



48 Spruce Street
Oakland, NJ 07436
Phone: (201)-951-3869
Tom Kincaid
Real Estate Consultant

July 21, 2014

Hand Delivered

Ms. Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

CC to Property Owner:
MERRIFIELD LLC
10 TALCOTT PLACE
WETHERSFIELD, CT 06109

RE: Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 47 Inwood Road. Rocky Hill, CT 06067. Known to Sprint Spectrum L.P. as site CT03XC070.

Dear Ms. Bachman:

In order to accommodate technological changes, implement Code Division Multiple Access (“CDMA”) and/or Long Term Evolution (“LTE”) capabilities, and enhance system performance in the state of Connecticut, Sprint Spectrum L.P. plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and its attachments is being sent to the chief elected official of the municipality in which affected cell site is located.

CDMA employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel.

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

Attached is a summary of the planned modifications, including power density calculations reflecting the change in Sprint's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modification as defined Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for the R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will not be affected.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by 6 decibels or more.
4. Radio Frequency power density may increase due to the use of one or more CDMA transmissions. Moreover, LTE will utilize additional radio frequencies newly licensed by the FCC for cellular mobile communications. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons Sprint Spectrum L.P. respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (845)-499-4712 or email JPalumbo@Transcendwireless.com with questions concerning this matter. Thank you for your consideration.

Sincerely,

Jennifer Palumbo
Real Estate Consultant

RADIO FREQUENCY FCC REGULATORY COMPLIANCE
MAXIMUM PERMISSIBLE EXPOSURE (MPE) ASSESSMENT

Sprint Existing Facility

Site ID: CT03XC070

Middletown CT 3

47 Inwood Road
Rocky Hill, CT 06067

July 21, 2014

EBI Project Number: 62143906

July 21, 2014

Sprint
Attn: RF Engineering Manager
1 International Boulevard, Suite 800
Mahwah, NJ 07495

Re: Radio Frequency Maximum Permissible Exposure (MPE) Assessment for Site:
CT03XC070 - Middletown CT 3

Site Total: 22.44% - MPE% in full compliance

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 47 Inwood Road, Rocky Hill, CT, for the purpose of determining whether the radio frequency (RF) exposure levels from the proposed Sprint equipment upgrades 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 ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ 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 ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the cellular band (850 MHz Band) is approximately $567 \mu\text{W}/\text{cm}^2$, and the general population exposure limit for the 1900 MHz and 2500 MHz bands is $1000 \mu\text{W}/\text{cm}^2$. 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 upgrades to the existing Sprint Wireless antenna facility located at 47 Inwood Road, Rocky Hill, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all emissions were calculated using the following assumptions:

- 1) 4 channels in the 1900 MHz Band were considered for each sector of the proposed installation.
- 2) 1 channel in the 800 MHz Band was considered for each sector of the proposed installation
- 3) 2 channels in the 2500 MHz Band 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 maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

- 6) The antennas used in this modeling are the RFS APXVSPP18-C-A20 and the RFS APXVTM14-C-I20. This is based on feedback from the carrier with regards to anticipated antenna selection. The RFS APXVSPP18-C-A20 has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. The RFS APXVTM14-C-I20 has a 15.9 dBd gain value at its main lobe at 2500 MHz. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 7) The antenna mounting height centerline for the proposed antennas is **140 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 calculation were done with respect to uncontrolled / general public threshold limits

Site ID	CT03XC070 - Middletown CT 3
Site Address	47 Inwood Road, Rocky Hill, CT, 06067
Site Type	Monopole

Sector 1

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
1a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	5.9	140	134	1/2 "	0.5	0	277.39	0.56%
1a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	140	134	1/2 "	0.5	0	39.00	0.14%
1B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	140	134	1/2 "	0.5	0	138.69	0.49%
Sector total Power Density Value:																1.18%

Sector 2

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
2a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	5.9	140	134	1/2 "	0.5	0	277.39	0.56%
2a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	140	134	1/2 "	0.5	0	39.00	0.14%
2B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	140	134	1/2 "	0.5	0	138.69	0.49%
Sector total Power Density Value:																1.18%

Sector 3

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
3a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	5.9	140	134	1/2 "	0.5	0	277.39	0.56%
3a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	140	134	1/2 "	0.5	0	39.00	0.14%
3B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	140	134	1/2 "	0.5	0	138.69	0.49%
Sector total Power Density Value:																1.18%

Site Composite MPE %	
Carrier	MPE %
Sprint	3.55%
Nextel	7.36%
AT&T	11.53%
Total Site MPE %	22.44%

Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public Maximum Permissible Exposure (MPE) to radio frequency energy.

The anticipated Maximum Composite contributions from the Sprint facility are **3.55% (1.18% from sector 1, 1.18% from sector 2 and 1.18% from sector 3)** 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 **22.44%** of the allowable FCC established general public limit sampled at 6 feet above ground level. This total composite site value is based upon MPE 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.



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

Sprint



AMERICAN TOWER CORPORATION

PROJECT: 2.5 EQUIPMENT DEPLOYMENT
 SITE NAME: MIDDLETOWN CT 3
 SITE CASCADE: CT03XC070
 SITE NUMBER: 302537
 SITE ADDRESS: 47 INWOOD ROAD
 ROCKY HILL, CT 06067
 SITE TYPE: MONOPOLE TOWER
 MARKET: NORTHERN CONNECTICUT

PLANS PREPARED FOR:



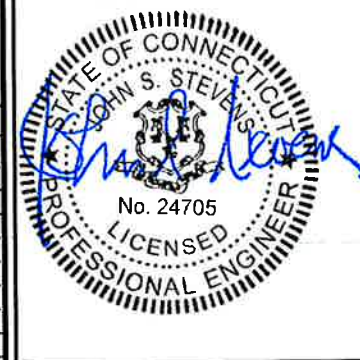
PLANS PREPARED BY:



MLA PARTNER:



ENGINEERING LICENSE:



DRAWING NOTICE:

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REVISIONS:

DESCRIPTION	DATE	BY	REV
FOR PERMIT	6/26/14	AJD	0
ISSUED FOR REVIEW	5/30/14	AHS	A

SITE NAME:

MIDDLETOWN CT 3

SITE CASCADE:

CT03XC070

SITE ADDRESS:

47 INWOOD ROAD
ROCKY HILL, CT 06067

SHEET DESCRIPTION:

TITLE SHEET & PROJECT DATA

SHEET NUMBER:

T-1

SITE INFORMATION

TOWER OWNER:
AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801

LATITUDE (NAD83):
41° 38' 18.91" N
41.638586°

LONGITUDE (NAD83):
72° 40' 45.44" W
-72.679289°

COUNTY:
HARTFORD

ZONING JURISDICTION:
CONNECTICUT SITING COUNCIL

ZONING DISTRICT:
TBD

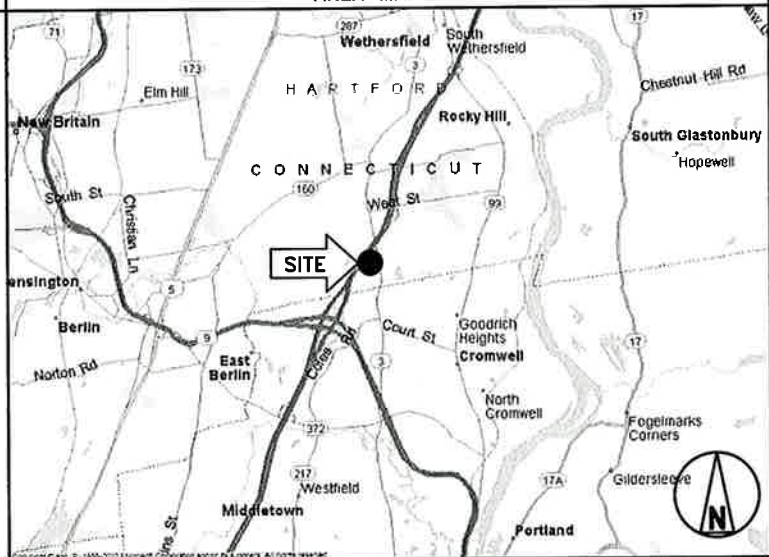
POWER COMPANY:
CL&P
(800) 286-2000

AAV PROVIDER:
AT&T
(800) 331-0500

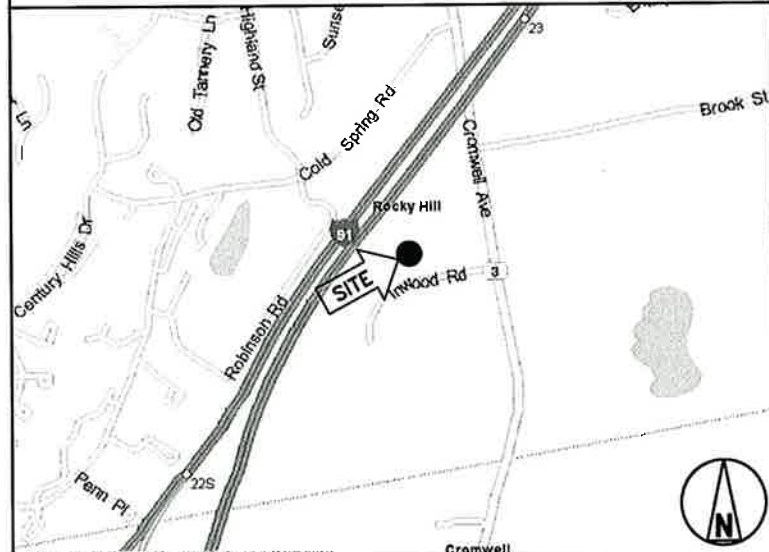
SPRINT CM:
MIKE DeLIA
(781) 316-6348
MICHAEL.DELIA@SPRINT.COM

AMERICAN TOWER PM:
KATHRYN WINDSOR
KATHRYN.WINDSOR@AMERICANTOWER.COM

AREA MAP



LOCATION MAP



PROJECT DESCRIPTION

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.

- INSTALL 2.5 EQUIPMENT IN EXISTING NV MMBS CABINET
- INSTALL (3) PANEL ANTENNAS
- INSTALL (3) RRU'S TO TOWER
- INSTALL (27) JUMPER CABLES
- INSTALL (1) FIBER CABLE
- INSTALL (4) BATTERIES IN EXISTING BBU CABINET

THESE PLANS HAVE BEEN DEVELOPED FOR THE MODIFICATION OF AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY OWNED OR LEASED BY SPRINT IN ACCORDANCE WITH THE SCOPE OF WORK PROVIDED BY SPRINT. INFINIGY HAS INCORPORATED THIS SCOPE OF WORK IN THE PLANS. THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS ACCOMPANIED BY A PASSING STRUCTURAL STABILITY ANALYSIS PREPARED BY A LICENSED STRUCTURAL ENGINEER. STRUCTURAL ANALYSIS MUST INCLUDE BOTH TOWER AND MOUNT.

APPLICABLE CODES

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALL IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. INTERNATIONAL BUILDING CODE (2012 IBC)
2. TIA-EIA-222-G OR LATEST EDITION
3. NFPA 780 - LIGHTNING PROTECTION CODE
4. 2011 NATIONAL ELECTRIC CODE OR LATEST EDITION
5. ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES, MOST RECENT EDITIONS
6. CT BUILDING CODE
7. LOCAL BUILDING CODE
8. CITY/COUNTY ORDINANCES



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DRAWING INDEX

SHEET NO.	SHEET TITLE	REV.
T-1	TITLE SHEET & PROJECT DATA	0
SP-1	SPRINT SPECIFICATIONS	0
SP-2	SPRINT SPECIFICATIONS	0
SP-3	SPRINT SPECIFICATIONS	0
A-1	SITE PLAN	0
A-2	TOWER ELEVATION & CABLE PLAN	0
A-3	ANTENNA LAYOUT & MOUNTING DETAILS	0
A-4	COLOR CODING & NOTES	0
A-5	EQUIPMENT & MOUNTING DETAILS	0
A-6	CIVIL DETAILS	0
A-7	PLUMBING DIAGRAM	0
A-8	RFDS	0
A-9	RFDS (CON'T)	0
E-1	ELECTRICAL & GROUNDING PLAN	0
E-2	ELECTRICAL & GROUNDING DETAILS	0

THESE OUTLINE SPECIFICATIONS IN CONJUNCTION WITH THE SPRINT STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

SECTION 01 100 - SCOPE OF WORK

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE SPRINT CONSTRUCTION STANDARDS FOR WIRELESS SITES, CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HERewith.
- 1.3 PRECEDENCE: SHOULD CONFLICTS OCCUR BETWEEN THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES INCLUDING THE STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES AND THE CONSTRUCTION DRAWINGS, INFORMATION ON THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE. NOTIFY SPRINT CONSTRUCTION MANAGER IF THIS OCCURS.
- 1.4 NATIONALLY RECOGNIZED CODES AND STANDARDS:
 - A. THE WORK SHALL COMPLY WITH APPLICABLE NATIONAL AND LOCAL CODES AND STANDARDS, LATEST EDITION, AND PORTIONS THEREOF, INCLUDED BUT NOT LIMITED TO THE FOLLOWING:
 1. GR-63-CORE NEBS REQUIREMENTS: PHYSICAL PROTECTION
 5. GR-78-CORE GENERIC REQUIREMENTS FOR THE PHYSICAL DESIGN AND MANUFACTURE OF TELECOMMUNICATIONS EQUIPMENT.
 3. GR-1089 CORE, ELECTROMAGNETIC COMPATIBILITY AND ELECTRICAL SAFETY -GENERIC CRITERIA FOR NETWORK TELECOMMUNICATIONS EQUIPMENT.
 4. NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS (NFPA) INCLUDING NFPA 70 (NATIONAL ELECTRICAL CODE - "NEC") AND NFPA 101 (LIFE SAFETY CODE).
 5. AMERICAN SOCIETY FOR TESTING OF MATERIALS (ASTM)
 6. INSTITUTE OF ELECTRONIC AND ELECTRICAL ENGINEERS (IEEE)
 7. AMERICAN CONCRETE INSTITUTE (ACI)
 8. AMERICAN WIRE PRODUCERS ASSOCIATION (AWPA)
 9. CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
 10. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
 11. PORTLAND CEMENT ASSOCIATION (PCA)
 12. NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)
 13. BRICK INDUSTRY ASSOCIATION (BIA)
 14. AMERICAN WELDING SOCIETY (AWS)
 15. NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA)
 16. SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)
 17. DOOR AND HARDWARE INSTITUTE (DHI)
 18. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
 19. APPLICABLE BUILDING CODES INCLUDING UNIFORM BUILDING CODE, SOUTHERN BUILDING CODE, BOCA, AND THE INTERNATIONAL BUILDING CODE.
- 1.5 DEFINITIONS:
 - A. WORK: THE SUM OF TASKS AND RESPONSIBILITIES IDENTIFIED IN THE CONTRACT DOCUMENTS.
 - B. COMPANY: SPRINT CORPORATION
 - C. ENGINEER: SYNONYMOUS WITH ARCHITECT & ENGINEER AND "A&E". THE DESIGN PROFESSIONAL HAVING PROFESSIONAL RESPONSIBILITY FOR DESIGN OF THE PROJECT.
 - D. CONTRACTOR: CONSTRUCTION CONTRACTOR; CONSTRUCTION VENDOR; INDIVIDUAL OR ENTITY WHO AFTER EXECUTION OF A CONTRACT IS BOUND TO ACCOMPLISH THE WORK.
 - E. THIRD PARTY VENDOR OR AGENCY: A VENDOR OR AGENCY ENGAGED SEPARATELY BY THE COMPANY, A&E, OR CONTRACTOR TO PROVIDE MATERIALS OR TO ACCOMPLISH SPECIFIC TASKS RELATED TO BUT NOT INCLUDED IN THE WORK.
 - F. OFCI: OWNER FURNISHED, CONTRACTOR INSTALLED EQUIPMENT.
 - G. CONSTRUCTION MANAGER - ALL PROJECTS RELATED COMMUNICATION TO FLOW THROUGH SPRINT REPRESENTATIVE IN CHARGE OF PROJECT...

- 1.6 SITE FAMILIARITY: CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE SPRINT CONSTRUCTION MANAGER PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OR FIELD CONDITIONS.
- 1.7 POINT OF CONTACT: COMMUNICATION BETWEEN SPRINT AND THE CONTRACTOR SHALL FLOW THROUGH THE SINGLE SPRINT CONSTRUCTION MANAGER APPOINTED TO MANAGE THE PROJECT FOR SPRINT.
- 1.8 ON-SITE SUPERVISION: THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT WHO SHALL BE IN ATTENDANCE AT THE SITE AT ALL TIMES DURING PERFORMANCE OF THE WORK.
- 1.9 DRAWINGS, SPECIFICATIONS AND DETAILS REQUIRED AT JOBSITE: THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A FULL SET OF THE CONSTRUCTION DRAWINGS, STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES AND THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES AT THE JOBSITE FROM MOBILIZATION THROUGH CONSTRUCTION COMPLETION.
 - A. THE JOBSITE DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE CLEARLY MARKED DAILY IN RED PENCIL WITH ANY CHANGES IN CONSTRUCTION OVER WHAT IS DEPICTED IN THE DOCUMENTS. AT CONSTRUCTION COMPLETION, THIS JOBSITE MARKUP SET SHALL BE DELIVERED TO THE COMPANY OR COMPANY'S DESIGNATED REPRESENTATIVE TO BE FORWARDED TO THE COMPANY'S A&E VENDOR FOR PRODUCTION OF "AS-BUILT" DRAWINGS.
 - B. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK. CONTRACTOR SHALL NOTIFY SPRINT CONSTRUCTION MANAGER OF ANY VARIATIONS PRIOR TO PROCEEDING WITH THE WORK.
 - C. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS NOTED OTHERWISE. SPACING BETWEEN EQUIPMENT IS THE REQUIRED CLEARANCE. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE SPRINT CONSTRUCTION MANAGER PRIOR TO PROCEEDING WITH THE WORK.
- 1.10 USE OF JOB SITE: THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION AND RELATED OPERATIONS INCLUDING STAGING AND STORAGE OF MATERIALS AND EQUIPMENT, PARKING, TEMPORARY FACILITIES, AND WASTE STORAGE TO THE LEASE PARCEL UNLESS OTHERWISE PERMITTED BY THE CONTRACT DOCUMENTS.
- 1.11 UTILITIES SERVICES: WHERE NECESSARY TO CUT EXISTING PIPES, ELECTRICAL WIRES, CONDUITS, CABLES, ETC., OF UTILITY SERVICES, OR OF FIRE PROTECTION OR COMMUNICATIONS SYSTEMS, THEY SHALL BE CUT AND CAPPED AT SUITABLE PLACES OR WHERE SHOWN. ALL SUCH ACTIONS SHALL BE COORDINATED WITH THE UTILITY COMPANY INVOLVED.
- 1.12 PERMITS / FEES: WHEN REQUIRED THAT A PERMIT OR CONNECTION FEE BE PAID TO A PUBLIC UTILITY PROVIDER FOR NEW SERVICE TO THE CONSTRUCTION PROJECT, PAYMENT OF SUCH FEE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 1.13 CONTRACTOR SHALL TAKE ALL MEASURES AND PROVIDE ALL MATERIAL NECESSARY FOR PROTECTING EXISTING EQUIPMENT AND PROPERTY.
- 1.14 METHODS OF PROCEDURE (MOPS) FOR CONSTRUCTION: CONTRACTOR SHALL PERFORM WORK AS DESCRIBED IN THE FOLLOWING INSTALLATION AND COMMISSIONING MOPS.

NOTE: IN SHORT-FORM SPECIFICATIONS ON THE DRAWINGS, A/E TO INSERT LIST OF APPLICABLE MOPS INCLUDING EN-2012-001, EN-2013-002, EL-0568, AND TS-0193
- 1.15 USE OF ELECTRONIC PROJECT MANAGEMENT SYSTEMS:

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 TEMPORARY UTILITIES AND FACILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY UTILITIES AND FACILITIES NECESSARY EXCEPT AS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS. TEMPORARY UTILITIES AND FACILITIES INCLUDE POTABLE WATER, HEAT, HVAC, ELECTRICITY, SANITARY FACILITIES, WASTE DISPOSAL FACILITIES, AND TELEPHONE/COMMUNICATION SERVICES. PROVIDE TEMPORARY UTILITIES AND FACILITIES IN ACCORDANCE WITH OSHA AND THE AUTHORITY HAVING JURISDICTION. CONTRACTOR MAY UTILIZE THE COMPANY ELECTRICAL SERVICE IN THE COMPLETION OF THE WORK WHEN IT BECOMES AVAILABLE. USE OF THE LESSORS OR SITE OWNER'S UTILITIES OR FACILITIES IS EXPRESSLY FORBIDDEN EXCEPT AS OTHERWISE ALLOWED IN THE CONTRACT DOCUMENTS.
- 3.2 ACCESS TO WORK: THE CONTRACTOR SHALL PROVIDE ACCESS TO THE JOB SITE FOR AUTHORIZED COMPANY PERSONNEL AND AUTHORIZED REPRESENTATIVES OF THE ARCHITECT/ENGINEER DURING ALL PHASES OF THE WORK.
- 3.3 TESTING: REQUIREMENTS FOR TESTING BY THIS CONTRACTOR SHALL BE AS INDICATED HERewith, ON THE CONSTRUCTION DRAWINGS, AND IN THE INDIVIDUAL SECTIONS OF THESE SPECIFICATIONS. SHOULD COMPANY CHOOSE TO ENGAGE ANY THIRD-PARTY TO CONDUCT ADDITIONAL TESTING, THE CONTRACTOR SHALL COOPERATE WITH AND PROVIDE A WORK AREA FOR COMPANY'S TEST AGENCY.
- 3.4 DIMENSIONS: VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD DIMENSIONS BEFORE FABRICATION OR ORDERING OF MATERIALS. DO NOT SCALE DRAWINGS.

3.5 EXISTING CONDITIONS: NOTIFY THE SPRINT CONSTRUCTION MANAGER OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON THE DRAWINGS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT AND ENGINEER.

SECTION 01 200 - COMPANY FURNISHED MATERIAL AND EQUIPMENT

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HERewith.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 RECEIPT OF MATERIAL AND EQUIPMENT:
 - A. A COMPANY FURNISHED MATERIAL AND EQUIPMENT IS IDENTIFIED ON THE RF DATA SHEET IN THE CONSTRUCTION DOCUMENTS.
 - B. THE CONTRACTOR IS RESPONSIBLE FOR SPRINT PROVIDED MATERIAL AND EQUIPMENT AND UPON RECEIPT SHALL:
 1. ACCEPT DELIVERIES AS SHIPPED AND TAKE RECEIPT.
 2. VERIFY COMPLETENESS AND CONDITION OF ALL DELIVERIES.
 3. TAKE RESPONSIBILITY FOR EQUIPMENT AND PROVIDE INSURANCE PROTECTION AS REQUIRED IN AGREEMENT.
 4. RECORD ANY DEFECTS OR DAMAGES AND WITHIN TWENTY-FOUR HOURS AFTER RECEIPT, REPORT TO SPRINT OR ITS DESIGNATED PROJECT REPRESENTATIVE OF SUCH.
 5. PROVIDE SECURE AND NECESSARY WEATHER PROTECTED WAREHOUSING.
 6. COORDINATE SAFE AND SECURE TRANSPORTATION OF MATERIAL AND EQUIPMENT, DELIVERING AND OFF-LOADING FROM CONTRACTOR'S WAREHOUSE TO SITE.
- 3.2 DELIVERABLES:
 - A. COMPLETE SHIPPING AND RECEIPT DOCUMENTATION IN ACCORDANCE WITH COMPANY PRACTICE.
 - B. IF APPLICABLE, COMPLETE LOST/STOLEN/DAMAGED DOCUMENTATION REPORT AS NECESSARY IN ACCORDANCE WITH COMPANY PRACTICE, AND AS DIRECTED BY COMPANY.
 - C. UPLOAD DOCUMENTATION INTO SPRINT SITE MANAGEMENT SYSTEM (SMS) AND/OR PROVIDE HARD COPY DOCUMENTATION AS REQUESTED.

SECTION 01 300 - CELL SITE CONSTRUCTION CO.

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HERewith.
- 1.3 NOTICE TO PROCEED
 - A. NO WORK SHALL COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF THE WORK ORDER.
 - B. UPON RECEIVING NOTICE TO PROCEED, CONTRACTOR SHALL FULLY PERFORM ALL WORK NECESSARY TO PROVIDE SPRINT WITH AN OPERATIONAL WIRELESS FACILITY.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 FUNCTIONAL REQUIREMENTS:
 - A. THE ACTIVITIES DESCRIBED IN THIS PARAGRAPH REPRESENT MINIMUM ACTIONS AND PROCESSES REQUIRED TO SUCCESSFULLY COMPLETE THE WORK. THE ACTIVITIES DESCRIBED ARE NOT EXHAUSTIVE, AND CONTRACTOR SHALL TAKE ANY AND ALL ACTIONS AS NECESSARY TO SUCCESSFULLY COMPLETE THE CONSTRUCTION OF A FULLY FUNCTIONING WIRELESS FACILITY AT THE SITE IN ACCORDANCE WITH COMPANY PROCESSES.
 - B. SUBMIT SPECIFIC DOCUMENTATION AS INDICATED HEREIN, AND OBTAIN REQUIRED APPROVALS WHILE THE WORK IS BEING PERFORMED.
 - C. MANAGE AND CONDUCT ALL FIELD CONSTRUCTION SERVICE RELATED ACTIVITIES
 - D. PROVIDE CONSTRUCTION ACTIVITIES TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

PLANS PREPARED FOR:



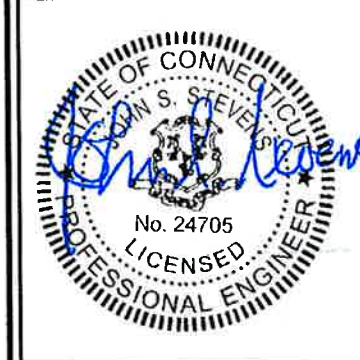
PLANS PREPARED BY:



MLA PARTNER:



ENGINEERING LICENSE:



DRAWING NOTICE:

THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF SPRINT AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPRINT.

REVISIONS:

DESCRIPTION	DATE	BY	REV
FOR PERMIT	6/26/14	AJD	0
ISSUED FOR REVIEW	5/30/14	AHS	A

SITE NAME:

MIDDLETOWN CT 3

SITE CASCADE:

CT03XC070

SITE ADDRESS:

47 INWOOD ROAD
ROCKY HILL, CT 06067

SHEET DESCRIPTION:

SPRINT SPECIFICATIONS

SHEET NUMBER:

SP-1

CONTINUE FROM SP-1

1. PERFORM ANY REQUIRED SITE ENVIRONMENTAL MITIGATION.
2. PREPARE GROUND SITES; PROVIDE DE-GRUBBING; AND ROUGH AND FINAL GRADING, AND COMPOUND SURFACE TREATMENTS.
3. MANAGE AND CONDUCT ALL ACTIVITIES FOR INSTALLATION OF UTILITIES INCLUDING ELECTRICAL AND TELCO BACKHAUL.
4. INSTALL UNDERGROUND FACILITIES INCLUDING UNDERGROUND POWER AND COMMUNICATIONS CONDUITS, AND UNDERGROUND GROUNDING SYSTEM.
5. INSTALL ABOVE GROUND GROUNDING SYSTEMS.
6. PROVIDE NEW HVAC INSTALLATIONS AND MODIFICATIONS.
7. INSTALL "H-FRAMES", CABINETS AND SHELTERS AS INDICATED.
8. INSTALL ROADS, ACCESS WAYS, CURBS AND DRAINS AS INDICATED.
9. ACCOMPLISH REQUIRED MODIFICATION OF EXISTING FACILITIES.
10. PROVIDE ANTENNA SUPPORT STRUCTURE FOUNDATIONS.
11. PROVIDE SLABS AND EQUIPMENT PLATFORMS.
12. INSTALL COMPOUND FENCING, SIGHT SHIELDING, LANDSCAPING AND ACCESS BARRIERS.
13. PERFORM INSPECTION AND MATERIAL TESTING AS REQUIRED HEREINAFTER.
14. CONDUCT SITE RESISTANCE TO EARTH TESTING AS REQUIRED HEREINAFTER
15. INSTALL FIXED GENERATOR SETS AND OTHER STANDBY POWER SOLUTIONS.
16. INSTALL TOWERS, ANTENNA SUPPORT STRUCTURES AND PLATFORMS ON EXISTING TOWERS AS REQUIRED.
17. INSTALL CELL SITE RADIOS, MICROWAVE, GPS, COAXIAL MAINLINE, ANTENNAS, CROSS BAND COUPLERS, TOWER TOP AMPLIFIERS, LOW NOISE AMPLIFIERS AND RELATED EQUIPMENT.
18. PERFORM, DOCUMENT, AND CLOSE OUT ANY CONSTRUCTION CONTROL DOCUMENTS THAT MAY BE REQUIRED BY GOVERNMENT AGENCIES AND LANDLORDS.
19. PERFORM ANTENNA AND COAX SWEEP TESTING AND MAKE ANY AND ALL NECESSARY CORRECTIONS.
20. REMAIN ON SITE MOBILIZED THROUGHOUT HAND-OFF AND INTEGRATION TO ASSIST AS NEEDED UNTIL SITE IS DEEMED SUBSTANTIALLY COMPLETE AND PLACED "ON AIR."

3.2 GENERAL REQUIREMENTS FOR CIVIL CONSTRUCTION:

- A. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH. AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE FROM THE SITE ALL REMAINING RUBBISH, IMPLEMENTS, TEMPORARY FACILITIES, AND SURPLUS MATERIALS.
- B. EQUIPMENT ROOMS SHALL AT ALL TIMES BE MAINTAINED "BROOM CLEAN" AND CLEAR OF DEBRIS.
- C. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO DISCOVER AND LOCATE ANY HAZARDOUS CONDITION.
 1. IN THE EVENT CONTRACTOR ENCOUNTERS ANY HAZARDOUS CONDITION WHICH HAS NOT BEEN ABATED OR OTHERWISE MITIGATED, CONTRACTOR AND ALL OTHER PERSONS SHALL IMMEDIATELY STOP WORK IN THE AFFECTED AREA AND NOTIFY COMPANY IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED EXCEPT BY WRITTEN NOTIFICATION BY COMPANY.
 2. CONTRACTOR AGREES TO USE CARE WHILE ON THE SITE AND SHALL NOT TAKE ANY ACTION THAT WILL OR MAY RESULT IN OR CAUSE THE HAZARDOUS CONDITION TO BE FURTHER RELEASED IN THE ENVIRONMENT, OR TO FURTHER EXPOSE INDIVIDUALS TO THE HAZARD.
- D. CONTRACTOR'S ACTIVITIES SHALL BE RESTRICTED TO THE PROJECT LIMITS. SHOULD AREAS OUTSIDE THE PROJECT LIMITS BE AFFECTED BY CONTRACTOR'S ACTIVITIES, CONTRACTOR SHALL IMMEDIATELY RETURN THEM TO ORIGINAL CONDITION
- E. CONDUCT TESTING AS REQUIRED HEREIN.

3.3 DELIVERABLES:

- A. CONTRACTOR SHALL REVIEW, APPROVE, AND SUBMIT TO SPRINT SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND SIMILAR SUBMITTALS AS REQUIRED HEREINAFTER
- B. PROVIDE DOCUMENTATION INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING. DOCUMENTATION SHALL BE FORWARDED IN ORIGINAL FORMAT AND/OR UPLOADED INTO SMS.
 1. ALL CORRESPONDENCE AND PRELIMINARY CONSTRUCTION REPORTS.
 2. PROJECT PROGRESS REPORTS.
 3. CIVIL CONSTRUCTION START DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
 4. ELECTRICAL SERVICE COMPLETION DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).

5. LINES AND ANTENNA INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
6. POWER INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
7. TELCO READY DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
8. PPC (OR SHELTER) INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
9. TOWER CONSTRUCTION START DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
10. TOWER CONSTRUCTION COMPLETE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
11. BTS AND RADIO EQUIPMENT DELIVERED AT SITE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
12. NETWORK OPERATIONS HANDOFF CHECKLIST (HOC WALK) COMPLETE (UPLOAD FORM IN SMS)
13. CIVIL CONSTRUCTION COMPLETE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
14. SITE CONSTRUCTION PROGRESS PHOTOS UNLOADED INTO SMS.

SECTION 01 400 - SUBMITTALS & TESTS

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HERewith.
- 1.3 SUBMITTALS:
 - A. THE WORK IN ALL ASPECTS SHALL COMPLY WITH THE CONSTRUCTION DRAWINGS AND THESE SPECIFICATIONS.
 - B. SUBMIT THE FOLLOWING TO COMPANY REPRESENTATIVE FOR APPROVAL
 1. CONCRETE MIX-DESIGNS FOR TOWER FOUNDATIONS, ANCHORS PIERS, AND CONCRETE PAVING.
 2. CONCRETE BREAK TESTS AS SPECIFIED HEREIN.
 3. SPECIAL FINISHES FOR INTERIOR SPACES, IF ANY.
 4. ALL EQUIPMENT AND MATERIALS SO IDENTIFIED ON THE CONSTRUCTION DRAWINGS.
 5. CHEMICAL GROUNDING DESIGN
 - D. ALTERNATES: AT THE COMPANY'S REQUEST, ANY ALTERNATIVES TO THE MATERIALS OR METHODS SPECIFIED SHALL BE SUBMITTED TO SPRINT'S CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO BEING SHIPPED TO SITE. SPRINT WILL REVIEW AND APPROVE ONLY THOSE REQUESTS MADE IN WRITING. NO VERBAL APPROVALS WILL BE CONSIDERED. SUBMITTAL FOR APPROVAL SHALL INCLUDE A STATEMENT OF COST REDUCTION PROPOSED FOR USE OF ALTERNATE PRODUCT.

1.4 TESTS AND INSPECTIONS:

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTS, INSPECTIONS AND PROJECT DOCUMENTATION.
- B. CONTRACTOR SHALL ACCOMPLISH TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 1. COAX SWEEPS AND FIBER TESTS PER TS-0200 REV 4 ANTENNA LINE ACCEPTANCE STANDARDS.
 2. AZIMUTH AND DOWNTILT USING ELECTRONIC COMMERCIAL MADE-FOR-THE-PURPOSE ANTENNA ALIGNMENT TOOL
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CORRECTIONS TO ANY WORK IDENTIFIED AS UNACCEPTABLE IN SITE INSPECTION ACTIVITIES AND/OR AS A RESULT OF TESTING.
- C. REQUIRED CLOSEOUT DOCUMENTATION INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
 1. AZIMUTH, DOWNTILT, AGL - UPLOAD REPORT FROM ANTENNA ALIGNMENT TOOL TO SITERRA TASK 465. INSTALLED AZIMUTH, DOWNTILT, AND AGL MUST CONFORM TO THE RF DATA SHEETS. SWEEP AND FIBER TESTS
 2. SCANABLE BARCODE PHOTOGRAPHS OF TOWER TOP AND INACCESSIBLE SERIALIZED EQUIPMENT
 3. ALL AVAILABLE JURISDICTIONAL INFORMATION
 4. PDF SCAN OF REDLINES PRODUCED IN FIELD

5. ELECTRONIC AS-BUILT DRAWINGS IN AUTOCAD AND PDF FORMATS. ANY FIELD CHANGE MUST BE REFLECTED BY MODIFYING THE PLANS, ELEVATIONS, AND DETAILS IN THE DRAWING SETS. GENERAL NOTES INDICATING MODIFICATIONS WILL NOT BE ACCEPTED. CHANGES SHALL BE HIGHLIGHTED AS "CLOUDS" IDENTIFIED AS THE "AS-BUILT" CONDITION.
6. LIEN WAIVERS
7. FINAL PAYMENT APPLICATION
8. REQUIRED FINAL CONSTRUCTION PHOTOS
9. CONSTRUCTION AND COMMISSIONING CHECKLIST COMPLETE WITH NO DEFICIENT ITEMS
10. ALL POST NTP TASKS INCLUDING DOCUMENT UPLOADS COMPLETED IN SITERRA (SPRINTS DOCUMENT REPOSITORY OF RECORD).

1.5 COMMISSIONING: PERFORM ALL COMMISSIONING AS REQUIRED BY APPLICABLE MOPs

1.6 INTEGRATION: PERFORM ALL INTEGRATION ACTIVITIES AS REQUIRED BY APPLICABLE MOPs

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 REQUIREMENTS FOR TESTING:

A. THIRD PARTY TESTING AGENCY:

1. WHEN THE USE OF A THIRD PARTY INDEPENDENT TESTING AGENCY IS REQUIRED, THE AGENCY THAT IS SELECTED MUST PERFORM SUCH WORK ON A REGULAR BASIS IN THE STATE WHERE THE PROJECT IS LOCATED AND HAVE A THOROUGH UNDERSTANDING OF LOCAL AVAILABLE MATERIALS, INCLUDING THE SOIL, ROCK, AND GROUNDWATER CONDITIONS.
2. THE THIRD PARTY TESTING AGENCY IS TO BE FAMILIAR WITH THE APPLICABLE REQUIREMENTS FOR THE TESTS TO BE DONE, EQUIPMENT TO BE USED, AND ASSOCIATED HEALTH AND SAFETY ISSUES.
3. EXPERIENCE IN SOILS, CONCRETE, MASONRY, AGGREGATE, AND ASPHALT TESTING USING ASTM, AASHTO, AND OTHER METHODS IS NEEDED.
4. EXPERIENCE IN SOILS, CONCRETE, MASONRY, AGGREGATE, AND ASPHALT TESTING USING ASTM, AASHTO, AND OTHER METHODS IS NEEDED.

