Category: 1

Base Elev: 0.000 (ft)

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Page: 8

6/23/2014 7:54:18 AM

Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

25 Iterations

Gust Response Factor: 1.10

Dead Load Factor: 0.90 Wind Load Factor: 1.60 Wind Importance Factor: 1.00

Shaft Segment Forces (Factored)

Silait	Segment Forces	Tacic	neuj						
Seg To	qo				lce		Wind	Dead	Tot Dead
Elev			qz	azGh C	Thick Tributary Ap	EPAs	Force X	Load Ice	Load
(ft)	Description	Kzt		(psf) (mph-ft) Cf	(in) (ft) (sf		(lb)	(lb)	(lb)
		4.00	********************************					Terrence de la company de la c	Name of the Owner, which the Party of the Owner, which th
0.00		1.00		30.07 580.37 0.650	0.000 0.00 0.000		0.0	0.0	0.0
5.00			0.85 27.339	30.07 568.49 0.650	0.000 5.00 27.090		847.2	0.0	1,160.1
10.00	A /- \		0.85 27.339	30.07 556.60 0.650	0.000 5.00 26.529		829.7	0.0	1,135.9
15.00	Appertunance(s)		0.85 27.339	30.07 544.71 0.650	0.000 5.00 25.968		812.2	0.0	1,111.8
20.00			0.90 29.008	31.90 548.84 0.650	0.000 5.00 25.408		843.1	0.0	1,087.6
25.00			0.94 30.403	33.44 549.35 0.650	0.000 5.00 24.847		864.2	0.0	1,063.5
30.00			0.98 31.592	34.75 547.22 0.650	0.000 5.00 24.287		877.8	0.0	1,039.3
35.00			1.01 32.634	35.89 543.18 0.650	0.000 5.00 23.726		885.8	0.0	1,015.2
40.00		1.00	1.04 33.565	36.92 537.70 0.650	0.000 5.00 23.165		889.5	0.0	991.0
45.00			1.07 34.408	37.84 531.07 0.650	0.000 5.00 22.605		889.8	0.0	966.9
46.75	Bot - Section 2	1.00	1.07 34.685	38.15 528.52 0.650	0.000 1.75 7.779		308.7	0.0	332.7
50.00			1.09 35.179	38.69 523.51 0.650	0.000 3.25 14.471		582.4	0.0	1,228.9
53.50	Top - Section 1	1.00	1.10 35.684	39.25 517.74 0.650	0.000 3.50 15.319		625.4	0.0	1,300.6
55.00		1.00	1.11 35.892	39.48 522.87 0.650	0.000 1.50 6.481	4.21	266.1	0.0	277.1
60.00		1.00	1.13 36.556	40.21 513.94 0.650	0.000 5.00 21.240		888.3	0.0	908.1
65.00		1.00	1.15 37.177	40.89 504.42 0.650	0.000 5.00 20.680		879.5	0.0	883.9
70.00		1.00	1.17 37.762	41.53 494.40 0.650	0.000 5.00 20.119	13.08	869.1	0.0	859.8
75.00		1.00		42.14 483.93 0.650	0.000 5.00 19.558	12.71	857.3	0.0	835.7
80.00		1.00	1.20 38.838	42.72 473.06 0.650	0.000 5.00 18.998	12.35	844.1	0.0	811.5
85.00		1.00	1.22 39.337	43.27 461.83 0.650	0.000 5.00 18.437	11.98	829.7	0.0	787.4
90.00		1.00	1.23 39.813	43.79 450.27 0.650	0.000 5.00 17.876	11.62	814.2	0.0	763.2
95.00	Bot - Section 3	1.00	1.25 40.269	44.29 438.41 0.650	0.000 5.00 17.316	11.26	797.7	0.0	739.1
100.0	Appertunance(s)	1.00	1.26 40.706	44.77 426.28 0.650	0.000 5.00 16.993	11.05	791.3	0.0	1.260.1
100.2	Top - Section 2	1.00	1.26 40.728	44.80 425.67 0.650	0.000 0.25 0.835	0.54	38.9	0.0	61.9
105.0		1.00	1.27 41.127	45.23 420.09 0.650	0.000 4.75 15.598	10.14	733.9	0.0	500.3
110.0		1.00	1.29 41.531	45.68 407.50 0.650	0.000 5.00 15.872	10.32	754.1	0.0	508.9
115.0		1.00	1.30 41.922	46.11 394.69 0.650	0.000 5.00 15.311	9.95	734.3	0.0	490.8
120.0		1.00	1.31 42.299	46.52 381.67 0.650	0.000 5.00 14.751	9.59	713.8	0.0	472.7
125.0		1.00	1.32 42.664	46.93 368.46 0.650	0.000 5.00 14.190	9.22	692.6	0.0	454.6
130.0	Bot - Section 4	1.00	1.33 43.018	47.32 355.08 0.650	0.000 5.00 13.629	8.86	670.7	0.0	436.5
134.2	Top - Section 3		1.34 43.310	47.64 343.56 0.650	0.000 4.25 11.279	7.33	558.8	0.0	598.2
135.0		1.00	1.34 43.361	47.69 345.76 0.650	0.000 0.75 1.948	1.27	96.6	0.0	41.7
140.0		1.00	1.35 43.694	48.06 332.05 0.650	0.000 5.00 12.667	8.23	633.2	0.0	271.1
145.0		1.00	1.36 44.018	48.42 318.20 0.650	0.000 5.00 12.106	7.87	609.6	0.0	259.0
150.0		1.00	1.37 44.334	48.76 304.20 0.650	0.000 5.00 11.546		585.6	0.0	247.0
152.0	Appertunance(s)	1.00	1.38 44.457	48.90 298.56 0.650	0.000 2.00 4.461	2.90	226.9	0.0	95.4
155.0		1.00	1.38 44.641	49.10 290.06 0.650	0.000 3.00 6.524	4.24	333.2	0.0	139.5
160.0		1.00	1.39 44.940	49.43 275.79 0.650	0.000 5.00 10.424	6.78	535.9	0.0	222.8
162.0	Appertunance(s)	1.00	1.40 45.058	49.56 270.04 0.650	0.000 2.00 4.013	2.61	206.8	0.0	85.7
165.0			1.40 45.232	49.75 261.39 0.650	0.000 3.00 5.851	3.80	302.8	0.0	125.0
170.0			1.41 45.517	50.06 246.87 0.650	0.000 5.00 9.303	6.05	484.4	0.0	198.7
173.0	Appertunance(s)		1.42 45.685	50.25 238.11 0.650	0.000 3.00 5.313	3.45	277.7	0.0	113.4
175.0	- John		1.42 45.796	50.37 232.24 0.650	0.000 2.00 3.430	2.23	179.7	0.0	73.2
					175.00	A A. Q	26,462.6		25.955.7
				Totals:	173.00		£0,402.0	U.U	Z3,333.1

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

Struct Class: II

Code: ANSI/TIA-222 Rev G

Exposure Category: C

Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:18 AM

Page: 9

Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

25 Iterations

Wind Importance Factor: 1.00

Gust Response Factor: 1.10 Dead Load Factor: 0.90 Wind Load Factor: 1.60

<u>Discrete Appurtenance Segment Forces</u> (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientat Factor	ion Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
15.00	4' Dish w/ Radome	1	27.339	30.073	1.00	1.00	10.85	0.000	0.000	522.06	0.00	0.00	108.00
100.0	Round Side Arm	1	40.706	44.777	1.00	1.00	5.20	0.000	0.000	372.54	0.00	0.00	135.00
100.0	Andrew DB589	1	40.706	44.777	1.00	1.00	1.38	0.000	0.000	98.87	0.00	0.00	10.35
152.0	RFS APXV18-206517S-	3	44.457	48.903	0.80	1.00	12.41	0.000	0.000	970.87	0.00	0.00	71.28
162.0	Round T-Arm	3	45.058	49.564	0.67	0.75	14.62	0.000	0.000	1,159.60	0.00	0.00	675.00
162.0	Ericsson AIR 21, 1.3	3	45.058	49.564	0.85	0.80	12.40	0.000	0.000	983.60	0.00	0.00	244.08
162.0	Ericsson AIR 21, 1.3	3	45.058	49.564	0.85	0.80	12.32	0.000	0.000	977.13	0.00	0.00	247.05
173.0	Flat Platform w/ Han	1	45.685	50.254	1.00	1.00	42.40	0.000	0.000	3,409.22	0.00	0.00	1,800.00
173.0	Alcatel-Lucent RRH2x	3	45.685	50.254	0.67	0.75	3.26	0.000	0.000	261.82	0.00	0.00	118.80
173.0	Antel BXA-171085-12B	3	45.685	50.254	0.88	0.75	9.37	0.000	0.000	753.04	0.00	0.00	40.50
173.0	Antel BXA-171063/12C	3	45.685	50.254	0.88	0.75	9.48	0.000	0.000	762.59	0.00	0.00	40.50
173.0	RFS DB-T1-6Z-8AB-0Z	1	45.685	50.254	0.67	0.75	2.41	0.000	0.000	193.94	0.00	0.00	39.60
173.0	Antel BXA-70063-6CF-	3	45.685	50.254	0.77	0.75	13.12	0.000	0.000	1,054.53	0.00	0.00	45.90
173.0	Andrew LNX-8513DS-	3	45.685	50.254	0.83	0.75	15.26	0.000	0.000	1,226.80	0.00	0.00	71.01
										12,746.59			3,647.07