3.2 REQUIRED TESTS:

A. CONTRACTOR SHALL ACCOMPLISH TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. CONCRETE CYLINDER BREAK TESTS FOR THE TOWER AND ANCHOR FOUNDATIONS AS SPECIFIED IN SECTION: PORTLAND CEMENT CONCRETE PAVING.
2. ASPHALT ROADWAY COMPACTED THICKNESS, SURFACE SMOOTHNESS, AND COMPACTED DENSITY TESTING AS SPECIFIED IN SECTION: HOT MIX ASPHALT PAVING.
3. FIELD QUALITY CONTROL TESTING AS SPECIFIED IN SECTION: PORTLAND CEMENT CONCRETE PAVING.
4. TESTING REQUIRED UNDER SECTION: AGGREGATE BASE FOR ACCESS ROADS, PADS AND ANCHOR LOCATIONS
5. STRUCTURAL BACKFILL COMPACTION TESTS FOR THE TOWER FOUNDATION.
6. SITE RESISTANCE TO EARTH TESTING PER EXHIBIT: CELL SITE GROUNDING SYSTEM DESIGN.
7. ANTENNA AND COAX SWEEP TESTS PER EXHIBIT: ANTENNA TRANSMISSION LINE ACCEPTANCE STANDARDS.
8. GROUNDING AT ANTENNA MASTS FOR GPS AND ANTENNAS
9. ALL OTHER TESTS REQUIRED BY COMPANY OR JURISDICTION.

3.3 REQUIRED INSPECTIONS

A. SCHEDULE INSPECTIONS WITH COMPANY REPRESENTATIVE.

B. CONDUCT INSPECTIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. GROUNDING SYSTEM INSTALLATION PRIOR TO EARTH CONCEALMENT DOCUMENTED WITH DIGITAL PHOTOGRAPHS BY CONTRACTOR, APPROVED BY A&E OR SPRINT REPRESENTATIVE.
2. FORMING FOR CONCRETE AND REBAR PLACEMENT PRIOR TO POUR DOCUMENTED WITH DIGITAL PHOTOGRAPHS BY CONTRACTOR, APPROVED BY A&E OR SPRINT REPRESENTATIVE.
3. COMPACTION OF BACKFILL MATERIALS; AGGREGATE BASE FOR ROADS, PADS, AND ANCHORS; ASPHALT PAVING; AND SHAFT BACKFILL FOR CONCRETE AND WOOD POLES, BY INDEPENDENT THIRD PARTY AGENCY.
4. PRE- AND POST-CONSTRUCTION ROOFTOP AND STRUCTURAL INSPECTIONS ON EXISTING FACILITIES.
5. TOWER ERECTION SECTION STACKING AND PLATFORM ATTACHMENT DOCUMENTED BY DIGITAL PHOTOGRAPHS BY THIRD PARTY AGENCY.
6. ANTENNA AZIMUTH , DOWN TILT AND PER SUNLIGHT TOOL SUNSIGHT INSTRUMENTS - ANTENNALIGN ALIGNMENT TOOL (AAT)

PLANS PREPARED FOR:



6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:



1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER 340-000

MLA PARTNER:



10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:



DRAWING NOTICE:

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REVISIONS:

DESCRIPTION	DATE	BY	REV
FOR PERMIT	6/26/14	AJD	0
ISSUED FOR REVIEW	5/30/14	AHS	A

SITE NAME:

MIDDLETOWN CT 3

SITE CASCADE:

CT03XC070

SITE ADDRESS:

**47 INWOOD ROAD
ROCKY HILL, CT 06067**

SHEET DESCRIPTION:

SPRINT SPECIFICATIONS

SHEET NUMBER:

SP-2

CONTINUE FROM SP-2

7. VERIFICATION DOCUMENTED WITH THE ANTENNA CHECKLIST REPORT, BY A&E, SITE DEVELOPMENT REP, OR RF REP.
 8. FINAL INSPECTION CHECKLIST AND HANDOFF WALK (HOC). SIGNED FORM SHOWING ACCEPTANCE BY FIELD OPS IS TO BE UPLOADED INTO SMS.
 9. COAX SWEEP AND FIBER TESTING DOCUMENTS SUBMITTED VIA SMS FOR RF APPROVAL.
 10. SCAN-ABLE BARCODE PHOTOGRAPHS OF TOWER TOP AND INACCESSIBLE SERIALIZED EQUIPMENT
 11. ALL AVAILABLE JURISDICTIONAL INFORMATION
 12. PDF SCAN OF REDLINES PRODUCED IN FIELD
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CORRECTIONS TO ANY WORK IDENTIFIED AS UNACCEPTABLE IN SITE INSPECTION ACTIVITIES AND/OR AS A RESULT OF TESTING.
- D. CONSTRUCTION INSPECTIONS AND CORRECTIVE MEASURES SHALL BE DOCUMENTED BY THE CONTRACTOR WITH WRITTEN REPORTS AND PHOTOGRAPHS. PHOTOGRAPHS MUST BE DIGITAL AND OF SUFFICIENT QUALITY TO CLEARLY SHOW THE SITE CONSTRUCTION. PHOTOGRAPHS MUST CLEARLY IDENTIFY THE PHOTOGRAPHED ITEM AND BE LABELED WITH THE SITE CASCADE NUMBER, SITE NAME, DESCRIPTION, AND DATE.
- 3.4 DELIVERABLES: TEST AND INSPECTION REPORTS AND CLOSEOUT DOCUMENTATION SHALL BE UPLOADED TO THE SMS AND/OR FORWARDED TO SPRINT FOR INCLUSION INTO THE PERMANENT SITE FILES.
- A. THE FOLLOWING TEST AND INSPECTION REPORTS SHALL BE PROVIDED AS APPLICABLE.
1. CONCRETE MIX AND CYLINDER BREAK REPORTS.
 2. STRUCTURAL BACKFILL COMPACTION REPORTS.
 3. SITE RESISTANCE TO EARTH TEST.
 4. ANTENNA AZIMUTH AND DOWN TILT VERIFICATION
 5. TOWER ERECTION INSPECTIONS AND MEASUREMENTS DOCUMENTING TOWER INSTALLED PER SUPPLIER'S REQUIREMENTS AND THE APPLICABLE SECTIONS HEREIN.
 6. COAX CABLE SWEEP TESTS PER COMPANY'S "ANTENNA LINE ACCEPTANCE STANDARDS".
- B. REQUIRED CLOSEOUT DOCUMENTATION INCLUDES THE FOLLOWING:
1. TEST WELLS AND TRENCHES: PHOTOGRAPHS OF ALL TEST WELLS; PHOTOGRAPHS SHOWING ALL OPEN EXCAVATIONS AND TRENCHING PRIOR TO BACKFILLING SHOWING A TAPE MEASURE VISIBLE IN THE EXCAVATIONS INDICATING DEPTH.
 2. CONDUITS, CONDUCTORS AND GROUNDING: PHOTOGRAPHS SHOWING TYPICAL INSTALLATION OF CONDUCTORS AND CONNECTORS; PHOTOGRAPHS SHOWING TYPICAL BEND RADIUS OF INSTALLED GROUND WIRES AND GROUND ROD SPACING;
 3. CONCRETE FORMS AND REINFORCING: CONCRETE FORMING AT TOWER AND EQUIPMENT/SHELTER PAD/FOUNDATIONS - PHOTOGRAPHS SHOWING ALL REINFORCING STEEL, UTILITY AND CONDUIT STUB OUTS; PHOTOGRAPHS SHOWING CONCRETE POUR OF SHELTER SLAB/FOUNDATION, TOWER FOUNDATION AND GUY ANCHORS WITH VIBRATOR IN USE; PHOTOGRAPHS SHOWING EACH ANCHOR ON GUYED TOWERS, BEFORE CONCRETE POUR.
 4. TOWER, ANTENNAS AND MAINLINE: INSPECTION AND PHOTOGRAPHS OF SECTION STACKING; INSPECTION AND PHOTOGRAPHS OF PLATFORM COMPONENT ATTACHMENT POINTS; PHOTOGRAPHS OF TOWER TOP GROUNDING; PHOTOS OF TOWER COAX LINE COLOR CODING AT THE TOP AND AT GROUND LEVEL; INSPECTION AND PHOTOGRAPHS OF OPERATIONAL OF TOWER LIGHTING, AND PLACEMENT OF FAA REGISTRATION SIGN; PHOTOGRAPHS SHOWING ADDITIONAL GROUNDING POINTS FOR TOWERS GREATER THAN 200 FEET.; PHOTOS OF ANTENNA GROUND BAR, EQUIPMENT GROUND BAR, AND MASTER GROUND BAR; PHOTOS OF GPS ANTENNA(S); PHOTOS OF EACH SECTOR OF ANTENNAS; ONE PHOTOGRAPH LOOKING AT THE SECTOR AND ONE FROM BEHIND SHOWING THE PROJECTED COVERAGE AREA; PHOTOS OF COAX WEATHERPROOFING - TOP AND BOTTOM; PHOTOS OF COAX GROUNDING--TOP AND BOTTOM; PHOTOS OF ANTENNA AND MAST GROUNDING; PHOTOS OF COAX CABLE ENTRY INTO SHELTER; PHOTOS OF PLATFORM MECHANICAL CONNECTIONS TO TOWER/MONOPOLE.
 5. ROOF TOPS: PRE--CONSTRUCTION AND POST--CONSTRUCTION VISUAL INSPECTION AND PHOTOGRAPHS OF THE ROOF AND INTERIOR TO DETERMINE AND DOCUMENT CONDITIONS; ROOF TOP CONSTRUCTION INSPECTIONS AS REQUIRED BY THE JURISDICTION; PHOTOGRAPHS OF CABLE TRAY AND/OR ICE BRIDGE; PHOTOGRAPHS OF DOGHOUSE/CABLE EXIT FROM ROOF;
 6. SITE LAYOUT - PHOTOGRAPHS OF THE OVERALL COMPOUND, INCLUDING EQUIPMENT PLATFORM FROM ALL FOUR CORNERS.
 7. FINISHED UTILITIES: CLOSE-UP PHOTOGRAPHS OF THE PPC BREAKER PANEL; CLOSE-UP PHOTOGRAPH OF THE INSIDE OF THE TELCO PANEL AND NIU; CLOSE-UP PHOTOGRAPH OF THE POWER METER AND DISCONNECT; PHOTOS OF POWER AND TELCO ENTRANCE TO COMPANY ENCLOSURE; PHOTOGRAPHS AT METER BOX AND/OR FACILITY DISTRIBUTION PANEL.
 8. REQUIRED MATERIALS CERTIFICATIONS: CONCRETE MIX DESIGNS; MILL CERTIFICATION FOR ALL REINFORCING AND STRUCTURAL STEEL; AND ASPHALT PAVING MIX DESIGN.
 9. ANY AND ALL SUBMITTALS BY THE JURISDICTION OR COMPANY.

SECTION 01 400 - SUBMITTALS & TESTS

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HERewith.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 WEEKLY REPORTS:
 - A. CONTRACTOR SHALL PROVIDE SPRINT WITH WEEKLY REPORTS SHOWING PROJECT STATUS. THIS STATUS REPORT FORMAT WILL BE PROVIDED TO THE CONTRACTOR BY SPRINT. THE REPORT WILL CONTAIN SITE ID NUMBER, THE MILESTONES FOR EACH SITE, INCLUDING THE BASELINE DATE, ESTIMATED COMPLETION DATE AND ACTUAL COMPLETION DATE.
 - B. REPORT INFORMATION WILL BE TRANSMITTED TO SPRINT VIA ELECTRONIC MEANS AS REQUIRED. THIS INFORMATION WILL PROVIDE A BASIS FOR PROGRESS MONITORING AND PAYMENT.
- 3.2 PROJECT CONFERENCE CALLS:
 - A. SPRINT MAY HOLD WEEKLY PROJECT CONFERENCE CALLS. CONTRACTOR WILL BE REQUIRED TO COMMUNICATE SITE STATUS, MILESTONE COMPLETIONS AND UPCOMING MILESTONE PROJECTIONS, AND ANSWER ANY OTHER SITE STATUS QUESTIONS AS NECESSARY.
- 3.3 PROJECT TRACKING IN SMS:
 - A. CONTRACTOR SHALL PROVIDE SCHEDULE UPDATES AND PROJECTIONS IN THE SMS SYSTEM ON A WEEKLY BASIS.
- 3.4 ADDITIONAL REPORTING:
 - A. ADDITIONAL OR ALTERNATE REPORTING REQUIREMENTS MAY BE ADDED TO THE REPORT AS DETERMINED TO BE REASONABLY NECESSARY BY COMPANY.
- 3.5 PROJECT PHOTOGRAPHS:
 - A. FILE DIGITAL PHOTOGRAPHS OF COMPLETED SITE IN JPEG FORMAT IN THE SMS PHOTO LIBRARY FOR THE RESPECTIVE SITE. PHOTOGRAPHS SHALL BE CLEARLY LABELED WITH SITE NUMBER, NAME AND DESCRIPTION, AND SHALL INCLUDE AT A MINIMUM THE FOLLOWING AS APPLICABLE:
 1. SHELTER AND TOWER OVERVIEW.
 2. TOWER FOUNDATION(S) - FORMS AND STEEL BEFORE POUR (EACH ANCHOR ON GUYED TOWERS).
 3. TOWER FOUNDATION(S) POUR WITH VIBRATOR IN USE (EACH ANCHOR ON GUYED TOWERS).
 4. TOWER STEEL AS BEING INSTALLED INTO HOLE (SHOW ANCHOR STEEL ON GUYED TOWERS).
 5. PHOTOS OF TOWER SECTION STACKING.
 6. CONCRETE TESTING / SAMPLES.
 7. PLACING OF ANCHOR BOLTS IN TOWER FOUNDATION.
 8. BUILDING/WATER TANK FROM ROAD FOR TENANT IMPROVEMENTS OR COMMENTS.
 9. SHELTER FOUNDATION--FORMS AND STEEL BEFORE POURING.
 10. SHELTER FOUNDATION POUR WITH VIBRATOR IN USE.
 11. COAX CABLE ENTRY INTO SHELTER.
 12. PLATFORM MECHANICAL CONNECTIONS TO TOWER/MONOPOLE.
 13. ROOFTOP PRE AND POST CONSTRUCTION PHOTOS TO INCLUDE PENETRATIONS AND INTERIOR CEILING.
 14. PHOTOS OF TOWER TOP COAX LINE COLOR CODING AND COLOR CODING AT GROUND LEVEL.
 15. PHOTOS OF ALL APPROPRIATE COMPANY OR REGULATORY SIGNAGE.
 16. PHOTOS OF EQUIPMENT BOLT DOWN INSIDE SHELTER.
 17. POWER AND TELCO ENTRANCE TO COMPANY ENCLOSURE AND POWER AND TELCO SUPPLY LOCATIONS INCLUDING METER/DISCONNECT.
 18. ELECTRICAL TRENCH(S) WITH ELECTRICAL / CONDUIT BEFORE BACKFILL.
 19. ELECTRICAL TRENCH(S) WITH FOIL-BACKED TAPE BEFORE FURTHER BACKFILL.
 20. TELCO TRENCH WITH TELEPHONE / CONDUIT BEFORE BACKFILL.
 21. TELCO TRENCH WITH FOIL-BACKED TAPE BEFORE FURTHER BACKFILL.
 22. SHELTER GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADI).
 23. TOWER GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADI).

24. FENCE GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADI).
25. ALL BTS GROUND CONNECTIONS.
26. ALL GROUND TEST WELLS.
27. ANTENNA GROUND BAR AND EQUIPMENT GROUND BAR.
28. ADDITIONAL GROUNDING POINTS ON TOWERS ABOVE 200'.
29. HVAC UNITS INCLUDING CONDENSERS ON SPLIT SYSTEMS.
30. GPS ANTENNAS.
31. CABLE TRAY AND/OR WAVEGUIDE BRIDGE.
32. DOGHOUSE/CABLE EXIT FROM ROOF.
33. EACH SECTOR OF ANTENNAS; ONE PHOTOGRAPH LOOKING AT THE SECTOR AND ONE FROM BEHIND SHOWING THE PROJECTED COVERAGE AREA.
34. MASTER BUS BAR.
35. TELCO BOARD AND NIU.
36. ELECTRICAL DISTRIBUTION WALL.
37. CABLE ENTRY WITH SURGE SUPPRESSION.
38. ENTRANCE TO EQUIPMENT ROOM.
39. COAX WEATHERPROOFING--TOP AND BOTTOM OF TOWER.
40. COAX GROUNDING --TOP AND BOTTOM OF TOWER.
41. ANTENNA AND MAST GROUNDING.
42. LANDSCAPING - WHERE APPLICABLE.

3.6 FINAL PROJECT ACCEPTANCE: COMPLETE ALL REQUIRED REPORTING TASKS PER CONTRACT, CONTRACT DOCUMENTS OR THE SPRINT INTEGRATED CONSTRUCTION STANDARDS FOR WIRELESS SITES AND UPLOAD INTO SITERRA.

PLANS PREPARED FOR:



PLANS PREPARED BY:



MLA PARTNER:



ENGINEERING LICENSE:



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ISSUED FOR REVIEW	5/30/14	AHS	A

SITE NAME:

MIDDLETOWN CT 3

SITE CASCADE:

CT03XC070

SITE ADDRESS:

47 INWOOD ROAD
ROCKY HILL, CT 06067

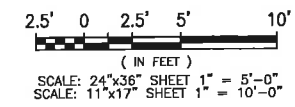
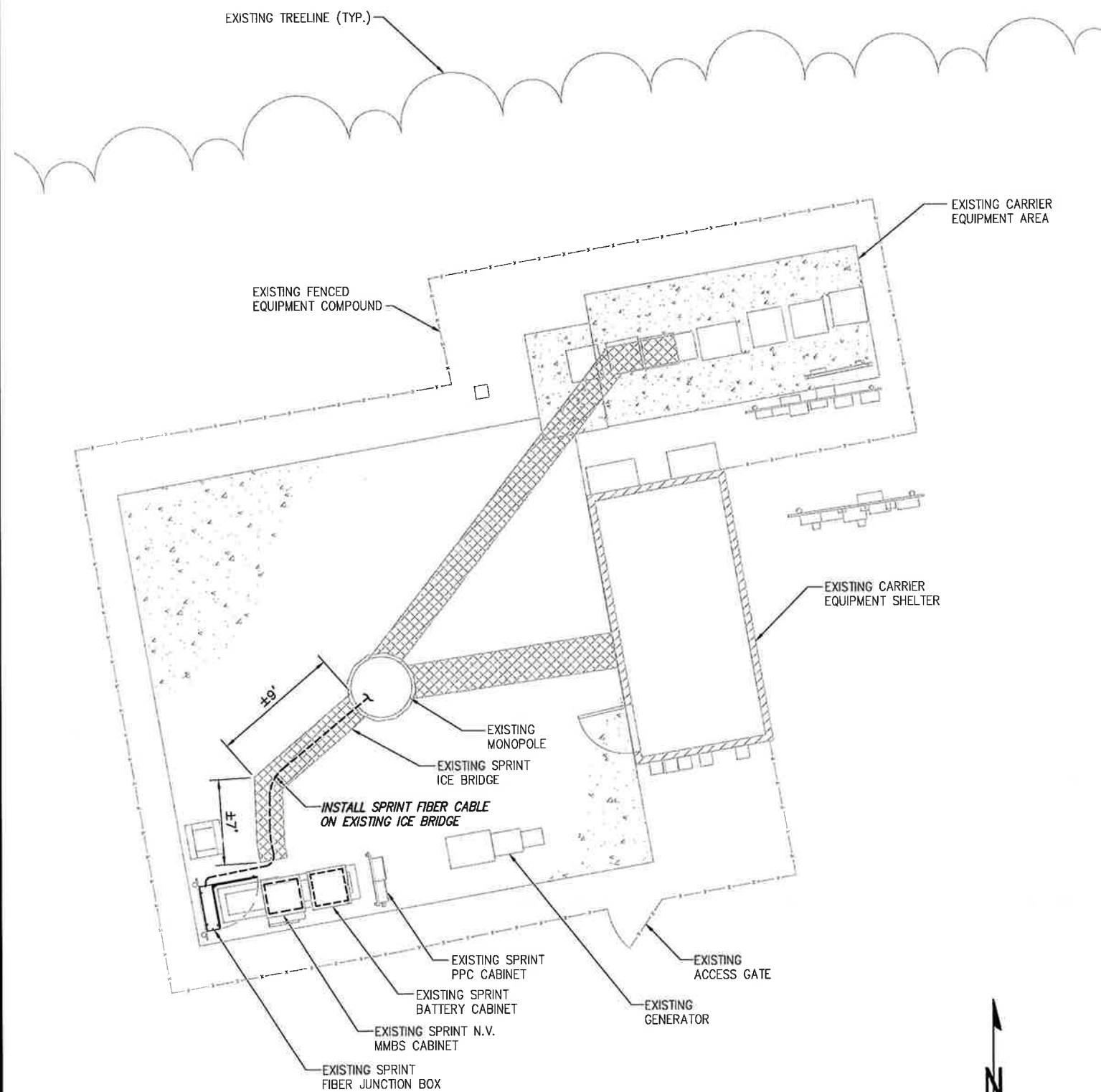
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SPRINT SPECIFICATIONS

SHEET NUMBER:

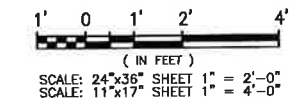
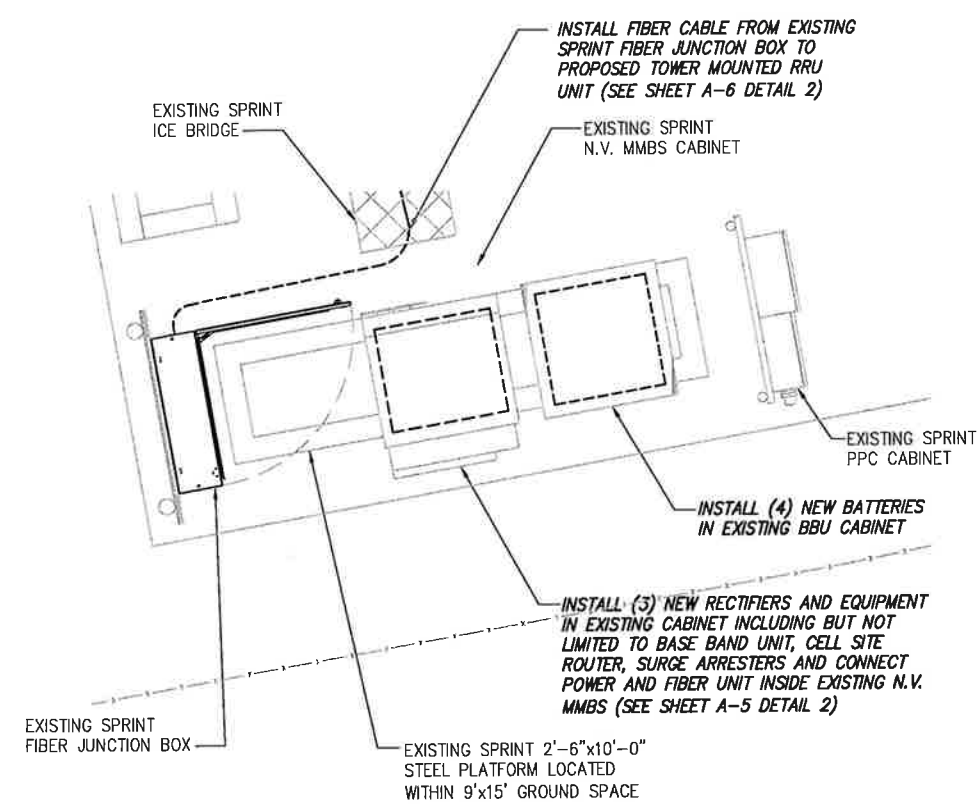
SP-3

INFORMATION CONTAINED WITHIN DRAWINGS ARE BASED ON PROVIDED INFORMATION AND ARE NOT THE RESULT OF A FIELD SURVEY.



OVERALL SITE PLAN

SCALE: AS NOTED 1



SPRINT EQUIPMENT PLAN

SCALE: AS NOTED 2

PLANS PREPARED FOR:

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER 340-000

MLA PARTNER:

10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

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MIDDLETOWN CT 3

SITE CASCADE:
CT03XC070

SITE ADDRESS:
**47 INWOOD ROAD
ROCKY HILL, CT 06067**

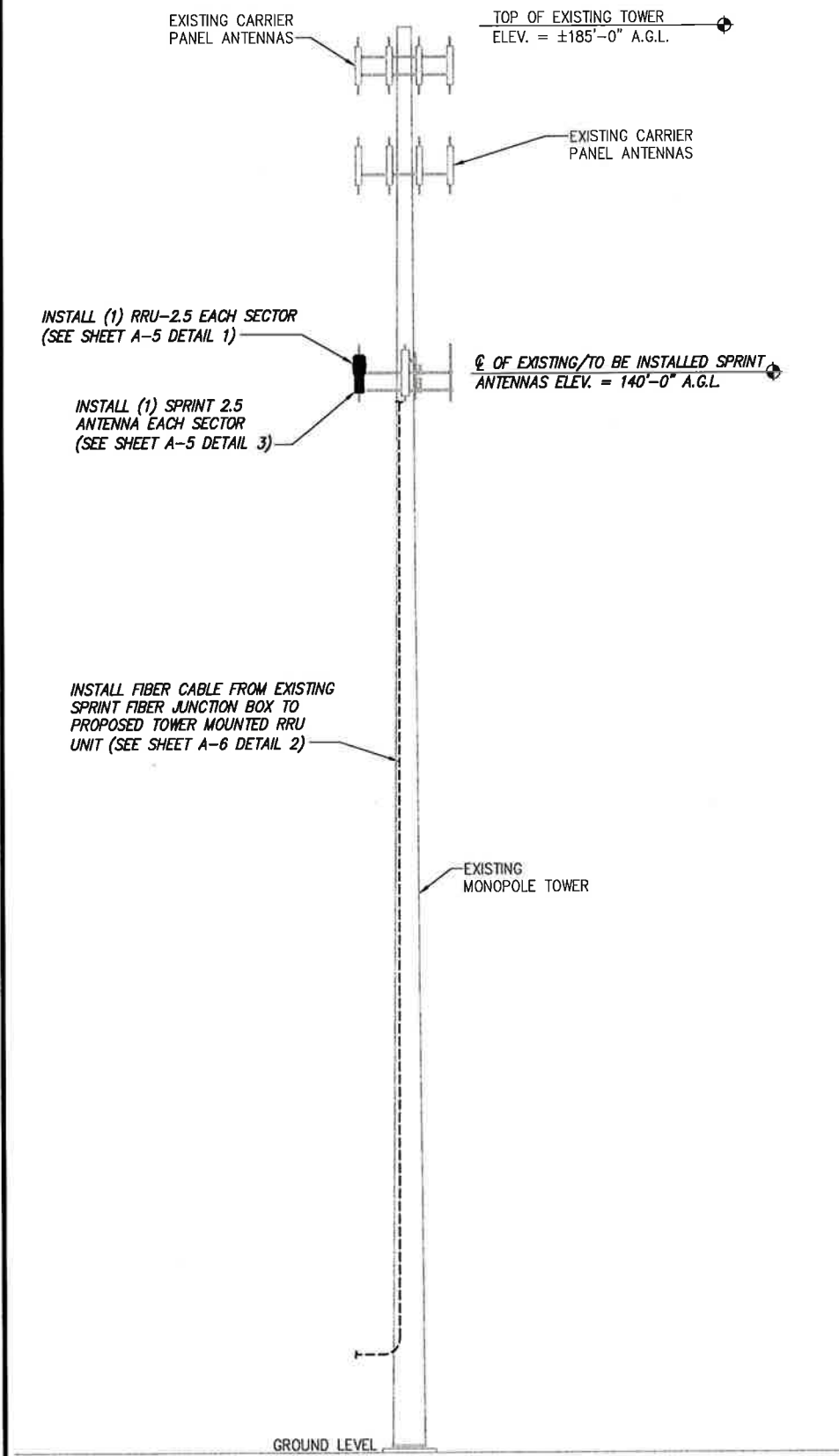
SHEET DESCRIPTION:
SITE PLAN

SHEET NUMBER:
A-1

NOTE:
SPRINT TOWER TOP WORK CONTINGENT ON FOLLOWING:
COMPLETION OF STRUCTURAL ANALYSIS PROVIDED BY
AMERICAN TOWER CORP., COMPLETION OF ANTENNA/RRH
MOUNTING ASSESSMENT (PROVIDED BY AE)

NOTE:
INFINIGY ENGINEERING HAS NOT EVALUATED THE
EXISTING TOWER OR MOUNT FOR THIS SITE, AND
ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL
INTEGRITY. REFER TO STRUCTURAL ANALYSIS BY
OTHERS PRIOR TO ANY CONSTRUCTION.

NOTE:
SEE DETAIL 2 ON A-3
FOR ANTENNA LAYOUT



DETAIL NOT USED NO SCALE 2

TOWER ELEVATION NO SCALE 1

DETAIL NOT USED NO SCALE 3

DETAIL NOT USED NO SCALE 4

PLANS PREPARED FOR:

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

Design. Build. Deliver.

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

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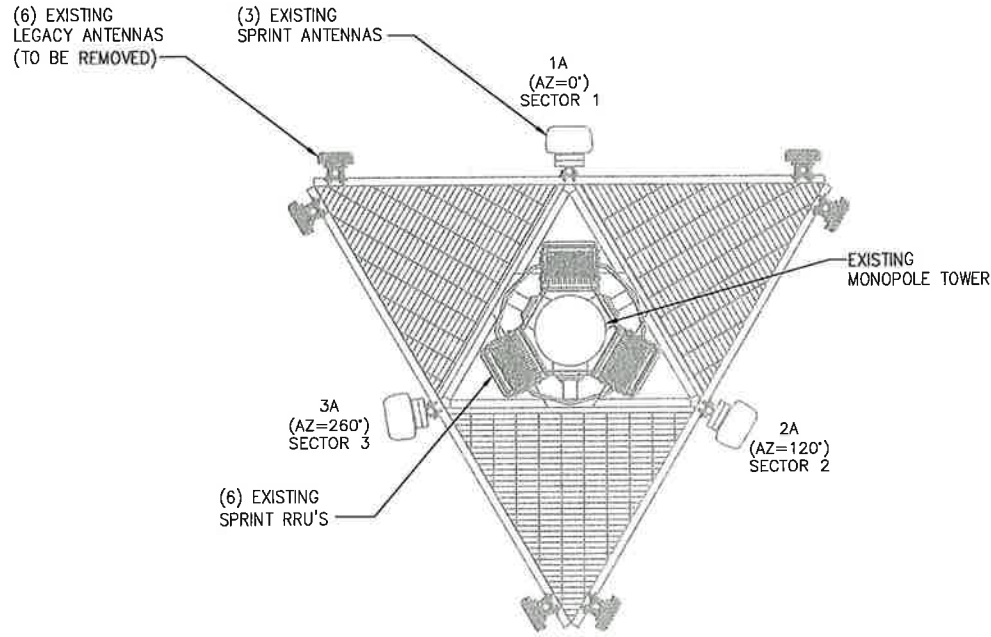
47 INWOOD ROAD
ROCKY HILL, CT 06067

SHEET DESCRIPTION:

TOWER ELEVATION
& CABLE PLAN

SHEET NUMBER:

A-2



0' = TRUE NORTH

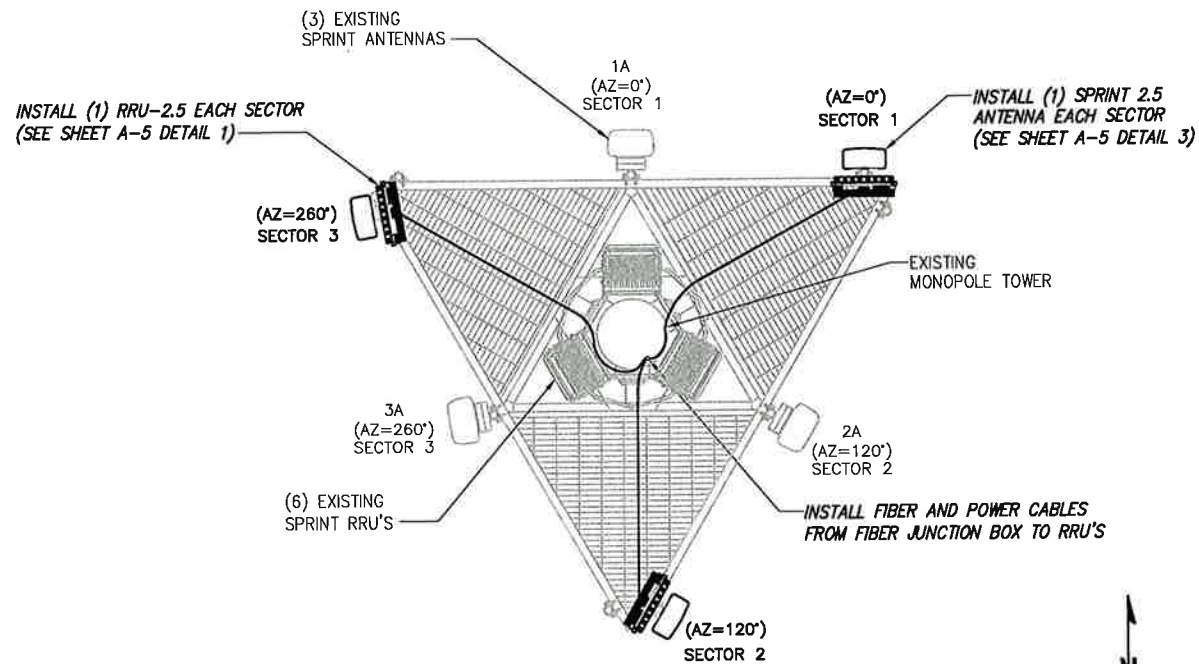
EXISTING ANTENNA & RRU LAYOUT

NO SCALE

1

NOTE:
JUMPERS FROM 2.5 RRH TO THE 2.5 ANTENNA CANNOT EXCEED 15 FEET

THE CONFIGURATION PLANS ARE BASED ON PROVIDED INFORMATION AND ARE FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION.

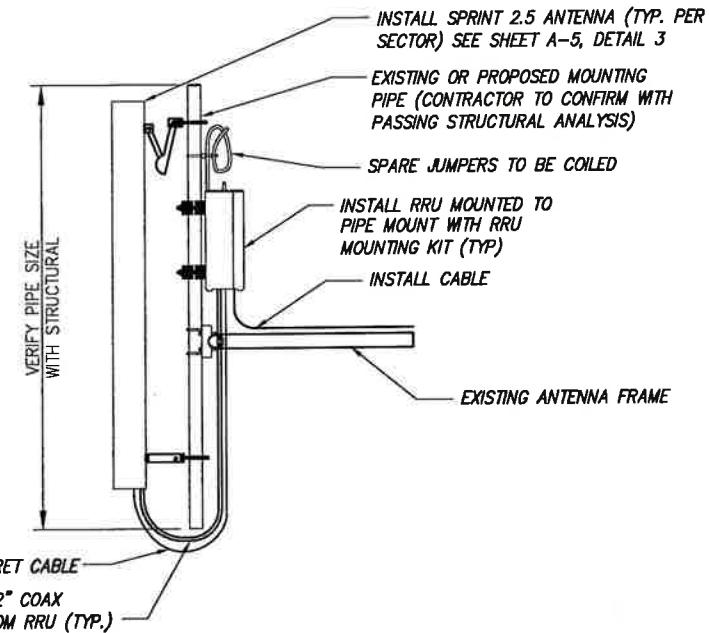


0' = TRUE NORTH

FINAL ANTENNA LAYOUT

NO SCALE

2



NOTES:

- CUT DC CONDUCTORS TO LENGTH.
- COIL FIBER CABLE AND SECURE AT SIDE OF RRU.
- DO NOT EXCEED BEND RADIUS.

NOTE:
CONTRACTOR TO POSITION RRU ON MOUNT BEHIND ANTENNA SUCH THAT THE RRU DOES NOT INTERFERE WITH THE EXISTING PLATFORM/T-ARM MOUNTING HARDWARE.

NOTE:
SPARE DC CABLES ARE COILED UP ON NV RRHS AT SPRINT ARRAY. THESE ARE TO BE USED TO POWER UP THE 2.5 RRHS AND TIED INTO EXISTING DC BREAKERS INSIDE THE FIBER JUNCTION BOX LOCATED AT EQUIPMENT.