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II **Exposure Category: C**

Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:18 AM

Page: 10

Load Case: 0.9D + 1.6W 115.00 mph with No Ice (Reduced DL) 25 Iterations

Gust Response Factor: 1.10

Dead Load Factor: 0.90 Wind Load Factor: 1.60 Wind Importance Factor: 1.00

(Factored) **Linear Appurtenance Segment Forces**

Seg Top Elev (ft)	p 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	(1) 7/8" Coax	Yes	5.00 0.00	0 1.09	0.45	0.00	27.339	0.017	0.000	0.00	1.49
10.00	(1) 7/8" Coax	Yes	5.00 0.00		0.45	0.00	27.339	0.017	0.000	0.00	1.49
15.00	(1) 7/8" Coax	Yes	5.00 0.00		0.45	0.00	27.339	0.017	0.000	0.00	1.49
20.00	(1) 7/8" Coax	Yes	5.00 0.00	0 1.09	0.45	0.00	29.008	0.018	0.000	0.00	1.49
25.00	(1) 7/8" Coax	Yes	5.00 0.00	0 1.09	0.45	0.00	30.403	0.018	0.000	0.00	1.49
30.00	(1) 7/8" Coax	Yes	5.00 0.00	0 1.09	0.45	0.00	31.592	0.019	0.000	0.00	1.49
35.00	(1) 7/8" Coax	Yes	5.00 0.00		0.45	0.00	32.634	0.019	0.000	0.00	1.49
40.00	(1) 7/8" Coax	Yes	5.00 0.00	0 1.09	0.45	0.00	33.565	0.020	0.000	0.00	1.49
45.00	(1) 7/8" Coax	Yes	5.00 0.00	0 1.09	0.45	0.00	34.408	0.020	0.000	0.00	1.49
46.75	(1) 7/8" Coax	Yes	1.75 0.00	1.09	0.16	0.00	34.685	0.020	0.000	0.00	0.52
50.00	(1) 7/8" Coax	Yes	3.25 0.00	1.09	0.30	0.00	35.179	0.021	0.000	0.00	0.97
53.50	(1) 7/8" Coax	Yes	3.50 0.00	1.09	0.32	0.00	35.684	0.021	0.000	0.00	1.04
55.00	(1) 7/8" Coax	Yes	1.50 0.00	1.09	0.14	0.00	35.892	0.021	0.000	0.00	0.45
60.00	(1) 7/8" Coax	Yes	5.00 0.00	0 1.09	0.45	0.00	36.556	0.021	0.000	0.00	1.49
65.00	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	37.177	0.022	0.000	0.00	1.49
70.00	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	37.762	0.023	0.000	0.00	1.49
75.00	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	38.314	0.023	0.000	0.00	1.49
80.00	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	38.838	0.024	0.000	0.00	1.49
85.00	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	39.337	0.025	0.000	0.00	1.49
90.00	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	39.813	0.025	0.000	0.00	1.49
95.00	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	40.269	0.026	0.000	0.00	1.49
100.0	(1) 7/8" Coax	Yes	5.00 0.00	1.09	0.45	0.00	40.706	0.027	0.000	0.00	1.49
									Totals:	0.00	29.70

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

Code: ANSI/TIA-222 Rev G

Struct Class: II **Exposure Category: C**

Topographic Category: 1 Base Elev: 0.000 (ft)

X

6/23/2014 7:54:18 AM

Page: 11

Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

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25 Iterations

Gust Response Factor: 1.10 Dead Load Factor: 0.90

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Applied Segment Forces Summary

Seg		Lateral	Axial	Torsion	Moment	
Elev		FX (-)	FY (-)	MY	MZ	
(ft)		(lb)	(lb)	(lb-ft)	(lb-ft)	
0.00		0.00	0.00	0.00	0.00	-
5.00		847.24	1,285.48	0.00	0.00	
10.00		829.71	1,261.33	0.00	0.00	
15.00		1,334.24	1,345.18	0.00	0.00	
20.00		843.15	1,212.90	0.00	0.00	
25.00		864.20	1,188.75	0.00	0.00	
30.00		877.76	1,164.60	0.00	0.00	
35.00		885.78	1,140.45	0.00	0.00	
40.00		889.51	1,116.31	0.00	0.00	
45.00		889.77	1,092.16	0.00	0.00	
46.75		308.68	376.55	0.00	0.00	
50.00		582.39	1,310.37	0.00	0.00	
53.50		625.38	1,388.35	0.00	0.00	
55.00		266.13	314.72	0.00	0.00	
60.00		888.26	1,033.38	0.00	0.00	
65.00		879.51	1,009.23	0.00	0.00	
70.00		869.12	985.08	0.00	0.00	
75.00		857.27	960.93	0.00	0.00	
80.00		844.09	936.78	0.00	0.00	
85.00		829.70	912.63	0.00	0.00	
90.00		814.21	888.48	0.00	0.00	
95.00		797.70	864.33	0.00	0.00	
100.0		1,262.75	1,530.69	0.00	0.00	
100.2		38.90	68.08	0.00	0.00	
105.0		733.85	617.86	0.00	0.00	
110.0		754.11	632.72	0.00	0.00	
115.0		734.31	614.61	0.00	0.00	
120.0		713.79	596.50	0.00	0.00	
125.0		692.59	578.39	0.00	0.00	
130.0		670.74	560.27	0.00	0.00	
134.2		558.85	703.47	0.00	0.00	
135.0		96.65	60.28	0.00	0.00	
140.0		633.17	394.90	0.00	0.00	
145.0		609.64	382.83	0.00	0.00	
150.0		585.57	370.75	0.00	0.00	
152.0		1,197.76	216.20	0.00	0.00	
155.0		333.16	200.47	0.00	0.00	
160.0		535.93	324.46	0.00	0.00	
162.0		3,327.17	1,292.54	0.00	0.00	
165.0		302.76	169.19	0.00	0.00	
170.0		484.43	272.33	0.00	0.00	
173.0		7,939.60	2,313.91	0.00	0.00	
175.0		179.69	73.19	0.00	0.00	
	Totals:	39,209.21	33,761.64	0.00	0.00	
	i otais.	39,209.21	33,101.04	บ.บบ	0.00	

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft) © 2007 - 2014 by ATC IPLLC. All rights reserved.

Code: ANSI/TIA-222 Rev G Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)



6/23/2014 7:54:18 AM

Page: 12

Load Case: 0.9D+1.6W	115.00 mph with No Ice (Reduced DL)	25 Iterations
Gust Response Factor: 1.10		Wind Importance Factor : 1.00

Gust Response Factor: 1.10 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)	t phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
ENGLIS	^ ^^	22.74	20.05	^ ^ ^	400407	0.00	400407	4.005.00						
	0.00 5.00	-33.71 -32.32	-39.25 -38.49	0.00	-4,284.87		4,284.87	4,635.39				0.00	0.00	0.705
		-32.32		0.00	-4,088.60		4,088.60	4,589.33				80.0	-0.15	0.693
	10.00 15.00	-30.97 -29.53	-37.74	0.00	-3,896.15		3,896.15	4,541.20				0.32	-0.30	0.682
	20.00	-29.53 -28.23	-36.47 -35.70	0.00 0.00	-3,707.47 -3,525.10		3,707.47 3,525.10	4,490.98				0.72	-0.45	0.671
	25.00	-26.23	-34.89	0.00	-3,325.10 -3,346.62		3,346.62	4,438.68	•	•	•	1.27 2.00	-0.61	0.660
	30.00	-25.71	-34.09	0.00	-3,346.62		3,346.62	4,384.31	•			2.00	-0.77	0.649
	35.00	-24.49	-33.24	0.00	-3,172.13	0.00		4,327.85	,				-0.93	0.637
	40.00	-24.49	-32.39	0.00	-2,835.61	0.00	3,001.79 2,835.61	4,269.31				3.95	-1.09	0.626
	45.00	-22.16	-31.52	0.00	-2,633.61		2,633.61	4,208.69 2 4,146.00 2				5.18 6.59	-1.26 -1.42	0.615 0.603
	46.75	-21.74	-31.24	0.00	-2.618.49	0.00	2,618.49	4,123.56				7.12	-1.42 -1.49	0.503
	50.00	-20.39	-30.66	0.00	-2,516.98	0.00	2,516.98	4,081.22				8.17	-1.43 -1.60	0.593
	53.50	-18.97	-30.02	0.00	-2,409.67	0.00	2,409.67	4,072.38				9.39	-1.72	0.570
	55.00	-18.61	-29.78	0.00	-2,364.63	0.00	2,364.63	4,052.46 2				9.94	-1.77	0.566
	60.00	-17.52	-28.92	0.00	-2.215.71	0.00	2,215.71	3,984.70	•	•	•	11.89	-1.94	0.554
	65.00	-16.46	-28.05	0.00	-2.071.13	0.00	2,071.13	3,914.86				14.02	-2.11	0.542
	70.00	-15.42	-27.19	0.00	-1.930.88	0.00	1,930.88	3,842.93				16.32	-2.29	0.529
	75.00	-14.42	-26.34	0.00	-1.794.93	0.00	1,794.93	3,768.93				18.81	-2.46	0.516
	80.00	-13.44	-25.50	0.00	-1,663.24	0.00	1,663.24	3,692.85				21.48	-2.64	0.503
	85.00	-12.49	-24,66	0.00	-1,535.76	0.00	1,535.76	3,614.69				24.34	-2.82	0.490
	90.00	-11.57	-23.84	0.00	-1,412,44	0.00	1,412.44	3,534.45				27.39	-3.00	0.475
	95.00	-10.67	-23.03	0.00	-1,293.24	0.00	1,293.24	3,452.12				30.63	-3.18	0.460
	100.00	-9.18	-21.70	0.00	-1,178.07	0.00	1,178.07	3,367.72				34.06	-3.37	0.445
	100.25	-9.08	-21.67	0.00	-1,172.65	0.00	1.172.65	2,327.13				34.24	-3.38	0.629
	105.00	-8.43	-20.93	0.00	-1,069.71	0.00	1,069.71	2,280.57				37.68	-3.55	0.605
	110.00	-7.77	-20.17	0.00	-965.04	0.00	965.04	2,229.53 1				41.53	-3.79	0.579
	115.00	-7.12	-19.43	0.00	-864.18	0.00	864.18	2,176.42 1				45.62	-4.02	0.551
	120.00	-6.50	-18.70	0.00	-767.05	0.00	767.05	2,121.22 1	1,060.61	2,955.25	1,479.82	49.96	-4.26	0.522
	125.00	-5.91	-17.99	0.00	-673.56	0.00	673.56	2,063.94 1	1,031.97	2,762.20	1,383.16	54.54	-4.49	0.490
	130.00	-5.34	-17.29	0.00	-583.62	0.00	583.62	2,004.58 1	,002.29	2,572.77	1,288.30	59.37	-4.72	0.456
	134.25	-4.65	-16.69	0.00	-510.12	0.00	510.12	1,131.19	565.59	1,425.34	713.73	63.65	-4.91	0.720
	135.00	-4.55	-16.60	0.00	-497.60	0.00	497.60	1,127.42	563.71	1,411.32	706.71	64.43	-4.95	0.709
	140.00	-4.13	-15.96	0.00	-414.60	0.00	414.60	1,101.14	550.57	1,317.99	659.98	69.77	-5.25	0.633
	145.00	-3.73	-15.33	0.00	-334.83	0.00	334.83	1,072.77		1,225.18	613.50	75.42	-5.54	0.550
	150.00	-3.38	-14.72	0.00	-258.17	0.00	258.17	1,042.33	521.16	1,133.21	567.45	81.36	-5.80	0.459
	152.00	-3.26	-13.52	0.00	-228.73	0.00	228.73	1,029.57	514.78	1,096.74	549.18	83.81	-5.90	0.420
	155.00	-3.05	-13.17	0.00	-188.18	0.00	188.18	1,009.80		1,042.44	521.99	87.56	-6.04	0.364
	160.00	-2.76	-12.61	0.00	-122.33	0.00	122.33	975.19	487.60	953.20	477.31	93.98	-6.23	0.260
	162.00	-1.83	-9.16	0.00	-97.11	0.00	97.11	960.77	480.38	918.02	459.69	96.60	-6.29	0.214
	165.00	-1.68	-8.85	0.00	-69.62	0.00	69.62	938.51	469.25	865.85	433.57	100.57	-6.36	0.163
	170.00	-1.46	-8.34	0.00	-25.38	0.00	25.38	899.74	449.87	780.71	390.94	107.27	-6.44	0.067
	173.00	-0.05	-0.19	0.00	-0.37	0.00	0.37	875.48	437.74	730.84	365.96	111.31	-6.46	0.001
	175.00	0.00	-0.18	0.00	0.00	0.00	0.00	858.89	429.45	698.14	349.59	114.01	-6.46	0.000

370625

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in)

Top Dia: 20.00 (in) Shape: 18 Sides

Taper: 0.265010 (in/ft)

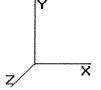
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Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C
Topographic Category: 1

Topographic Catego Base Elev: 0.000 (ft)



6/23/2014 7:54:18 AM

Page: 13

24 Iterations

Load Case: 1.2D + 1.0Di + 1.0Wi

50.00 mph with 0.75 in Radial Ice

ice Dead Load Factor: 1.00

Wind Importance Factor: 1.00

Ice Importance Factor: 1.00

Dead Load Factor: 1.20 Wind Load Factor: 1.00

Gust Response Factor: 1.10

Shaft Segment Forces (Factored)