NOTE:
THE DIAGRAM IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR IS TO REFER TO PASSING STRUCTURAL ANALYSIS FOR ANTENNA AND RRU MOUNTING DETAILS

DETAIL NOT USED

NO SCALE

3

TYPICAL ANTENNA & RRU MOUNTING DETAILS

NO SCALE

4

PLANS PREPARED FOR:



PLANS PREPARED BY:



MLA PARTNER:



ENGINEERING LICENSE:



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ROCKY HILL, CT 06067

SHEET DESCRIPTION:

ANTENNA LAYOUT
& MOUNTING DETAILS

SHEET NUMBER:

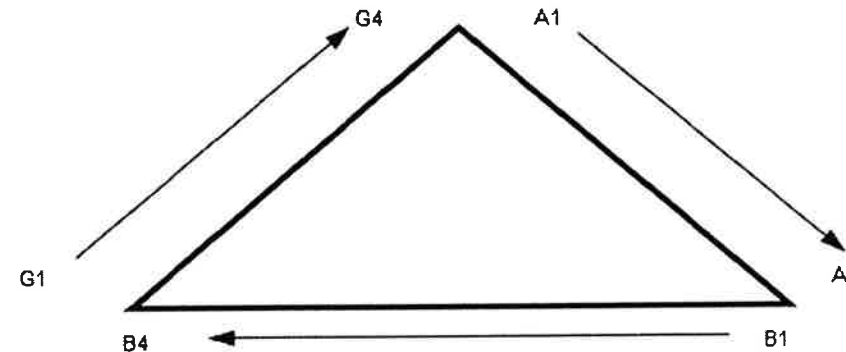
A-3

NV CABLES				
BAND	INDICATOR	PORT	COLOR	
800-1	YEL GRN	NV-1	GRN	
1900-1	YEL RED	NV-2	BLU	
1900-2	YEL BRN	NV-3	BRN	
1900-3	YEL BLU	NV-4	WHT	
1900-4	YEL SLT	NV-5	RED	
800-2	YEL ORG	NV-6	SLT	
SPARE	YEL WHT	NV-7	PPL	
2500	YEL PPL	NV-8	ORG	

HYBRID	
HYBRID	COLOR
1	GRN
2	BLU
3	BRN
4	WHT
5	RED
6	SLT
7	PPL
8	ORG

2.5 Band		
2500 Radio 1	COLOR	
YEL WHT	GRN	
YEL WHT	BLU	
YEL WHT	BRN	
YEL WHT	WHT	
YEL WHT	RED	
YEL WHT	SLT	
YEL WHT	PPL	
YEL WHT	ORG	

Figure 1: Antenna Orientation



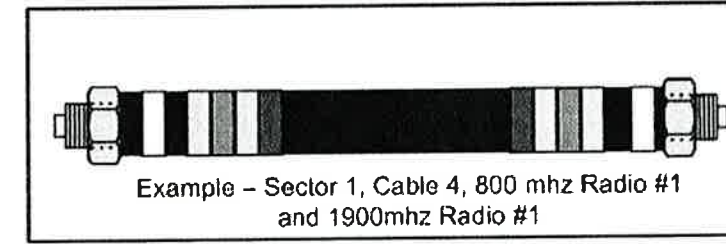
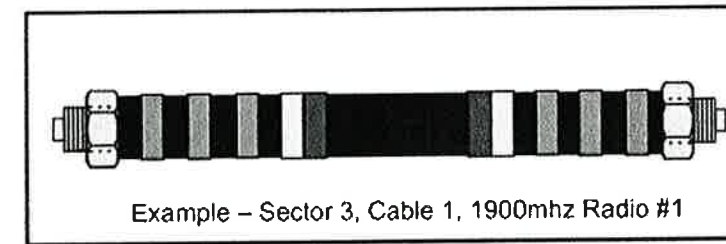
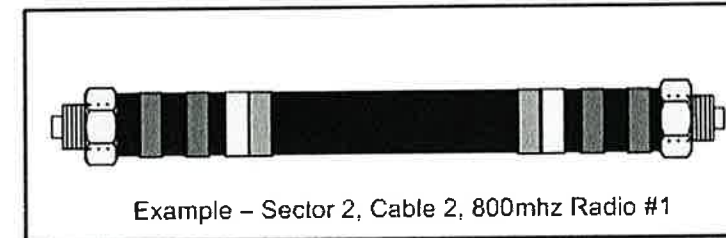
NOTES:

- ALL CABLES SHALL BE MARKED WITH 2" WIDE, UV STABILIZED, UL APPROVED TAPE.
- THE FIRST RING SHALL BE CLOSEST TO THE END OF THE CABLE AND SPACED APPROXIMATELY 2" FROM THE END CONNECTOR, WEATHERPROOFING, OR BREAK-OUT CYLINDER. THERE SHALL BE A 1" SPACE BETWEEN EACH RING FOR THE CABLE IDENTIFIER, AND NO SPACES BETWEEN THE FREQUENCY BANDS.
- A 2" GAP SHALL SEPARATE THE CABLE COLOR CODE FROM THE FREQUENCY COLOR CODE. THE 2" COLOR RINGS FOR THE FREQUENCY CODE SHALL BE PLACED NEXT TO EACH OTHER WITH NO SPACES.
- THE 2" COLORED TAPE(S) SHALL EACH BE WRAPPED A MINIMUM OF 3 TIMES AROUND THE INDIVIDUAL CABLES, AND THE TAPE SHALL BE KEPT IN THE SAME LOCATION AS MUCH AS POSSIBLE.
- SITES WITH MORE THAN FOUR (4) SECTORS WILL REQUIRE ADDITIONAL RINGS FOR EACH SECTOR, FOLLOWING THE PATTERN. HIGH CAPACITY SITES WILL USE THE NEXT COLOR IN THE SEQUENCE FOR ADDITIONAL CABLES IN EACH SECTOR.
- HYBRID FIBER CABLE SHALL BE SECTOR IDENTIFIED INSIDE THE CABINET ON FREQUENCY BUNDLES, ON THE SEALTITE, ON THE MAIN LINE UPON EXIT OF SEALTITE, AND BEFORE AND AFTER THE BREAKOUT UNIT (MEDUSA), AS WELL AS BEFORE AND AFTER ANY ENTRANCE OR EXIT.
- HFC "MAIN TRUNK" WILL NOT BE MARKED WITH THE FREQUENCY CODES, AS IT CONTAINS ALL FREQUENCIES.
- INDIVIDUAL POWER PAIRS AND FIBER BUNDLES SHALL BE LABELED WITH BOTH THE CABLE AND FREQUENCY.

Sector	Cable	First Ring	Second Ring	Third Ring
1 Alpha	1	Green	No Tape	No Tape
	2	Blue	No Tape	No Tape
	3		No Tape	No Tape
	4	White	No Tape	No Tape
	5	Red	No Tape	No Tape
	6	Grey	No Tape	No Tape
	7	Purple	No Tape	No Tape
	8	Orange	No Tape	No Tape
2 Beta	1	Green	Green	No Tape
	2	Blue	Blue	No Tape
	3			No Tape
	4	White	White	No Tape
	5	Red	Red	No Tape
	6	Grey	Grey	No Tape
	7	Purple	Purple	No Tape
	8	Orange	Orange	No Tape
3 Gamma	1	Green	Green	Green
	2	Blue	Blue	Blue
	3			
	4	White	White	White
	5	Red	Red	Red
	6	Grey	Grey	Grey
	7	Purple	Purple	Purple
	8	Orange	Orange	Orange

NV FREQUENCY	INDICATOR	ID
800-1	YEL	GRN
1900-1	YEL	RED
1900-2	YEL	BRN
1900-3	YEL	BLU
1900-4	YEL	SLT
800-1	YEL	ORG
RESERVED	YEL	WHT
RESERVED	YEL	PPL

2.5 FREQUENCY	INDICATOR	ID
2500 -1	YEL	WHT GRN
2500 -2	YEL	WHT RED
2500 -3	YEL	WHT BRN
2500 -4	YEL	WHT BLU
2500 -5	YEL	WHT SLT
2500 -6	YEL	WHT ORG
2500 -7	YEL	WHT WHT
2500 -8	YEL	WHT PPL



PLANS PREPARED FOR:

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PLANS PREPARED BY:

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JOB NUMBER 340-000

MLA PARTNER:

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SITE ADDRESS:

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ROCKY HILL, CT 06067

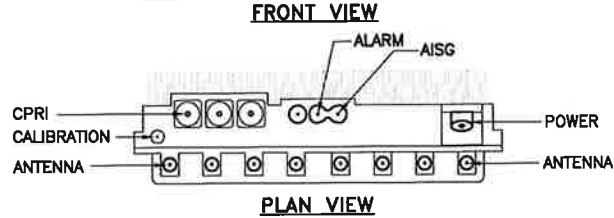
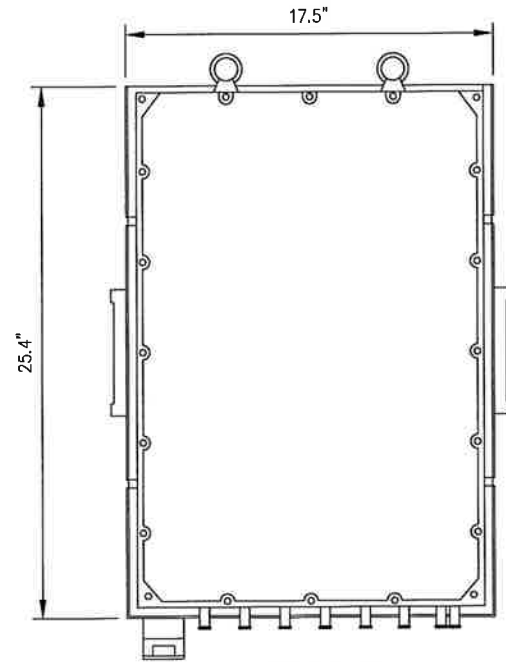
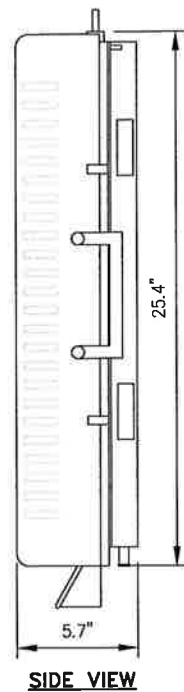
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COLOR CODING AND NOTES

SHEET NUMBER:

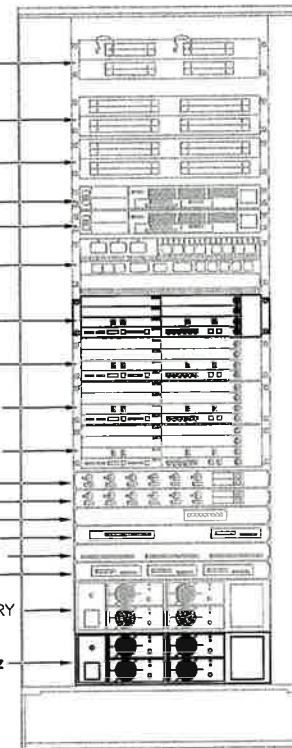
A-4

RRU: ALCATEL LUCENT TD-RRH8X20
 COLOR: LIGHT GREY
 WEIGHT: 70 LBS.



NOTES
 COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRU'S RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING. DO NOT OPEN RRU PACKAGES IN THE RAIN.

- DS3 SURGE PROTECTOR
- POWER INJECTOR 5-8
- POWER INJECTOR 1-4
- 7210 SAS-M 2
- 7210 SAS-M 1
- 7205 SAR-8
- LTE-BBU 2.5GHz
- LTE-BBU FDD
- CDMA MT-BBU GROWTH
- CDMA MT-BBU PRIMARY
- PDP1
- PDP2
- 15MHz SPLITTER
- ETHERNET HUB SEC-B
- PRIMARY PROTECTION T1
- SEC-B #1, #1 & #3
- RECTIFIER SHELF PRIMARY
- RECTIFIER SHELF 2.5GHz



FRONT VIEW

2.5 RRU

NO SCALE

1

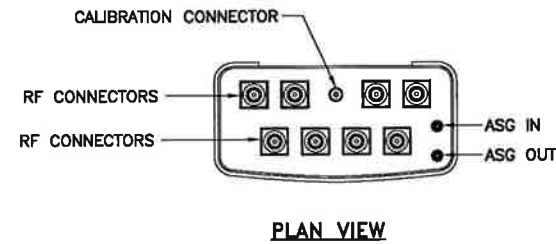
NEW EQUIPMENT IN EXISTING CABINET

NO SCALE

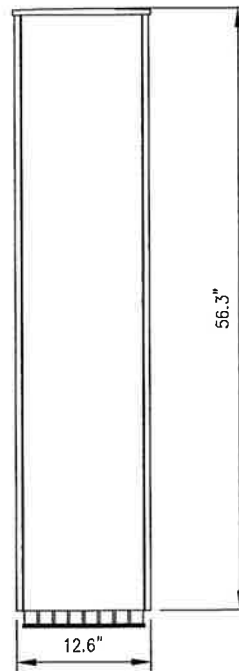
2

ANTENNA: RFS APXVTM14-C-I20

RADOME MATERIAL: ASA
 RADOME COLOR: LIGHT GREY
 DIMENSIONS, HxWxD.in(mim): 56.3"x12.6"x6.3" (1430x320x160mm)
 WEIGHT: 52.9 lbs
 CONNECTORS: (8) 4.1/9.5 DIN FEMALE
 (1) NF - CALIBRATION CONNECTOR



SIDE VIEW



FRONT VIEW

2.5 ANTENNA

NO SCALE

3

DETAIL NOT USED

NO SCALE

4

PLANS PREPARED FOR:



PLANS PREPARED BY:



MLA PARTNER:



ENGINEERING LICENSE:



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SITE CASCADE:

CT03XC070

SITE ADDRESS:

47 INWOOD ROAD
 ROCKY HILL, CT 06067

SHEET DESCRIPTION:

EQUIPMENT &
 MOUNTING DETAILS

SHEET NUMBER:

A-5

RFS HYBRIFLEX RISER CABLE SCHEDULE

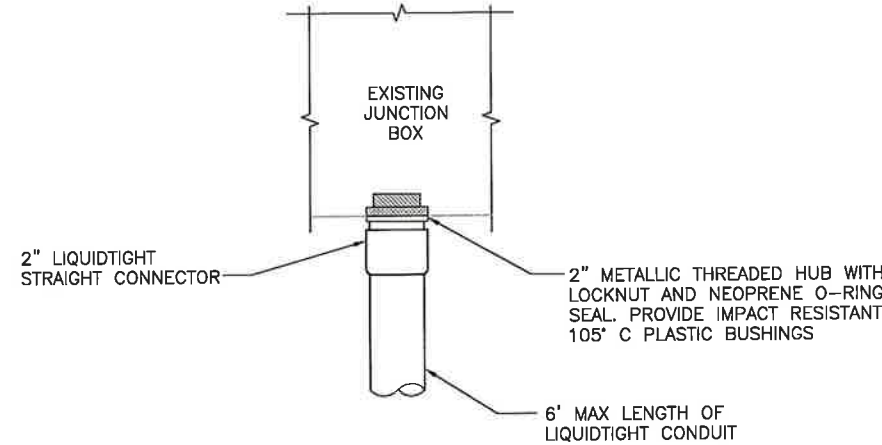
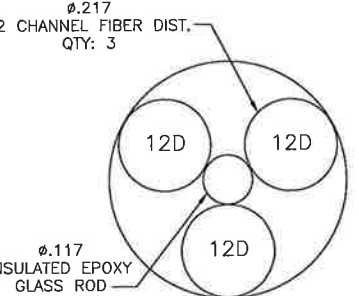
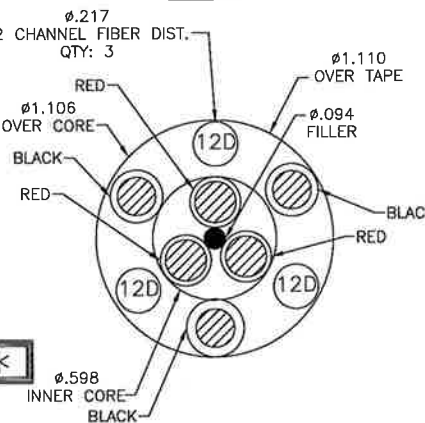
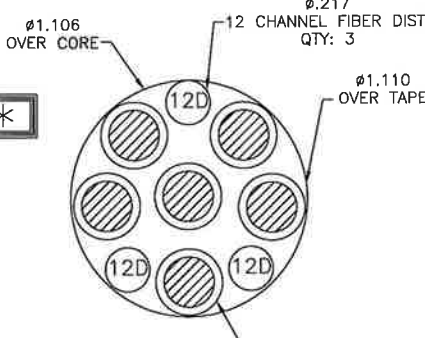
Fiber Only (Existing DC Power)	Hybrid cable MN: HB058-M12-050F 12x multi-mode fiber pairs, Top: Outdoor protected connectors, Bottom: LC Connectors, 5/8 cable, 50 ft	50 ft
	MN: HB058-M12-075F	75 ft
	MN: HB058-M12-100F	100 ft
	MN: HB058-M12-125F	125 ft
	MN: HB058-M12-150F	150 ft
	MN: HB058-M12-175F	175 ft
	MN: HB058-M12-200F	200 ft
8 AWG Power	Hybrid cable MN: HB114-08U3M12-050F 3x 8 AWG power pairs, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 50 ft	50 ft
	MN: HB114-08U3M12-075F	75 ft
	MN: HB114-08U3M12-100F	100 ft
	MN: HB114-08U3M12-125F	125 ft
	MN: HB114-08U3M12-150F	150 ft
	MN: HB114-08U3M12-175F	175 ft
	MN: HB114-08U3M12-200F	200 ft
6 AWG Power	Hybrid cable MN: HB114-13U3M12-225F 3x 6 AWG power pair, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 3/4 cable, 225 ft	225 ft
	MN: HB114-13U3M12-250F	250 ft
	MN: HB114-13U3M12-275F	275 ft
	MN: HB114-13U3M12-300F	300 ft
4 AWG Power	Hybrid cable MN: HB114-21U3M12-325F 3x 4 AWG power pair, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 325 ft	325 ft
	MN: HB114-21U3M12-350F	350 ft
	MN: HB114-21U3M12-375F	375 ft

RFS HYBRIFLEX JUMPER CABLE SCHEDULE

Fiber Only	Hybrid Jumper cable MN: HBF012-M3-5F1 5 ft, 3x multi-mode fiber pairs, Outdoor & LC connectors, 1/2 cable	5 ft
	MN: HBF012-M3-10F1	10 ft
	MN: HBF012-M3-15F1	15 ft
	MN: HBF012-M3-20F1	20 ft
	MN: HBF012-M3-25F1	25 ft
	MN: HBF012-M3-30F1	30 ft
8 AWG Power	Hybrid Jumper cable MN: HBF058-08U1M3-5F1 5 ft, 1x 8 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 5/8 cable	5 ft
	MN: HBF058-08U1M3-10F1	10 ft
	MN: HBF058-08U1M3-15F1	15 ft
	MN: HBF058-08U1M3-20F1	20 ft
	MN: HBF058-08U1M3-25F1	25 ft
	MN: HBF058-08U1M3-30F1	30 ft
6 AWG Power	Hybrid Jumper cable MN: HBF058-13U1M3-5F1 5 ft, 1x 6 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 5/8 cable	5 ft
	MN: HBF058-13U1M3-10F1	10 ft
	MN: HBF058-13U1M3-15F1	15 ft
	MN: HBF058-13U1M3-20F1	20 ft
	MN: HBF058-13U1M3-25F1	25 ft
	MN: HBF058-13U1M3-30F1	30 ft
4 AWG Power	Hybrid Jumper cable MN: HBF078-21U1M3-5F1 5 ft, 1x 4 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 7/8 cable	5 ft
	MN: HBF078-21U1M3-10F1	10 ft
	MN: HBF078-21U1M3-15F1	15 ft
	MN: HBF078-21U1M3-20F1	20 ft
	MN: HBF078-21U1M3-25F1	25 ft
	MN: HBF078-21U1M3-30F1	30 ft

NOTE:
SPRINT CM TO CONFIRM HYBRID OR FIBER RISER CABLE
AND HYBRID OR FIBER JUMPER CABLE MODEL NUMBERS IF
HYBRID CABLES ARE REQUIRED BEFORE PREPARING BOM.

NOTE:
APPROXIMATE LENGTH OF RISER CABLE IS ±180'. THIS
INCLUDES LENGTH AT GRADE, VERTICAL RISE AS WELL AS
15% BUFFER. VERIFY PRIOR TO ORDERING.



FIBER JUNCTION BOX PENETRATION

NO SCALE

2

2.5 CABLE CROSS SECTION DATA

NO SCALE

1

DETAIL NOT USED

NO SCALE

3

PLANS PREPARED FOR:

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

1033 Watervliet Shaker Rd
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DESCRIPTION	DATE	BY	REV
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ISSUED FOR REVIEW	5/30/14	AHS	A

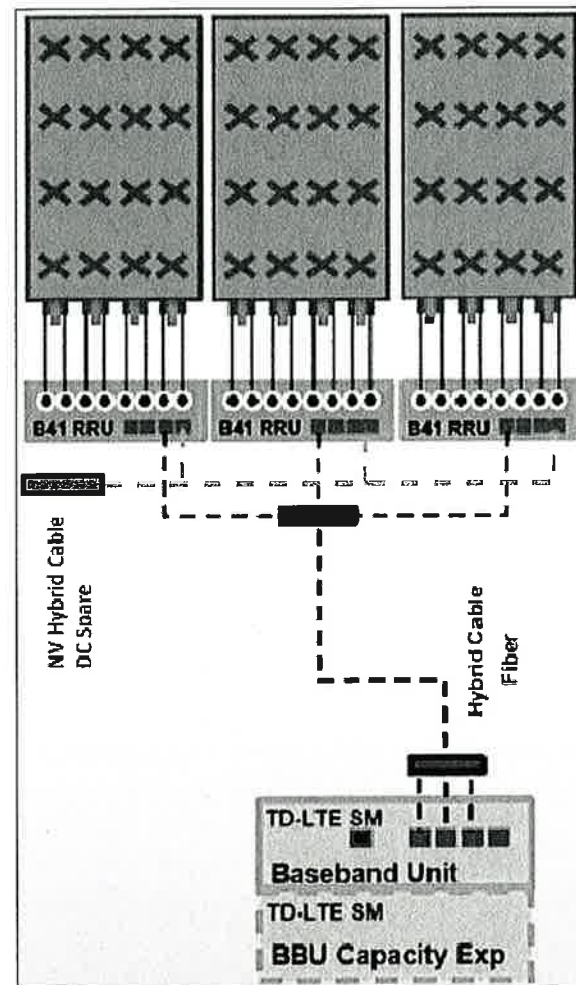
SITE NAME:
MIDDLETOWN CT 3

SITE CASCADE:
CT03XC070

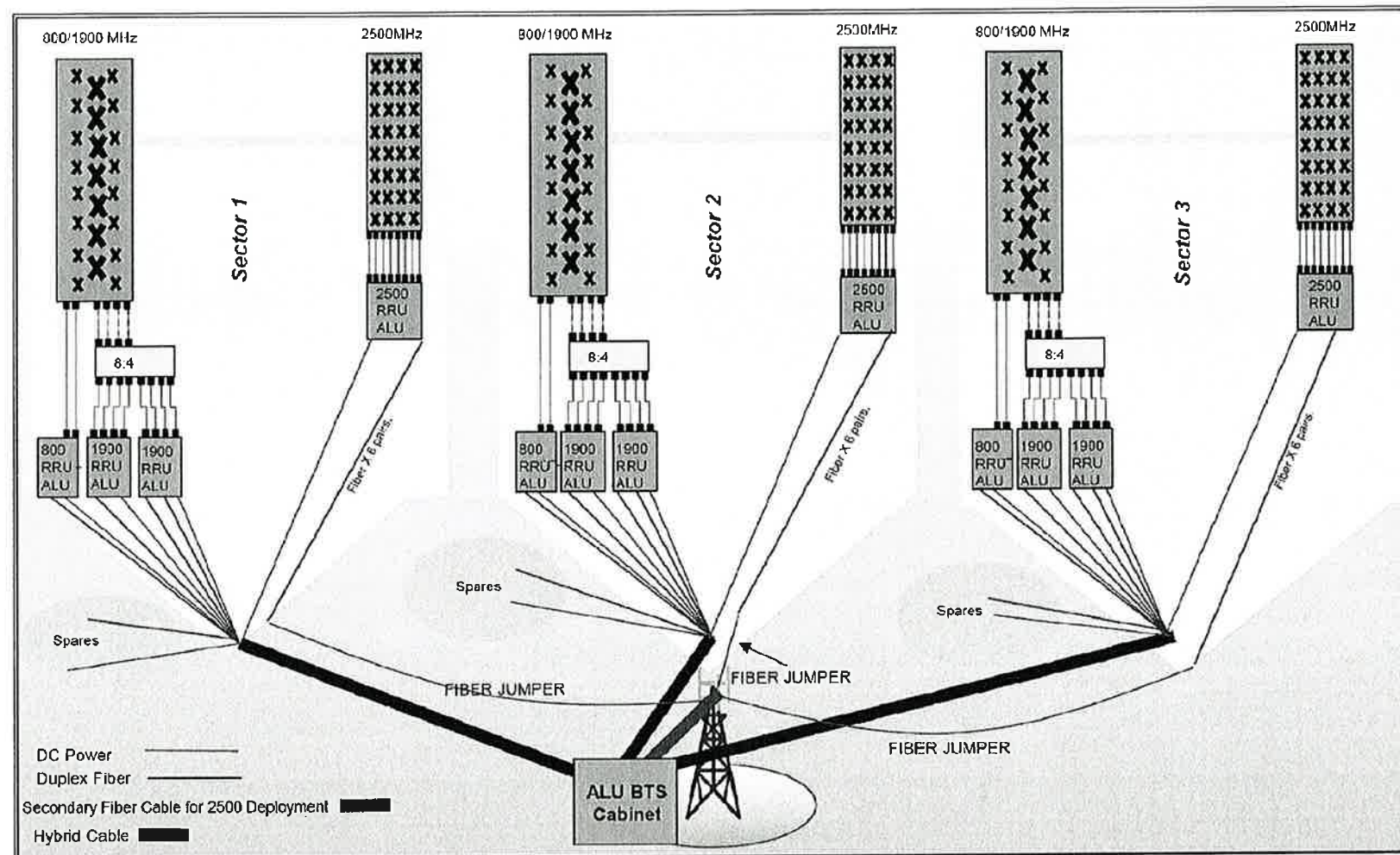
SITE ADDRESS:
**47 INWOOD ROAD
ROCKY HILL, CT 06067**

SHEET DESCRIPTION:
CIVIL DETAILS

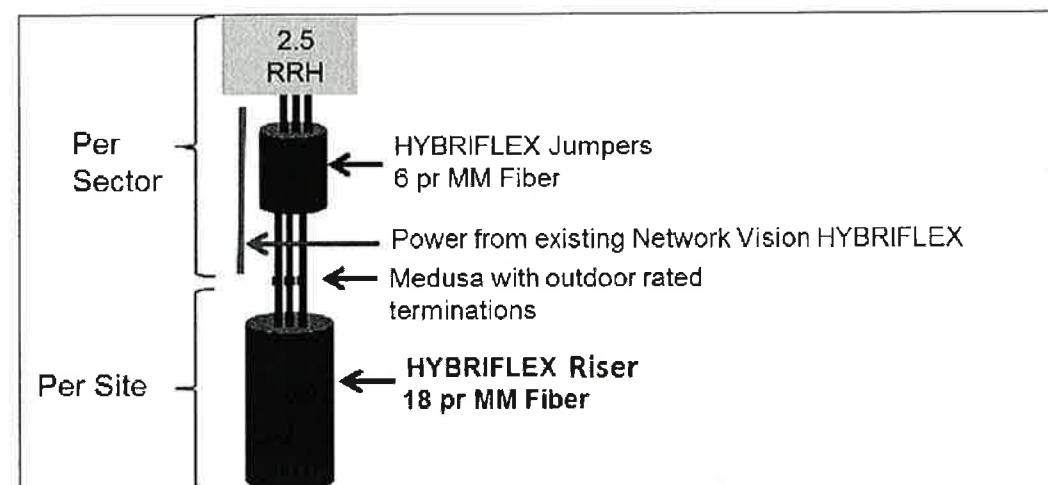
SHEET NUMBER:
A-6



ALU 2.5 ALU SCENARIO 1



RAN WIRING DIAGRAM



RF 2.5 ALU SCENARIO 1

PLUMBING DIAGRAM

NO SCALE

1

PLANS PREPARED FOR:

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER 340-000

MLA PARTNER:

10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

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FOR PERMIT	6/26/14	AJD	0
ISSUED FOR REVIEW	5/30/14	AHS	A

SITE NAME:
MIDDLETOWN CT 3

SITE CASCADE:
CT03XC070

SITE ADDRESS:
47 INWOOD ROAD
ROCKY HILL, CT 06067

SHEET DESCRIPTION:
PLUMBING DIAGRAM

SHEET NUMBER:
A-7

RFDS

Cascade Number CT03XC070
 Site Number 0
 Site Name Nextel Tower
 OEM ALU
 99 Market Name Northern Connecticut
 Cluster ID Northern Connecticut19
 Issue Date 03/07/2014
 Solution ID
 PID 25LTECT03XC070
 Revision 1
 Revision Date 03/07/2014
 Status Draft
 Needed Date
 RFDS Engineer
 Sprint RF Engineer Bill Hastings
 RF Engineer Phone
 RF Engineer Email Bill.M.Hastings@sprint.com
 Sprint RF Manager Jonathan Hull
 RF Manager Phone
 RF Manager Email Jonathan.B.Hull@sprint.com
 Project Description New 2.5G TDD LTE service at existing site. Add new antennas, RRH and RAN equipment.
 Process Instance ID 207143

Location

Latitude (decimal only)
 Longitude (decimal only)
 Address 47 Inwood Rd
 City Rocky Hill
 State CT
 Zip Code 6067
 County Hartford
 E911 Phase

Site Level Design - 2500 MHz

	Number of Sectors	Carrier Count when 2.5G is on air	Tx and Rx start and stop frequencies
LTE 2500	3	3	2496 MHz - 2690 MHz
New Growth Cabinet			

Make/Model None
 New Growth Cabinet Quantity 0
 New Top Hat Make/Model None
 New Top Hat Cabinet Quantity 0
 Incremental Current Draw needed by new Growth Cabinet or Top Hat (amps)
 Radio Configuration 8T8R
 Split Mode 0
 Radio Scenario 1
 Plumbing Diagram File Name
 RRH / RRU Model TD-RRH8x20-25
 RRH / RRU Qty 3
 Power Junction Cylinder Make/Model None
 Power Junction Cylinder Qty 0
 Optical Junction Cylinder Make/Model N/A
 Optical Junction Cylinder Qty 0
 Use existing 1900Mhz Power for RRH? false
 Use existing 1900Mhz fiber for RRH? false
 Hybrid/Fiber Cable Make/Model
 Hybrid/Fiber Qty 0
 Homerun Coax Cable Make/Model
 Homerun Coax Cable Qty 0
 Additional GPS antenna required? false

A&E Drawing Requirements

1) Calculate and call-out hybrid/fiber/coax main line cable route and lengths. 2) Calculate and call-out AISG cable route and lengths. 3) All antenna heights are to center of horizontal antenna. 4) Verify CL height with as-built drawings in Siteira or per Sprint site development. 5) No object is to be located 45 degrees left and right of front of antenna or 67.5 degrees from horizontal from top and bottom of antenna. If this is not possible, contact RF Engineer for further instruction. In addition, 2.5G antenna is not to be placed in front of any other antenna using the same rules as above. Reference Sprint Antenna Placement Guidelines in Siteira General Library for more details. This includes Sprint and non-Sprint antennas. If necessary, 2.5G antenna can be placed at far edge of horizontal antenna mount member for clear Line Of Site or even on another sector mount for clear Line Of Site. 6) Horizontally, 2.5G antenna must be at least 18" from 1900Mhz antenna, 30" from 800Mhz antenna and 30Mhz from dual band 1900Mhz and 800Mhz antenna. Reference Sprint Antenna

https://pvmbx844.ad.sprint.com/sbm/BizSolo/RFDS_GET/Report.jsp

6/26/2014

https://pvmbx844.ad.sprint.com/sbm/BizSolo/RFDS_GET/Report.jsp

6/26/2014


ABOVE RFDS AS PROVIDED TO INFINIGY. CONTRACTOR TO VERIFY CURRENT RFDS REVISION NUMBER PRIOR TO CONSTRUCTION.

PLANS PREPARED FOR:

 6580 Sprint Parkway
 Overland Park, Kansas 66251

PLANS PREPARED BY:

 1033 Watervliet Shaker Rd
 Albany, NY 12205
 Office # (518) 690-0790
 Fax # (518) 690-0793
 JOB NUMBER 340-000

MLA PARTNER:

 10 PRESIDENTIAL WAY
 WOBURN, MA 01801

ENGINEERING LICENSE:


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REVISIONS:

DESCRIPTION	DATE	BY	REV

FOR PERMIT 6/26/14 AJD 0
 ISSUED FOR REVIEW 5/30/14 AHS A

SITE NAME:
MIDDLETOWN CT 3

SITE CASCADE:
CT03XC070

SITE ADDRESS:
**47 INWOOD ROAD
 ROCKY HILL, CT 06067**

SHEET DESCRIPTION:
RFDS

SHEET NUMBER:
A-8

Placement Guidelines in Siterra General Library for vertical spacing requirements.

1) AISG tests to verify operation is to be performed AFTER final installation of antennas and AISG cables have been connected. Verify operation of ALL existing Sprint AISG equipment including 800Mhz, 1.9Ghz and 2.5G. Test include complete downtilt, azimuth (if applicable) and beamwidth swings (if applicable). Document AISG test results in Coax Sweep Test spreadsheet. 3) General Contractor must insure that no object is located in front of antenna. This means no object is to be located 45 degrees left and right of front of antenna or 67.5 degrees from horizontal from top and bottom of antenna. If this is not possible, contact RF Engineer for further instruction. In addition, 2.5G antenna is not to be placed in front of any other antenna using the same rules as above. This includes Sprint and non-Sprint antennas. 4) General Contract is required to use a digital alignment tool to set azimuth, roll and downtilt. Azimuth accuracy is to be within 3 degrees. Downtilt and roll (left to right tilt) is to be within 0.1 degrees. If for some reason this accuracy cannot be achieved, update as-built drawings and email Sprint RF Engineer with as-built settings. Use 3Z RF alignment tool or equivalent tool.

<http://www.3ztelecom.com/antenna-alignment-tool/>

Site development - if no centerline height and azimuth exists in this RFDS, it means final RFDS has not been completed. If site is already leased and zoned, turn site on per lease. If not yet leased or zoned or if you can easily change the RF configuration, lease and zone, using on-air 1900 CL height and azimuth, mDT=0, eDT=-2 and use antenna called out in this RFDS for leasing and zoning. At some point, the final RFDS will come through. If different than your current configuration, you need to make a judgment call. If you can change the configuration without much delay in turning the site on, then make the change. If not, the build the site with existing configuration. Later one, you will receive funding to release, zone and modify site per final RFDS.

Special Construction Requirements

Additional RF Notes

Final/New Configuration	Sector and Antenna - 2500 MHz		
	Sector 1	Sector 2	Sector 3
Azimuth	0	120	260
Antenna Center Line (ft)			
Antenna Manufacturer	RFS	RFS	RFS
Antenna Model	APXVTM14-ALU-I20	APXVTM14-ALU-I20	APXVTM14-ALU-I20
Antenna Qty	1	1	1
Antenna Mechanical Downtilt	0	0	0
Antenna Electrical Downtilt	-2	-2	-2
Combined with Upper Splitter Make/Model			
Upper Splitter Qty	0	0	0
Top Jumper Make/Model	Coax Jumper. Mfg TBD. Coax Jumper. Mfg TBD. Coax Jumper. Mfg TBD.		
Top Jumper Quantity (individual jumpers, not bunch)	9	9	9
Bottom Jumper Make/Model			
Bottom Jumper Qty	0	0	0
Surge Arrestor			
RF Filter Make/Model	N/A	N/A	N/A
RF Filter Qty	0	0	0

https://pvmxb844.ad.sprint.com/sbm/BizSolo/RFDS_GET/Report.jsp

6/26/2014

https://pvmxb844.ad.sprint.com/sbm/BizSolo/RFDS_GET/Report.jsp

6/26/2014

ABOVE RFDS AS PROVIDED TO INFINIGY. CONTRACTOR TO VERIFY CURRENT RFDS REVISION NUMBER PRIOR TO CONSTRUCTION.