Jilait	Segment Forces	Tracto	neuj											
Seg To	qq							lce				Wind	Dead	Tot Dead
Elev	•			qz	azGh	С		Thick	Tributa	ry Ap	EPAs	Force X	Load Ice	
(ft)	Description	Kzt	Kz	(psf)		(mph-ft)	Cf	(in)	(ft)	(sf)	(sf)	(lb)	(lb)	(lb)
ANNOUNCE DE LA COMPANSION DE LA COMPANSI		4.00				WATER CONTRACTOR OF THE PERSON		***************************************	***************		and the same of th	CONTRACTOR OF THE PARTY OF THE	MANUAL PROPERTY OF THE PROPERT	
0.00		1.00	0.85	5.168		0.000		0.000	0.00		0.00	0.0	0.0	0.0
5.00			0.85	5.168		0.000		1.242		28.125	33.75	191.9	502.7	2,049.5
10.00			0.85	5.168		0.000		1.331		27.638	33.17	188.5	528.5	2,043.0
15.00	Appertunance(s)		0.85	5.168		0.000		1.386		27.124	32.55	185.0	539.3	2,021.7
20.00			0.90	5.483		0.000		1.427		26.597	31.92	192.5	543.6	1,993.7
25.00			0.94			0.000		1.459	5.00	26.063	31.28	197.7	544.0	1,962.0
30.00			0.98	5.972	6.569	0.000	1.200	1.486		25.525	30.63	201.2	541.9	1,927.7
35.00		1.00	1.01	6.169		0.000		1.509	5.00	24.983	29.98	203.4	538.0	1,891.6
40.00		1.00	1.04	6.345	6.979	0.000	1.200	1.529	5.00	24.440	29.33	204.7	532.7	1,854.1
45.00		1.00	1.07	6.504	7.155	0.000	1.200	1.547	5.00	23.894	28.67	205.1	526.4	1,815.6
46.75	Bot - Section 2	1.00	1.07	6.557	7.212	0.000	1.200	1.553	1.75	8.232	9.88	71.2	183.4	627.0
50.00		1.00	1.09	6.650	7.315	0.000	1.200	1.564	3.25	15.318	18.38	134.5	342.2	1,980.8
53.50	Top - Section 1	1.00	1.10	6.746	7.420	0.000	1.200	1.574	3.50	16.238	19.49	144.6	364.7	2,098.9
55.00		1.00	1.11	6.785	7.463	0.000	1.200	1.579	1.50	6.876	8.25	61.6	155.6	525.1
60.00		1.00	1.13	6.910	7.601	0.000	1.200	1.592		22.567	27.08	205.9	510.0	1,720.8
65.00		1.00	1.15	7.028	7.731	0.000	1.200	1.605		22.017	26.42	204.2	500.9	1.679.5
70.00		1.00	1.17	7.138	7.852	0.000	1.200	1.617		21.467	25.76	202.3	491.3	1,637.7
75.00		1.00	1.19	7.243	7.967	0.000	1.200	1.628		20.915	25.10	200.0	481.3	1,595.5
80.00				7.342		0.000		1.639		20.363	24.44	197.3	470.9	1,552.9
85.00				7.436		0.000		1.649		19.811	23.77	194.5	460.2	1.510.0
90.00		1.00		7.526	8.279			1.658		19.258	23.11	191.3	449.2	1,466.8
95.00	Bot - Section 3	1.00	1.25	7.612	8.374	0.000		1.667		18.705	22.45	188.0	437.8	1,423.3
100.0	Appertunance(s)	1.00		7.695		0.000		1.676		18.390	22.07	186.8	432.2	2.112.3
100.2	Top - Section 2		1.26	7.699	8.469	0.000		1.676	0.25		1.09	9.2	21.6	104.1
105.0				7.774		0.000		1.684		16.931	20.32	173.7	399.4	1,066.4
110.0			1.29	7.851	8.636			1.692		17.282	20.74	179.1	408.4	1,087.0
115.0		1.00		7.925		0.000		1.699		16.728	20.07	175.0	396.2	1,050.6
120.0		1.00		7.996		0.000		1.707		16.173	19.41	170.7	383.8	1,030.0
125.0		1.00		8.065		0.000		1.714		15.618	18.74	166.3	371.2	977.3
130.0	Bot - Section 4	1.00		8.132				1.720		15.063	18.08	161.7	358.4	940.4
134.2	Top - Section 3	1.00		8.187		0.000		1.726		12.502	15.00	135.1	298.8	1.096.4
135.0	rop - dection 5	1.00		8.197		0.000		1.727		2.164	2.60	23.4	52.4	*
140.0		1.00		8.260		0.000		1.733		14.111	16.93	153.9	336.5	108.0 698.0
145.0		1.00		8.321										
150.0			1.37	8.381	9.133	0.000		1.739		13.556	16.27	148.9	323.3	668.7
	Annovitumonoo(o)							1.745		13.000	15.60	143.8	310.0	639.3
152.0 155.0	Appertunance(s)	1.00 1.00	1.38	8.404 8.439		0.000 1		1.748	2.00		6.05	56.0	121.9	249.1
					9.283	0.000 1		1.751	3.00		8.88	82.4	177.9	363.9
160.0	A ====================================	1.00		8.495		0.000 1		1.757		11.888	14.27	133.3	283.0	580.0
162.0	Appertunance(s)		1.40	8.518	9.369	0.000 1		1.759	2.00		5.52	51.7	111.0	225.3
165.0			1.40	8.551		0.000 1		1.762	3.00		8.08	76.0	161.6	328.2
170.0	A		1.41	8.604		0.000 1		1.767		10.776	12.93	122.4	255.4	520.3
173.0	Appertunance(s)		1.42	8.636		0.000 1		1.770	3.00		7.44	70.7	148.3	299.5
175.0		1.00	1.42	8.657	9.523	0.000 1	1.200	1.772	2.00	4.021	4.82	45.9	96.6	194.2
						7	Γotals:		175.00			6,231.4	15,092.4	49,700.1

Location: Old Saybrook, CT

Height: 175.0 (ft)

Base Dia: 64.69 (in)

Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C

Topographic Category: 1

Base Elev: 0.000 (ft)

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X Z,

Page: 14

6/23/2014 7:54:19 AM

Load Case: 1.2D + 1.0Di + 1.0Wi

50.00 mph with 0.75 in Radial Ice

24 Iterations

Gust Response Factor: 1.10

Dead Load Factor: 1.20 Wind Load Factor: 1.00 Ice Dead Load Factor: 1.00

Wind Importance Factor: 1.00

Ice Importance Factor: 1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientat Factor	ion Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
	4' Dish w/ Radome	1	5.168	5.685	1.00	1.00	12.12	0.000	0.000	68.90	0.00	0.00	306.42
100.0	Round Side Arm	1	7.695	8.464	1.00	1.00	7.81	0.000	0.000	66.14	0.00	0.00	225.39
100.0	Andrew DB589	1	7.695	8.464	1.00	1.00	4.47	0.000	0.000	37.81	0.00	0.00	92.52
152.0	RFS APXV18-206517S-	3	8.404	9.244	0.80	1.00	15.39	0.000	0.000	142.23	0.00	0.00	448.62
162.0	Round T-Arm	3	8.518	9.369	0.67	0.75	27.17	0.000	0.000	254.59	0.00	0.00	1,341.13
162.0	Ericsson AIR 21, 1.3	3	8.518	9.369	0.85	0.80	14.66	0.000	0.000	137.33	0.00	0.00	833.69
162.0	Ericsson AIR 21, 1.3	3	8.518	9.369	0.85	0.80	14.57	0.000	0.000	136.48	0.00	0.00	835.35
173.0	Flat Platform w/ Han	1	8.636	9.500	1.00	1.00	63.72	0.000	0.000	605.30	0.00	0.00	3.394.54
173.0	Alcatel-Lucent RRH2x	3	8.636	9.500	0.67	0.75	4.24	0.000	0.000	40.31	0.00	0.00	383.00
173.0	Antel BXA-171085-12B	3	8.636	9.500	0.88	0.75	11.83	0.000	0.000	112.39	0.00	0.00	418.77
173.0	Antel BXA-171063/12C	3	8.636	9.500	0.88	0.75	11.94	0.000	0.000	113.47	0.00	0.00	421.61
173.0	RFS DB-T1-6Z-8AB-0Z	1	8.636	9.500	0.67	0.75	2.86	0.000	0.000	27.15	0.00	0.00	198.97
173.0	Antel BXA-70063-6CF-	3	8.636	9.500	0.77	0.75	15.34	0.000	0.000	145.74	0.00	0.00	593.17
173.0	Andrew LNX-8513DS-	3	8.636	9.500	0.83	0.75	17.74	0.000	0.000	168.50	0.00	0.00	715.47
										2,056.33			10,208.65

Location: Old Saybrook, CT

Height: 175.0 (ft)

Base Dia: 64.69 (in) Top Dia:

20.00 (in) Shape: 18 Sides

Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)

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Totals:

0.00

471.11

6/23/2014 7:54:19 AM

Page: 15

Load Case: 1.2D + 1.0Di + 1.0Wi

50.00 mph with 0.75 in Radial Ice

24 Iterations

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

Wind Importance Factor: 1.00 Ice Importance Factor: 1.00

Wind Load Factor: 1.00

Linea	r Appurtenance S	Segment Forc	es (Fact	ored)							
Seg To	p			Exposed					Cf		Dead
Elev	Γ	Exposed	Length	Width	Area	CaAa	qz		Adjust	FX	Load
(ft)	Description	To Wind	(ft) Ca	(in)	(sqft)	(sqft)	(psf)	Ra	Factor	(lb)	(lb)
5.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.49	0.00	5.168	0.017	0.000	0.00	17.16
10.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.56	0.00	5.168	0.017	0.000	0.00	18.94
15.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.61	0.00	5.168	0.017	0.000	0.00	20.09
20.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.64	0.00	5.483	0.018	0.000	0.00	20.96
25.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.67	0.00	5.747	0.018	0.000	0.00	21.66
30.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.69	0.00	5.972	0.019	0.000	0.00	22.26
35.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.71	0.00	6.169	0.019	0.000	0.00	22.78
40.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.73	0.00	6.345	0.020	0.000	0.00	23.24
45.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.74	0.00	6.504	0.020	0.000	0.00	23.66
46.75	(1) 7/8" Coax	Yes	1.75 0.000	1.09	0.61	0.00	6.557	0.020	0.000	0.00	8.33
50.00	(1) 7/8" Coax	Yes	3.25 0.000	1.09	1.14	0.00	6.650	0.021	0.000	0.00	15.63
53.50	(1) 7/8" Coax	Yes	3.50 0.000	1.09	1.24	0.00	6.746	0.021	0.000	0.00	17.00
55.00	(1) 7/8" Coax	Yes	1.50 0.000	1.09	0.53	0.00	6.785	0.021	0.000	0.00	7.32
60.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.78	0.00	6.910	0.021	0.000	0.00	24.72
65.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.79	0.00	7.028	0.022	0.000	0.00	25.02
70.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.80	0.00	7.138	0.023	0.000	0.00	25.31
75.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.81	0.00	7.243	0.023	0.000	0.00	25.58
80.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.82	0.00	7.342	0.024	0.000	0.00	25.83
85.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.83	0.00	7.436	0.025	0.000	0.00	26.07
90.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.84	0.00	7.526	0.025	0.000	0.00	26.30
95.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.84	0.00	7.612	0.026	0.000	0.00	26.52
100.0	(1) 7/8" Coax	Yes	5.00 0.000	1.09	1.85	0.00	7.695	0.027	0.000	0.00	26.74

Location: Old Saybrook, CT

Height: 175.0 (ft)

Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides Taper: 0.265010 (in/ft)

Struct Class: II **Exposure Category: C**

Code: ANSI/TIA-222 Rev G

Topographic Category: 1

Base Elev: 0.000 (ft)

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24 Iterations

Page: 16

Load Case: 1.2D + 1.0Di + 1.0Wi

50.00 mph with 0.75 in Radial Ice

Ice Dead Load Factor: 1.00

Wind Importance Factor: 1.00

Ice Importance Factor: 1.00

Dead Load Factor: 1.20 Wind Load Factor: 1.00

Gust Response Factor: 1.10

Applied Segment Forces Summary

Seg		Lateral	Axial	Torsion	Moment
Elev		FX (-)	FY (-)	MY	MZ
(ft)		(lb)	(lb)	(lb-ft)	(lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		191.86	2,231.88	0.00	0.00
10.00		188.54	2,227.22	0.00	0.00
15.00		253.93	2,513.41	0.00	0.00
20.00		192.51	2,179.74	0.00	0.00
25.00		197.72	2,148.68	0.00	0.00
30.00		201.22	2,115.00	0.00	0.00
35.00		203.44	2,079.43	0.00	0.00
40.00		204.69	2,042.42	0.00	0.00
45.00		205.15	2,004.27	0.00	0.00
46.75		71.25	693.08	0.00	0.00
50.00		134.47	2,103.71	0.00	0.00
53.50		144.58	2,231.45	0.00	0.00
55.00		61.58	581.92	0.00	0.00
60.00		205.85	1,910.58	0.00	0.00
65.00		204.25	1,869.58	0.00	0.00
70.00		202.27	1,828.09	0.00	0.00
75.00		199.96	1,786.15	0.00	0.00
80.00		197.35	1,743.82	0.00	0.00
85.00		194.46	1,701.14	0.00	0.00
90.00		191.32	1,658.14	0.00	0.00
95.00		187.95	1,614.84	0.00	0.00
100.0		290.74	2,621.96	0.00	0.00
100.2		9.20	112.36	0.00	0.00
105.0		173.75	1,223.19	0.00	0.00
110.0		179.10	1,252.02	0.00	0.00
115.0		174.98	1,215.65	0.00	0.00
120.0		170.70	1,179.10	0.00	0.00
125.0		166.27	1,142.36	0.00	0.00
130.0		161.69	1,142.36	0.00	0.00
134.2		135.11	1,236.75	0.00	0.00
135.0		23.42	132.80	0.00	0.00
140.0		153.85	863.06	0.00	0.00
145.0		148.89	833.76	0.00	0.00
150.0					
152.0		143.81 198.18	804.34 763.70	0.00	0.00
155.0				0.00	0.00
160.0		82.42 133.31	445.22 715.58	0.00	0.00
162.0				0.00	0.00
		580.11	3,289.71	0.00	0.00
165.0		75.98	387.14	0.00	0.00
170.0		122.39	618.55	0.00	0.00
173.0		1,283.51	6,483.92	0.00	0.00
175.0		45.94	194.19	0.00	0.00
	Totals:	8,287.70	65,885.36	0.00	0.00

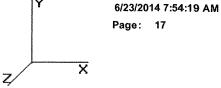
Pole: 370625 Code: ANSI/TIA-222 Rev G

Location :Old Saybrook, CTStruct Class :IIHeight :175.0 (ft)Exposure Category :CBase Dia :64.69 (in)Topographic Category :1

Top Dia: 20.00 (in) Base Elev: 0.000 (ft)

Shape: 18 Sides

Taper: 0.265010 (in/ft) © 2007 - 2014 by ATC IPLLC. All rights reserved.



24 Iterations

Load Case: 1.2D + 1.0Di + 1.0Wi 50.00 mph with 0.75 in Radial Ice 24

Wind Load Factor: 1.00

Calculated Forces

Seg	Pu	Vu	Tu	Mu	Mu	Resultant	phi	phi	idq	phi	Total		
Elev	FY (-)	FX (-)	MY	MZ	MX	Moment	Pn	Vn	Tn	Mn	Deflect	Rotation	
(ft)	(kips)	(kips)	(ft-kips)	(ft-kips)	(ft-kips)	(ft-kips)	(kips)	(kips)		(ft-kips)	(in)	(deg)	Ratio
				((,				Security of the security of th	***************************************		(409)	11010
0.00	-65.88	-8.31	0.00	-888.28	0.00	888.28	4,635.39				0.00	0.00	0.159
5.00	-63.65	-8.15	0.00	-846.75	0.00	846.75	4,589.33 2				0.02	-0.03	0.156
10.00	-61.42	-7.99	0.00	-806.02	0.00	806.02	4,541.20 2	2,270.60	11,526.9	5,772.03	0.07	-0.06	0.153
15.00	-58.90	-7.77	0.00	-766.06	0.00	766.06	4,490.98 2				0.15	-0.09	0.150
20.00	-56.71	-7.60	0.00	-727.23	0.00	727.23	4,438.68 2				0.26	-0.13	0.148
25.00	-54.56	-7.43	0.00	-689.22	0.00	689.22	4,384.31 2	•	•	•	0.41	-0.16	0.145
30.00	-52.44	-7.25	0.00	-652.08	0.00	652.08	4,327.85 2	,			0.60	-0.19	0.142
35.00	-50.36	-7.07	0.00	-615.81	0.00	615.81	4,269.31 2				0.82	-0.23	0.139
40.00	-48.31	-6.89	0.00	-580.46	0.00	580.46	4,208.69 2				1.07	-0.26	0.136
45.00	-46.31	-6.69	0.00	-546.02	0.00	546.02	4,146.00 2				1.36	-0.29	0.133
46.75	-45.61	-6.63	0.00	-534.32	0.00	534.32	4,123.56 2		•	•	1.47	-0.31	0.132
50.00	-43.51	-6.50	0.00	-512.77	0.00	512.77	4,081.22 2	. *	•	•	1.69	-0.33	0.130
53.50	-41.28	-6.36	0.00	-490.01	0.00	490.01	4,072.38 2				1.94	-0.35	0.125
55.00	-40.69	-6.31	0.00	-480.48	0.00	480.48	4,052.46 2				2.05	-0.36	0.124
60.00	-38.78	-6.11	0.00	-448.94	0.00	448.94	3,984.70 1				2.45	-0.40	0.121
65.00	-36.91	-5.92	0.00	-418.37	0.00	418.37	3,914.86 1				2.89	-0.43	0.118
70.00	-35.08	-5.72	0.00	-388.79	0.00	388.79	3,842.93 1				3.36	-0.47	0.115
75.00	-33.29	-5.53	0.00	-360.18	0.00	360.18	3,768.93 1	•	•	•	3.87	-0.50	0.112
80.00	-31.54	-5.33	0.00	-332.54	0.00	332.54	3,692.85 1	,			4.42	-0.54	0.108
85.00	-29.84	-5.14	0.00	-305.87	0.00	305.87	3,614.69 1				5.00	-0.57	0.105
90.00	-28.18	-4.95	0.00	-280.17	0.00	280.17	3,534.45 1				5.62	-0.61	0.102
95.00	-26.57	-4.76	0.00	-255.41	0.00	255.41	3,452.12 1				6.28	-0.65	0.098
100.00	-23.95	-4.45	0.00	-231.60	0.00	231.60	3,367.72 1	•	•	•	6.98	-0.68	0.094
100.25	-23.83	-4.45	0.00	-230.49	0.00	230.49	2,327.13 1				7.01	-0.69	0.133
105.00	-22.61	-4.27	0.00	-209.38	0.00	209.38	2,280.57 1				7.71	-0.72	0.128
110.00	-21.36	-4.09	0.00	-188.01	0.00	188.01	2,229.53 1				8.49	-0.77	0.122
115.00	-20.14	-3.92	0.00	-167.54	0.00	167.54	2,176.42 1				9.32	-0.81	0.115
120.00	-18.96	-3.75	0.00	-147.94	0.00	147.94	2,121.22 1				10.19	-0.86	0.109
125.00	-17.82 -16.71	-3.58	0.00	-129.21	0.00	129.21	2,063.94 1				11.12	-0.90	0.102
130.00 134.25	-16.71 -15.48	-3.41 -3.26	0.00 0.00	-111.33	0.00	111.33	2,004.58 1				12.08	-0.95	0.095
134.23	-15.46	-3.24	0.00	-96.84 -94.40	0.00 0.00	96.84 94.40	1,131.19		1,425.34	713.73	12.94	-0.98	0.149
140.00	-13.34	-3.24					1,127.42		1,411.32	706.71	13.10	-0.99	0.147
145.00	-14.46	-2.93	0.00 0.00	-78.19 -62.76	0.00 0.00	78.19	1,101.14		1,317.99	659.98	14.16	-1.05	0.132
150.00	-13.85	-2.93 -2.78	0.00	-62.76 -48.09	0.00	62.76	1,072.77		1,225.18	613.50	15.29	-1.10	0.115
150.00	-12.04	-2.76 -2.57	0.00			48.09	1,042.33		1,133.21	567.45	16.47	-1.15	0.097
	-12.06	-2.57 -2.49		-42.52 -34.80	0.00	42.52	1,029.57		1,096.74	549.18	16.96	-1.17	0.089
155.00 160.00	-11.64	-2.49 -2.34	0.00 0.00	-34.80	0.00 0.00	34.80 22.36	1,009.80 975.19	487.60	1,042.44 953.20	521.99 477.31	17.70	-1.19	0.078
162.00	-10.93 -7.65	-1.69	0.00	-22.36 -17.67	0.00	22.36 17.67	960.77	480.38	918.02	477.31	18.97 19.49	-1.23 -1.24	0.058 0.046
165.00	-7.26	-1.61	0.00	-17.67	0.00	12.59	938.51	469.25	865.85	433.57	20.27	-1.24 -1.25	0.046
170.00	-6.65	-1.48	0.00	-4.53	0.00	4.53	899.74	449.87	780.71	390.94	21.59	-1.25 -1.27	0.037
173.00	-0.03	-0.05	0.00	-4.53	0.00	4.53 0.10	875.48	449.07	730.84	365.96	22.39	-1.27	0.000
175.00	0.00	-0.05	0.00	0.00	0.00	0.10	858.89	429.45	698.14	349.59	22.92	-1.27	0.000
175.00	0.00	-0.03	0.00	0.00	0.00	0.00	0.00.09	723.43	050.14	J4J.JJ	£ £ . J £	-1.21	0.000