PLANS PREPARED FOR:



6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:



1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 890-0790
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JOB NUMBER 340-000

MLA PARTNER:



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WOBURN, MA 01801

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ISSUED FOR REVIEW	5/30/14	AHS	A

SITE NAME:
MIDDLETOWN CT 3

SITE CASCADE:
CT03XC070

SITE ADDRESS:
47 INWOOD ROAD
ROCKY HILL, CT 06067

SHEET DESCRIPTION:
RFDS (CONT)

SHEET NUMBER:
A-9

PLANS PREPARED FOR:



PLANS PREPARED BY:



MLA PARTNER:



ENGINEERING LICENSE:



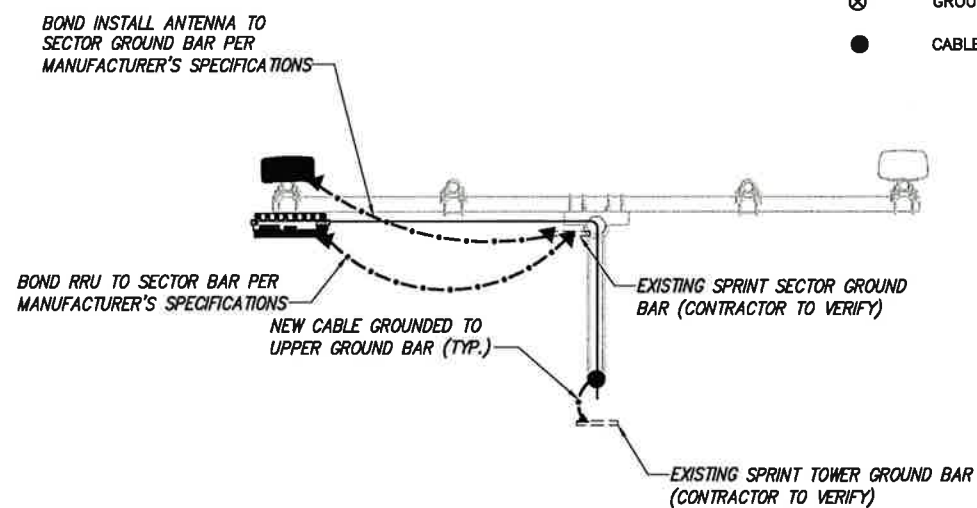
PLAN NOT USED

NO SCALE

1

LEGEND:

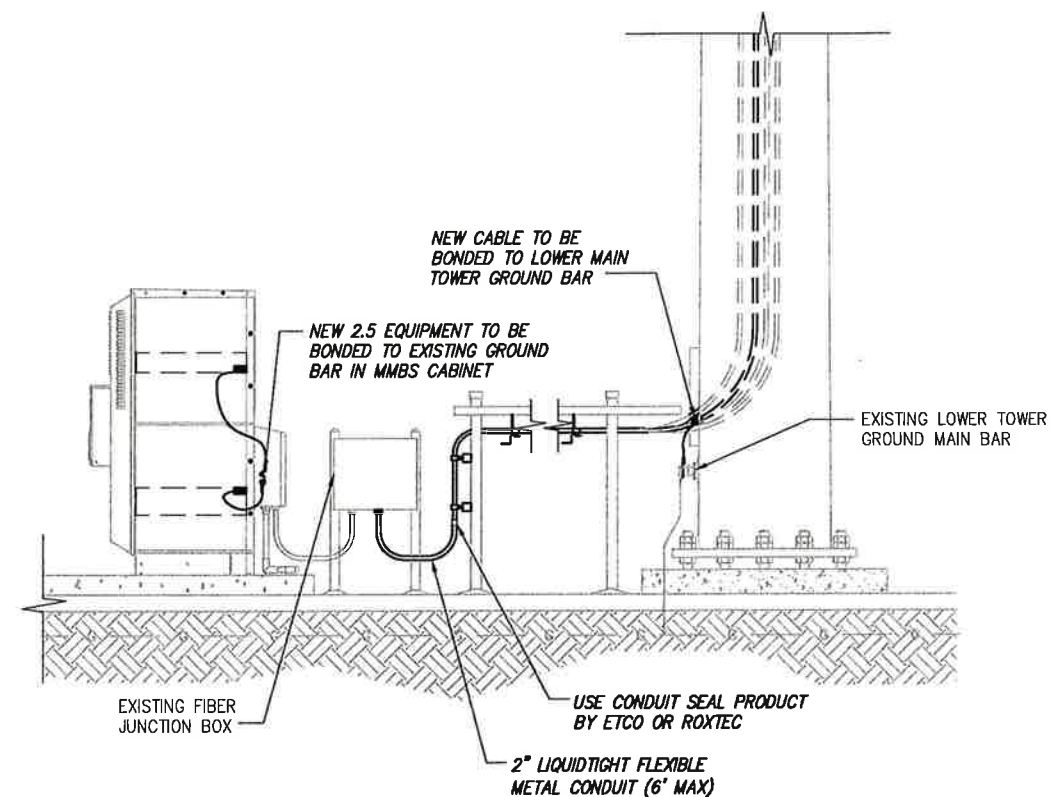
- G — EXISTING GROUND RING
- CADWELD CONNECTION (EXOTHERMIC WELD)
- ▲ MECHANICAL CONNECTION
- ⊗ GROUND ROD
- CABLE GROUND KIT



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE

2



TYPICAL EQUIPMENT GROUNDING PLAN (ELEVATION)

NO SCALE

3

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ISSUED FOR REVIEW	5/30/14	AHS	A

SITE NAME:

MIDDLETOWN CT 3

SITE CASCADE:

CT03XC070

SITE ADDRESS:

47 INWOOD ROAD
ROCKY HILL, CT 06067

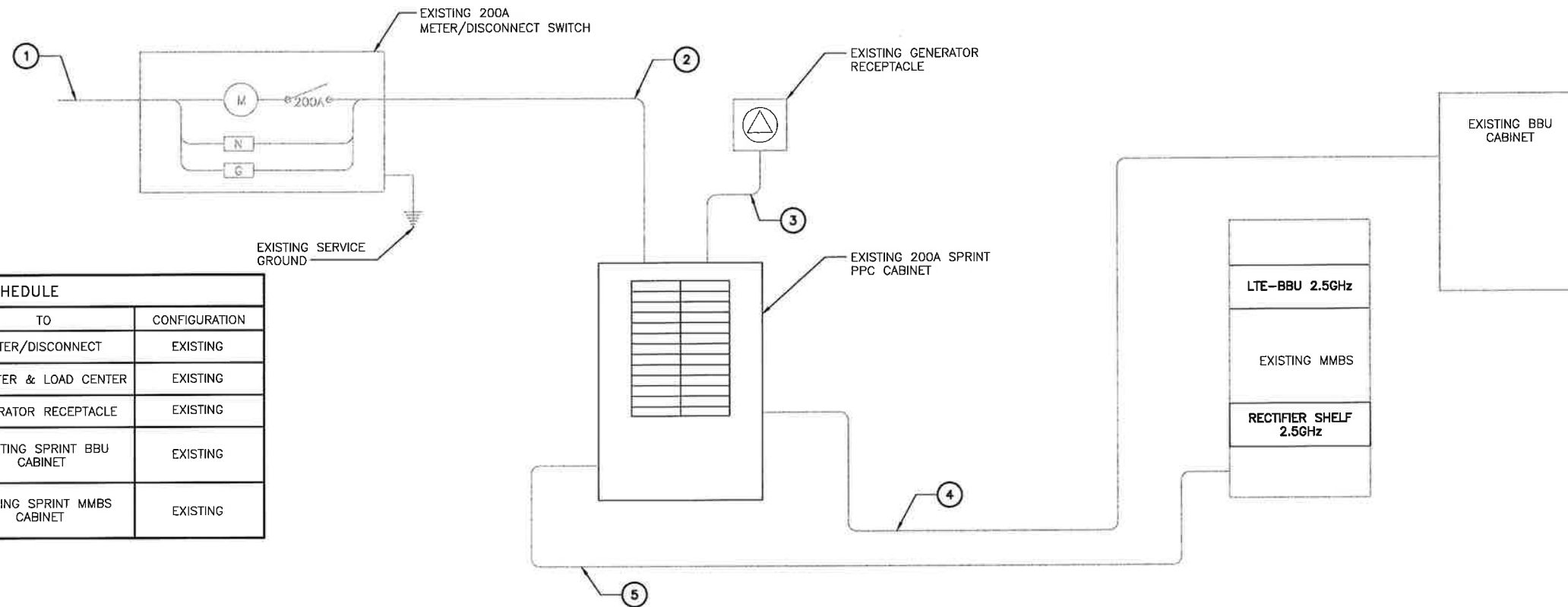
SHEET DESCRIPTION:

ELECTRICAL &
GROUNDING PLAN

SHEET NUMBER:

E-1

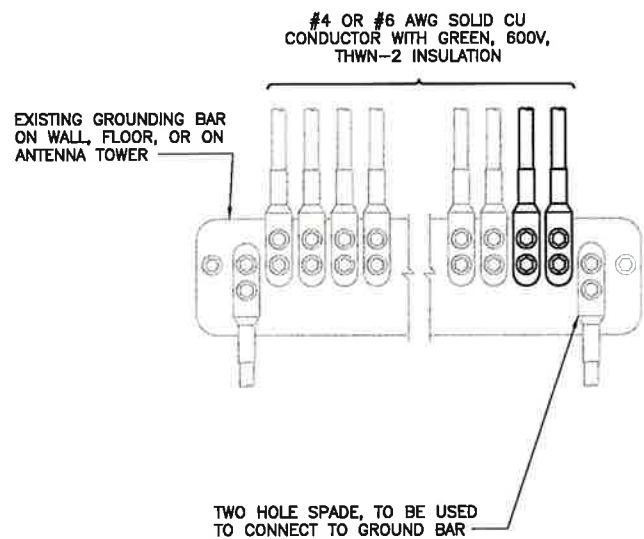
NOTES
 CG SHALL REFERENCE ALL SPECS FOR "CONNECTING THE POWER SUPPLY" OF THE NEW INSTALLATION DOCUMENTS, FOR ALL CONNECTION SPECIFICATIONS.



CIRCUIT SCHEDULE			
NO	FROM	TO	CONFIGURATION
①	UTILITY SOURCE	METER/DISCONNECT	EXISTING
②	METER/DISCONNECT	TRANSFER & LOAD CENTER	EXISTING
③	TRANSFER & LOAD CENTER	GENERATOR RECEPTACLE	EXISTING
④	TRANSFER & LOAD CENTER	EXISTING SPRINT BBU CABINET	EXISTING
⑤	TRANSFER & LOAD CENTER	EXISTING SPRINT MMBS CABINET	EXISTING

ELECTRICAL ONE-LINE DIAGRAM

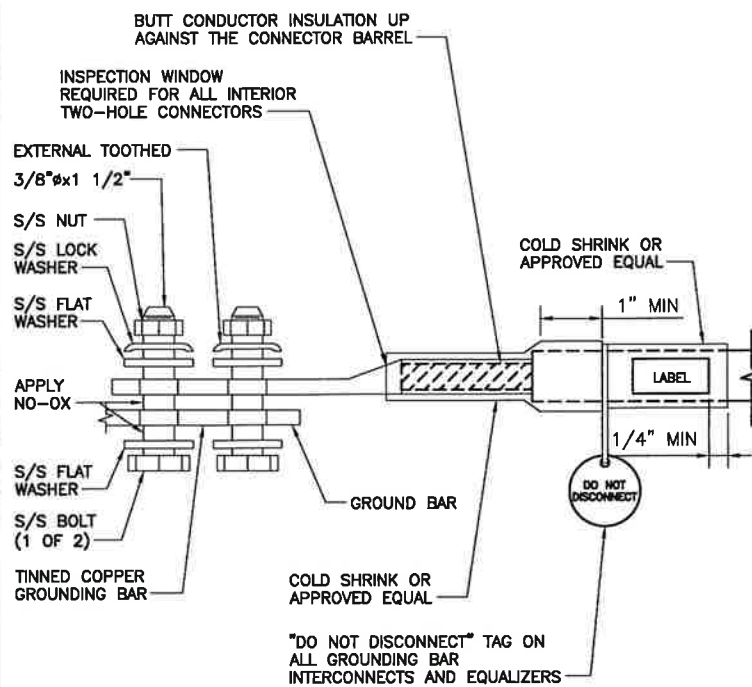
NO SCALE 1



NOTES
 1. APPLY NO-OX TO LUG AND BAR CONTACT SURFACE. DO NOT COAT INLINE LUG.
 2. IF STOLEN GROUND BARS ARE ENCOUNTERED, CONTACT SPRINT CM FOR REPLACEMENT THREADED ROD KIT.

INSTALLATION OF GROUNDING CONDUCTOR TO GROUNDING BAR

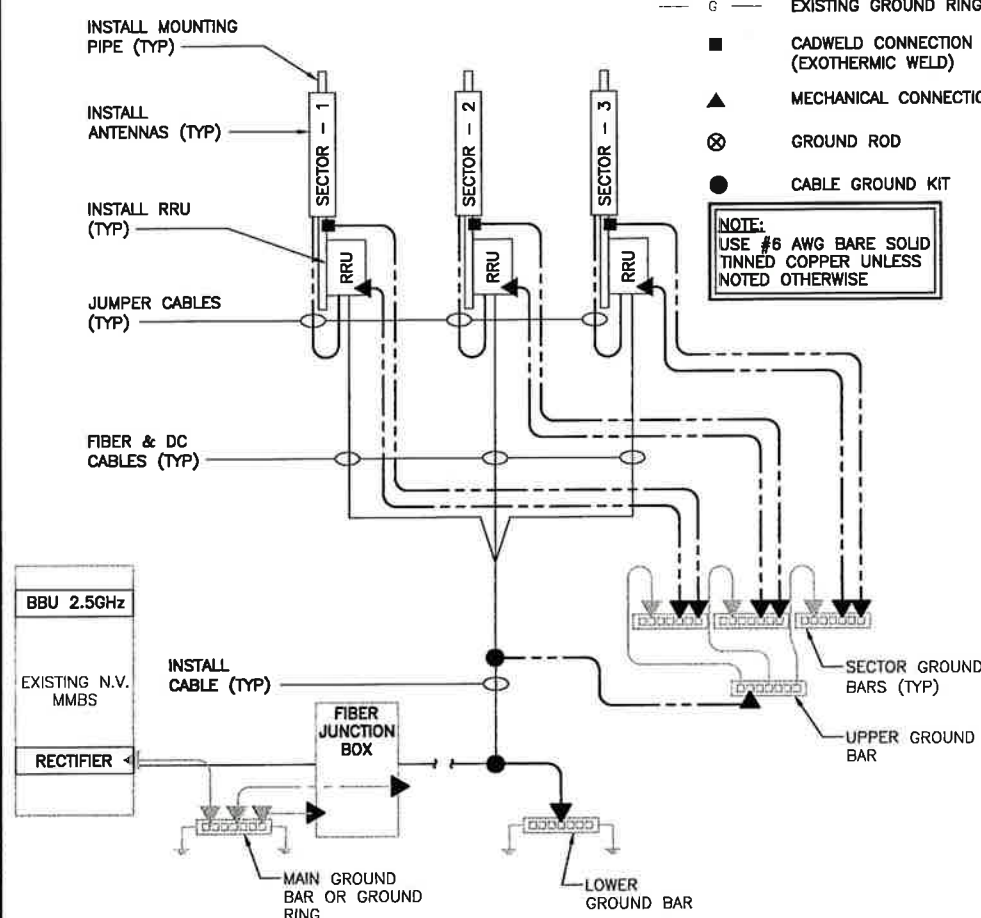
NO SCALE 2



"DO NOT DISCONNECT" TAG ON ALL GROUNDING BAR INTERCONNECTS AND EQUALIZERS

TWO HOLE LUG

NO SCALE 3



GROUNDING RISER DIAGRAM

NO SCALE 4

PLANS PREPARED FOR:
Sprint
 6580 Sprint Parkway
 Overland Park, Kansas 66251

PLANS PREPARED BY:
INFINIGY Design. Build. Deliver.
 1033 Watervliet Shaker Rd
 Albany, NY 12205
 Office # (518) 690-0790
 Fax # (518) 690-0793
 JOB NUMBER 340-000

MLA PARTNER:
AMERICAN TOWER CORPORATION
 10 PRESIDENTIAL WAY
 WOBURN, MA 01801

ENGINEERING LICENSE:

 JOHN S. STEVENS
 No. 24705
 LICENSED PROFESSIONAL ENGINEER

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REVISIONS:	DESCRIPTION	DATE	BY	REV
FOR PERMIT		6/26/14	AJD	0
ISSUED FOR REVIEW		5/30/14	AHS	A

SITE NAME:
MIDDLETOWN CT 3

SITE CASCADE:
CT03XC070

SITE ADDRESS:
 47 INWOOD ROAD
 ROCKY HILL, CT 06067

SHEET DESCRIPTION:
ELECTRICAL & GROUNDING DETAILS

SHEET NUMBER:
E-2



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 185 ft Monopole
ATC Site Name : Middletown CT 3, CT
ATC Site Number : 302537
Engineering Number : 58882521
Proposed Carrier : Sprint Nextel
Carrier Site Name : Middletown CT 3
Carrier Site Number : CT03XC070
Site Location : 47 Inwood Road
Rocky Hill, CT 06067-3453
41.638586,-72.679289
County : Hartford
Date : May 30, 2014
Max Usage : 79%
Result : Pass

Zachary Polaha



Jun 2 2014 1:21 PM



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



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 185 ft monopole to reflect the change in loading by Sprint Nextel.

Supporting Documents

Tower Drawings	Valmont Drawing #DC1646Z, dated November 2, 1993
Foundation Drawing	H. Edmund Bergeron Civil Engineers Project #93127, dated December 21, 1993
Geotechnical Report	Materials Testing Inc File #99 GT 93, dated December 2, 1993
Modifications	ATC Project #51430332, dated December 12, 2012

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:	95 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 & 2011 CT Amendment
Structure Class:	II
Exposure Category:	B
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 ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
182.0	184.0	9	48" x 12" Panels	Platform w/ Handrails	(12) 1 5/8" Coax	Sprint Nextel
		3	72" x 12" Panels			
169.0	171.0	6	Ericsson RRUS 11	Low Profile Platform	(2) 0.78" 8 AWG 6 (12) 1 5/8" Coax (1) 0.39" Cable (1) 3" Conduit	AT&T Mobility
		6	Allgon 7770.00			
		3	KMW AM-X-CD-16-65-00T-RET			
	170.0	12	Powerwave LGP21401			
		1	Raycap DC6-48-60-18-8F			
138.0	140.0	3	Alcatel-Lucent 800MHz 2X50W RRH w/ Filter	Platform w/ Handrails	(3) 1 1/4" Hybriflex	Sprint Nextel
		3	Alcatel-Lucent 4X40W RRH			
		3	RFS APXVSP18-C-A20			

Equipment to be Removed

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
140.0	140.0	6	Allgon 7184 /M1900-90-16.5I	-	(6) 1 5/8" Coax	Sprint Nextel

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
138.0	140.0	3	Alcatel-Lucent TD-RRH8x20	Platform w/ Handrails	(1) 1 1/4" Hybriflex	Sprint Nextel
		3	RFS APXVTM14-C-I20			

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	58%	Pass
Shaft	79%	Pass
Base Plate	37%	Pass
Reinforcement	65%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	3,821.4	5,158.9	4,064.2	79%
Shear (Kips)	32.1	43.4	34.7	80%

* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

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) (°)
138.0	1.634	1.545

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



Standard Conditions

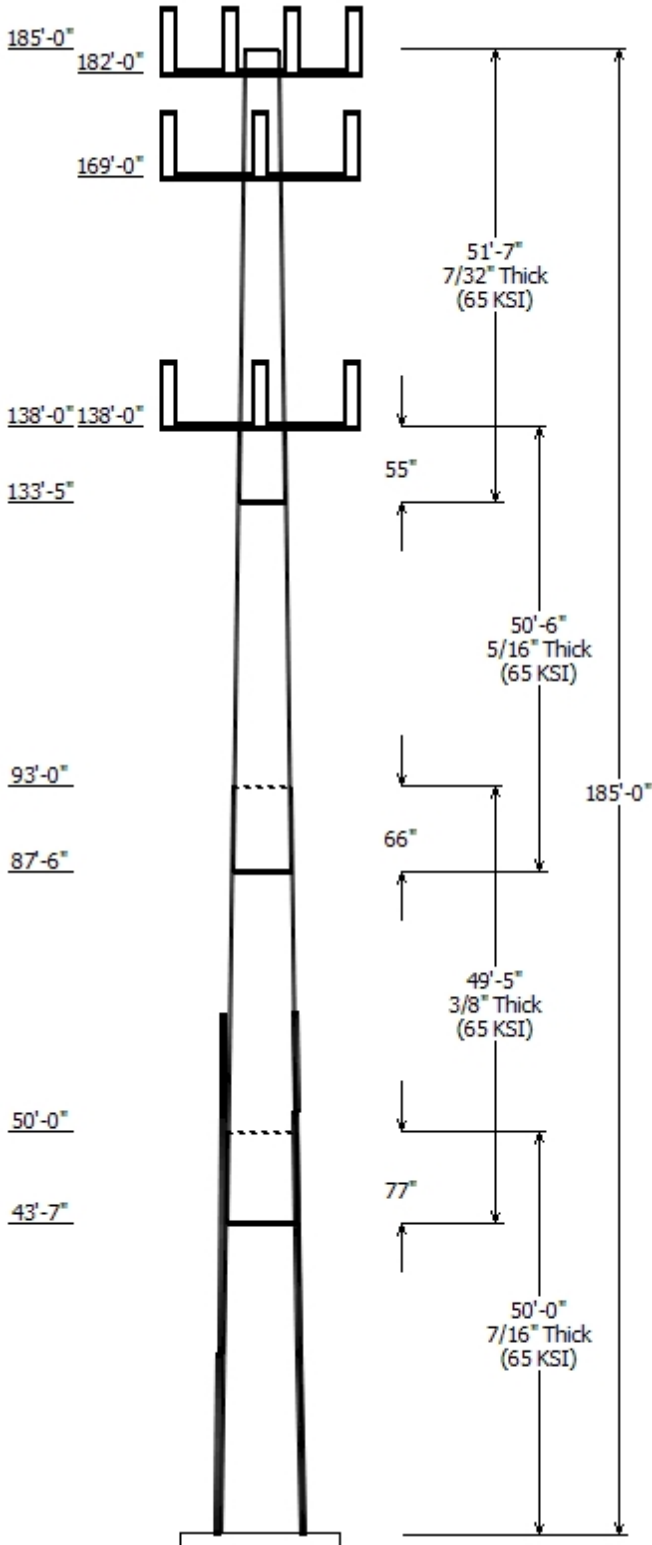
All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- 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.



Job Information	
Pole :	302537
Code :	ANSI/TIA-222 Rev G
Description :	185 ft Valmont pole - Model verified 5/30/12
Client :	Sprint Nextel
Struct Class :	II
Location :	Middletown CT 3, CT
Shape :	12 Sides
Exposure :	B
Height :	185.00 (ft)
Topo :	1
Base Elev (ft):	0.00
Taper:	0.18801(in/ft)

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap		Steel Grade (ksi)
		Top	Bottom			Length (in)	Taper (in/ft)	
1	50.000	42.59	52.00	0.438		0.000	0.188014	65
2	49.417	35.26	44.55	0.375	Slip Joint	77.000	0.188014	65
3	50.500	27.42	36.92	0.313	Slip Joint	66.000	0.188014	65
4	51.583	19.03	28.72	0.219	Slip Joint	55.000	0.188014	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
182.000	182.000	1	Flat Platform w/ Handrails	
182.000	184.000	3	72" x 12" Panels	
182.000	184.000	9	48" x 12" Panels	
169.000	171.000	6	Ericsson RRUS 11	
169.000	170.000	1	Raycap DC6-48-60-18-8F	
169.000	171.000	3	KMW AM-X-CD-16-65-00T-RET	
169.000	170.000	12	Powerwave LGP21401	
169.000	171.000	6	Allgon 7770.00	
169.000	169.000	1	Round Low Profile Platform	
138.000	140.000	3	RFS APXVTM14-C-I20	
138.000	140.000	3	Alcatel-Lucent TD-RRH8x20	
138.000	140.000	3	Alcatel-Lucent 4X40W RRH	
138.000	140.000	3	Alcatel-Lucent 800 MHz 2X50W	
138.000	140.000	3	RFS APXVSP18-C-A20	
138.000	138.000	1	Flat Platform w/ Handrails	

Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
73.620	169.0	1 5/8" Coax	Yes
0.000	182.0	1 5/8" Coax	No
0.000	73.620	#20 Dywidag	Yes
0.000	73.620	1 5/8" Coax	Yes
0.000	138.0	1 1/4" Hybriflex	Yes
0.000	138.0	1 1/4" Hybriflex	Yes
0.000	169.0	0.39" Cable	Yes
0.000	169.0	0.78" 8 AWG 6	Yes
0.000	169.0	3" Conduit	Yes

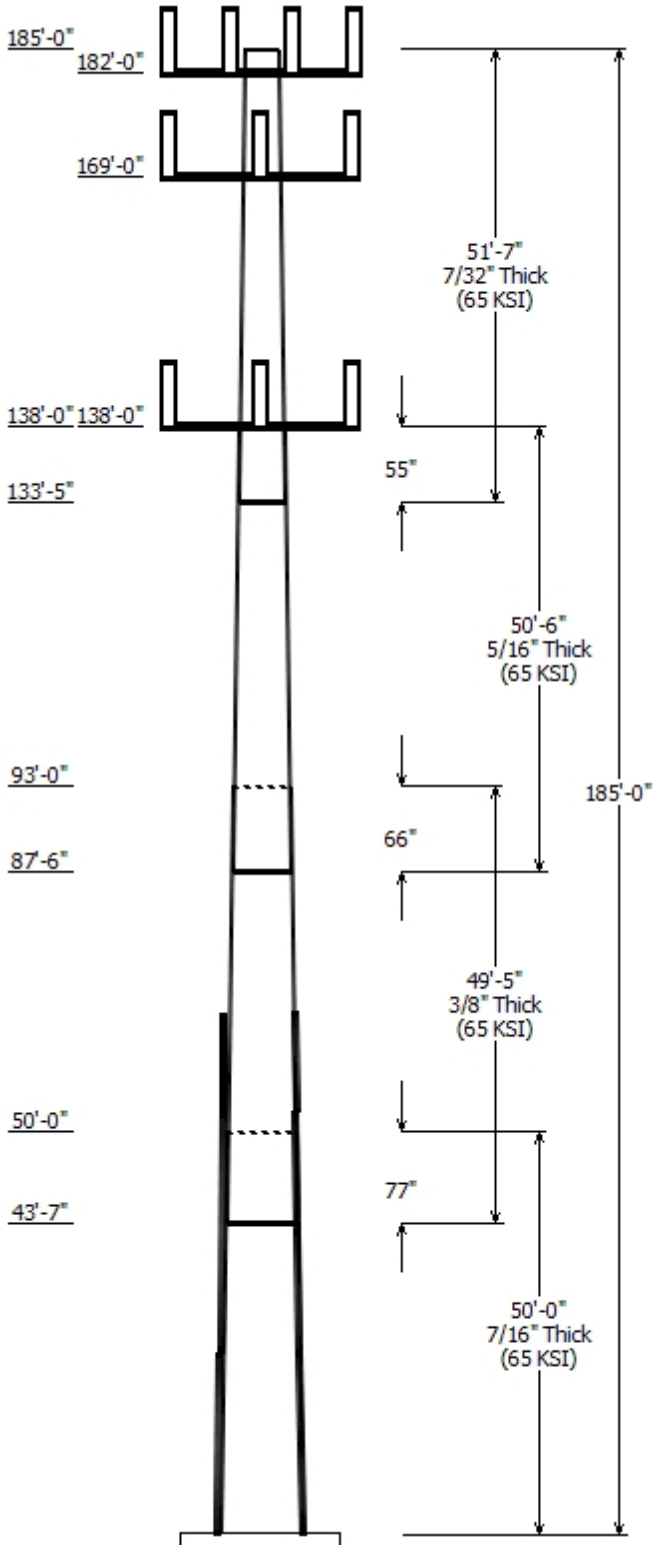
Load Cases	
1.2D + 1.6W	95.00 mph with No Ice
0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice
1.0D + 1.0W	60.00 mph Serviceability

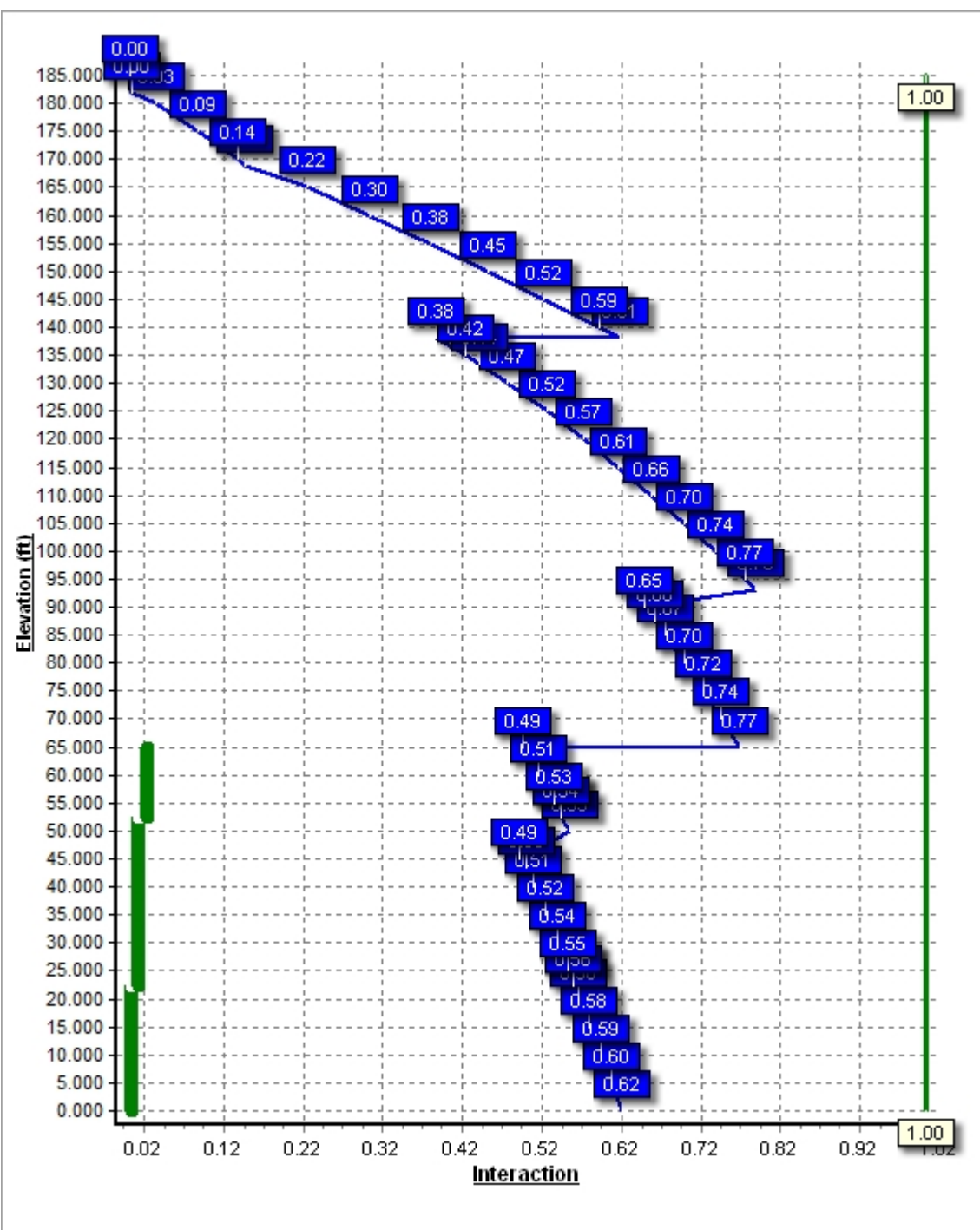
Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)

1.2D + 1.6W	4064.17	34.66	53.45
0.9D + 1.6W	3787.54	31.48	41.17
1.2D + 1.0Di + 1.0Wi	1021.60	7.63	101.12
1.0D + 1.0W	963.96	7.94	45.30

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000

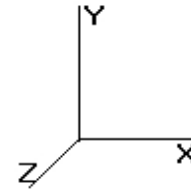




Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Bottom						Top						
							Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-12	50.000	0.4375	65		0.00	11,232	52.00	0.00	72.64	24650.3	29.70	118.86	42.59	50.00	59.40	13476.5	23.95	97.37	0.188014
2-12	49.417	0.3750	65	Slip	77.00	8,028	44.55	43.58	53.35	13291.4	29.69	118.82	35.26	93.00	42.13	6545.8	23.05	94.04	0.188014
3-12	50.500	0.3125	65	Slip	66.00	5,510	36.92	87.50	36.84	6302.8	29.52	118.16	27.42	138.00	27.29	2560.9	21.38	87.77	0.188014
4-12	51.583	0.2188	65	Slip	55.00	2,925	28.72	133.42	20.08	2083.3	33.05	131.33	19.03	185.00	13.25	598.5	21.17	86.99	0.188014
Shaft Weight						27,695													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice			Ice			Distance From Face (ft)	Vert Ecc (ft)
			Weight (lb)	EPAA (sf)	Orientation Factor	Weight (lb)	EPAA (sf)	Orientation Factor		
182.00	48" x 12" Panels	9	30.00	5.070	0.67	225.54	6.440	0.67	0.000	2.000
182.00	72" x 12" Panels	3	45.00	8.130	0.67	324.48	9.938	0.50	0.000	2.000
182.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	3,935.85	70.967	1.00	0.000	0.000
169.00	Allgon 7770.00	6	35.00	5.510	0.77	232.01	6.965	0.77	0.000	2.000
169.00	Ericsson RRUS 11	6	55.00	2.520	0.67	172.83	3.420	0.67	0.000	2.000
169.00	KMW AM-X-CD-16-65-00T-	3	48.50	8.020	0.79	321.51	9.807	0.79	0.000	2.000
169.00	Powerwave LGP21401	12	14.10	1.100	0.50	65.91	1.752	0.50	0.000	1.000
169.00	Raycap DC6-48-60-18-8F	1	20.00	1.110	1.00	138.15	2.767	1.00	0.000	1.000
169.00	Round Low Profile Platform	1	1500.00	21.700	1.00	2,376.01	47.659	1.00	0.000	0.000
138.00	Alcatel-Lucent 4X40W RRH	3	88.00	3.260	0.67	264.24	3.408	0.67	0.000	2.000
138.00	Alcatel-Lucent 800 MHz	3	64.00	2.060	0.67	192.85	2.875	0.67	0.000	2.000
138.00	Alcatel-Lucent TD-RRH8x20	3	66.10	3.690	0.67	181.60	5.740	0.67	0.000	2.000
138.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	3,883.01	70.187	1.00	0.000	0.000
138.00	RFS APXVSP18-C-A20	3	57.00	8.020	0.83	337.68	9.768	0.83	0.000	2.000
138.00	RFS APXVTM14-C-I20	3	56.20	6.340	0.78	250.01	9.225	0.78	0.000	2.000
Totals		58	7773.60			21,199.82			Number of Loadings : 15	

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
0.00	182.00	(12) 1 5/8" Coax	0.00	N
0.00	169.00	(1) 0.39" Cable	0.00	Y
0.00	169.00	(2) 0.78" 8 AWG 6	0.00	Y
0.00	169.00	(1) 3" Conduit	0.00	Y
73.62	169.00	(12) 1 5/8" Coax	5.94	Y
0.00	138.00	(3) 1 1/4" Hybriflex	0.00	Y
0.00	138.00	(1) 1 1/4" Hybriflex	0.00	Y
0.00	73.62	(4) #20 Dywidag	8.00	Y
0.00	73.62	(12) 1 5/8" Coax	0.00	Y

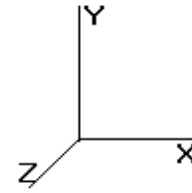
Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	— Intermediate Connections —		Connectors	Continuation?	
			Description			Spacing (in)	Len (in)			
0.00	22.50	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	No
22.50	52.50	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes
52.50	65.00	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes

Pole : 302537
Location : Middletown CT 3, CT
Height : 185.0 (ft)
Base Dia : 52.00 (in)
Top Dia : 19.03 (in)
Shape : 12 Sides
Taper : 0.188014 (in/ft)

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

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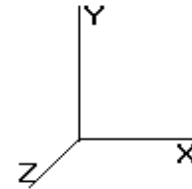


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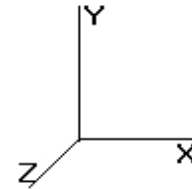
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Segment Properties (Max Len : 5 ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	S (in3)	Weight (lb)	Additional Reinforcing		
											Area (in^2)	Ix (in^4)	Weight (lb)
0.00		0.4375	52.000	72.639	24,650.3	29.70	118.86	72.3	915.8	0.0	19.64	8,518	0.0
5.00		0.4375	51.060	71.314	23,326.5	29.13	116.71	72.9	882.6	1,224.6	19.64	8,249	334.0
10.00		0.4375	50.120	69.990	22,050.9	28.55	114.56	73.6	849.9	1,202.1	19.64	7,983	334.0
15.00		0.4375	49.180	68.666	20,822.7	27.98	112.41	74.2	817.9	1,179.5	19.64	7,723	334.0
20.00		0.4375	48.240	67.341	19,641.0	27.40	110.26	74.8	786.6	1,157.0	19.64	7,466	334.0
22.50	Reinf. Top Reinf	0.4375	47.770	66.679	19,067.3	27.11	109.19	75.1	771.1	570.1	19.64	7,339	167.0
25.00		0.4375	47.300	66.017	18,504.9	26.83	108.11	75.5	755.8	564.4	19.64	7,214	167.0
30.00		0.4375	46.360	64.693	17,413.5	26.25	105.96	76.1	725.6	1,111.9	19.64	6,966	334.0
35.00		0.4375	45.420	63.368	16,365.8	25.67	103.82	76.7	696.1	1,089.4	19.64	6,722	334.0
40.00		0.4375	44.479	62.044	15,361.0	25.10	101.67	77.3	667.2	1,066.9	19.64	6,483	334.0
43.58	Bot - Section 2	0.4375	43.806	61.095	14,666.8	24.69	100.13	77.8	646.8	750.7	19.64	6,314	239.4
45.00		0.4375	43.539	60.720	14,398.2	24.52	99.52	78.0	638.9	550.0	19.64	6,435	94.6
50.00	Top - Section 1	0.3750	43.349	51.891	12,232.1	28.83	115.60	73.3	545.1	1,914.3	19.64	6,201	334.0
52.50	Reinf. Top Reinf	0.3750	42.879	51.324	11,835.1	28.49	114.34	73.6	533.2	439.0	19.64	6,086	167.0
55.00		0.3750	42.409	50.756	11,446.8	28.16	113.09	74.0	521.4	434.2	19.64	5,971	167.0
60.00		0.3750	41.469	49.621	10,695.8	27.49	110.58	74.7	498.3	853.9	19.64	5,746	334.0
65.00	Reinf. Top	0.3750	40.529	48.486	9,978.5	26.82	108.08	75.5	475.6	834.6	19.64	5,525	334.0
70.00		0.3750	39.589	47.351	9,293.9	26.14	105.57	76.2	453.5	815.3			
75.00		0.3750	38.649	46.216	8,641.4	25.47	103.06	76.9	431.9	796.0			
80.00		0.3750	37.709	45.081	8,020.2	24.80	100.56	77.7	410.9	776.7			
85.00		0.3750	36.769	43.946	7,429.5	24.13	98.05	78.4	390.3	757.3			
87.50	Bot - Section 3	0.3750	36.299	43.378	7,145.3	23.79	96.80	78.8	380.3	371.5			
90.00		0.3750	35.829	42.810	6,868.5	23.46	95.54	79.1	370.3	677.9			
93.00	Top - Section 2	0.3125	35.890	35.800	5,783.7	28.63	114.85	73.5	311.3	802.0			
95.00		0.3125	35.514	35.421	5,602.3	28.31	113.64	73.8	304.7	242.3			
100.0		0.3125	34.574	34.475	5,165.3	27.50	110.64	74.7	288.6	594.6			
105.0		0.3125	33.634	33.529	4,751.7	26.70	107.63	75.6	272.9	578.5			
110.0		0.3125	32.694	32.583	4,360.8	25.89	104.62	76.5	257.7	562.4			
115.0		0.3125	31.753	31.637	3,991.9	25.08	101.61	77.4	242.9	546.3			
120.0		0.3125	30.813	30.691	3,644.4	24.28	98.60	78.2	228.5	530.2			
125.0		0.3125	29.873	29.746	3,317.7	23.47	95.59	79.1	214.6	514.1			
130.0		0.3125	28.933	28.800	3,011.2	22.66	92.59	80.0	201.1	498.0			
133.4	Bot - Section 4	0.3125	28.291	28.153	2,812.9	22.11	90.53	80.6	192.1	331.1			
135.0		0.3125	27.993	27.854	2,724.1	21.86	89.58	80.9	188.0	258.4			
138.0		0.3125	27.429	27.286	2,560.9	21.38	87.77	81.4	180.4	482.3			
138.0	Top - Section 3	0.2188	27.867	19.474	1,900.1	31.99	127.39	69.8	131.7	0.1			
140.0		0.2188	27.491	19.210	1,823.6	31.53	125.67	70.3	128.2	131.6			
145.0		0.2188	26.551	18.547	1,641.5	30.38	121.37	71.6	119.4	321.2			
150.0		0.2188	25.610	17.885	1,471.9	29.23	117.08	72.8	111.0	309.9			
155.0		0.2188	24.670	17.223	1,314.4	28.08	112.78	74.1	102.9	298.7			
160.0		0.2188	23.730	16.561	1,168.5	26.92	108.48	75.4	95.1	287.4			
165.0		0.2188	22.790	15.899	1,033.9	25.77	104.18	76.6	87.6	276.1			
169.0		0.2188	22.038	15.369	933.9	24.85	100.75	77.6	81.9	212.8			
170.0		0.2188	21.850	15.237	910.0	24.62	99.89	77.9	80.5	52.1			
175.0		0.2188	20.910	14.574	796.4	23.47	95.59	79.1	73.6	253.6			
180.0		0.2188	19.970	13.912	692.8	22.32	91.29	80.4	67.0	242.3			
182.0		0.2188	19.594	13.647	653.9	21.86	89.57	80.9	64.5	93.8			
185.0		0.2188	19.030	13.250	598.5	21.17	86.99	81.6	60.8	137.3			
											27,694.6	4,342.0	

Pole : 302537
 Location : Middletown CT 3, CT
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Load Case: 1.2D + 1.6W	95.00 mph with No Ice	28 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

Shaft Segment Forces (Factored)

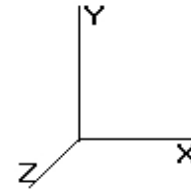
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	356.57	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	350.12	1.150	* 0.000	5.00	22.228	25.56	691.2	0.0	1,803.5
10.00		1.00	0.70	15.364	16.90	343.68	1.158	* 0.000	5.00	21.823	25.28	683.5	0.0	1,776.5
15.00		1.00	0.70	15.364	16.90	337.23	1.167	* 0.000	5.00	21.417	24.99	675.8	0.0	1,749.4
20.00		1.00	0.70	15.364	16.90	330.79	1.176	* 0.000	5.00	21.012	24.71	668.1	0.0	1,722.4
22.50	Reinf. Top Reinf Bottom	1.00	0.70	15.364	16.90	327.56	1.183	* 0.000	2.50	10.354	12.25	331.2	0.0	851.1
25.00		1.00	0.70	15.364	16.90	324.34	1.188	* 0.000	2.50	10.252	12.18	329.3	0.0	844.3
30.00		1.00	0.70	15.377	16.91	318.03	1.195	* 0.000	5.00	20.201	24.14	653.3	0.0	1,668.3
35.00		1.00	0.73	16.070	17.67	318.52	1.205	* 0.000	5.00	19.795	23.86	674.7	0.0	1,641.3
40.00		1.00	0.76	16.694	18.36	317.93	1.216	* 0.000	5.00	19.390	23.57	692.6	0.0	1,614.3
43.58	Bot - Section 2	1.00	0.77	17.109	18.82	316.98	1.225	* 0.000	3.58	13.646	16.72	503.4	0.0	1,140.2
45.00		1.00	0.78	17.266	18.99	316.49	1.231	* 0.000	1.42	5.429	6.68	203.1	0.0	754.6
50.00	Top - Section 1	1.00	0.81	17.793	19.57	314.35	1.238	* 0.000	5.00	18.902	23.41	733.0	0.0	2,631.2
52.50	Reinf. Top Reinf Bottom	1.00	0.82	18.043	19.84	318.63	1.238	* 0.000	2.50	9.299	11.51	365.5	0.0	693.8
55.00		1.00	0.83	18.285	20.11	317.24	1.244	* 0.000	2.50	9.198	11.44	368.1	0.0	688.0
60.00		1.00	0.85	18.745	20.61	314.09	1.253	* 0.000	5.00	18.091	22.66	747.7	0.0	1,358.7
65.00	Reinf. Top	1.00	0.87	19.179	21.09	310.50	1.265	* 0.000	5.00	17.686	22.38	755.4	0.0	1,335.5
70.00		1.00	0.89	19.589	21.54	306.53	1.279	* 0.000	5.00	17.280	22.10	761.8	0.0	978.3
75.00		1.00	0.91	19.979	21.97	302.21	1.250	* 0.000	5.00	16.875	21.10	742.0	0.0	955.2
80.00		1.00	0.92	20.351	22.38	297.59	1.151	* 0.000	5.00	16.469	18.95	678.9	0.0	932.0
85.00		1.00	0.94	20.706	22.77	292.70	1.162	* 0.000	5.00	16.064	18.67	680.4	0.0	908.8
87.50	Bot - Section 3	1.00	0.95	20.879	22.96	290.15	1.171	* 0.000	2.50	7.881	9.23	339.2	0.0	445.8
90.00		1.00	0.95	21.047	23.15	287.55	1.177	* 0.000	2.50	7.912	9.31	345.0	0.0	813.5
93.00	Top - Section 2	1.00	0.96	21.245	23.37	284.35	1.184	* 0.000	3.00	9.363	11.09	414.6	0.0	962.4
95.00		1.00	0.97	21.375	23.51	287.23	1.182	* 0.000	2.00	6.159	7.28	273.9	0.0	290.8
100.00		1.00	0.98	21.690	23.86	281.69	1.191	* 0.000	5.00	15.117	18.01	687.4	0.0	713.5
105.00		1.00	1.00	21.995	24.19	275.94	1.205	* 0.000	5.00	14.711	17.72	686.1	0.0	694.2
110.00		1.00	1.01	22.289	24.51	270.02	1.219	* 0.000	5.00	14.306	17.44	684.1	0.0	674.9
115.00		1.00	1.02	22.574	24.83	263.93	1.234	* 0.000	5.00	13.900	17.16	681.6	0.0	655.6
120.00		1.00	1.04	22.850	25.13	257.67	1.250	* 0.000	5.00	13.495	16.87	678.5	0.0	636.3
125.00		1.00	1.05	23.118	25.43	251.27	1.267	* 0.000	5.00	13.089	16.59	674.9	0.0	617.0
130.00		1.00	1.06	23.379	25.71	244.73	1.285	* 0.000	5.00	12.684	16.30	670.8	0.0	597.6
133.4	Bot - Section 4	1.00	1.07	23.553	25.90	240.19	1.200	* 0.000	3.42	8.435	10.12	419.6	0.0	397.3
135.00		1.00	1.07	23.632	25.99	238.06	1.200	* 0.000	1.58	3.903	4.68	194.8	0.0	310.1
138.0	Appertunance(s)	1.00	1.08	23.781	26.15	234.00	1.200	* 0.000	3.00	7.285	8.74	365.9	0.0	578.7
138.0	Top - Section 3	1.00	1.08	23.781	26.15	234.00	1.200	* 0.000	0.00	0.001	0.00	0.0	0.0	0.1
140.00		1.00	1.08	23.879	26.26	235.01	1.200	* 0.000	2.00	4.775	5.73	240.8	0.0	157.9
145.00		1.00	1.09	24.120	26.53	228.11	1.200	* 0.000	5.00	11.656	13.99	593.8	0.0	385.4
150.00		1.00	1.11	24.355	26.79	221.10	1.200	* 0.000	5.00	11.250	13.50	578.7	0.0	371.9
155.00		1.00	1.12	24.584	27.04	213.99	1.200	* 0.000	5.00	10.845	13.01	563.1	0.0	358.4
160.00		1.00	1.13	24.808	27.28	206.77	1.200	* 0.000	5.00	10.439	12.53	547.0	0.0	344.9
165.00		1.00	1.14	25.027	27.53	199.45	1.200	* 0.000	5.00	10.034	12.04	530.3	0.0	331.4
169.0	Appertunance(s)	1.00	1.14	25.199	27.71	193.53	1.200	* 0.000	4.00	7.735	9.28	411.7	0.0	255.4
170.00		1.00	1.15	25.241	27.76	192.04	1.000	0.000	1.00	1.893	1.89	84.1	0.0	62.5
175.00		1.00	1.16	25.451	27.99	184.54	1.000	0.000	5.00	9.223	9.22	413.1	0.0	304.3
180.00		1.00	1.16	25.657	28.22	176.96	1.000	0.000	5.00	8.817	8.82	398.1	0.0	290.8
182.0	Appertunance(s)	1.00	1.17	25.738	28.31	173.90	1.000	0.000	2.00	3.413	3.41	154.6	0.0	112.5
185.00		1.00	1.17	25.859	28.44	169.29	1.000	0.000	3.00	4.998	5.00	227.5	0.0	164.7
Totals:									185.00			23,798.1	0.0	37,575.5

* = Cf Adjusted By Linear Load Ra Effect

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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Load Case: 1.2D + 1.6W 95.00 mph with No Ice 28 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 1.20

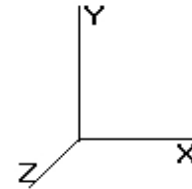
Wind Load Factor : 1.60

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
138.0	Flat Platform w/ Han	1	23.781	26.159	1.00	1.00	42.40	0.000	0.000	1,774.65	0.00	0.00	2,400.00
138.0	RFS APXVSPP18-C-	3	23.879	26.267	0.83	0.75	14.98	0.000	2.000	629.46	0.00	1,258.92	205.20
138.0	Alcatel-Lucent 800 M	3	23.879	26.267	0.67	0.75	3.11	0.000	2.000	130.51	0.00	261.03	230.40
138.0	Alcatel-Lucent 4X40W	3	23.879	26.267	0.67	0.75	4.91	0.000	2.000	206.54	0.00	413.08	316.80
138.0	Alcatel-Lucent TD-RR	3	23.879	26.267	0.67	0.75	5.56	0.000	2.000	233.78	0.00	467.57	237.96
138.0	RFS APXVTM14-C-I20	3	23.879	26.267	0.78	0.75	11.13	0.000	2.000	467.63	0.00	935.25	202.32
169.0	Round Low Profile PI	1	25.199	27.719	1.00	1.00	21.70	0.000	0.000	962.39	0.00	0.00	1,800.00
169.0	Allgon 7770.00	6	25.284	27.812	0.77	0.80	20.36	0.000	2.000	906.22	0.00	1,812.45	252.00
169.0	Powerwave LGP21401	12	25.241	27.765	0.50	0.80	5.28	0.000	1.000	234.56	0.00	234.56	203.04
169.0	KMW AM-X-CD-16-65-	3	25.284	27.812	0.79	0.80	15.21	0.000	2.000	676.65	0.00	1,353.30	174.60
169.0	Raycap DC6-48-60-18-	1	25.241	27.765	1.00	0.80	0.89	0.000	1.000	39.45	0.00	39.45	24.00
169.0	Ericsson RRUS 11	6	25.284	27.812	0.67	0.80	8.10	0.000	2.000	360.64	0.00	721.27	396.00
182.0	48" x 12" Panels	9	25.819	28.400	0.67	0.75	22.93	0.000	2.000	1,041.91	0.00	2,083.82	324.00
182.0	72" x 12" Panels	3	25.819	28.400	0.67	0.75	12.26	0.000	2.000	556.92	0.00	1,113.84	162.00
182.0	Flat Platform w/ Han	1	25.738	28.312	1.00	1.00	42.40	0.000	0.000	1,920.67	0.00	0.00	2,400.00
										10,141.99			9,328.32

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.2D + 1.6W

95.00 mph with No Ice

28 Iterations

Gust Response Factor : 1.10
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

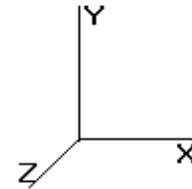
Wind Importance Factor : 1.00

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	0.42
5.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	7.08
5.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	45.48
5.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	18.00
5.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	6.00
5.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.150	1.150	0.00	0.00
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	59.03
10.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	0.42
10.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	7.08
10.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	45.48
10.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	18.00
10.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	6.00
10.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.153	1.158	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	59.03
15.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	0.42
15.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	7.08
15.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	45.48
15.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	18.00
15.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	6.00
15.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.156	1.167	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	59.03
20.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	0.42
20.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	7.08
20.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	45.48
20.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	18.00
20.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	6.00
20.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.159	1.176	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	59.03
22.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	0.21
22.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	3.54
22.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	22.74
22.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	9.00
22.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	3.00
22.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	15.364	0.161	1.183	0.00	0.00
22.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	29.52
25.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	0.21
25.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	3.54
25.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	22.74
25.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	9.00
25.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	3.00
25.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	15.364	0.163	1.188	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	29.52
30.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	0.42
30.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	7.08
30.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	45.48
30.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	18.00
30.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	6.00
30.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.377	0.165	1.195	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	59.03
35.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	0.42
35.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	7.08

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.2D + 1.6W 95.00 mph with No Ice 28 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

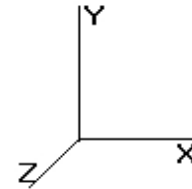
Dead Load Factor : 1.20

Wind Load Factor : 1.60

35.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	45.48
35.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	18.00
35.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	6.00
35.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	16.070	0.168	1.205	0.00	0.00
35.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	59.03
40.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	0.42
40.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	7.08
40.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	45.48
40.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	18.00
40.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	6.00
40.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	16.694	0.172	1.216	0.00	0.00
40.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	59.03
43.58	(1) 0.39" Cable	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	0.30
43.58	(2) 0.78" 8 AWG 6	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	5.07
43.58	(1) 3" Conduit	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	32.59
43.58	(3) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	12.90
43.58	(1) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	4.30
43.58	(4) #20 Dywidag	Yes	3.58	0.000	8.00	2.39	0.00	17.109	0.175	1.225	0.00	0.00
43.58	(12) 1 5/8" Coax	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	42.31
45.00	(1) 0.39" Cable	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	0.12
45.00	(2) 0.78" 8 AWG 6	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	2.01
45.00	(1) 3" Conduit	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	12.89
45.00	(3) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	5.10
45.00	(1) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	1.70
45.00	(4) #20 Dywidag	Yes	1.42	0.000	8.00	0.94	0.00	17.266	0.177	1.231	0.00	0.00
45.00	(12) 1 5/8" Coax	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	16.73
50.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	0.42
50.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	7.08
50.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	45.48
50.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	18.00
50.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	6.00
50.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	17.793	0.179	1.238	0.00	0.00
50.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	59.03
52.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	0.21
52.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	3.54
52.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	22.74
52.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	9.00
52.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	3.00
52.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	18.043	0.179	1.238	0.00	0.00
52.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	29.52
55.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	0.21
55.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	3.54
55.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	22.74
55.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	9.00
55.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	3.00
55.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	18.285	0.181	1.244	0.00	0.00
55.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	29.52
60.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	0.42
60.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	7.08
60.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	45.48
60.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	18.00
60.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	6.00
60.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	18.745	0.184	1.253	0.00	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	59.03
65.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	0.42
65.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	7.08
65.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	45.48

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.2D + 1.6W 95.00 mph with No Ice 28 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

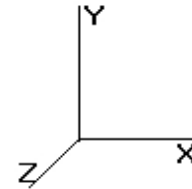
Dead Load Factor : 1.20

Wind Load Factor : 1.60

65.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	18.00
65.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	6.00
65.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	19.179	0.188	1.265	0.00	0.00
65.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	59.03
70.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	0.42
70.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	7.08
70.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	45.48
70.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	18.00
70.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	6.00
70.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	19.589	0.193	1.279	0.00	0.00
70.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	59.03
75.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	0.42
75.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	7.08
75.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	45.48
75.00	(12) 1 5/8" Coax	Yes	1.38	0.000	5.94	0.68	0.00	19.979	0.183	1.250	0.00	16.29
75.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	18.00
75.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	6.00
75.00	(4) #20 Dywidag	Yes	3.62	0.000	8.00	2.41	0.00	19.979	0.183	1.250	0.00	0.00
75.00	(12) 1 5/8" Coax	Yes	3.62	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	42.74
80.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	0.42
80.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	7.08
80.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	45.48
80.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	20.351	0.150	1.151	0.00	59.03
80.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	18.00
80.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	6.00
85.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	0.42
85.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	7.08
85.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	45.48
85.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	20.706	0.154	1.162	0.00	59.03
85.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	18.00
85.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	6.00
87.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	0.21
87.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	3.54
87.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	22.74
87.50	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	1.24	0.00	20.879	0.157	1.171	0.00	29.52
87.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	9.00
87.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	3.00
90.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	0.21
90.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	3.54
90.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	22.74
90.00	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	1.24	0.00	21.047	0.159	1.177	0.00	29.51
90.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	9.00
90.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	3.00
93.00	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	0.25
93.00	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	4.25
93.00	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	27.29
93.00	(12) 1 5/8" Coax	Yes	3.00	0.000	5.94	1.49	0.00	21.245	0.161	1.184	0.00	35.42
93.00	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	10.80
93.00	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	3.60
95.00	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	0.17
95.00	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	2.83
95.00	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	18.19
95.00	(12) 1 5/8" Coax	Yes	2.00	0.000	5.94	0.99	0.00	21.375	0.161	1.182	0.00	23.61
95.00	(3) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	7.20
95.00	(1) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	2.40
100.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	0.42
100.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	7.08

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.2D + 1.6W 95.00 mph with No Ice 28 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

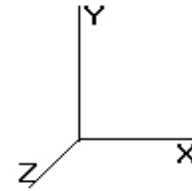
Dead Load Factor : 1.20

Wind Load Factor : 1.60

100.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	45.48
100.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	21.690	0.164	1.191	0.00	59.03
100.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	18.00
100.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	6.00
105.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	0.42
105.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	7.08
105.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	45.48
105.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	21.995	0.168	1.205	0.00	59.03
105.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	18.00
105.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	6.00
110.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	0.42
110.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	7.08
110.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	45.48
110.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	22.289	0.173	1.219	0.00	59.03
110.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	18.00
110.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	6.00
115.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	0.42
115.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	7.08
115.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	45.48
115.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	22.574	0.178	1.234	0.00	59.03
115.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	18.00
115.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	6.00
120.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	0.42
120.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	7.08
120.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	45.48
120.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	22.850	0.183	1.250	0.00	59.03
120.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	18.00
120.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	6.00
125.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	0.42
125.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	7.08
125.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	45.48
125.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	23.118	0.189	1.267	0.00	59.03
125.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	18.00
125.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	6.00
130.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	0.42
130.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	7.08
130.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	45.48
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	23.379	0.195	1.285	0.00	59.03
130.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	18.00
130.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	6.00
133.4	(1) 0.39" Cable	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	0.29
133.4	(2) 0.78" 8 AWG 6	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	4.84
133.4	(1) 3" Conduit	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	31.08
133.4	(12) 1 5/8" Coax	Yes	3.42	0.788	5.94	1.69	1.33	23.553	0.201	0.000	55.27	40.34
133.4	(3) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	12.30
133.4	(1) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	4.10
135.0	(1) 0.39" Cable	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	0.13
135.0	(2) 0.78" 8 AWG 6	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	2.24
135.0	(1) 3" Conduit	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	14.40
135.0	(12) 1 5/8" Coax	Yes	1.58	0.787	5.94	0.78	0.62	23.632	0.204	0.000	25.65	18.69
135.0	(3) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	5.70
135.0	(1) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	1.90
138.0	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	0.25
138.0	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	4.25
138.0	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	27.29
138.0	(12) 1 5/8" Coax	Yes	3.00	0.784	5.94	1.49	1.16	23.781	0.207	0.000	48.76	35.42
138.0	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	10.80

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



5/30/2014 5:25:26 PM
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Load Case: 1.2D + 1.6W 95.00 mph with No Ice 28 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 1.20

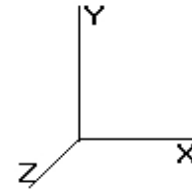
Wind Load Factor : 1.60

138.0	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	3.60
138.0	(1) 0.39" Cable	Yes	0.00	0.000	0.00	0.00	0.00	23.781	0.209	0.000	0.00	0.00
138.0	(2) 0.78" 8 AWG 6	Yes	0.00	0.000	0.00	0.00	0.00	23.781	0.209	0.000	0.00	0.00
138.0	(1) 3" Conduit	Yes	0.00	0.000	0.00	0.00	0.00	23.781	0.209	0.000	0.00	0.00
138.0	(12) 1 5/8" Coax	Yes	0.00	0.784	5.94	0.00	0.00	23.781	0.209	0.000	0.01	0.00
140.0	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	23.879	0.207	0.000	0.00	0.17
140.0	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	23.879	0.207	0.000	0.00	2.83
140.0	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	23.879	0.207	0.000	0.00	18.19
140.0	(12) 1 5/8" Coax	Yes	2.00	0.783	5.94	0.99	0.77	23.879	0.207	0.000	32.57	23.61
145.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.120	0.212	0.000	0.00	0.42
145.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.120	0.212	0.000	0.00	7.08
145.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.120	0.212	0.000	0.00	45.48
145.0	(12) 1 5/8" Coax	Yes	5.00	0.779	5.94	2.47	1.93	24.120	0.212	0.000	81.84	59.03
150.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.355	0.220	0.000	0.00	0.42
150.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.355	0.220	0.000	0.00	7.08
150.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.355	0.220	0.000	0.00	45.48
150.0	(12) 1 5/8" Coax	Yes	5.00	0.775	5.94	2.47	1.92	24.355	0.220	0.000	82.24	59.03
155.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.584	0.228	0.000	0.00	0.42
155.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.584	0.228	0.000	0.00	7.08
155.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.584	0.228	0.000	0.00	45.48
155.0	(12) 1 5/8" Coax	Yes	5.00	0.772	5.94	2.47	1.91	24.584	0.228	0.000	82.63	59.03
160.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.808	0.237	0.000	0.00	0.42
160.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.808	0.237	0.000	0.00	7.08
160.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.808	0.237	0.000	0.00	45.48
160.0	(12) 1 5/8" Coax	Yes	5.00	0.768	5.94	2.47	1.90	24.808	0.237	0.000	83.00	59.03
165.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	25.027	0.247	0.000	0.00	0.42
165.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	25.027	0.247	0.000	0.00	7.08
165.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	25.027	0.247	0.000	0.00	45.48
165.0	(12) 1 5/8" Coax	Yes	5.00	0.765	5.94	2.47	1.89	25.027	0.247	0.000	83.37	59.03
169.0	(1) 0.39" Cable	Yes	4.00	0.000	0.00	0.00	0.00	25.199	0.256	0.000	0.00	0.34
169.0	(2) 0.78" 8 AWG 6	Yes	4.00	0.000	0.00	0.00	0.00	25.199	0.256	0.000	0.00	5.66
169.0	(1) 3" Conduit	Yes	4.00	0.000	0.00	0.00	0.00	25.199	0.256	0.000	0.00	36.38
169.0	(12) 1 5/8" Coax	Yes	4.00	0.762	5.94	1.98	1.51	25.199	0.256	0.000	66.92	47.23
Totals:											642.26	4,448.43

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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Load Case: 1.2D + 1.6W 95.00 mph with No Ice 28 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 1.20

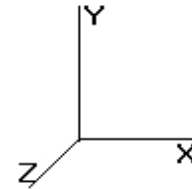
Wind Load Factor : 1.60

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	691.16	1,998.56	0.00	0.00
10.00	683.48	1,971.53	0.00	0.00
15.00	675.81	1,944.49	0.00	0.00
20.00	668.13	1,917.45	0.00	0.00
22.50	331.19	948.59	0.00	0.00
25.00	329.27	941.83	0.00	0.00
30.00	653.33	1,863.37	0.00	0.00
35.00	674.72	1,836.33	0.00	0.00
40.00	692.62	1,809.30	0.00	0.00
43.58	503.44	1,280.03	0.00	0.00
45.00	203.07	809.90	0.00	0.00
50.00	732.98	2,826.26	0.00	0.00
52.50	365.49	791.35	0.00	0.00
55.00	368.10	785.56	0.00	0.00
60.00	747.70	1,553.73	0.00	0.00
65.00	755.42	1,530.56	0.00	0.00
70.00	761.80	1,173.38	0.00	0.00
75.00	741.99	1,150.21	0.00	0.00
80.00	678.86	1,127.03	0.00	0.00
85.00	680.38	1,103.86	0.00	0.00
87.50	339.15	543.31	0.00	0.00
90.00	345.05	910.98	0.00	0.00
93.00	414.60	1,079.42	0.00	0.00
95.00	273.91	368.77	0.00	0.00
100.0	687.41	908.57	0.00	0.00
105.0	686.07	889.26	0.00	0.00
110.0	684.11	869.95	0.00	0.00
115.0	681.58	850.63	0.00	0.00
120.0	678.50	831.32	0.00	0.00
125.0	674.91	812.01	0.00	0.00
130.0	670.84	792.69	0.00	0.00
133.4	474.84	530.62	0.00	0.00
135.0	220.46	371.89	0.00	0.00
138.0	3,857.25	4,288.43	0.00	3,335.85
138.0	0.05	0.08	0.00	0.00
140.0	273.39	226.34	0.00	0.00
145.0	675.60	556.48	0.00	0.00
150.0	660.92	542.96	0.00	0.00
155.0	645.70	529.44	0.00	0.00
160.0	629.96	515.92	0.00	0.00
165.0	613.72	502.41	0.00	0.00
169.0	3,658.49	3,241.83	0.00	4,161.04
170.0	84.10	74.29	0.00	0.00
175.0	413.12	363.35	0.00	0.00
180.0	398.15	349.84	0.00	0.00
182.0	3,674.12	3,022.15	0.00	3,197.66
185.0	227.48	164.75	0.00	0.00
Totals:	34,582.39	53,501.02	0.00	10,694.55

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



Load Case: 1.2D + 1.6W	95.00 mph with No Ice	28 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

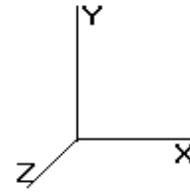
Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-53.45	-34.66	0.00	-4,064.17	0.00	4,064.17	4,727.77	2,363.89	10,057.5	4,967.06	0.00	0.00	0.617
5.00	-51.35	-34.12	0.00	-3,890.86	0.00	3,890.86	4,681.88	2,340.94	9,776.84	4,828.41	0.09	-0.17	0.604
10.00	-49.28	-33.58	0.00	-3,720.25	0.00	3,720.25	4,634.49	2,317.25	9,496.63	4,690.03	0.36	-0.34	0.591
15.00	-47.24	-33.03	0.00	-3,552.36	0.00	3,552.36	4,585.61	2,292.80	9,217.10	4,551.98	0.81	-0.51	0.577
20.00	-45.26	-32.45	0.00	-3,387.20	0.00	3,387.20	4,535.22	2,267.61	8,938.46	4,414.37	1.45	-0.69	0.564
22.50	-44.26	-32.17	0.00	-3,306.09	0.00	3,306.09	4,509.47	2,254.74	8,799.52	4,345.75	1.83	-0.77	0.557
22.50	-44.26	-32.17	0.00	-3,306.09	0.00	3,306.09	4,509.47	2,254.74	8,799.52	4,345.75	1.83	-0.77	0.557
25.00	-43.25	-31.93	0.00	-3,225.67	0.00	3,225.67	4,483.35	2,241.67	8,660.87	4,277.28	2.26	-0.86	0.550
30.00	-41.31	-31.37	0.00	-3,066.04	0.00	3,066.04	4,429.97	2,214.99	8,384.50	4,140.79	3.26	-1.04	0.536
35.00	-39.39	-30.78	0.00	-2,909.20	0.00	2,909.20	4,375.10	2,187.55	8,109.53	4,004.99	4.44	-1.21	0.522
40.00	-37.52	-30.14	0.00	-2,755.32	0.00	2,755.32	4,318.73	2,159.36	7,836.14	3,869.97	5.80	-1.39	0.507
43.58	-36.21	-29.66	0.00	-2,647.31	0.00	2,647.31	4,277.41	2,138.70	7,641.27	3,773.74	6.89	-1.51	0.497
45.00	-35.34	-29.51	0.00	-2,605.29	0.00	2,605.29	4,260.86	2,130.43	7,564.50	3,735.82	7.34	-1.56	0.488
50.00	-32.48	-28.77	0.00	-2,457.76	0.00	2,457.76	3,421.90	1,710.95	6,065.62	2,995.58	9.07	-1.74	0.552
52.50	-31.65	-28.43	0.00	-2,385.85	0.00	2,385.85	3,401.39	1,700.70	5,962.75	2,944.78	10.01	-1.82	0.542
52.50	-31.65	-28.43	0.00	-2,385.85	0.00	2,385.85	3,401.39	1,700.70	5,962.75	2,944.78	10.01	-1.82	0.542
55.00	-30.81	-28.11	0.00	-2,314.79	0.00	2,314.79	3,380.51	1,690.25	5,860.04	2,894.05	10.99	-1.92	0.532
60.00	-29.20	-27.40	0.00	-2,174.25	0.00	2,174.25	3,337.62	1,668.81	5,655.16	2,792.87	13.09	-2.10	0.513
65.00	-27.61	-26.67	0.00	-2,037.26	0.00	2,037.26	3,293.24	1,646.62	5,451.16	2,692.12	15.39	-2.28	0.493
65.00	-27.61	-26.67	0.00	-2,037.26	0.00	2,037.26	3,293.24	1,646.62	5,451.16	2,692.12	15.39	-2.28	0.765
70.00	-26.36	-25.97	0.00	-1,903.89	0.00	1,903.89	3,247.36	1,623.68	5,248.21	2,591.90	17.87	-2.46	0.743
75.00	-25.13	-25.30	0.00	-1,774.05	0.00	1,774.05	3,199.99	1,599.99	5,046.49	2,492.27	20.60	-2.74	0.720
80.00	-23.91	-24.68	0.00	-1,647.55	0.00	1,647.55	3,151.11	1,575.56	4,846.18	2,393.35	23.63	-3.03	0.696
85.00	-22.76	-24.03	0.00	-1,524.13	0.00	1,524.13	3,100.74	1,550.37	4,647.44	2,295.20	26.94	-3.31	0.672
87.50	-22.18	-23.71	0.00	-1,464.06	0.00	1,464.06	3,074.99	1,537.50	4,548.71	2,246.44	28.71	-3.45	0.659
90.00	-21.23	-23.37	0.00	-1,404.79	0.00	1,404.79	3,048.88	1,524.44	4,450.47	2,197.92	30.56	-3.59	0.646
93.00	-20.12	-22.94	0.00	-1,334.67	0.00	1,334.67	2,367.81	1,183.91	3,474.51	1,715.93	32.87	-3.76	0.787
95.00	-19.68	-22.71	0.00	-1,288.81	0.00	1,288.81	2,354.00	1,177.00	3,417.42	1,687.73	34.47	-3.88	0.772
100.00	-18.71	-22.06	0.00	-1,175.24	0.00	1,175.24	2,318.41	1,159.21	3,275.08	1,617.44	38.69	-4.19	0.735
105.00	-17.76	-21.41	0.00	-1,064.92	0.00	1,064.92	2,281.33	1,140.66	3,133.47	1,547.50	43.24	-4.50	0.696
110.00	-16.84	-20.74	0.00	-957.88	0.00	957.88	2,242.75	1,121.37	2,992.76	1,478.01	48.11	-4.80	0.656
115.00	-15.95	-20.07	0.00	-854.16	0.00	854.16	2,202.67	1,101.33	2,853.13	1,409.05	53.29	-5.10	0.614
120.00	-15.09	-19.40	0.00	-753.80	0.00	753.80	2,161.09	1,080.55	2,714.76	1,340.72	58.78	-5.38	0.570
125.00	-14.26	-18.71	0.00	-656.82	0.00	656.82	2,118.02	1,059.01	2,577.82	1,273.09	64.55	-5.66	0.523
130.00	-13.47	-18.02	0.00	-563.26	0.00	563.26	2,073.45	1,036.73	2,442.48	1,206.25	70.61	-5.92	0.474
133.42	-12.95	-17.52	0.00	-501.70	0.00	501.70	2,042.13	1,021.07	2,351.01	1,161.07	74.91	-6.09	0.439
135.00	-12.57	-17.28	0.00	-473.97	0.00	473.97	2,027.39	1,013.69	2,308.93	1,140.29	76.94	-6.17	0.422
138.00	-8.71	-12.99	0.00	-418.79	0.00	418.79	1,999.03	999.51	2,229.72	1,101.18	80.85	-6.31	0.385
138.00	-8.70	-13.00	0.00	-418.78	0.00	418.78	1,223.81	611.90	1,396.77	689.81	80.85	-6.31	0.615
140.00	-8.47	-12.73	0.00	-392.79	0.00	392.79	1,215.85	607.93	1,368.67	675.93	83.51	-6.40	0.589
145.00	-7.93	-12.03	0.00	-329.14	0.00	329.14	1,194.90	597.45	1,298.35	641.21	90.35	-6.68	0.520
150.00	-7.43	-11.34	0.00	-268.98	0.00	268.98	1,172.46	586.23	1,228.11	606.52	97.47	-6.94	0.450
155.00	-6.94	-10.66	0.00	-212.26	0.00	212.26	1,148.52	574.26	1,158.11	571.95	104.85	-7.17	0.378
160.00	-6.48	-9.99	0.00	-158.94	0.00	158.94	1,123.08	561.54	1,088.54	537.59	112.46	-7.37	0.302
165.00	-6.04	-9.33	0.00	-108.97	0.00	108.97	1,096.15	548.08	1,019.56	503.52	120.25	-7.54	0.222
169.00	-3.30	-5.28	0.00	-67.47	0.00	67.47	1,073.53	536.76	964.93	476.54	126.59	-7.64	0.145
170.00	-3.23	-5.19	0.00	-62.19	0.00	62.19	1,067.72	533.86	951.36	469.84	128.19	-7.66	0.135
175.00	-2.92	-4.74	0.00	-36.22	0.00	36.22	1,037.79	518.90	884.11	436.63	136.23	-7.73	0.086
180.00	-2.63	-4.30	0.00	-12.53	0.00	12.53	1,006.37	503.18	817.98	403.97	144.33	-7.78	0.034
182.00	-0.13	-0.25	0.00	-0.74	0.00	0.74	993.38	496.69	791.88	391.08	147.58	-7.78	0.002
185.00	0.00	-0.23	0.00	0.00	0.00	0.00	973.45	486.72	753.15	371.95	152.45	-7.78	0.000