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in)

Top Dia: 20.00 (in)

Shape: 18 Sides

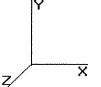
Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:19 AM

Page: 18

Load Case: 1.0D + 1.0W 60.00 mph Serviceability 23 Iterations

Gust Response Factor: 1.10 Wind Importance Factor: 1.00

Dead Load Factor: 1.00 Wind Load Factor: 1.00

Shaft Segment For	<u>rces</u> (Factored)
-------------------	------------------------

Seg To	op	•	•					lce				Wind	Dead	Tot Dead
Elev	•			qz	qzGh	C	٦	Thick '	Tributa	ry Ap	EPAs	Force X	Load Ice	Load
(ft)	Description	Kzt	Kz	(psf)	(psf)	(mph-ft)	Cf	(in)	(ft)	(sf)	(sf)	(lb)	(lb)	(lb)
0.00	an canada kanada a maka an aka amaka ka manaka ka mana bakan ku ka ka ka 1996-1996-19	1.00	0.85	7.442	8.186	302.80 0.6	50	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00				7.442		296.60 0.6		0.000		27.090	17.61	144.1	0.0	1,289.0
10.00		1.00		7.442		290.40 0.6		0.000		26.529	17.24	141.2	0.0	1,262.1
15.00	Appertunance(s)	1.00	0.85	7.442		284.19 0.6		0.000		25.968	16.88	138.2	0.0	1,235.3
20.00		1.00	0.90	7.896	8.686	286.35 0.6	50	0.000	5.00	25.408	16.52	143.4	0.0	1,208.5
25.00		1.00	0.94	8.276	9.104	286.62 0.6	50	0.000	5.00	24.847	16.15	147.0	0.0	1,181.6
30.00		1.00		8.600	9.460	285.50 0.6	50	0.000	5.00	24.287	15.79	149.3	0.0	1,154.8
35.00		1.00		8.883		283.40 0.6		0.000	5.00	23.726	15.42	150.7	0.0	1,128.0
40.00		1.00	1.04		10.05	280.54 0.6	50	0.000	5.00	23.165	15.06	151.3	0.0	1,101.1
45.00		1.00		9.366		277.08 0.6		0.000		22.605	14.69	151.4	0.0	1,074.3
46.75	Bot - Section 2		1.07			275.75 0.6		0.000		7.779	5.06	52.5	0.0	369.7
50.00		1.00		9.576		273.13 0.6		0.000		14.471	9.41	99.1	0.0	1,365.5
53.50	Top - Section 1		1.10			270.12 0.6		0.000	3.50	15.319	9.96	106.4	0.0	1,445.2
55.00		1.00		9.770		272.80 0.6		0.000		6.481	4.21	45.3	0.0	307.9
60.00			1.13			268.14 0.6		0.000		21.240	13.81	151.1	0.0	1,009.0
65.00			1.15 1			263.18 0.6		0.000		20.680	13.44	149.6	0.0	982.2
70.00			1.17 1			257.95 0.6		0.000		20.119	13.08	147.9	0.0	955.3
75.00			1.19 1			252.48 0.6		0.000		19.558	12.71	145.8	0.0	928.5
80.00			1.20 1			246.81 0.6		0.000		18.998	12.35	143.6	0.0	901.7
85.00			1.22 1			240.95 0.6		0.000		18.437	11.98	141.2	0.0	874.8
90.00			1.23 1			234.92 0.6		0.000		17.876	11.62	138.5	0.0	848.0
95.00	Bot - Section 3		1.25 1			228.74 0.6		0.000		17.316	11.26	135.7	0.0	821.2
100.0	Appertunance(s)		1.26 1			222.41 0.6		0.000		16.993	11.05	134.6	0.0	1,400.1
100.2	Top - Section 2		1.26 1			222.09 0.6		0.000		0.835	0.54	6.6	0.0	68.8
105.0		1.00	1.27 1			219.17 0.6		0.000		15.598	10.14	124.9	0.0	555.8
110.0			1.29 1			212.60 0.6		0.000		15.872	10.32	128.3	0.0	565.5
115.0			1.30 1			205.92 0.6		0.000		15.311	9.95	124.9	0.0	545.3
120.0			1.31 1			199.13 0.6		0.000		14.751	9.59	121.4	0.0	525.2
125.0	Dat Castian t		1.32 1			192.24 0.6		0.000		14.190	9.22	117.8	0.0	505.1
130.0	Bot - Section 4		1.33 1			185.25 0.6		0.000		13.629	8.86	114.1	0.0	485.0
134.2 135.0	Top - Section 3		1.34 1			179.25 0.6		0.000		11.279	7.33	95.1	0.0	664.7
140.0			1.34 1 1.35 1			180.39 0.6		0.000			1.27	16.4	0.0	46.3
145.0		1.00	1.36 1			173.24 0.6 166.01 0.6		0.000		12.667	8.23 7.87	107.7	0.0	301.2
150.0			1.37 1			158.71 0.6		0.000		12.106 11.546	7.50	103.7 99.6	0.0	287.8
150.0	Appertunance(s)		1.38 1			155.77 0.6		0.000				38.6	0.0	274.4 106.0
155.0	Apperturiance(s)		1.38 1			151.33 0.6		0.000	2.00 3.00		2.90 4.24	36.6 56.7	0.0 0.0	155.0
160.0		1.00	1.39 1			143.89 0.6		0.000		10.424	6.78	91.2	0.0	247.6
162.0	Appertunance(s)		1.40 1			140.89 0.6		0.000	2.00		2.61	35.2	0.0	247.0 95.3
165.0	rhhei miance(2)		1.40 1			136.37 0.6		0.000	3.00	5.851	3.80	51.5	0.0	138.9
170.0			1.41 1			128.80 0.6		0.000	5.00	9.303	6.05	82.4	0.0	220.7
173.0	Appertunance(s)	1.00	1.42 1			124.23 0.6		0.000	3.00	5.313	3.45	47.2	0.0	126.0
175.0	Apperturiance(3)	1.00	1.42 1			121.17 0.6		0.000	2.00	3.430	2.23	30.6	0.0	81.3
110.0		1.00	1.74 1.	2.700	10.71					J. 4 JU	2.23			
						ıot	als:		175.00			4,502.1	0.0	28,839.7

Location: Old Saybrook, CT

Base Dia:

Height: 175.0 (ft) 64.69 (in)

Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft) Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C

Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:19 AM

Page: 19

Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 Iterations

Gust Response Factor: 1.10

Dead Load Factor: 1.00 Wind Load Factor: 1.00 Wind Importance Factor: 1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientat Factor	ion Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	De ad Load (lb)
15.00	4' Dish w/ Radome	1	7.442	8.186	1.00	1.00	10.85	0.000	0.000	88.82	0.00	0.00	120.00
100.0	Round Side Arm	1	11.081	12.189	1.00	1.00	5.20	0.000	0.000	63.38	0.00	0.00	150.00
100.0	Andrew DB589	1	11.081	12.189	1.00	1.00	1.38	0.000	0.000	16.82	0.00	0.00	11.50
152.0	RFS APXV18-206517S-	3	12.102	13.312	0.80	1.00	12.41	0.000	0.000	165.18	0.00	0.00	79.20
162.0	Round T-Arm	3	12.265	13.492	0.67	0.75	14.62	0.000	0.000	197.29	0.00	0.00	750.00
162.0	Ericsson AIR 21, 1.3	3	12.265	13.492	0.85	0.80	12.40	0.000	0.000	167.34	0.00	0.00	271.20
162.0	Ericsson AIR 21, 1.3	3	12.265	13.492	0.85	0.80	12.32	0.000	0.000	166.24	0.00	0.00	274.50
173.0	Flat Platform w/ Han	1	12.436	13.680	1.00	1.00	42.40	0.000	0.000	580.02	0.00	0.00	2.000.00
173.0	Alcatel-Lucent RRH2x	3	12.436	13.680	0.67	0.75	3.26	0.000	0.000	44.54	0.00	0.00	132.00
173.0	Antel BXA-171085-12B	3	12.436	13.680	0.88	0.75	9.37	0.000	0.000	128.12	0.00	0.00	45.00
173.0	Antel BXA-171063/12C	3	12.436	13.680	0.88	0.75	9.48	0.000	0.000	129.74	0.00	0.00	45.00
173.0	RFS DB-T1-6Z-8AB-0Z	1	12.436	13.680	0.67	0.75	2.41	0.000	0.000	33.00	0.00	0.00	44.00
173.0	Antel BXA-70063-6CF-	3	12.436	13.680	0.77	0.75	13.12	0.000	0.000	179.41	0.00	0.00	51.00
173.0	Andrew LNX-8513DS-	3	12.436	13.680	0.83	0.75	15.26	0.000	0.000	208.72	0.00	0.00	78.90
										2,168.61			4,052.30

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

Code: ANSI/TIA-222 Rev G

Struct Class: II **Exposure Category: C**

Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:19 AM

Page: 20

Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 Iterations

Gust Response Factor: 1.10

Dead Load Factor: 1.00

Wind Importance Factor: 1.00

Wind Load Factor: 1.00

Linear Appurtenance Segment Forces (Factored)

Seg To Elev (ft)	p 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	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	7.442	0.017	0.000	0.00	1.65
10.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	7.442	0.017	0.000	0.00	1.65
15.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	7.442	0.017	0.000	0.00	1.65
20.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	7.896	0.018	0.000	0.00	1.65
25.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	8.276	0.018	0.000	0.00	1.65
30.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	8.600	0.019	0.000	0.00	1.65
35.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	8.883	0.019	0.000	0.00	1.65
40.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	9.137	0.020	0.000	0.00	1.65
45.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	9.366	0.020	0.000	0.00	1.65
46.75	(1) 7/8" Coax	Yes	1.75 0.000	1.09	0.16	0.00	9.442	0.020	0.000	0.00	0.58
50.00	(1) 7/8" Coax	Yes	3.25 0.000	1.09	0.30	0.00	9.576	0.021	0.000	0.00	1.07
53.50	(1) 7/8" Coax	Yes	3.50 0.000	1.09	0.32	0.00	9.714	0.021	0.000	0.00	1.16
55.00	(1) 7/8" Coax	Yes	1.50 0.000	1.09	0.14	0.00	9.770	0.021	0.000	0.00	0.50
60.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	9.951	0.021	0.000	0.00	1.65
65.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	10.120	0.022	0.000	0.00	1.65
70.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	10.279	0.023	0.000	0.00	1.65
75.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	10.430	0.023	0.000	0.00	1.65
80.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	10.572	0.024	0.000	0.00	1.65
85.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	10.708	0.025	0.000	0.00	1.65
90.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	10.838	0.025	0.000	0.00	1.65
95.00	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00		0.026	0.000	0.00	1.65
100.0	(1) 7/8" Coax	Yes	5.00 0.000	1.09	0.45	0.00	11.081	0.027	0.000	0.00	1.65
									Totals:	0.00	33.00

Pole: 370625 Code: ANSI/TIA-222 Rev G

Location: Old Saybrook, CT Struct Class: II

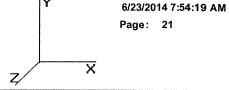
Height: 175.0 (ft) Exposure Category: C

Base Dia: 64.69 (in) Topographic Category: 1

Base Dia: 64.69 (in) Topographic Category: 1
Top Dia: 20.00 (in) Base Elev: 0.000 (ft)

Shape: 18 Sides

Taper: 0.265010 (in/ft) © 2007 - 2014 by ATC IPLLC. All rights reserved.



Load Case: 1.0D + 1.0W 60.00 mph Serviceability 23 Iterations

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

Applied Segment Forces Summary

Totals:

6,670.75 37,512.94

Seg Late	ral	Axial	Torsion	Moment	
Elev FX	(-)	FY (-)	MY	MZ	
(ft) (lb		(lb)	(lb-ft)	(lb-ft)	_
	00	0.00	0.00	0.00	il reso
5.00 144.		1,428.31	0.00	0.00	
10.00 141.		1,401.48	0.00	0.00	
15.00 227.		1,494.65	0.00	0.00	
20.00 143.		1,347.67	0.00	0.00	
25.00 147.		1,320.84	0.00	0.00	
30.00 149.		1,294.00	0.00	0.00	
35.00 150.		1,267.17	0.00	0.00	
40.00 151.	33	1,240.34	0.00	0.00	
45.00 151.		1,213.51	0.00	0.00	
46.75 52.		418.39	0.00	0.00	
50.00 99.		1,455.97	0.00	0.00	
53.50 106.	40	1,542.61	0.00	0.00	
55.00 45.3		349.69	0.00	0.00	
60.00 151.	12	1,148.20	0.00	0.00	
65.00 149.	63	1,121.37	0.00	0.00	
70.00 147.3		1,094.53	0.00	0.00	
75.00 145.		1,067.70	0.00	0.00	
80.00 143.		1,040.87	0.00	0.00	
85.00 141.	16	1,014.04	0.00	0.00	
90.00 138.	52	987.20	0.00	0.00	
95.00 135.	72	960.37	0.00	0.00	
100.0 214.8	83	1,700.76	0.00	0.00	
100.2 6.0	62	75.65	0.00	0.00	
105.0 124.	85	686.51	0.00	0.00	
110.0 128.3	30	703.02	0.00	0.00	
115.0 124.9	93	682.90	0.00	0.00	
120.0 121.4		662.77	0.00	0.00	
125.0 117.8	B3	642.65	0.00	0.00	
130.0 114.	11	622.53	0.00	0.00	
134.2 95.		781.63	0.00	0.00	
135.0 16.4		66.97	0.00	0.00	
140.0 107.	72	438.78	0.00	0.00	
145.0 103.7		425.37	0.00	0.00	
150.0 99.0		411.95	0.00	0.00	
152.0 203.7		240.22	0.00	0.00	
155.0 56.6		222.75	0.00	0.00	
160.0 91.		360.52	0.00	0.00	
162.0 566.0		1,436.15	0.00	0.00	
165.0 51.3		187.99	0.00	0.00	
170.0 82.4		302.58	0.00	0.00	
173.0 1,350.7		2,571.01	0.00	0.00	
175.0 1,536.1		81.32	0.00	0.00	
	• •	01.02	0.00	0.00	

0.00

0.00

Location: Old Saybrook, CT

Height: 175.0 (ft)