Pole : 302537
Location : Middletown CT 3, CT
Height : 185.0 (ft)
Base Dia : 52.00 (in)
Top Dia : 19.03 (in)
Shape : 12 Sides
Taper : 0.188014 (in/ft)

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

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Load Case: 1.2D + 1.6W

95.00 mph with No Ice

28 Iterations

Gust Response Factor : 1.10

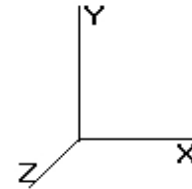
Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

Shaft Segment Forces (Factored)

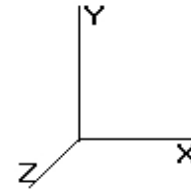
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	356.57	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	350.12	1.000	* 0.000	5.00	22.228	22.23	601.1	0.0	1,436.1
10.00		1.00	0.70	15.364	16.90	343.68	1.000	* 0.000	5.00	21.823	21.82	590.1	0.0	1,415.9
15.00		1.00	0.70	15.364	16.90	337.23	1.000	* 0.000	5.00	21.417	21.42	579.1	0.0	1,395.6
20.00		1.00	0.70	15.364	16.90	330.79	1.000	* 0.000	5.00	21.012	21.01	568.2	0.0	1,375.3
22.50	Reinf. Top Reinf Bottom	1.00	0.70	15.364	16.90	327.56	1.000	* 0.000	2.50	10.354	10.35	280.0	0.0	680.0
25.00		1.00	0.70	15.364	16.90	324.34	1.000	* 0.000	2.50	10.252	10.25	277.2	0.0	675.0
30.00		1.00	0.70	15.377	16.91	318.03	1.000	* 0.000	5.00	20.201	20.20	546.7	0.0	1,334.7
35.00		1.00	0.73	16.070	17.67	318.52	1.000	* 0.000	5.00	19.795	19.80	559.9	0.0	1,314.5
40.00		1.00	0.76	16.694	18.36	317.93	1.000	* 0.000	5.00	19.390	19.39	569.7	0.0	1,294.2
43.58	Bot - Section 2	1.00	0.77	17.109	18.82	316.98	1.000	* 0.000	3.58	13.646	13.65	410.9	0.0	915.0
45.00		1.00	0.78	17.266	18.99	316.49	1.000	* 0.000	1.42	5.429	5.43	165.0	0.0	589.6
50.00	Top - Section 1	1.00	0.81	17.793	19.57	314.35	1.000	* 0.000	5.00	18.902	18.90	591.9	0.0	2,056.9
52.50	Reinf. Top Reinf Bottom	1.00	0.82	18.043	19.84	318.63	1.000	* 0.000	2.50	9.299	9.30	295.3	0.0	562.1
55.00		1.00	0.83	18.285	20.11	317.24	1.000	* 0.000	2.50	9.198	9.20	296.0	0.0	557.8
60.00		1.00	0.85	18.745	20.61	314.09	1.000	* 0.000	5.00	18.091	18.09	596.8	0.0	1,102.5
65.00	Reinf. Top	1.00	0.87	19.179	21.09	310.50	1.000	* 0.000	5.00	17.686	17.69	597.0	0.0	1,085.1
70.00		1.00	0.89	19.589	21.54	306.53	1.000	* 0.000	5.00	17.280	17.28	595.8	0.0	733.8
75.00		1.00	0.91	19.979	21.97	302.21	1.000	* 0.000	5.00	16.875	16.87	593.4	0.0	716.4
80.00		1.00	0.92	20.351	22.38	297.59	1.000	* 0.000	5.00	16.469	16.47	589.9	0.0	699.0
85.00		1.00	0.94	20.706	22.77	292.70	1.000	* 0.000	5.00	16.064	16.06	585.4	0.0	681.6
87.50	Bot - Section 3	1.00	0.95	20.879	22.96	290.15	1.000	* 0.000	2.50	7.881	7.88	289.6	0.0	334.3
90.00		1.00	0.95	21.047	23.15	287.55	1.000	* 0.000	2.50	7.912	7.91	293.1	0.0	610.1
93.00	Top - Section 2	1.00	0.96	21.245	23.37	284.35	1.000	* 0.000	3.00	9.363	9.36	350.1	0.0	721.8
95.00		1.00	0.97	21.375	23.51	287.23	1.000	* 0.000	2.00	6.159	6.16	231.7	0.0	218.1
100.00		1.00	0.98	21.690	23.86	281.69	1.000	* 0.000	5.00	15.117	15.12	577.1	0.0	535.1
105.00		1.00	1.00	21.995	24.19	275.94	1.000	* 0.000	5.00	14.711	14.71	569.5	0.0	520.7
110.00		1.00	1.01	22.289	24.51	270.02	1.000	* 0.000	5.00	14.306	14.31	561.2	0.0	506.2
115.00		1.00	1.02	22.574	24.83	263.93	1.000	* 0.000	5.00	13.900	13.90	552.3	0.0	491.7
120.00		1.00	1.04	22.850	25.13	257.67	1.000	* 0.000	5.00	13.495	13.49	542.7	0.0	477.2
125.00		1.00	1.05	23.118	25.43	251.27	1.000	* 0.000	5.00	13.089	13.09	532.6	0.0	462.7
130.00		1.00	1.06	23.379	25.71	244.73	1.000	* 0.000	5.00	12.684	12.68	521.9	0.0	448.2
133.4	Bot - Section 4	1.00	1.07	23.553	25.90	240.19	1.200	* 0.000	3.42	8.435	10.12	419.6	0.0	298.0
135.00		1.00	1.07	23.632	25.99	238.06	1.200	* 0.000	1.58	3.903	4.68	194.8	0.0	232.6
138.0	Appertunance(s)	1.00	1.08	23.781	26.15	234.00	1.200	* 0.000	3.00	7.285	8.74	365.9	0.0	434.0
138.0	Top - Section 3	1.00	1.08	23.781	26.15	234.00	1.200	* 0.000	0.00	0.001	0.00	0.0	0.0	0.0
140.00		1.00	1.08	23.879	26.26	235.01	1.200	* 0.000	2.00	4.775	5.73	240.8	0.0	118.4
145.00		1.00	1.09	24.120	26.53	228.11	1.200	* 0.000	5.00	11.656	13.99	593.8	0.0	289.1
150.00		1.00	1.11	24.355	26.79	221.10	1.200	* 0.000	5.00	11.250	13.50	578.7	0.0	278.9
155.00		1.00	1.12	24.584	27.04	213.99	1.200	* 0.000	5.00	10.845	13.01	563.1	0.0	268.8
160.00		1.00	1.13	24.808	27.28	206.77	1.200	* 0.000	5.00	10.439	12.53	547.0	0.0	258.7
165.00		1.00	1.14	25.027	27.53	199.45	1.200	* 0.000	5.00	10.034	12.04	530.3	0.0	248.5
169.0	Appertunance(s)	1.00	1.14	25.199	27.71	193.53	1.200	* 0.000	4.00	7.735	9.28	411.7	0.0	191.5
170.00		1.00	1.15	25.241	27.76	192.04	1.000	0.000	1.00	1.893	1.89	84.1	0.0	46.9
175.00		1.00	1.16	25.451	27.99	184.54	1.000	0.000	5.00	9.223	9.22	413.1	0.0	228.2
180.00		1.00	1.16	25.657	28.22	176.96	1.000	0.000	5.00	8.817	8.82	398.1	0.0	218.1
182.0	Appertunance(s)	1.00	1.17	25.738	28.31	173.90	1.000	0.000	2.00	3.413	3.41	154.6	0.0	84.4
185.00		1.00	1.17	25.859	28.44	169.29	1.000	0.000	3.00	4.998	5.00	227.5	0.0	123.6
Totals:									185.00			20,634.1	0.0	29,267.1

* = Cf Adjusted By Linear Load Ra Effect

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 0.90

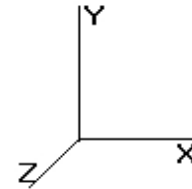
Wind Load Factor : 1.60

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
138.0	Flat Platform w/ Han	1	23.781	26.159	1.00	1.00	42.40	0.000	0.000	1,774.65	0.00	0.00	1,800.00
138.0	RFS APXVSPP18-C-	3	23.879	26.267	0.83	0.75	14.98	0.000	2.000	629.46	0.00	1,258.92	153.90
138.0	Alcatel-Lucent 800 M	3	23.879	26.267	0.67	0.75	3.11	0.000	2.000	130.51	0.00	261.03	172.80
138.0	Alcatel-Lucent 4X40W	3	23.879	26.267	0.67	0.75	4.91	0.000	2.000	206.54	0.00	413.08	237.60
138.0	Alcatel-Lucent TD-RR	3	23.879	26.267	0.67	0.75	5.56	0.000	2.000	233.78	0.00	467.57	178.47
138.0	RFS APXVTM14-C-I20	3	23.879	26.267	0.78	0.75	11.13	0.000	2.000	467.63	0.00	935.25	151.74
169.0	Round Low Profile PI	1	25.199	27.719	1.00	1.00	21.70	0.000	0.000	962.39	0.00	0.00	1,350.00
169.0	Allgon 7770.00	6	25.284	27.812	0.77	0.80	20.36	0.000	2.000	906.22	0.00	1,812.45	189.00
169.0	Powerwave LGP21401	12	25.241	27.765	0.50	0.80	5.28	0.000	1.000	234.56	0.00	234.56	152.28
169.0	KMW AM-X-CD-16-65-	3	25.284	27.812	0.79	0.80	15.21	0.000	2.000	676.65	0.00	1,353.30	130.95
169.0	Raycap DC6-48-60-18-	1	25.241	27.765	1.00	0.80	0.89	0.000	1.000	39.45	0.00	39.45	18.00
169.0	Ericsson RRUS 11	6	25.284	27.812	0.67	0.80	8.10	0.000	2.000	360.64	0.00	721.27	297.00
182.0	48" x 12" Panels	9	25.819	28.400	0.67	0.75	22.93	0.000	2.000	1,041.91	0.00	2,083.82	243.00
182.0	72" x 12" Panels	3	25.819	28.400	0.67	0.75	12.26	0.000	2.000	556.92	0.00	1,113.84	121.50
182.0	Flat Platform w/ Han	1	25.738	28.312	1.00	1.00	42.40	0.000	0.000	1,920.67	0.00	0.00	1,800.00
										10,141.99			6,996.24

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 0.90

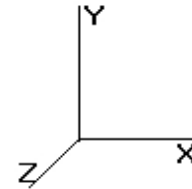
Wind Load Factor : 1.60

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	0.31
5.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	5.31
5.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	34.11
5.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	13.50
5.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	4.50
5.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.150	1.150	0.00	0.00
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.150	1.150	0.00	44.27
10.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	0.31
10.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	5.31
10.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	34.11
10.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	13.50
10.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	4.50
10.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.153	1.158	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.153	1.158	0.00	44.27
15.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	0.31
15.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	5.31
15.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	34.11
15.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	13.50
15.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	4.50
15.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.156	1.167	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.156	1.167	0.00	44.27
20.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	0.31
20.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	5.31
20.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	34.11
20.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	13.50
20.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	4.50
20.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.364	0.159	1.176	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.159	1.176	0.00	44.27
22.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	0.16
22.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	2.65
22.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	17.06
22.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	6.75
22.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	2.25
22.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	15.364	0.161	1.183	0.00	0.00
22.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.161	1.183	0.00	22.14
25.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	0.16
25.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	2.65
25.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	17.06
25.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	6.75
25.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	2.25
25.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	15.364	0.163	1.188	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	15.364	0.163	1.188	0.00	22.14
30.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	0.31
30.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	5.31
30.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	34.11
30.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	13.50
30.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	4.50
30.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	15.377	0.165	1.195	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.165	1.195	0.00	44.27
35.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	0.31
35.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	5.31

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

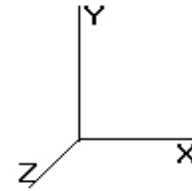
Dead Load Factor : 0.90

Wind Load Factor : 1.60

35.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	34.11
35.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	13.50
35.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	4.50
35.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	16.070	0.168	1.205	0.00	0.00
35.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.070	0.168	1.205	0.00	44.27
40.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	0.31
40.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	5.31
40.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	34.11
40.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	13.50
40.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	4.50
40.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	16.694	0.172	1.216	0.00	0.00
40.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.694	0.172	1.216	0.00	44.27
43.58	(1) 0.39" Cable	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	0.23
43.58	(2) 0.78" 8 AWG 6	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	3.81
43.58	(1) 3" Conduit	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	24.45
43.58	(3) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	9.68
43.58	(1) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	3.23
43.58	(4) #20 Dywidag	Yes	3.58	0.000	8.00	2.39	0.00	17.109	0.175	1.225	0.00	0.00
43.58	(12) 1 5/8" Coax	Yes	3.58	0.000	0.00	0.00	0.00	17.109	0.175	1.225	0.00	31.73
45.00	(1) 0.39" Cable	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	0.09
45.00	(2) 0.78" 8 AWG 6	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	1.50
45.00	(1) 3" Conduit	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	9.66
45.00	(3) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	3.82
45.00	(1) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	1.27
45.00	(4) #20 Dywidag	Yes	1.42	0.000	8.00	0.94	0.00	17.266	0.177	1.231	0.00	0.00
45.00	(12) 1 5/8" Coax	Yes	1.42	0.000	0.00	0.00	0.00	17.266	0.177	1.231	0.00	12.54
50.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	0.31
50.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	5.31
50.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	34.11
50.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	13.50
50.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	4.50
50.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	17.793	0.179	1.238	0.00	0.00
50.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.793	0.179	1.238	0.00	44.27
52.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	0.16
52.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	2.65
52.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	17.06
52.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	6.75
52.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	2.25
52.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	18.043	0.179	1.238	0.00	0.00
52.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	18.043	0.179	1.238	0.00	22.14
55.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	0.16
55.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	2.65
55.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	17.06
55.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	6.75
55.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	2.25
55.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	18.285	0.181	1.244	0.00	0.00
55.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	18.285	0.181	1.244	0.00	22.14
60.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	0.31
60.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	5.31
60.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	34.11
60.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	13.50
60.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	4.50
60.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	18.745	0.184	1.253	0.00	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.745	0.184	1.253	0.00	44.27
65.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	0.31
65.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	5.31
65.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	34.11

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

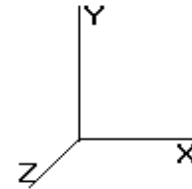
Dead Load Factor : 0.90

Wind Load Factor : 1.60

65.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	13.50
65.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	4.50
65.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	19.179	0.188	1.265	0.00	0.00
65.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.179	0.188	1.265	0.00	44.27
70.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	0.31
70.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	5.31
70.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	34.11
70.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	13.50
70.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	4.50
70.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	19.589	0.193	1.279	0.00	0.00
70.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.589	0.193	1.279	0.00	44.27
75.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	0.31
75.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	5.31
75.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	34.11
75.00	(12) 1 5/8" Coax	Yes	1.38	0.000	5.94	0.68	0.00	19.979	0.183	1.250	0.00	12.22
75.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	13.50
75.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	4.50
75.00	(4) #20 Dywidag	Yes	3.62	0.000	8.00	2.41	0.00	19.979	0.183	1.250	0.00	0.00
75.00	(12) 1 5/8" Coax	Yes	3.62	0.000	0.00	0.00	0.00	19.979	0.183	1.250	0.00	32.05
80.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	0.31
80.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	5.31
80.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	34.11
80.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	20.351	0.150	1.151	0.00	44.27
80.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	13.50
80.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.351	0.150	1.151	0.00	4.50
85.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	0.31
85.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	5.31
85.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	34.11
85.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	20.706	0.154	1.162	0.00	44.27
85.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	13.50
85.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	20.706	0.154	1.162	0.00	4.50
87.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	0.16
87.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	2.66
87.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	17.06
87.50	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	1.24	0.00	20.879	0.157	1.171	0.00	22.14
87.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	6.75
87.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	20.879	0.157	1.171	0.00	2.25
90.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	0.16
90.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	2.65
90.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	17.05
90.00	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	1.24	0.00	21.047	0.159	1.177	0.00	22.13
90.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	6.75
90.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	21.047	0.159	1.177	0.00	2.25
93.00	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	0.19
93.00	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	3.19
93.00	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	20.47
93.00	(12) 1 5/8" Coax	Yes	3.00	0.000	5.94	1.49	0.00	21.245	0.161	1.184	0.00	26.57
93.00	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	8.10
93.00	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	21.245	0.161	1.184	0.00	2.70
95.00	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	0.13
95.00	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	2.12
95.00	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	13.64
95.00	(12) 1 5/8" Coax	Yes	2.00	0.000	5.94	0.99	0.00	21.375	0.161	1.182	0.00	17.71
95.00	(3) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	5.40
95.00	(1) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	21.375	0.161	1.182	0.00	1.80
100.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	0.31
100.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	5.31

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

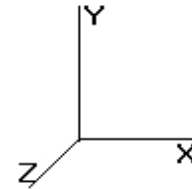
Dead Load Factor : 0.90

Wind Load Factor : 1.60

100.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	34.11
100.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	21.690	0.164	1.191	0.00	44.27
100.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	13.50
100.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.690	0.164	1.191	0.00	4.50
105.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	0.31
105.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	5.31
105.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	34.11
105.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	21.995	0.168	1.205	0.00	44.27
105.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	13.50
105.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	21.995	0.168	1.205	0.00	4.50
110.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	0.31
110.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	5.31
110.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	34.11
110.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	22.289	0.173	1.219	0.00	44.27
110.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	13.50
110.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.289	0.173	1.219	0.00	4.50
115.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	0.31
115.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	5.31
115.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	34.11
115.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	22.574	0.178	1.234	0.00	44.27
115.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	13.50
115.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.574	0.178	1.234	0.00	4.50
120.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	0.31
120.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	5.31
120.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	34.11
120.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	22.850	0.183	1.250	0.00	44.27
120.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	13.50
120.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	22.850	0.183	1.250	0.00	4.50
125.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	0.31
125.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	5.31
125.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	34.11
125.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	23.118	0.189	1.267	0.00	44.27
125.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	13.50
125.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.118	0.189	1.267	0.00	4.50
130.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	0.31
130.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	5.31
130.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	34.11
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	23.379	0.195	1.285	0.00	44.27
130.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	13.50
130.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	23.379	0.195	1.285	0.00	4.50
133.4	(1) 0.39" Cable	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	0.22
133.4	(2) 0.78" 8 AWG 6	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	3.63
133.4	(1) 3" Conduit	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	23.31
133.4	(12) 1 5/8" Coax	Yes	3.42	0.788	5.94	1.69	1.33	23.553	0.201	0.000	55.27	30.26
133.4	(3) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	9.23
133.4	(1) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	23.553	0.201	0.000	0.00	3.08
135.0	(1) 0.39" Cable	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	0.10
135.0	(2) 0.78" 8 AWG 6	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	1.68
135.0	(1) 3" Conduit	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	10.80
135.0	(12) 1 5/8" Coax	Yes	1.58	0.787	5.94	0.78	0.62	23.632	0.204	0.000	25.65	14.02
135.0	(3) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	4.27
135.0	(1) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	23.632	0.204	0.000	0.00	1.42
138.0	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	0.19
138.0	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	3.19
138.0	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	20.47
138.0	(12) 1 5/8" Coax	Yes	3.00	0.784	5.94	1.49	1.16	23.781	0.207	0.000	48.76	26.56
138.0	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	8.10

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 0.90

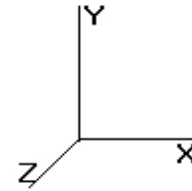
Wind Load Factor : 1.60

138.0	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	23.781	0.207	0.000	0.00	2.70
138.0	(1) 0.39" Cable	Yes	0.00	0.000	0.00	0.00	0.00	23.781	0.209	0.000	0.00	0.00
138.0	(2) 0.78" 8 AWG 6	Yes	0.00	0.000	0.00	0.00	0.00	23.781	0.209	0.000	0.00	0.00
138.0	(1) 3" Conduit	Yes	0.00	0.000	0.00	0.00	0.00	23.781	0.209	0.000	0.00	0.00
138.0	(12) 1 5/8" Coax	Yes	0.00	0.784	5.94	0.00	0.00	23.781	0.209	0.000	0.01	0.00
140.0	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	23.879	0.207	0.000	0.00	0.13
140.0	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	23.879	0.207	0.000	0.00	2.12
140.0	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	23.879	0.207	0.000	0.00	13.64
140.0	(12) 1 5/8" Coax	Yes	2.00	0.783	5.94	0.99	0.77	23.879	0.207	0.000	32.57	17.71
145.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.120	0.212	0.000	0.00	0.31
145.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.120	0.212	0.000	0.00	5.31
145.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.120	0.212	0.000	0.00	34.11
145.0	(12) 1 5/8" Coax	Yes	5.00	0.779	5.94	2.47	1.93	24.120	0.212	0.000	81.84	44.27
150.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.355	0.220	0.000	0.00	0.31
150.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.355	0.220	0.000	0.00	5.31
150.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.355	0.220	0.000	0.00	34.11
150.0	(12) 1 5/8" Coax	Yes	5.00	0.775	5.94	2.47	1.92	24.355	0.220	0.000	82.24	44.27
155.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.584	0.228	0.000	0.00	0.31
155.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.584	0.228	0.000	0.00	5.31
155.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.584	0.228	0.000	0.00	34.11
155.0	(12) 1 5/8" Coax	Yes	5.00	0.772	5.94	2.47	1.91	24.584	0.228	0.000	82.63	44.27
160.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	24.808	0.237	0.000	0.00	0.31
160.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	24.808	0.237	0.000	0.00	5.31
160.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	24.808	0.237	0.000	0.00	34.11
160.0	(12) 1 5/8" Coax	Yes	5.00	0.768	5.94	2.47	1.90	24.808	0.237	0.000	83.00	44.27
165.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	25.027	0.247	0.000	0.00	0.31
165.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	25.027	0.247	0.000	0.00	5.31
165.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	25.027	0.247	0.000	0.00	34.11
165.0	(12) 1 5/8" Coax	Yes	5.00	0.765	5.94	2.47	1.89	25.027	0.247	0.000	83.37	44.27
169.0	(1) 0.39" Cable	Yes	4.00	0.000	0.00	0.00	0.00	25.199	0.256	0.000	0.00	0.25
169.0	(2) 0.78" 8 AWG 6	Yes	4.00	0.000	0.00	0.00	0.00	25.199	0.256	0.000	0.00	4.25
169.0	(1) 3" Conduit	Yes	4.00	0.000	0.00	0.00	0.00	25.199	0.256	0.000	0.00	27.29
169.0	(12) 1 5/8" Coax	Yes	4.00	0.762	5.94	1.98	1.51	25.199	0.256	0.000	66.92	35.42
Totals:											642.26	3,336.32

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 0.90

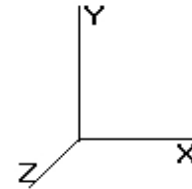
Wind Load Factor : 1.60

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	601.07	1,582.42	0.00	0.00
10.00	590.11	1,562.14	0.00	0.00
15.00	579.14	1,541.87	0.00	0.00
20.00	568.18	1,521.59	0.00	0.00
22.50	279.98	753.19	0.00	0.00
25.00	277.23	748.12	0.00	0.00
30.00	546.71	1,481.03	0.00	0.00
35.00	559.85	1,460.75	0.00	0.00
40.00	569.71	1,440.47	0.00	0.00
43.58	410.91	1,019.86	0.00	0.00
45.00	164.99	631.08	0.00	0.00
50.00	591.95	2,203.19	0.00	0.00
52.50	295.30	635.26	0.00	0.00
55.00	295.99	630.92	0.00	0.00
60.00	596.85	1,248.80	0.00	0.00
65.00	596.96	1,231.42	0.00	0.00
70.00	595.76	880.04	0.00	0.00
75.00	593.36	862.65	0.00	0.00
80.00	589.88	845.27	0.00	0.00
85.00	585.41	827.89	0.00	0.00
87.50	289.59	407.48	0.00	0.00
90.00	293.09	683.24	0.00	0.00
93.00	350.10	809.57	0.00	0.00
95.00	231.71	276.58	0.00	0.00
100.0	577.08	681.43	0.00	0.00
105.0	569.48	666.94	0.00	0.00
110.0	561.20	652.46	0.00	0.00
115.0	552.26	637.97	0.00	0.00
120.0	542.71	623.49	0.00	0.00
125.0	532.57	609.01	0.00	0.00
130.0	521.89	594.52	0.00	0.00
133.4	474.84	397.96	0.00	0.00
135.0	220.46	278.92	0.00	0.00
138.0	3,857.25	3,216.33	0.00	3,335.85
138.0	0.05	0.06	0.00	0.00
140.0	273.39	169.76	0.00	0.00
145.0	675.60	417.36	0.00	0.00
150.0	660.92	407.22	0.00	0.00
155.0	645.70	397.08	0.00	0.00
160.0	629.96	386.94	0.00	0.00
165.0	613.72	376.80	0.00	0.00
169.0	3,658.49	2,431.37	0.00	4,161.04
170.0	84.10	55.72	0.00	0.00
175.0	413.12	272.52	0.00	0.00
180.0	398.15	262.38	0.00	0.00
182.0	3,674.12	2,266.61	0.00	3,197.66
185.0	227.48	123.56	0.00	0.00
Totals:	31,418.32	41,211.25	0.00	10,694.55

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



Load Case: 0.9D + 1.6W 95.00 mph with No Ice (Reduced DL) 27 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

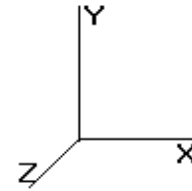
Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-41.17	-31.48	0.00	-3,787.54	0.00	3,787.54	4,727.77	2,363.89	10,057.5	4,967.06	0.00	0.00	0.574
5.00	-39.50	-30.98	0.00	-3,630.17	0.00	3,630.17	4,681.88	2,340.94	9,776.84	4,828.41	0.09	-0.16	0.562
10.00	-37.85	-30.49	0.00	-3,475.26	0.00	3,475.26	4,634.49	2,317.25	9,496.63	4,690.03	0.34	-0.32	0.551
15.00	-36.23	-30.00	0.00	-3,322.80	0.00	3,322.80	4,585.61	2,292.80	9,217.10	4,551.98	0.76	-0.48	0.539
20.00	-34.65	-29.49	0.00	-3,172.78	0.00	3,172.78	4,535.22	2,267.61	8,938.46	4,414.37	1.35	-0.64	0.527
22.50	-33.86	-29.25	0.00	-3,099.04	0.00	3,099.04	4,509.47	2,254.74	8,799.52	4,345.75	1.71	-0.72	0.521
22.50	-33.86	-29.25	0.00	-3,099.04	0.00	3,099.04	4,509.47	2,254.74	8,799.52	4,345.75	1.71	-0.72	0.521
25.00	-33.05	-29.04	0.00	-3,025.91	0.00	3,025.91	4,483.35	2,241.67	8,660.87	4,277.28	2.11	-0.81	0.515
30.00	-31.50	-28.56	0.00	-2,880.72	0.00	2,880.72	4,429.97	2,214.99	8,384.50	4,140.79	3.04	-0.97	0.503
35.00	-29.97	-28.06	0.00	-2,737.92	0.00	2,737.92	4,375.10	2,187.55	8,109.53	4,004.99	4.15	-1.13	0.490
40.00	-28.47	-27.53	0.00	-2,597.63	0.00	2,597.63	4,318.73	2,159.36	7,836.14	3,869.97	5.42	-1.30	0.477
43.58	-27.43	-27.13	0.00	-2,498.99	0.00	2,498.99	4,277.41	2,138.70	7,641.27	3,773.74	6.44	-1.42	0.468
45.00	-26.75	-27.00	0.00	-2,460.55	0.00	2,460.55	4,260.86	2,130.43	7,564.50	3,735.82	6.87	-1.46	0.460
50.00	-24.51	-26.40	0.00	-2,325.54	0.00	2,325.54	3,421.90	1,710.95	6,065.62	2,995.58	8.49	-1.63	0.521
52.50	-23.84	-26.13	0.00	-2,259.53	0.00	2,259.53	3,401.39	1,700.70	5,962.75	2,944.78	9.37	-1.71	0.512
52.50	-23.84	-26.13	0.00	-2,259.53	0.00	2,259.53	3,401.39	1,700.70	5,962.75	2,944.78	9.37	-1.71	0.512
55.00	-23.16	-25.86	0.00	-2,194.22	0.00	2,194.22	3,380.51	1,690.25	5,860.04	2,894.05	10.29	-1.80	0.503
60.00	-21.85	-25.29	0.00	-2,064.90	0.00	2,064.90	3,337.62	1,668.81	5,655.16	2,792.87	12.27	-1.97	0.486
65.00	-20.57	-24.71	0.00	-1,938.45	0.00	1,938.45	3,293.24	1,646.62	5,451.16	2,692.12	14.43	-2.15	0.468
65.00	-20.57	-24.71	0.00	-1,938.45	0.00	1,938.45	3,293.24	1,646.62	5,451.16	2,692.12	14.43	-2.15	0.727
70.00	-19.62	-24.16	0.00	-1,814.88	0.00	1,814.88	3,247.36	1,623.68	5,248.21	2,591.90	16.77	-2.32	0.706
75.00	-18.67	-23.62	0.00	-1,694.08	0.00	1,694.08	3,199.99	1,599.99	5,046.49	2,492.27	19.34	-2.59	0.686
80.00	-17.75	-23.07	0.00	-1,576.00	0.00	1,576.00	3,151.11	1,575.56	4,846.18	2,393.35	22.19	-2.86	0.664
85.00	-16.87	-22.50	0.00	-1,460.64	0.00	1,460.64	3,100.74	1,550.37	4,647.44	2,295.20	25.33	-3.13	0.642
87.50	-16.43	-22.23	0.00	-1,404.37	0.00	1,404.37	3,074.99	1,537.50	4,548.71	2,246.44	27.00	-3.26	0.631
90.00	-15.71	-21.94	0.00	-1,348.80	0.00	1,348.80	3,048.88	1,524.44	4,450.47	2,197.92	28.74	-3.40	0.619
93.00	-14.87	-21.58	0.00	-1,282.97	0.00	1,282.97	2,367.81	1,183.91	3,474.51	1,715.93	30.93	-3.56	0.754
95.00	-14.53	-21.38	0.00	-1,239.83	0.00	1,239.83	2,354.00	1,177.00	3,417.42	1,687.73	32.45	-3.67	0.741
100.00	-13.78	-20.83	0.00	-1,132.92	0.00	1,132.92	2,318.41	1,159.21	3,275.08	1,617.44	36.45	-3.97	0.707
105.00	-13.05	-20.28	0.00	-1,028.76	0.00	1,028.76	2,281.33	1,140.66	3,133.47	1,547.50	40.77	-4.27	0.671
110.00	-12.35	-19.74	0.00	-927.34	0.00	927.34	2,242.75	1,121.37	2,992.76	1,478.01	45.40	-4.56	0.633
115.00	-11.66	-19.19	0.00	-828.66	0.00	828.66	2,202.67	1,101.33	2,853.13	1,409.05	50.33	-4.85	0.594
120.00	-11.00	-18.65	0.00	-732.70	0.00	732.70	2,161.09	1,080.55	2,714.76	1,340.72	55.56	-5.13	0.552
125.00	-10.36	-18.11	0.00	-639.46	0.00	639.46	2,118.02	1,059.01	2,577.82	1,273.09	61.06	-5.40	0.507
130.00	-9.75	-17.57	0.00	-548.91	0.00	548.91	2,073.45	1,036.73	2,442.48	1,206.25	66.85	-5.65	0.460
133.42	-9.37	-17.08	0.00	-488.87	0.00	488.87	2,042.13	1,021.07	2,351.01	1,161.07	70.95	-5.82	0.426
135.00	-9.08	-16.85	0.00	-461.84	0.00	461.84	2,027.39	1,013.69	2,308.93	1,140.29	72.89	-5.90	0.410
138.00	-6.27	-12.68	0.00	-407.96	0.00	407.96	1,999.03	999.51	2,229.72	1,101.18	76.63	-6.03	0.374
138.00	-6.26	-12.69	0.00	-407.96	0.00	407.96	1,223.81	611.90	1,396.77	689.81	76.63	-6.03	0.597
140.00	-6.08	-12.42	0.00	-382.59	0.00	382.59	1,215.85	607.93	1,368.67	675.93	79.17	-6.12	0.571
145.00	-5.68	-11.73	0.00	-320.50	0.00	320.50	1,194.90	597.45	1,298.35	641.21	85.72	-6.39	0.505
150.00	-5.31	-11.05	0.00	-261.86	0.00	261.86	1,172.46	586.23	1,228.11	606.52	92.54	-6.65	0.437
155.00	-4.95	-10.38	0.00	-206.63	0.00	206.63	1,148.52	574.26	1,158.11	571.95	99.61	-6.87	0.366
160.00	-4.61	-9.72	0.00	-154.75	0.00	154.75	1,123.08	561.54	1,088.54	537.59	106.90	-7.07	0.292
165.00	-4.30	-9.07	0.00	-106.15	0.00	106.15	1,096.15	548.08	1,019.56	503.52	114.37	-7.23	0.215
169.00	-2.34	-5.14	0.00	-65.70	0.00	65.70	1,073.53	536.76	964.93	476.54	120.46	-7.32	0.140
170.00	-2.30	-5.05	0.00	-60.56	0.00	60.56	1,067.72	533.86	951.36	469.84	121.99	-7.34	0.131
175.00	-2.07	-4.61	0.00	-35.31	0.00	35.31	1,037.79	518.90	884.11	436.63	129.70	-7.42	0.083
180.00	-1.86	-4.18	0.00	-12.28	0.00	12.28	1,006.37	503.18	817.98	403.97	137.47	-7.46	0.032
182.00	-0.09	-0.24	0.00	-0.72	0.00	0.72	993.38	496.69	791.88	391.08	140.59	-7.47	0.002
185.00	0.00	-0.23	0.00	0.00	0.00	0.00	973.45	486.72	753.15	371.95	145.27	-7.47	0.000

Pole : 302537
Location : Middletown CT 3, CT
Height : 185.0 (ft)
Base Dia : 52.00 (in)
Top Dia : 19.03 (in)
Shape : 12 Sides
Taper : 0.188014 (in/ft)

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

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Load Case: 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

27 Iterations

Gust Response Factor : 1.10

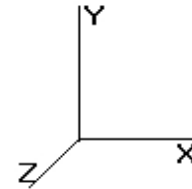
Dead Load Factor : 0.90

Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
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 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	27 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.682	0.000	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	4.256	4.682	0.000	1.200	* 1.656	5.00	23.608	28.33	132.6	565.3	2,368.8
10.00		1.00	0.70	4.256	4.682	0.000	1.200	* 1.775	5.00	23.302	27.96	130.9	596.4	2,372.8
15.00		1.00	0.70	4.256	4.682	0.000	1.200	* 1.848	5.00	22.958	27.55	129.0	610.6	2,360.1
20.00		1.00	0.70	4.256	4.682	0.000	1.200	* 1.902	5.00	22.597	27.12	126.9	617.5	2,339.9
22.50	Reinf. Top Reinf Bottom	1.00	0.70	4.256	4.682	0.000	1.200	* 1.925	2.50	11.156	13.39	62.7	309.6	1,160.7
25.00		1.00	0.70	4.256	4.682	0.000	1.200	* 1.945	2.50	11.063	13.28	62.2	310.0	1,154.3
30.00		1.00	0.70	4.260	4.686	0.000	1.200	* 1.981	5.00	21.852	26.22	122.9	619.9	2,288.2
35.00		1.00	0.73	4.451	4.897	0.000	1.200	* 2.012	5.00	21.472	25.77	126.2	617.6	2,258.9
40.00		1.00	0.76	4.625	5.087	0.000	1.200	* 2.039	5.00	21.089	25.31	128.7	613.9	2,228.1
43.58	Bot - Section 2	1.00	0.77	4.739	5.213	0.000	1.200	* 2.056	3.58	14.875	17.85	93.1	437.4	1,577.7
45.00		1.00	0.78	4.783	5.261	0.000	1.200	* 2.063	1.42	5.916	7.10	37.4	175.4	930.0
50.00	Top - Section 1	1.00	0.81	4.929	5.422	0.000	1.200	* 2.085	5.00	20.640	24.77	134.3	613.0	3,244.3
52.50	Reinf. Top Reinf Bottom	1.00	0.82	4.998	5.498	0.000	1.200	* 2.095	2.50	10.172	12.21	67.1	304.9	998.7
55.00		1.00	0.83	5.065	5.572	0.000	1.200	* 2.105	2.50	10.075	12.09	67.4	303.2	991.2
60.00		1.00	0.85	5.193	5.712	0.000	1.200	* 2.123	5.00	19.860	23.83	136.1	599.0	1,957.6
65.00	Reinf. Top	1.00	0.87	5.313	5.844	0.000	1.200	* 2.140	5.00	19.469	23.36	136.5	591.0	1,926.5
70.00		1.00	0.89	5.426	5.969	0.000	1.200	* 2.156	5.00	19.077	22.89	136.6	582.4	1,560.8
75.00		1.00	0.91	5.534	6.088	0.000	1.200	* 2.171	5.00	18.684	22.42	136.5	573.4	1,528.6
80.00		1.00	0.92	5.637	6.201	0.000	1.200	* 2.185	5.00	18.290	21.95	136.1	564.0	1,496.0
85.00		1.00	0.94	5.736	6.309	0.000	1.200	* 2.198	5.00	17.896	21.47	135.5	554.2	1,463.0
87.50	Bot - Section 3	1.00	0.95	5.784	6.362	0.000	1.200	* 2.205	2.50	8.800	10.56	67.2	274.6	720.4
90.00		1.00	0.95	5.830	6.413	0.000	1.200	* 2.211	2.50	8.833	10.60	68.0	276.5	1,090.0
93.00	Top - Section 2	1.00	0.96	5.885	6.474	0.000	1.200	* 2.218	3.00	10.472	12.57	81.4	328.2	1,290.5
95.00		1.00	0.97	5.921	6.513	0.000	1.200	* 2.223	2.00	6.900	8.28	53.9	217.0	507.8
100.00		1.00	0.98	6.008	6.609	0.000	1.200	* 2.234	5.00	16.979	20.37	134.7	532.0	1,245.6
105.00		1.00	1.00	6.093	6.702	0.000	1.200	* 2.245	5.00	16.582	19.90	133.4	521.1	1,215.3
110.00		1.00	1.01	6.174	6.792	0.000	1.200	* 2.256	5.00	16.186	19.42	131.9	509.9	1,184.8
115.00		1.00	1.02	6.253	6.879	0.000	1.200	* 2.266	5.00	15.788	18.95	130.3	498.5	1,154.1
120.00		1.00	1.04	6.330	6.963	0.000	1.200	* 2.276	5.00	15.391	18.47	128.6	486.9	1,123.2
125.00		1.00	1.05	6.404	7.044	0.000	1.200	* 2.285	5.00	14.993	17.99	126.7	475.1	1,092.1
130.00		1.00	1.06	6.476	7.124	0.000	1.200	* 2.294	5.00	14.595	17.51	124.8	463.2	1,060.8
133.4	Bot - Section 4	1.00	1.07	6.524	7.177	0.000	1.200	* 2.300	3.42	9.744	11.69	83.9	310.9	708.2
135.0		1.00	1.07	6.546	7.201	0.000	1.200	* 2.303	1.58	4.511	5.41	39.0	144.9	455.0
138.0	Appertunance(s)	1.00	1.08	6.588	7.246	0.000	1.200	* 2.308	3.00	8.439	10.13	73.4	270.1	848.8
138.0	Top - Section 3	1.00	1.08	6.588	7.246	0.000	1.200	* 2.308	0.00	0.001	0.00	0.0	0.0	0.1
140.00		1.00	1.08	6.615	7.276	0.000	1.200	* 2.311	2.00	5.545	6.65	48.4	178.1	336.0
145.00		1.00	1.09	6.681	7.350	0.000	1.200	* 2.319	5.00	13.588	16.31	119.8	432.8	818.2
150.00		1.00	1.11	6.746	7.421	0.000	1.200	* 2.327	5.00	13.189	15.83	117.5	420.2	792.1
155.00		1.00	1.12	6.810	7.491	0.000	1.200	* 2.335	5.00	12.790	15.35	115.0	407.5	765.9
160.00		1.00	1.13	6.872	7.559	0.000	1.200	* 2.342	5.00	12.391	14.87	112.4	394.6	739.5
165.00		1.00	1.14	6.933	7.626	0.000	1.200	* 2.349	5.00	11.991	14.39	109.7	381.6	713.0
169.0	Appertunance(s)	1.00	1.14	6.980	7.678	0.000	1.200	* 2.355	4.00	9.305	11.17	85.7	296.9	552.2
170.00		1.00	1.15	6.992	7.691	0.000	1.200	* 2.356	1.00	2.286	2.74	21.1	73.7	136.2
175.00		1.00	1.16	7.050	7.755	0.000	1.200	* 2.363	5.00	11.192	13.43	104.2	355.3	659.6
180.00		1.00	1.16	7.107	7.818	0.000	1.200	* 2.370	5.00	10.792	12.95	101.2	341.9	632.7
182.0	Appertunance(s)	1.00	1.17	7.130	7.843	0.000	1.200	* 2.372	2.00	4.204	5.04	39.6	134.6	247.2
185.00		1.00	1.17	7.163	7.879	0.000	1.200	* 2.376	3.00	6.186	7.42	58.5	197.1	361.8

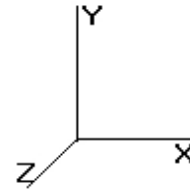
* = Cf Adjusted By Linear Load Ra Effect

Totals: 185.00 4,648.8 19,081.8 56,657.3

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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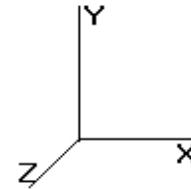
Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	27 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
138.0	Flat Platform w/ Han	1	6.588	7.246	1.00	1.00	70.19	0.000	0.000	508.60	0.00	0.00	3,833.01
138.0	RFS APXVSPP18-C-	3	6.615	7.276	0.83	0.75	18.24	0.000	2.000	132.74	0.00	265.47	1,047.23
138.0	Alcatel-Lucent 800 M	3	6.615	7.276	0.67	0.75	4.33	0.000	2.000	31.53	0.00	63.06	616.96
138.0	Alcatel-Lucent 4X40W	3	6.615	7.276	0.67	0.75	5.14	0.000	2.000	37.38	0.00	74.77	845.51
138.0	Alcatel-Lucent TD-RR	3	6.615	7.276	0.67	0.75	8.65	0.000	2.000	62.97	0.00	125.93	534.66
138.0	RFS APXVTM14-C-I20	3	6.615	7.276	0.78	0.75	16.19	0.000	2.000	117.80	0.00	235.60	675.14
169.0	Round Low Profile PI	1	6.980	7.678	1.00	1.00	47.66	0.000	0.000	365.94	0.00	0.00	2,476.01
169.0	Allgon 7770.00	6	7.004	7.704	0.77	0.80	25.74	0.000	2.000	198.32	0.00	396.64	1,434.04
169.0	Powerwave LGP21401	12	6.992	7.691	0.50	0.80	8.41	0.000	1.000	64.69	0.00	64.69	824.70
169.0	KMW AM-X-CD-16-65-	3	7.004	7.704	0.79	0.80	18.59	0.000	2.000	143.26	0.00	286.51	993.62
169.0	Raycap DC6-48-60-18-	1	6.992	7.691	1.00	0.80	2.21	0.000	1.000	17.03	0.00	17.03	142.15
169.0	Ericsson RRUS 11	6	7.004	7.704	0.67	0.80	11.00	0.000	2.000	84.73	0.00	169.45	1,102.98
182.0	48" x 12" Panels	9	7.152	7.867	0.67	0.75	29.12	0.000	2.000	229.12	0.00	458.24	2,083.85
182.0	72" x 12" Panels	3	7.152	7.867	0.50	0.75	11.18	0.000	2.000	87.95	0.00	175.91	1,000.43
182.0	Flat Platform w/ Han	1	7.130	7.843	1.00	1.00	70.97	0.000	0.000	556.57	0.00	0.00	3,885.85
										2,638.62			21,496.14

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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Load Case: 1.2D + 1.0Di + 1.0Wi 50.00 mph with 1.00 in Radial Ice 27 Iterations

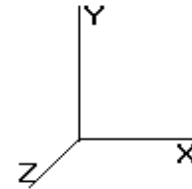
Gust Response Factor : 1.10 Ice Dead Load Factor : 1.00 Wind Importance Factor : 1.00
 Dead Load Factor : 1.20 Ice Importance Factor : 1.00
 Wind Load Factor : 1.00

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.150	1.150	0.00	19.75
5.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.150	1.150	0.00	34.39
5.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.150	1.150	0.00	89.89
5.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.150	1.150	0.00	67.48
5.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.150	1.150	0.00	33.66
5.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	4.71	0.00	4.256	0.150	1.150	0.00	16.75
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.150	1.150	0.00	248.44
10.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.153	1.158	0.00	22.42
10.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.153	1.158	0.00	37.60
10.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.153	1.158	0.00	93.99
10.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.153	1.158	0.00	72.10
10.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.153	1.158	0.00	36.86
10.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	4.81	0.00	4.256	0.153	1.158	0.00	19.24
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.153	1.158	0.00	261.91
15.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.156	1.167	0.00	24.16
15.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.156	1.167	0.00	39.67
15.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.156	1.167	0.00	96.62
15.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.156	1.167	0.00	75.05
15.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.156	1.167	0.00	38.93
15.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	4.87	0.00	4.256	0.156	1.167	0.00	20.87
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.156	1.167	0.00	270.32
20.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.159	1.176	0.00	25.47
20.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.159	1.176	0.00	41.23
20.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.159	1.176	0.00	98.59
20.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.159	1.176	0.00	77.25
20.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.159	1.176	0.00	40.49
20.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	4.92	0.00	4.256	0.159	1.176	0.00	22.11
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.159	1.176	0.00	276.54
22.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.161	1.183	0.00	13.02
22.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.161	1.183	0.00	20.95
22.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.161	1.183	0.00	49.71
22.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.161	1.183	0.00	39.09
22.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.161	1.183	0.00	20.58
22.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	2.47	0.00	4.256	0.161	1.183	0.00	11.32
22.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.161	1.183	0.00	139.58
25.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.163	1.188	0.00	13.27
25.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.163	1.188	0.00	21.25
25.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.163	1.188	0.00	50.09
25.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.163	1.188	0.00	39.52
25.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.163	1.188	0.00	20.88
25.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	2.48	0.00	4.256	0.163	1.188	0.00	11.56
25.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	4.256	0.163	1.188	0.00	140.76
30.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.260	0.165	1.195	0.00	27.46
30.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.260	0.165	1.195	0.00	43.58
30.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.260	0.165	1.195	0.00	101.53
30.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.260	0.165	1.195	0.00	80.53
30.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.260	0.165	1.195	0.00	42.83
30.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	4.98	0.00	4.260	0.165	1.195	0.00	23.97
30.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.260	0.165	1.195	0.00	285.68
35.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.451	0.168	1.205	0.00	28.26
35.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.451	0.168	1.205	0.00	44.52

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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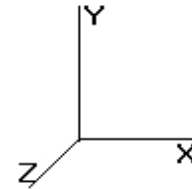
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Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	27 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

35.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.451	0.168	1.205	0.00	102.70
35.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.451	0.168	1.205	0.00	81.84
35.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.451	0.168	1.205	0.00	43.76
35.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	5.01	0.00	4.451	0.168	1.205	0.00	24.72
35.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.451	0.168	1.205	0.00	289.28
40.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.172	1.216	0.00	28.97
40.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.172	1.216	0.00	45.35
40.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.172	1.216	0.00	103.74
40.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.172	1.216	0.00	82.99
40.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.172	1.216	0.00	44.59
40.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	5.03	0.00	4.625	0.172	1.216	0.00	25.39
40.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.625	0.172	1.216	0.00	292.45
43.58	(1) 0.39" Cable	Yes	3.58	0.000	0.00	0.00	0.00	4.739	0.175	1.225	0.00	21.10
43.58	(2) 0.78" 8 AWG 6	Yes	3.58	0.000	0.00	0.00	0.00	4.739	0.175	1.225	0.00	32.89
43.58	(1) 3" Conduit	Yes	3.58	0.000	0.00	0.00	0.00	4.739	0.175	1.225	0.00	74.83
43.58	(3) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	4.739	0.175	1.225	0.00	60.02
43.58	(1) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	4.739	0.175	1.225	0.00	32.35
43.58	(4) #20 Dywidag	Yes	3.58	0.000	8.00	3.62	0.00	4.739	0.175	1.225	0.00	18.51
43.58	(12) 1 5/8" Coax	Yes	3.58	0.000	0.00	0.00	0.00	4.739	0.175	1.225	0.00	211.06
45.00	(1) 0.39" Cable	Yes	1.42	0.000	0.00	0.00	0.00	4.783	0.177	1.231	0.00	8.39
45.00	(2) 0.78" 8 AWG 6	Yes	1.42	0.000	0.00	0.00	0.00	4.783	0.177	1.231	0.00	13.06
45.00	(1) 3" Conduit	Yes	1.42	0.000	0.00	0.00	0.00	4.783	0.177	1.231	0.00	29.66
45.00	(3) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	4.783	0.177	1.231	0.00	23.81
45.00	(1) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	4.783	0.177	1.231	0.00	12.85
45.00	(4) #20 Dywidag	Yes	1.42	0.000	8.00	1.43	0.00	4.783	0.177	1.231	0.00	7.37
45.00	(12) 1 5/8" Coax	Yes	1.42	0.000	0.00	0.00	0.00	4.783	0.177	1.231	0.00	83.66
50.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	4.929	0.179	1.238	0.00	30.20
50.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	4.929	0.179	1.238	0.00	46.79
50.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	4.929	0.179	1.238	0.00	105.52
50.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.929	0.179	1.238	0.00	84.98
50.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	4.929	0.179	1.238	0.00	46.03
50.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	5.07	0.00	4.929	0.179	1.238	0.00	26.55
50.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.929	0.179	1.238	0.00	297.86
52.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	4.998	0.179	1.238	0.00	15.24
52.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	4.998	0.179	1.238	0.00	23.56
52.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	4.998	0.179	1.238	0.00	52.96
52.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	4.998	0.179	1.238	0.00	42.71
52.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	4.998	0.179	1.238	0.00	23.17
52.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	2.54	0.00	4.998	0.179	1.238	0.00	13.41
52.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	4.998	0.179	1.238	0.00	149.53
55.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	5.065	0.181	1.244	0.00	15.37
55.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	5.065	0.181	1.244	0.00	23.71
55.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	5.065	0.181	1.244	0.00	53.15
55.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	5.065	0.181	1.244	0.00	42.92
55.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	5.065	0.181	1.244	0.00	23.33
55.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	2.54	0.00	5.065	0.181	1.244	0.00	13.53
55.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	5.065	0.181	1.244	0.00	150.11
60.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.184	1.253	0.00	31.24
60.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.184	1.253	0.00	48.01
60.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.184	1.253	0.00	107.03
60.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.184	1.253	0.00	86.65
60.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.184	1.253	0.00	47.24
60.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	5.10	0.00	5.193	0.184	1.253	0.00	27.54
60.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.193	0.184	1.253	0.00	302.39
65.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	5.313	0.188	1.265	0.00	31.71
65.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	5.313	0.188	1.265	0.00	48.55
65.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.313	0.188	1.265	0.00	107.71

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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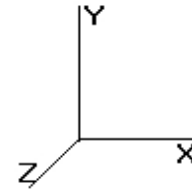
Load Case: 1.2D + 1.0Di + 1.0Wi 50.00 mph with 1.00 in Radial Ice 27 Iterations

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

65.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.313	0.188	1.265	0.00	87.40
65.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.313	0.188	1.265	0.00	47.79
65.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	5.12	0.00	5.313	0.188	1.265	0.00	27.98
65.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.313	0.188	1.265	0.00	304.41
70.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	5.426	0.193	1.279	0.00	32.15
70.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	5.426	0.193	1.279	0.00	49.07
70.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.426	0.193	1.279	0.00	108.34
70.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.426	0.193	1.279	0.00	88.11
70.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.426	0.193	1.279	0.00	48.30
70.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	5.13	0.00	5.426	0.193	1.279	0.00	28.40
70.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.426	0.193	1.279	0.00	306.30
75.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.183	1.250	0.00	32.57
75.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.183	1.250	0.00	49.55
75.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.183	1.250	0.00	108.94
75.00	(12) 1 5/8" Coax	Yes	1.38	0.000	5.94	1.18	0.00	5.534	0.183	1.250	0.00	85.03
75.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.183	1.250	0.00	88.77
75.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.534	0.183	1.250	0.00	48.79
75.00	(4) #20 Dywidag	Yes	3.62	0.000	8.00	3.72	0.00	5.534	0.183	1.250	0.00	20.85
75.00	(12) 1 5/8" Coax	Yes	3.62	0.000	0.00	0.00	0.00	5.534	0.183	1.250	0.00	223.04
80.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	5.637	0.150	1.151	0.00	32.97
80.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	5.637	0.150	1.151	0.00	50.01
80.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.637	0.150	1.151	0.00	109.50
80.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.30	0.00	5.637	0.150	1.151	0.00	309.74
80.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.637	0.150	1.151	0.00	89.40
80.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.637	0.150	1.151	0.00	49.25
85.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	5.736	0.154	1.162	0.00	33.34
85.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	5.736	0.154	1.162	0.00	50.45
85.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	5.736	0.154	1.162	0.00	110.04
85.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.31	0.00	5.736	0.154	1.162	0.00	311.33
85.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.736	0.154	1.162	0.00	89.99
85.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	5.736	0.154	1.162	0.00	49.68
87.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	5.784	0.157	1.171	0.00	16.76
87.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	5.784	0.157	1.171	0.00	25.33
87.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	5.784	0.157	1.171	0.00	55.16
87.50	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	2.16	0.00	5.784	0.157	1.171	0.00	156.07
87.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	5.784	0.157	1.171	0.00	45.15
87.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	5.784	0.157	1.171	0.00	24.95
90.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	5.830	0.159	1.177	0.00	16.85
90.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	5.830	0.159	1.177	0.00	25.43
90.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	5.830	0.159	1.177	0.00	55.27
90.00	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	2.16	0.00	5.830	0.159	1.177	0.00	156.39
90.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	5.830	0.159	1.177	0.00	45.27
90.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	5.830	0.159	1.177	0.00	25.04
93.00	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	5.885	0.161	1.184	0.00	20.35
93.00	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	5.885	0.161	1.184	0.00	30.67
93.00	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	5.885	0.161	1.184	0.00	66.52
93.00	(12) 1 5/8" Coax	Yes	3.00	0.000	5.94	2.59	0.00	5.885	0.161	1.184	0.00	188.24
93.00	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	5.885	0.161	1.184	0.00	54.54
93.00	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	5.885	0.161	1.184	0.00	30.20
95.00	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	5.921	0.161	1.182	0.00	13.62
95.00	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	5.921	0.161	1.182	0.00	20.50
95.00	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	5.921	0.161	1.182	0.00	44.41
95.00	(12) 1 5/8" Coax	Yes	2.00	0.000	5.94	1.73	0.00	5.921	0.161	1.182	0.00	125.68
95.00	(3) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	5.921	0.161	1.182	0.00	36.43
95.00	(1) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	5.921	0.161	1.182	0.00	20.19
100.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.008	0.164	1.191	0.00	34.37
100.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.008	0.164	1.191	0.00	51.64

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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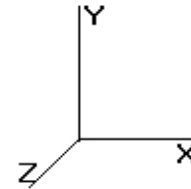
Load Case: 1.2D + 1.0Di + 1.0Wi 50.00 mph with 1.00 in Radial Ice 27 Iterations

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

100.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.008	0.164	1.191	0.00	111.51
100.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.34	0.00	6.008	0.164	1.191	0.00	315.63
100.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.008	0.164	1.191	0.00	91.62
100.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.008	0.164	1.191	0.00	50.87
105.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.093	0.168	1.205	0.00	34.69
105.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.093	0.168	1.205	0.00	52.01
105.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.093	0.168	1.205	0.00	111.95
105.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.35	0.00	6.093	0.168	1.205	0.00	316.94
105.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.093	0.168	1.205	0.00	92.11
105.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.093	0.168	1.205	0.00	51.24
110.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.174	0.173	1.219	0.00	34.99
110.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.174	0.173	1.219	0.00	52.36
110.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.174	0.173	1.219	0.00	112.38
110.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.35	0.00	6.174	0.173	1.219	0.00	318.20
110.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.174	0.173	1.219	0.00	92.59
110.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.174	0.173	1.219	0.00	51.59
115.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.253	0.178	1.234	0.00	35.28
115.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.253	0.178	1.234	0.00	52.70
115.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.253	0.178	1.234	0.00	112.80
115.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.36	0.00	6.253	0.178	1.234	0.00	319.40
115.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.253	0.178	1.234	0.00	93.05
115.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.253	0.178	1.234	0.00	51.92
120.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.330	0.183	1.250	0.00	35.57
120.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.330	0.183	1.250	0.00	53.03
120.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.330	0.183	1.250	0.00	113.20
120.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.37	0.00	6.330	0.183	1.250	0.00	320.56
120.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.330	0.183	1.250	0.00	93.49
120.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.330	0.183	1.250	0.00	52.25
125.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.404	0.189	1.267	0.00	35.84
125.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.404	0.189	1.267	0.00	53.34
125.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.404	0.189	1.267	0.00	113.58
125.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.38	0.00	6.404	0.189	1.267	0.00	321.68
125.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.404	0.189	1.267	0.00	93.91
125.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.404	0.189	1.267	0.00	52.57
130.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.476	0.195	1.285	0.00	36.11
130.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.476	0.195	1.285	0.00	53.65
130.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.476	0.195	1.285	0.00	113.96
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	4.39	0.00	6.476	0.195	1.285	0.00	322.76
130.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.476	0.195	1.285	0.00	94.33
130.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.476	0.195	1.285	0.00	52.87
133.4	(1) 0.39" Cable	Yes	3.42	0.000	0.00	0.00	0.00	6.524	0.201	0.000	0.00	24.80
133.4	(2) 0.78" 8 AWG 6	Yes	3.42	0.000	0.00	0.00	0.00	6.524	0.201	0.000	0.00	36.80
133.4	(1) 3" Conduit	Yes	3.42	0.000	0.00	0.00	0.00	6.524	0.201	0.000	0.00	78.05
133.4	(12) 1 5/8" Coax	Yes	3.42	1.200	5.94	3.00	3.60	6.524	0.201	0.000	25.85	221.07
133.4	(3) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	6.524	0.201	0.000	0.00	64.65
133.4	(1) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	6.524	0.201	0.000	0.00	36.27
135.0	(1) 0.39" Cable	Yes	1.58	0.000	0.00	0.00	0.00	6.546	0.204	0.000	0.00	11.51
135.0	(2) 0.78" 8 AWG 6	Yes	1.58	0.000	0.00	0.00	0.00	6.546	0.204	0.000	0.00	17.08
135.0	(1) 3" Conduit	Yes	1.58	0.000	0.00	0.00	0.00	6.546	0.204	0.000	0.00	36.19
135.0	(12) 1 5/8" Coax	Yes	1.58	1.200	5.94	1.39	1.67	6.546	0.204	0.000	12.02	102.52
135.0	(3) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	6.546	0.204	0.000	0.00	29.99
135.0	(1) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	6.546	0.204	0.000	0.00	16.83
138.0	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	6.588	0.207	0.000	0.00	21.91
138.0	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	6.588	0.207	0.000	0.00	32.47
138.0	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	6.588	0.207	0.000	0.00	68.72
138.0	(12) 1 5/8" Coax	Yes	3.00	1.200	5.94	2.64	3.17	6.588	0.207	0.000	22.95	194.65
138.0	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	6.588	0.207	0.000	0.00	56.98

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.2D + 1.0Di + 1.0Wi 50.00 mph with 1.00 in Radial Ice 27 Iterations

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

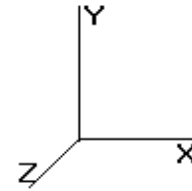
Wind Load Factor : 1.00

138.0	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	6.588	0.207	0.000	0.00	32.00
138.0	(1) 0.39" Cable	Yes	0.00	0.000	0.00	0.00	0.00	6.588	0.209	0.000	0.00	0.00
138.0	(2) 0.78" 8 AWG 6	Yes	0.00	0.000	0.00	0.00	0.00	6.588	0.209	0.000	0.00	0.00
138.0	(1) 3" Conduit	Yes	0.00	0.000	0.00	0.00	0.00	6.588	0.209	0.000	0.00	0.01
138.0	(12) 1 5/8" Coax	Yes	0.00	1.200	5.94	0.00	0.00	6.588	0.209	0.000	0.00	0.02
140.0	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	6.615	0.207	0.000	0.00	14.64
140.0	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	6.615	0.207	0.000	0.00	21.69
140.0	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	6.615	0.207	0.000	0.00	45.86
140.0	(12) 1 5/8" Coax	Yes	2.00	1.200	5.94	1.76	2.11	6.615	0.207	0.000	15.37	129.91
145.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.681	0.212	0.000	0.00	36.85
145.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.681	0.212	0.000	0.00	54.51
145.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.681	0.212	0.000	0.00	115.01
145.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	4.41	5.29	6.681	0.212	0.000	38.87	325.80
150.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.746	0.220	0.000	0.00	37.09
150.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.746	0.220	0.000	0.00	54.78
150.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.746	0.220	0.000	0.00	115.34
150.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	4.41	5.30	6.746	0.220	0.000	39.31	326.75
155.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.810	0.228	0.000	0.00	37.32
155.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.810	0.228	0.000	0.00	55.05
155.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.810	0.228	0.000	0.00	115.66
155.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	4.42	5.30	6.810	0.228	0.000	39.74	327.67
160.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.872	0.237	0.000	0.00	37.54
160.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.872	0.237	0.000	0.00	55.30
160.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.872	0.237	0.000	0.00	115.98
160.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	4.43	5.31	6.872	0.237	0.000	40.15	328.57
165.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.933	0.247	0.000	0.00	37.76
165.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.933	0.247	0.000	0.00	55.55
165.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.933	0.247	0.000	0.00	116.28
165.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	4.43	5.32	6.933	0.247	0.000	40.56	329.45
169.0	(1) 0.39" Cable	Yes	4.00	0.000	0.00	0.00	0.00	6.980	0.256	0.000	0.00	30.34
169.0	(2) 0.78" 8 AWG 6	Yes	4.00	0.000	0.00	0.00	0.00	6.980	0.256	0.000	0.00	44.60
169.0	(1) 3" Conduit	Yes	4.00	0.000	0.00	0.00	0.00	6.980	0.256	0.000	0.00	93.22
169.0	(12) 1 5/8" Coax	Yes	4.00	1.200	5.94	3.55	4.26	6.980	0.256	0.000	32.71	264.10
Totals:										307.53	20,815.94	

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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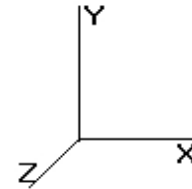
Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	27 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	132.63	2,938.18	0.00	0.00
10.00	130.91	2,976.00	0.00	0.00
15.00	128.97	2,984.71	0.00	0.00
20.00	126.95	2,980.62	0.00	0.00
22.50	62.67	1,484.42	0.00	0.00
25.00	62.15	1,481.19	0.00	0.00
30.00	122.86	2,952.82	0.00	0.00
35.00	126.16	2,933.03	0.00	0.00
40.00	128.73	2,910.62	0.00	0.00
43.58	93.05	2,070.77	0.00	0.00
45.00	37.35	1,125.51	0.00	0.00
50.00	134.28	3,941.20	0.00	0.00
52.50	67.11	1,348.81	0.00	0.00
55.00	67.36	1,342.84	0.00	0.00
60.00	136.13	2,666.77	0.00	0.00
65.00	136.53	2,641.05	0.00	0.00
70.00	136.64	2,280.46	0.00	0.00
75.00	136.49	2,245.16	0.00	0.00
80.00	136.10	2,195.91	0.00	0.00
85.00	135.49	2,166.91	0.00	0.00
87.50	67.18	1,073.35	0.00	0.00
90.00	67.98	1,443.74	0.00	0.00
93.00	81.35	1,716.48	0.00	0.00
95.00	53.93	792.25	0.00	0.00
100.0	134.66	1,960.22	0.00	0.00
105.0	133.36	1,933.28	0.00	0.00
110.0	131.91	1,905.97	0.00	0.00
115.0	130.32	1,878.31	0.00	0.00
120.0	128.59	1,850.33	0.00	0.00
125.0	126.74	1,822.06	0.00	0.00
130.0	124.77	1,793.50	0.00	0.00
133.4	109.77	1,210.16	0.00	0.00
135.0	51.00	687.80	0.00	0.00
138.0	987.35	8,843.48	0.00	764.84
138.0	0.01	0.13	0.00	0.00
140.0	63.79	571.70	0.00	0.00
145.0	158.71	1,409.43	0.00	0.00
150.0	156.76	1,385.10	0.00	0.00
155.0	154.71	1,360.59	0.00	0.00
160.0	152.55	1,335.90	0.00	0.00
165.0	150.30	1,311.03	0.00	0.00
169.0	992.40	8,005.24	0.00	934.32
170.0	21.10	147.99	0.00	0.00
175.0	104.15	718.61	0.00	0.00
180.0	101.24	691.75	0.00	0.00
182.0	913.21	7,240.90	0.00	634.15
185.0	58.49	361.83	0.00	0.00
Totals:	7,594.93	101,118.1	0.00	2,333.31

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	27 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

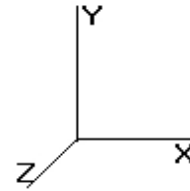
Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-101.12	-7.63	0.00	-1,021.60	0.00	1,021.60	4,727.77	2,363.89	10,057.5	4,967.06	0.00	0.00	0.170
5.00	-98.17	-7.57	0.00	-983.44	0.00	983.44	4,681.88	2,340.94	9,776.84	4,828.41	0.02	-0.04	0.167
10.00	-95.19	-7.51	0.00	-945.57	0.00	945.57	4,634.49	2,317.25	9,496.63	4,690.03	0.09	-0.09	0.164
15.00	-92.20	-7.45	0.00	-908.02	0.00	908.02	4,585.61	2,292.80	9,217.10	4,551.98	0.21	-0.13	0.161
20.00	-89.22	-7.37	0.00	-870.78	0.00	870.78	4,535.22	2,267.61	8,938.46	4,414.37	0.37	-0.17	0.158
22.50	-87.73	-7.33	0.00	-852.37	0.00	852.37	4,509.47	2,254.74	8,799.52	4,345.75	0.46	-0.20	0.157
22.50	-87.73	-7.33	0.00	-852.37	0.00	852.37	4,509.47	2,254.74	8,799.52	4,345.75	0.46	-0.20	0.157
25.00	-86.24	-7.32	0.00	-834.04	0.00	834.04	4,483.35	2,241.67	8,660.87	4,277.28	0.57	-0.22	0.155
30.00	-83.28	-7.25	0.00	-797.46	0.00	797.46	4,429.97	2,214.99	8,384.50	4,140.79	0.83	-0.27	0.152
35.00	-80.35	-7.17	0.00	-761.23	0.00	761.23	4,375.10	2,187.55	8,109.53	4,004.99	1.13	-0.31	0.149
40.00	-77.43	-7.08	0.00	-725.38	0.00	725.38	4,318.73	2,159.36	7,836.14	3,869.97	1.48	-0.36	0.145
43.58	-75.36	-7.00	0.00	-700.02	0.00	700.02	4,277.41	2,138.70	7,641.27	3,773.74	1.76	-0.39	0.143
45.00	-74.23	-6.99	0.00	-690.10	0.00	690.10	4,260.86	2,130.43	7,564.50	3,735.82	1.88	-0.40	0.141
50.00	-70.29	-6.87	0.00	-655.13	0.00	655.13	3,421.90	1,710.95	6,065.62	2,995.58	2.32	-0.45	0.160
52.50	-68.93	-6.82	0.00	-637.95	0.00	637.95	3,401.39	1,700.70	5,962.75	2,944.78	2.57	-0.47	0.158
52.50	-68.93	-6.82	0.00	-637.95	0.00	637.95	3,401.39	1,700.70	5,962.75	2,944.78	2.57	-0.47	0.158
55.00	-67.59	-6.79	0.00	-620.89	0.00	620.89	3,380.51	1,690.25	5,860.04	2,894.05	2.82	-0.50	0.155
60.00	-64.92	-6.69	0.00	-586.94	0.00	586.94	3,337.62	1,668.81	5,655.16	2,792.87	3.37	-0.55	0.151
65.00	-62.27	-6.58	0.00	-553.51	0.00	553.51	3,293.24	1,646.62	5,451.16	2,692.12	3.97	-0.60	0.146
65.00	-62.27	-6.58	0.00	-553.51	0.00	553.51	3,293.24	1,646.62	5,451.16	2,692.12	3.97	-0.60	0.225
70.00	-59.99	-6.48	0.00	-520.64	0.00	520.64	3,247.36	1,623.68	5,248.21	2,591.90	4.62	-0.65	0.219
75.00	-57.73	-6.40	0.00	-488.23	0.00	488.23	3,199.99	1,599.99	5,046.49	2,492.27	5.33	-0.72	0.214
80.00	-55.53	-6.31	0.00	-456.25	0.00	456.25	3,151.11	1,575.56	4,846.18	2,393.35	6.13	-0.80	0.208
85.00	-53.36	-6.19	0.00	-424.72	0.00	424.72	3,100.74	1,550.37	4,647.44	2,295.20	7.01	-0.88	0.202
87.50	-52.28	-6.15	0.00	-409.24	0.00	409.24	3,074.99	1,537.50	4,548.71	2,246.44	7.48	-0.92	0.199
90.00	-50.84	-6.09	0.00	-393.88	0.00	393.88	3,048.88	1,524.44	4,450.47	2,197.92	7.97	-0.96	0.196
93.00	-49.12	-6.02	0.00	-375.60	0.00	375.60	2,367.81	1,183.91	3,474.51	1,715.93	8.59	-1.01	0.240
95.00	-48.32	-6.00	0.00	-363.56	0.00	363.56	2,354.00	1,177.00	3,417.42	1,687.73	9.02	-1.04	0.236
100.00	-46.35	-5.90	0.00	-333.57	0.00	333.57	2,318.41	1,159.21	3,275.08	1,617.44	10.15	-1.13	0.226
105.00	-44.42	-5.79	0.00	-304.07	0.00	304.07	2,281.33	1,140.66	3,133.47	1,547.50	11.38	-1.21	0.216
110.00	-42.50	-5.68	0.00	-275.10	0.00	275.10	2,242.75	1,121.37	2,992.76	1,478.01	12.70	-1.30	0.205
115.00	-40.62	-5.57	0.00	-246.67	0.00	246.67	2,202.67	1,101.33	2,853.13	1,409.05	14.11	-1.39	0.194
120.00	-38.77	-5.45	0.00	-218.83	0.00	218.83	2,161.09	1,080.55	2,714.76	1,340.72	15.60	-1.47	0.181
125.00	-36.94	-5.33	0.00	-191.57	0.00	191.57	2,118.02	1,059.01	2,577.82	1,273.09	17.19	-1.55	0.168
130.00	-35.15	-5.19	0.00	-164.94	0.00	164.94	2,073.45	1,036.73	2,442.48	1,206.25	18.85	-1.63	0.154
133.42	-33.94	-5.07	0.00	-147.21	0.00	147.21	2,042.13	1,021.07	2,351.01	1,161.07	20.03	-1.68	0.143
135.00	-33.25	-5.01	0.00	-139.19	0.00	139.19	2,027.39	1,013.69	2,308.93	1,140.29	20.59	-1.70	0.138
138.00	-24.44	-3.77	0.00	-123.38	0.00	123.38	1,999.03	999.51	2,229.72	1,101.18	21.67	-1.74	0.124
138.00	-24.44	-3.78	0.00	-123.38	0.00	123.38	1,223.81	611.90	1,396.77	689.81	21.67	-1.74	0.199
140.00	-23.86	-3.72	0.00	-115.83	0.00	115.83	1,215.85	607.93	1,368.67	675.93	22.41	-1.77	0.191
145.00	-22.45	-3.55	0.00	-97.23	0.00	97.23	1,194.90	597.45	1,298.35	641.21	24.30	-1.85	0.170
150.00	-21.07	-3.37	0.00	-79.50	0.00	79.50	1,172.46	586.23	1,228.11	606.52	26.28	-1.93	0.149
155.00	-19.71	-3.19	0.00	-62.64	0.00	62.64	1,148.52	574.26	1,158.11	571.95	28.34	-2.00	0.127
160.00	-18.38	-3.01	0.00	-46.68	0.00	46.68	1,123.08	561.54	1,088.54	537.59	30.46	-2.05	0.103
165.00	-17.07	-2.82	0.00	-31.63	0.00	31.63	1,096.15	548.08	1,019.56	503.52	32.64	-2.10	0.078
169.00	-9.11	-1.54	0.00	-19.40	0.00	19.40	1,073.53	536.76	964.93	476.54	34.41	-2.13	0.049
170.00	-8.96	-1.51	0.00	-17.87	0.00	17.87	1,067.72	533.86	951.36	469.84	34.86	-2.14	0.046
175.00	-8.25	-1.39	0.00	-10.30	0.00	10.30	1,037.79	518.90	884.11	436.63	37.11	-2.16	0.032
180.00	-7.56	-1.26	0.00	-3.37	0.00	3.37	1,006.37	503.18	817.98	403.97	39.37	-2.17	0.016
182.00	-0.36	-0.07	0.00	-0.22	0.00	0.22	993.38	496.69	791.88	391.08	40.28	-2.17	0.001
185.00	0.00	-0.06	0.00	0.00	0.00	0.00	973.45	486.72	753.15	371.95	41.65	-2.17	0.000

Pole : 302537
Location : Middletown CT 3, CT
Height : 185.0 (ft)
Base Dia : 52.00 (in)
Top Dia : 19.03 (in)
Shape : 12 Sides
Taper : 0.188014 (in/ft)

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

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Load Case: 1.2D + 1.0Di + 1.0Wi