Base Dia: 64.69 (in) Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

Struct Class: II

Code: ANSI/TIA-222 Rev G

Exposure Category: C
Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:19 AM

Page: 22

Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 Iterations

Wind Importance Factor: 1.00

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

Calculated Forces

_														
	Seg	Pu	Vu	Tu	Mu	Mu	Resultant	phi	phi	phi	phi	Total		
	Elev	FY (-)	FX (-)	MY	MZ	MX	Moment	Pn	Vn	Tn	Mn	Deflect	Rotation	
	(ft)	(kips)	(kips)	(ft-kips)	(ft-kips)	(ft-kips)	(ft-kips)	(kips)	(kips)	(ft-kips)	(ft-kips)	(in)	(deg)	Ratio
Economic Control	0.00	-37.51	-6.68	0.00	-731.57	0.00	731.57	4,635.39 2	2,317.69	12,274.7	6,146.49	0.00	0.00	0.127
	5.00	-36.08	-6.55	0.00	-698.18	0.00	698.18	4,589.33 2	2,294.67	11,900.9	5,959.31	0.01	-0.03	0.125
	10.00	-34.68	-6.42	0.00	-665.43	0.00	665.43	4,541.20 2	2,270.60	11,526.9	5,772.03	0.05	-0.05	0.123
	15.00	-33.18	-6.21	0.00	-633.32		633.32	4,490.98 2	2,245.49	11,153.0	5,584.80	0.12	-0.08	0.121
	20.00	-31.83	-6.08	0.00	-602.27		602.27	4,438.68 2	2,219.34	10,779.6	5,397.81	0.22	-0.10	0.119
	25.00	-30.51	-5.94	0.00	-571.87		571.87	4,384.31 2				0.34	-0.13	0.117
	30.00	-29.21	-5.81	0.00	-542.15		542.15	4,327.85 2				0.49	-0.16	0.115
	35.00	-27.94	-5.66	0.00	-513.12		513.12	4,269.31 2				0.67	-0.19	0.113
	40.00	-26.70	-5.52	0.00	-484.80	0.00	484.80	4,208.69 2				0.88	-0.21	0.110
	45.00	-25.48	-5.37	0.00	-457.18	0.00	457.18	4,146.00 2				1.13	-0.24	0.108
	46.75	-25.06	-5.33	0.00	-447.78	0.00	447.78	4,123.56 2				1.22	-0.25	0.108
	50.00	-23.60	-5.23	0.00	-430.47	0.00	430.47	4,081.22 2				1.40	-0.27	0.106
	53.50	-22.06	-5.12	0.00	-412.16	0.00	412.16	4,072.38 2	,			1.60	-0.29	0.102
	55.00	-21.71	-5.08	0.00	-404.48	0.00	404.48	4,052.46 2				1.70	-0.30	0.101
	60.00	-20.56	-4.93	0.00	-379.07	0.00	379.07	3,984.70 1				2.03	-0.33	0.099
	65.00	-19.44	-4.79	0.00	-354.40	0.00	354.40	3,914.86 1				2.39	-0.36	0.097
	70.00 75.00	-18.34 -17.27	-4.64 -4.50	0.00 0.00	-330.46 -307.25	0.00 0.00	330.46 307.25	3,842.93 1				2.79	-0.39	0.095
	80.00	-17.27	-4.36	0.00	-307.23 -284.76	0.00	307.25 284.76	3,768.93 1				3.21	-0.42	0.092
	85.00	-15.22	-4.21	0.00	-262.98	0.00	262.98	3,692.85 1	•	•	•	3.67	-0.45	0.090
	90.00	-14.23	-4.21	0.00	-202.90 -241.91	0.00	202.90 241.91	3,614.69 1	•	•	•	4.16 4.68	-0.48	0.087
	95.00	-13.27	-3.94	0.00	-221.54	0.00	221.54	3,534.45 1				5.24	-0.51 -0.54	0.085 0.082
	100.00	-11.57	-3.71	0.00	-201.85	0.00	221.54	3,452.12 1 3,367.72 1				5.24 5.82	-0.54 -0.58	0.082
	100.25	-11.49	-3.71	0.00	-200.93	0.00	200.93	2,327.13 1	,	•	•	5.85	-0.58	0.079
	105.23	-10.80	-3.58	0.00	-183.33	0.00	183.33	2,280.57 1				6.44	-0.56 -0.61	0.112
	110.00	-10.10	-3.45	0.00	-165.43	0.00	165.43	2,229.53 1				7.10	-0.65	0.103
	115.00	-9.41	-3.32	0.00	-148.17	0.00	148.17	2,176.42 1				7.80	-0.69	0.103
	120.00	-8.75	-3.20	0.00	-131.55	0.00	131.55	2,121.22 1				8.55	-0.73	0.093
	125.00	-8.11	-3.08	0.00	-115.54	0.00	115.54	2,063.94 1				9.33	-0.77	0.033
	130.00	-7.49	-2.96	0.00	-100.14	0.00	100.14	2,004.58 1				10.16	-0.81	0.081
	134.25	-6.70	-2.86	0.00	-87.54	0.00	87.54	1,131.19	565.59	1,425.34	713.73	10.89	-0.84	0.129
	135.00	-6.64	-2.85	0.00	-85.40	0.00	85.40	1,127.42		1,411.32	706.71	11.02	-0.85	0.127
	140.00	-6.20	-2.74	0.00	-71.17	0.00	71.17	1,101.14		1,317.99	659.98	11.94	-0.90	0.113
	145.00	-5.77	-2.63	0.00	-57.49	0.00	57.49	1,072.77		1,225.18	613.50	12.91	-0.95	0.099
	150.00	-5.36	-2.53	0.00	-44.34	0.00	44.34	1,042.33	521.16	1,133.21	567.45	13.93	-0.99	0.083
	152.00	-5.12	-2.32	0.00	-39.29	0.00	39.29	1,029.57		1,096.74	549.18	14.35	-1.01	0.077
	155.00	-4.90	-2.26	0.00	-32.33	0.00	32.33	1,009.80		1,042.44	521.99	14.99	-1.03	0.067
	160.00	-4.54	-2.17	0.00	-21.02	0.00	21.02	975.19	487.60	953.20	477.31	16.09	-1.07	0.049
	162.00	-3.11	-1.57	0.00	-16.68	0.00	16.68	960.77	480.38	918.02	459.69	16.54	-1.08	0.040
	165.00	-2.93	-1.52	0.00	-11.96	0.00	11.96	938.51	469.25	865.85	433.57	17.22	-1.09	0.031
	170.00	-2.63	-1.43	0.00	-4.36	0.00	4.36	899.74	449.87	780.71	390.94	18.37	-1.10	0.014
	173.00	-0.08	-0.03	0.00	-0.06	0.00	0.06	875.48	437.74	730.84	365.96	19.07	-1.11	0.000
	175.00	0.00	-0.03	0.00	0.00	0.00	0.00	858.89	429.45	698.14	349.59	19.53	-1.11	0.000

Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in)

Top Dia: 20.00 (in)

Shape: 18 Sides

Taper: 0.265010 (in/ft)

Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:19 AM

Page: 23

Analysis Summary

		CONTROL DE	- Rea	Water Committee of the	Max Usage			
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	 	CONTRACTOR OF THE PARTY OF THE
1.2D + 1.6W	39.27	0.00	44.96	0.00	0.00	4315.71	134.25	0.73
0.9D + 1.6W	39.25	0.00	33.71	0.00	0.00	4284.87	134.25	0.72
1.2D + 1.0Di + 1.0Wi	8.31	0.00	65.88	0.00	0.00	888.28	0.00	0.16
1.0D + 1.0W	6.68	0.00	37.51	0.00	0.00	731.57	134.25	0.13

Pole: 370625 Location: Old Saybrook, CT

Height: 175.0 (ft) Base Dia: 64.69 (in)

Top Dia: 20.00 (in) Shape: 18 Sides

Taper: 0.265010 (in/ft)

Code: ANSI/TIA-222 Rev G

Struct Class: II

Exposure Category: C
Topographic Category: 1

Base Elev: 0.000 (ft)

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6/23/2014 7:54:19 AM

Page: 24

Base Summary

Reactions

ECONOMICO MANAGEMENTO DE	Original Design	sign —	HEUDENSKURONSKUNSVER	Analysis	ETEROTES ETEROTORISMO	
Mome (kip-		Shear (kip)	Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment Design %
5,400	.00 52.00	0 48.00	4,315.71	65.88	39.27	79.92

Base Plate

Yield (ksi)	Thick (in)	Width (in)	Style	Sides	(in)	` ,	Mu (kip-in)	Phi Mn (kip-in)	Ratio
50.0	2.750	72 000	Clinned	Λ	16.00	0 555	270.60	797 Q <i>A</i>	A 20

Anchor Bolts

								Start	Co	mpressio	,	d amendmental control of	Tension	E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-
Bolt	Num		Bolt	Yie Id	Ultim ate		Cluster	Angle	Force	Allow		Force	Allow	
Circle	Bolts	Bolt Type	Dia (in)	(ksi)	(ksi)	Arrange	Dist (in)	(deg)	(kip)	(kip)	Ratio	(kip)	(kip)	Ratio
72.00	24	2.25" 18J	2.25	75.00	100.00	Clustered	6.00	45.0	122.63	260.00	0.48	117.14	260.00	0.46