50.00 mph with 1.00 in Radial Ice

27 Iterations

Gust Response Factor : 1.10

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00

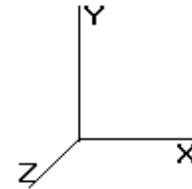
Dead Load Factor : 1.20

Ice Importance Factor : 1.00

Wind Load Factor : 1.00

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.0D + 1.0W	60.00 mph Serviceability	26 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	6.129	6.742	225.20	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	6.129	6.742	221.13	1.000	* 0.000	5.00	22.228	22.23	149.9	0.0	1,558.6
10.00		1.00	0.70	6.129	6.742	217.06	1.000	* 0.000	5.00	21.823	21.82	147.1	0.0	1,536.1
15.00		1.00	0.70	6.129	6.742	212.99	1.000	* 0.000	5.00	21.417	21.42	144.4	0.0	1,513.5
20.00		1.00	0.70	6.129	6.742	208.92	1.000	* 0.000	5.00	21.012	21.01	141.7	0.0	1,491.0
22.50	Reinf. Top Reinf Bottom	1.00	0.70	6.129	6.742	206.88	1.000	* 0.000	2.50	10.354	10.35	69.8	0.0	737.1
25.00		1.00	0.70	6.129	6.742	204.84	1.000	* 0.000	2.50	10.252	10.25	69.1	0.0	731.4
30.00		1.00	0.70	6.134	6.747	200.86	1.000	* 0.000	5.00	20.201	20.20	136.3	0.0	1,445.9
35.00		1.00	0.73	6.410	7.051	201.17	1.000	* 0.000	5.00	19.795	19.80	139.6	0.0	1,423.4
40.00		1.00	0.76	6.659	7.325	200.80	1.000	* 0.000	5.00	19.390	19.39	142.0	0.0	1,400.9
43.58	Bot - Section 2	1.00	0.77	6.825	7.507	200.19	1.000	* 0.000	3.58	13.646	13.65	102.4	0.0	990.1
45.00		1.00	0.78	6.887	7.576	199.89	1.000	* 0.000	1.42	5.429	5.43	41.1	0.0	644.6
50.00	Top - Section 1	1.00	0.81	7.098	7.807	198.54	1.000	* 0.000	5.00	18.902	18.90	147.6	0.0	2,248.3
52.50	Reinf. Top Reinf Bottom	1.00	0.82	7.197	7.917	201.24	1.000	* 0.000	2.50	9.299	9.30	73.6	0.0	606.0
55.00		1.00	0.83	7.294	8.023	200.36	1.000	* 0.000	2.50	9.198	9.20	73.8	0.0	601.2
60.00		1.00	0.85	7.477	8.225	198.37	1.000	* 0.000	5.00	18.091	18.09	148.8	0.0	1,187.9
65.00	Reinf. Top	1.00	0.87	7.650	8.415	196.10	1.000	* 0.000	5.00	17.686	17.69	148.8	0.0	1,168.6
70.00		1.00	0.89	7.814	8.595	193.59	1.000	* 0.000	5.00	17.280	17.28	148.5	0.0	815.3
75.00		1.00	0.91	7.969	8.766	190.87	1.000	* 0.000	5.00	16.875	16.87	147.9	0.0	796.0
80.00		1.00	0.92	8.118	8.930	187.95	1.000	* 0.000	5.00	16.469	16.47	147.1	0.0	776.7
85.00		1.00	0.94	8.260	9.086	184.86	1.000	* 0.000	5.00	16.064	16.06	145.9	0.0	757.3
87.50	Bot - Section 3	1.00	0.95	8.328	9.161	183.25	1.000	* 0.000	2.50	7.881	7.88	72.2	0.0	371.5
90.00		1.00	0.95	8.396	9.235	181.61	1.000	* 0.000	2.50	7.912	7.91	73.1	0.0	677.9
93.00	Top - Section 2	1.00	0.96	8.475	9.322	179.59	1.000	* 0.000	3.00	9.363	9.36	87.3	0.0	802.0
95.00		1.00	0.97	8.526	9.379	181.41	1.000	* 0.000	2.00	6.159	6.16	57.8	0.0	242.3
100.00		1.00	0.98	8.652	9.517	177.91	1.000	* 0.000	5.00	15.117	15.12	143.9	0.0	594.6
105.00		1.00	1.00	8.774	9.651	174.28	1.000	* 0.000	5.00	14.711	14.71	142.0	0.0	578.5
110.00		1.00	1.01	8.891	9.780	170.54	1.000	* 0.000	5.00	14.306	14.31	139.9	0.0	562.4
115.00		1.00	1.02	9.005	9.905	166.69	1.000	* 0.000	5.00	13.900	13.90	137.7	0.0	546.3
120.00		1.00	1.04	9.115	10.02	162.74	1.000	* 0.000	5.00	13.495	13.49	135.3	0.0	530.2
125.00		1.00	1.05	9.222	10.14	158.70	1.000	* 0.000	5.00	13.089	13.09	132.8	0.0	514.1
130.00		1.00	1.06	9.326	10.25	154.57	1.000	* 0.000	5.00	12.684	12.68	130.1	0.0	498.0
133.4	Bot - Section 4	1.00	1.07	9.395	10.33	151.70	1.200	* 0.000	3.42	8.435	10.12	104.6	0.0	331.1
135.00		1.00	1.07	9.427	10.36	150.35	1.200	* 0.000	1.58	3.903	4.68	48.6	0.0	258.4
138.0	Appertunance(s)	1.00	1.08	9.486	10.43	147.79	1.200	* 0.000	3.00	7.285	8.74	91.2	0.0	482.3
138.0	Top - Section 3	1.00	1.08	9.486	10.43	147.79	1.200	* 0.000	0.00	0.001	0.00	0.0	0.0	0.1
140.00		1.00	1.08	9.525	10.47	148.42	1.200	* 0.000	2.00	4.775	5.73	60.0	0.0	131.6
145.00		1.00	1.09	9.621	10.58	144.07	1.200	* 0.000	5.00	11.656	13.99	148.0	0.0	321.2
150.00		1.00	1.11	9.715	10.68	139.64	1.200	* 0.000	5.00	11.250	13.50	144.3	0.0	309.9
155.00		1.00	1.12	9.806	10.78	135.15	1.200	* 0.000	5.00	10.845	13.01	140.4	0.0	298.7
160.00		1.00	1.13	9.896	10.88	130.59	1.200	* 0.000	5.00	10.439	12.53	136.4	0.0	287.4
165.00		1.00	1.14	9.983	10.98	125.97	1.200	* 0.000	5.00	10.034	12.04	132.2	0.0	276.1
169.0	Appertunance(s)	1.00	1.14	10.052	11.05	122.23	1.200	* 0.000	4.00	7.735	9.28	102.6	0.0	212.8
170.00		1.00	1.15	10.069	11.07	121.29	1.000	0.000	1.00	1.893	1.89	21.0	0.0	52.1
175.00		1.00	1.16	10.152	11.16	116.55	1.000	0.000	5.00	9.223	9.22	103.0	0.0	253.6
180.00		1.00	1.16	10.234	11.25	111.76	1.000	0.000	5.00	8.817	8.82	99.3	0.0	242.3
182.0	Appertunance(s)	1.00	1.17	10.267	11.29	109.83	1.000	0.000	2.00	3.413	3.41	38.5	0.0	93.8
185.00		1.00	1.17	10.315	11.34	106.92	1.000	0.000	3.00	4.998	5.00	56.7	0.0	137.3

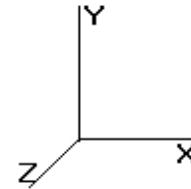
* = Cf Adjusted By Linear Load Ra Effect

Totals: 185.00 5,144.2 0.0 32,036.6

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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Load Case: 1.0D + 1.0W 60.00 mph Serviceability 26 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 1.00

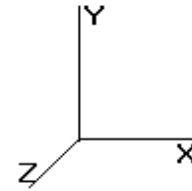
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
138.0	Flat Platform w/ Han	1	9.486	10.435	1.00	1.00	42.40	0.000	0.000	442.43	0.00	0.00	2,000.00
138.0	RFS APXVSPP18-C-	3	9.525	10.478	0.83	0.75	14.98	0.000	2.000	156.93	0.00	313.86	171.00
138.0	Alcatel-Lucent 800 M	3	9.525	10.478	0.67	0.75	3.11	0.000	2.000	32.54	0.00	65.08	192.00
138.0	Alcatel-Lucent 4X40W	3	9.525	10.478	0.67	0.75	4.91	0.000	2.000	51.49	0.00	102.98	264.00
138.0	Alcatel-Lucent TD-RR	3	9.525	10.478	0.67	0.75	5.56	0.000	2.000	58.28	0.00	116.57	198.30
138.0	RFS APXVTM14-C-I20	3	9.525	10.478	0.78	0.75	11.13	0.000	2.000	116.58	0.00	233.17	168.60
169.0	Round Low Profile PI	1	10.052	11.057	1.00	1.00	21.70	0.000	0.000	239.93	0.00	0.00	1,500.00
169.0	Allgon 7770.00	6	10.085	11.094	0.77	0.80	20.36	0.000	2.000	225.93	0.00	451.86	210.00
169.0	Powerwave LGP21401	12	10.069	11.075	0.50	0.80	5.28	0.000	1.000	58.48	0.00	58.48	169.20
169.0	KMW AM-X-CD-16-65-	3	10.085	11.094	0.79	0.80	15.21	0.000	2.000	168.69	0.00	337.39	145.50
169.0	Raycap DC6-48-60-18-	1	10.069	11.075	1.00	0.80	0.89	0.000	1.000	9.83	0.00	9.83	20.00
169.0	Ericsson RRUS 11	6	10.085	11.094	0.67	0.80	8.10	0.000	2.000	89.91	0.00	179.82	330.00
182.0	48" x 12" Panels	9	10.299	11.329	0.67	0.75	22.93	0.000	2.000	259.76	0.00	519.51	270.00
182.0	72" x 12" Panels	3	10.299	11.329	0.67	0.75	12.26	0.000	2.000	138.84	0.00	277.69	135.00
182.0	Flat Platform w/ Han	1	10.267	11.293	1.00	1.00	42.40	0.000	0.000	478.84	0.00	0.00	2,000.00
										2,528.47			7,773.60

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.0D + 1.0W 60.00 mph Serviceability 26 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 1.00

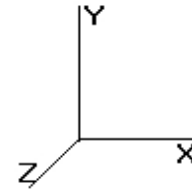
Wind Load Factor : 1.00

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.150	1.150	0.00	0.35
5.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.150	1.150	0.00	5.90
5.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.150	1.150	0.00	37.90
5.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.150	1.150	0.00	15.00
5.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.150	1.150	0.00	5.00
5.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	6.129	0.150	1.150	0.00	0.00
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.150	1.150	0.00	49.19
10.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.153	1.158	0.00	0.35
10.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.153	1.158	0.00	5.90
10.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.153	1.158	0.00	37.90
10.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.153	1.158	0.00	15.00
10.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.153	1.158	0.00	5.00
10.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	6.129	0.153	1.158	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.153	1.158	0.00	49.19
15.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.156	1.167	0.00	0.35
15.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.156	1.167	0.00	5.90
15.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.156	1.167	0.00	37.90
15.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.156	1.167	0.00	15.00
15.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.156	1.167	0.00	5.00
15.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	6.129	0.156	1.167	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.156	1.167	0.00	49.19
20.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.159	1.176	0.00	0.35
20.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.159	1.176	0.00	5.90
20.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.159	1.176	0.00	37.90
20.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.159	1.176	0.00	15.00
20.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.159	1.176	0.00	5.00
20.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	6.129	0.159	1.176	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.159	1.176	0.00	49.19
22.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.161	1.183	0.00	0.17
22.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.161	1.183	0.00	2.95
22.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.161	1.183	0.00	18.95
22.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.161	1.183	0.00	7.50
22.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.161	1.183	0.00	2.50
22.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	6.129	0.161	1.183	0.00	0.00
22.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.161	1.183	0.00	24.60
25.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.163	1.188	0.00	0.17
25.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.163	1.188	0.00	2.95
25.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.163	1.188	0.00	18.95
25.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.163	1.188	0.00	7.50
25.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.163	1.188	0.00	2.50
25.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	6.129	0.163	1.188	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	6.129	0.163	1.188	0.00	24.60
30.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.134	0.165	1.195	0.00	0.35
30.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.134	0.165	1.195	0.00	5.90
30.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.134	0.165	1.195	0.00	37.90
30.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.134	0.165	1.195	0.00	15.00
30.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.134	0.165	1.195	0.00	5.00
30.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	6.134	0.165	1.195	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.134	0.165	1.195	0.00	49.19
35.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.410	0.168	1.205	0.00	0.35
35.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.410	0.168	1.205	0.00	5.90

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.0D + 1.0W **60.00 mph Serviceability** **26 Iterations**

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

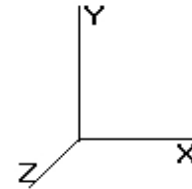
Dead Load Factor : 1.00

Wind Load Factor : 1.00

35.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.410	0.168	1.205	0.00	37.90
35.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.410	0.168	1.205	0.00	15.00
35.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.410	0.168	1.205	0.00	5.00
35.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	6.410	0.168	1.205	0.00	0.00
35.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.410	0.168	1.205	0.00	49.19
40.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.172	1.216	0.00	0.35
40.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.172	1.216	0.00	5.90
40.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.172	1.216	0.00	37.90
40.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.172	1.216	0.00	15.00
40.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.172	1.216	0.00	5.00
40.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	6.659	0.172	1.216	0.00	0.00
40.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.659	0.172	1.216	0.00	49.19
43.58	(1) 0.39" Cable	Yes	3.58	0.000	0.00	0.00	0.00	6.825	0.175	1.225	0.00	0.25
43.58	(2) 0.78" 8 AWG 6	Yes	3.58	0.000	0.00	0.00	0.00	6.825	0.175	1.225	0.00	4.23
43.58	(1) 3" Conduit	Yes	3.58	0.000	0.00	0.00	0.00	6.825	0.175	1.225	0.00	27.16
43.58	(3) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	6.825	0.175	1.225	0.00	10.75
43.58	(1) 1 1/4" Hybriflex	Yes	3.58	0.000	0.00	0.00	0.00	6.825	0.175	1.225	0.00	3.58
43.58	(4) #20 Dywidag	Yes	3.58	0.000	8.00	2.39	0.00	6.825	0.175	1.225	0.00	0.00
43.58	(12) 1 5/8" Coax	Yes	3.58	0.000	0.00	0.00	0.00	6.825	0.175	1.225	0.00	35.26
45.00	(1) 0.39" Cable	Yes	1.42	0.000	0.00	0.00	0.00	6.887	0.177	1.231	0.00	0.10
45.00	(2) 0.78" 8 AWG 6	Yes	1.42	0.000	0.00	0.00	0.00	6.887	0.177	1.231	0.00	1.67
45.00	(1) 3" Conduit	Yes	1.42	0.000	0.00	0.00	0.00	6.887	0.177	1.231	0.00	10.74
45.00	(3) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	6.887	0.177	1.231	0.00	4.25
45.00	(1) 1 1/4" Hybriflex	Yes	1.42	0.000	0.00	0.00	0.00	6.887	0.177	1.231	0.00	1.42
45.00	(4) #20 Dywidag	Yes	1.42	0.000	8.00	0.94	0.00	6.887	0.177	1.231	0.00	0.00
45.00	(12) 1 5/8" Coax	Yes	1.42	0.000	0.00	0.00	0.00	6.887	0.177	1.231	0.00	13.94
50.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	7.098	0.179	1.238	0.00	0.35
50.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	7.098	0.179	1.238	0.00	5.90
50.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.098	0.179	1.238	0.00	37.90
50.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.098	0.179	1.238	0.00	15.00
50.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.098	0.179	1.238	0.00	5.00
50.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	7.098	0.179	1.238	0.00	0.00
50.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.098	0.179	1.238	0.00	49.19
52.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	7.197	0.179	1.238	0.00	0.17
52.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	7.197	0.179	1.238	0.00	2.95
52.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	7.197	0.179	1.238	0.00	18.95
52.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	7.197	0.179	1.238	0.00	7.50
52.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	7.197	0.179	1.238	0.00	2.50
52.50	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	7.197	0.179	1.238	0.00	0.00
52.50	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	7.197	0.179	1.238	0.00	24.60
55.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	7.294	0.181	1.244	0.00	0.17
55.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	7.294	0.181	1.244	0.00	2.95
55.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	7.294	0.181	1.244	0.00	18.95
55.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	7.294	0.181	1.244	0.00	7.50
55.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	7.294	0.181	1.244	0.00	2.50
55.00	(4) #20 Dywidag	Yes	2.50	0.000	8.00	1.67	0.00	7.294	0.181	1.244	0.00	0.00
55.00	(12) 1 5/8" Coax	Yes	2.50	0.000	0.00	0.00	0.00	7.294	0.181	1.244	0.00	24.60
60.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.184	1.253	0.00	0.35
60.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.184	1.253	0.00	5.90
60.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.184	1.253	0.00	37.90
60.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.184	1.253	0.00	15.00
60.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.184	1.253	0.00	5.00
60.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	7.477	0.184	1.253	0.00	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.477	0.184	1.253	0.00	49.19
65.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	7.650	0.188	1.265	0.00	0.35
65.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	7.650	0.188	1.265	0.00	5.90
65.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.650	0.188	1.265	0.00	37.90

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.0D + 1.0W **60.00 mph Serviceability** **26 Iterations**

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

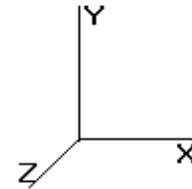
Dead Load Factor : 1.00

Wind Load Factor : 1.00

65.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.650	0.188	1.265	0.00	15.00
65.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.650	0.188	1.265	0.00	5.00
65.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	7.650	0.188	1.265	0.00	0.00
65.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.650	0.188	1.265	0.00	49.19
70.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	7.814	0.193	1.279	0.00	0.35
70.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	7.814	0.193	1.279	0.00	5.90
70.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.814	0.193	1.279	0.00	37.90
70.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.814	0.193	1.279	0.00	15.00
70.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.814	0.193	1.279	0.00	5.00
70.00	(4) #20 Dywidag	Yes	5.00	0.000	8.00	3.33	0.00	7.814	0.193	1.279	0.00	0.00
70.00	(12) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.814	0.193	1.279	0.00	49.19
75.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.183	1.250	0.00	0.35
75.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.183	1.250	0.00	5.90
75.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.183	1.250	0.00	37.90
75.00	(12) 1 5/8" Coax	Yes	1.38	0.000	5.94	0.68	0.00	7.969	0.183	1.250	0.00	13.58
75.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.183	1.250	0.00	15.00
75.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	7.969	0.183	1.250	0.00	5.00
75.00	(4) #20 Dywidag	Yes	3.62	0.000	8.00	2.41	0.00	7.969	0.183	1.250	0.00	0.00
75.00	(12) 1 5/8" Coax	Yes	3.62	0.000	0.00	0.00	0.00	7.969	0.183	1.250	0.00	35.62
80.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	8.118	0.150	1.151	0.00	0.35
80.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	8.118	0.150	1.151	0.00	5.90
80.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	8.118	0.150	1.151	0.00	37.90
80.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	8.118	0.150	1.151	0.00	49.19
80.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.118	0.150	1.151	0.00	15.00
80.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.118	0.150	1.151	0.00	5.00
85.00	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	8.260	0.154	1.162	0.00	0.35
85.00	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	8.260	0.154	1.162	0.00	5.90
85.00	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	8.260	0.154	1.162	0.00	37.90
85.00	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	8.260	0.154	1.162	0.00	49.19
85.00	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.260	0.154	1.162	0.00	15.00
85.00	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.260	0.154	1.162	0.00	5.00
87.50	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	8.328	0.157	1.171	0.00	0.18
87.50	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	8.328	0.157	1.171	0.00	2.95
87.50	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	8.328	0.157	1.171	0.00	18.95
87.50	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	1.24	0.00	8.328	0.157	1.171	0.00	24.60
87.50	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	8.328	0.157	1.171	0.00	7.50
87.50	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	8.328	0.157	1.171	0.00	2.50
90.00	(1) 0.39" Cable	Yes	2.50	0.000	0.00	0.00	0.00	8.396	0.159	1.177	0.00	0.17
90.00	(2) 0.78" 8 AWG 6	Yes	2.50	0.000	0.00	0.00	0.00	8.396	0.159	1.177	0.00	2.95
90.00	(1) 3" Conduit	Yes	2.50	0.000	0.00	0.00	0.00	8.396	0.159	1.177	0.00	18.95
90.00	(12) 1 5/8" Coax	Yes	2.50	0.000	5.94	1.24	0.00	8.396	0.159	1.177	0.00	24.59
90.00	(3) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	8.396	0.159	1.177	0.00	7.50
90.00	(1) 1 1/4" Hybriflex	Yes	2.50	0.000	0.00	0.00	0.00	8.396	0.159	1.177	0.00	2.50
93.00	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	8.475	0.161	1.184	0.00	0.21
93.00	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	8.475	0.161	1.184	0.00	3.54
93.00	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	8.475	0.161	1.184	0.00	22.74
93.00	(12) 1 5/8" Coax	Yes	3.00	0.000	5.94	1.49	0.00	8.475	0.161	1.184	0.00	29.52
93.00	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	8.475	0.161	1.184	0.00	9.00
93.00	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	8.475	0.161	1.184	0.00	3.00
95.00	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	8.526	0.161	1.182	0.00	0.14
95.00	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	8.526	0.161	1.182	0.00	2.36
95.00	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	8.526	0.161	1.182	0.00	15.16
95.00	(12) 1 5/8" Coax	Yes	2.00	0.000	5.94	0.99	0.00	8.526	0.161	1.182	0.00	19.67
95.00	(3) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	8.526	0.161	1.182	0.00	6.00
95.00	(1) 1 1/4" Hybriflex	Yes	2.00	0.000	0.00	0.00	0.00	8.526	0.161	1.182	0.00	2.00
100.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	8.652	0.164	1.191	0.00	0.35
100.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	8.652	0.164	1.191	0.00	5.90

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.0D + 1.0W **60.00 mph Serviceability** **26 Iterations**

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

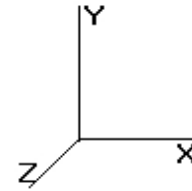
Dead Load Factor : 1.00

Wind Load Factor : 1.00

100.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	8.652	0.164	1.191	0.00	37.90
100.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	8.652	0.164	1.191	0.00	49.19
100.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.652	0.164	1.191	0.00	15.00
100.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.652	0.164	1.191	0.00	5.00
105.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	8.774	0.168	1.205	0.00	0.35
105.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	8.774	0.168	1.205	0.00	5.90
105.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	8.774	0.168	1.205	0.00	37.90
105.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	8.774	0.168	1.205	0.00	49.19
105.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.774	0.168	1.205	0.00	15.00
105.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.774	0.168	1.205	0.00	5.00
110.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	8.891	0.173	1.219	0.00	0.35
110.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	8.891	0.173	1.219	0.00	5.90
110.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	8.891	0.173	1.219	0.00	37.90
110.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	8.891	0.173	1.219	0.00	49.19
110.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.891	0.173	1.219	0.00	15.00
110.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	8.891	0.173	1.219	0.00	5.00
115.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.005	0.178	1.234	0.00	0.35
115.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.005	0.178	1.234	0.00	5.90
115.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.005	0.178	1.234	0.00	37.90
115.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	9.005	0.178	1.234	0.00	49.19
115.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.005	0.178	1.234	0.00	15.00
115.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.005	0.178	1.234	0.00	5.00
120.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.115	0.183	1.250	0.00	0.35
120.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.115	0.183	1.250	0.00	5.90
120.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.115	0.183	1.250	0.00	37.90
120.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	9.115	0.183	1.250	0.00	49.19
120.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.115	0.183	1.250	0.00	15.00
120.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.115	0.183	1.250	0.00	5.00
125.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.222	0.189	1.267	0.00	0.35
125.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.222	0.189	1.267	0.00	5.90
125.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.222	0.189	1.267	0.00	37.90
125.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	9.222	0.189	1.267	0.00	49.19
125.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.222	0.189	1.267	0.00	15.00
125.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.222	0.189	1.267	0.00	5.00
130.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.326	0.195	1.285	0.00	0.35
130.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.326	0.195	1.285	0.00	5.90
130.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.326	0.195	1.285	0.00	37.90
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	5.94	2.47	0.00	9.326	0.195	1.285	0.00	49.19
130.0	(3) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.326	0.195	1.285	0.00	15.00
130.0	(1) 1 1/4" Hybriflex	Yes	5.00	0.000	0.00	0.00	0.00	9.326	0.195	1.285	0.00	5.00
133.4	(1) 0.39" Cable	Yes	3.42	0.000	0.00	0.00	0.00	9.395	0.201	0.000	0.00	0.24
133.4	(2) 0.78" 8 AWG 6	Yes	3.42	0.000	0.00	0.00	0.00	9.395	0.201	0.000	0.00	4.03
133.4	(1) 3" Conduit	Yes	3.42	0.000	0.00	0.00	0.00	9.395	0.201	0.000	0.00	25.90
133.4	(12) 1 5/8" Coax	Yes	3.42	1.200	5.94	1.69	2.03	9.395	0.201	0.000	20.98	33.62
133.4	(3) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	9.395	0.201	0.000	0.00	10.25
133.4	(1) 1 1/4" Hybriflex	Yes	3.42	0.000	0.00	0.00	0.00	9.395	0.201	0.000	0.00	3.42
135.0	(1) 0.39" Cable	Yes	1.58	0.000	0.00	0.00	0.00	9.427	0.204	0.000	0.00	0.11
135.0	(2) 0.78" 8 AWG 6	Yes	1.58	0.000	0.00	0.00	0.00	9.427	0.204	0.000	0.00	1.87
135.0	(1) 3" Conduit	Yes	1.58	0.000	0.00	0.00	0.00	9.427	0.204	0.000	0.00	12.00
135.0	(12) 1 5/8" Coax	Yes	1.58	1.200	5.94	0.78	0.94	9.427	0.204	0.000	9.75	15.57
135.0	(3) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	9.427	0.204	0.000	0.00	4.75
135.0	(1) 1 1/4" Hybriflex	Yes	1.58	0.000	0.00	0.00	0.00	9.427	0.204	0.000	0.00	1.58
138.0	(1) 0.39" Cable	Yes	3.00	0.000	0.00	0.00	0.00	9.486	0.207	0.000	0.00	0.21
138.0	(2) 0.78" 8 AWG 6	Yes	3.00	0.000	0.00	0.00	0.00	9.486	0.207	0.000	0.00	3.54
138.0	(1) 3" Conduit	Yes	3.00	0.000	0.00	0.00	0.00	9.486	0.207	0.000	0.00	22.74
138.0	(12) 1 5/8" Coax	Yes	3.00	1.200	5.94	1.49	1.78	9.486	0.207	0.000	18.59	29.52
138.0	(3) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	9.486	0.207	0.000	0.00	9.00

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



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Load Case: 1.0D + 1.0W **60.00 mph Serviceability** **26 Iterations**

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

Dead Load Factor : 1.00

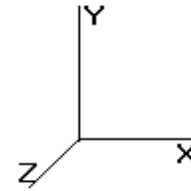
Wind Load Factor : 1.00

138.0	(1) 1 1/4" Hybriflex	Yes	3.00	0.000	0.00	0.00	0.00	9.486	0.207	0.000	0.00	3.00
138.0	(1) 0.39" Cable	Yes	0.00	0.000	0.00	0.00	0.00	9.486	0.209	0.000	0.00	0.00
138.0	(2) 0.78" 8 AWG 6	Yes	0.00	0.000	0.00	0.00	0.00	9.486	0.209	0.000	0.00	0.00
138.0	(1) 3" Conduit	Yes	0.00	0.000	0.00	0.00	0.00	9.486	0.209	0.000	0.00	0.00
138.0	(12) 1 5/8" Coax	Yes	0.00	1.200	5.94	0.00	0.00	9.486	0.209	0.000	0.00	0.00
140.0	(1) 0.39" Cable	Yes	2.00	0.000	0.00	0.00	0.00	9.525	0.207	0.000	0.00	0.14
140.0	(2) 0.78" 8 AWG 6	Yes	2.00	0.000	0.00	0.00	0.00	9.525	0.207	0.000	0.00	2.36
140.0	(1) 3" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	9.525	0.207	0.000	0.00	15.16
140.0	(12) 1 5/8" Coax	Yes	2.00	1.200	5.94	0.99	1.19	9.525	0.207	0.000	12.45	19.67
145.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.621	0.212	0.000	0.00	0.35
145.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.621	0.212	0.000	0.00	5.90
145.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.621	0.212	0.000	0.00	37.90
145.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	2.47	2.97	9.621	0.212	0.000	31.43	49.19
150.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.715	0.220	0.000	0.00	0.35
150.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.715	0.220	0.000	0.00	5.90
150.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.715	0.220	0.000	0.00	37.90
150.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	2.47	2.97	9.715	0.220	0.000	31.74	49.19
155.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.806	0.228	0.000	0.00	0.35
155.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.806	0.228	0.000	0.00	5.90
155.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.806	0.228	0.000	0.00	37.90
155.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	2.47	2.97	9.806	0.228	0.000	32.04	49.19
160.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.896	0.237	0.000	0.00	0.35
160.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.896	0.237	0.000	0.00	5.90
160.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.896	0.237	0.000	0.00	37.90
160.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	2.47	2.97	9.896	0.237	0.000	32.33	49.19
165.0	(1) 0.39" Cable	Yes	5.00	0.000	0.00	0.00	0.00	9.983	0.247	0.000	0.00	0.35
165.0	(2) 0.78" 8 AWG 6	Yes	5.00	0.000	0.00	0.00	0.00	9.983	0.247	0.000	0.00	5.90
165.0	(1) 3" Conduit	Yes	5.00	0.000	0.00	0.00	0.00	9.983	0.247	0.000	0.00	37.90
165.0	(12) 1 5/8" Coax	Yes	5.00	1.200	5.94	2.47	2.97	9.983	0.247	0.000	32.61	49.19
169.0	(1) 0.39" Cable	Yes	4.00	0.000	0.00	0.00	0.00	10.052	0.256	0.000	0.00	0.28
169.0	(2) 0.78" 8 AWG 6	Yes	4.00	0.000	0.00	0.00	0.00	10.052	0.256	0.000	0.00	4.72
169.0	(1) 3" Conduit	Yes	4.00	0.000	0.00	0.00	0.00	10.052	0.256	0.000	0.00	30.32
169.0	(12) 1 5/8" Coax	Yes	4.00	1.200	5.94	1.98	2.38	10.052	0.256	0.000	26.27	39.36
Totals:											248.19	3,707.03

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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

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Load Case: 1.0D + 1.0W 60.00 mph Serviceability 26 Iterations

Gust Response Factor : 1.10 Wind Importance Factor : 1.00

Dead Load Factor : 1.00

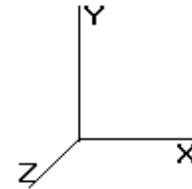
Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	149.85	1,721.14	0.00	0.00
10.00	147.12	1,698.60	0.00	0.00
15.00	144.38	1,676.07	0.00	0.00
20.00	141.65	1,653.54	0.00	0.00
22.50	69.80	818.32	0.00	0.00
25.00	69.12	812.69	0.00	0.00
30.00	136.30	1,608.48	0.00	0.00
35.00	139.58	1,585.95	0.00	0.00
40.00	142.03	1,563.41	0.00	0.00
43.58	102.44	1,106.59	0.00	0.00
45.00	41.13	690.69	0.00	0.00
50.00	147.58	2,410.88	0.00	0.00
52.50	73.62	687.29	0.00	0.00
55.00	73.79	682.46	0.00	0.00
60.00	148.80	1,350.44	0.00	0.00
65.00	148.83	1,331.13	0.00	0.00
70.00	148.53	977.82	0.00	0.00
75.00	147.93	958.51	0.00	0.00
80.00	147.06	939.19	0.00	0.00
85.00	145.95	919.88	0.00	0.00
87.50	72.20	452.76	0.00	0.00
90.00	73.07	759.15	0.00	0.00
93.00	87.28	899.52	0.00	0.00
95.00	57.77	307.31	0.00	0.00
100.0	143.87	757.14	0.00	0.00
105.0	141.98	741.05	0.00	0.00
110.0	139.91	724.96	0.00	0.00
115.0	137.68	708.86	0.00	0.00
120.0	135.30	692.77	0.00	0.00
125.0	132.77	676.67	0.00	0.00
130.0	130.11	660.58	0.00	0.00
133.4	125.58	442.18	0.00	0.00
135.0	58.32	309.91	0.00	0.00
138.0	968.08	3,573.70	0.00	831.65
138.0	0.01	0.06	0.00	0.00
140.0	72.48	188.62	0.00	0.00
145.0	179.46	463.74	0.00	0.00
150.0	176.01	452.47	0.00	0.00
155.0	172.41	441.20	0.00	0.00
160.0	168.69	429.94	0.00	0.00
165.0	164.83	418.67	0.00	0.00
169.0	921.68	2,701.53	0.00	1,037.38
170.0	20.97	61.91	0.00	0.00
175.0	102.99	302.80	0.00	0.00
180.0	99.26	291.53	0.00	0.00
182.0	915.99	2,518.46	0.00	797.20
185.0	56.71	137.29	0.00	0.00
Totals:	7,920.90	45,307.84	0.00	2,666.23

Pole : 302537
 Location : Middletown CT 3, CT
 Height : 185.0 (ft)
 Base Dia : 52.00 (in)
 Top Dia : 19.03 (in)
 Shape : 12 Sides
 Taper : 0.188014 (in/ft)

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



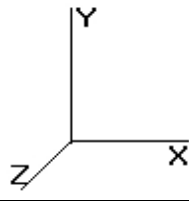
Load Case: 1.0D + 1.0W	60.00 mph Serviceability	26 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-45.30	-7.94	0.00	-963.96	0.00	963.96	4,727.77	2,363.89	10,057.5	4,967.06	0.00	0.00	0.152
5.00	-43.58	-7.82	0.00	-924.28	0.00	924.28	4,681.88	2,340.94	9,776.84	4,828.41	0.02	-0.04	0.149
10.00	-41.87	-7.70	0.00	-885.20	0.00	885.20	4,634.49	2,317.25	9,496.63	4,690.03	0.09	-0.08	0.146
15.00	-40.19	-7.58	0.00	-846.71	0.00	846.71	4,585.61	2,292.80	9,217.10	4,551.98	0.19	-0.12	0.143
20.00	-38.54	-7.45	0.00	-808.82	0.00	808.82	4,535.22	2,267.61	8,938.46	4,414.37	0.34	-0.16	0.139
22.50	-37.72	-7.40	0.00	-790.18	0.00	790.18	4,509.47	2,254.74	8,799.52	4,345.75	0.43	-0.18	0.138
22.50	-37.72	-7.40	0.00	-790.18	0.00	790.18	4,509.47	2,254.74	8,799.52	4,345.75	0.43	-0.18	0.138
25.00	-36.90	-7.34	0.00	-771.69	0.00	771.69	4,483.35	2,241.67	8,660.87	4,277.28	0.54	-0.21	0.136
30.00	-35.29	-7.23	0.00	-734.97	0.00	734.97	4,429.97	2,214.99	8,384.50	4,140.79	0.77	-0.25	0.133
35.00	-33.70	-7.10	0.00	-698.84	0.00	698.84	4,375.10	2,187.55	8,109.53	4,004.99	1.06	-0.29	0.130
40.00	-32.13	-6.97	0.00	-663.31	0.00	663.31	4,318.73	2,159.36	7,836.14	3,869.97	1.38	-0.33	0.126
43.58	-31.02	-6.88	0.00	-638.32	0.00	638.32	4,277.41	2,138.70	7,641.27	3,773.74	1.64	-0.36	0.124
45.00	-30.33	-6.85	0.00	-628.58	0.00	628.58	4,260.86	2,130.43	7,564.50	3,735.82	1.75	-0.37	0.122
50.00	-27.91	-6.70	0.00	-594.35	0.00	594.35	3,421.90	1,710.95	6,065.62	2,995.58	2.16	-0.42	0.138
52.50	-27.22	-6.63	0.00	-577.61	0.00	577.61	3,401.39	1,700.70	5,962.75	2,944.78	2.39	-0.44	0.135
52.50	-27.22	-6.63	0.00	-577.61	0.00	577.61	3,401.39	1,700.70	5,962.75	2,944.78	2.39	-0.44	0.135
55.00	-26.54	-6.57	0.00	-561.04	0.00	561.04	3,380.51	1,690.25	5,860.04	2,894.05	2.62	-0.46	0.133
60.00	-25.18	-6.42	0.00	-528.21	0.00	528.21	3,337.62	1,668.81	5,655.16	2,792.87	3.13	-0.50	0.128
65.00	-23.85	-6.28	0.00	-496.09	0.00	496.09	3,293.24	1,646.62	5,451.16	2,692.12	3.68	-0.55	0.124
65.00	-23.85	-6.28	0.00	-496.09	0.00	496.09	3,293.24	1,646.62	5,451.16	2,692.12	3.68	-0.55	0.192
70.00	-22.87	-6.15	0.00	-464.68	0.00	464.68	3,247.36	1,623.68	5,248.21	2,591.90	4.28	-0.59	0.186
75.00	-21.90	-6.01	0.00	-433.95	0.00	433.95	3,199.99	1,599.99	5,046.49	2,492.27	4.93	-0.66	0.181
80.00	-20.96	-5.88	0.00	-403.88	0.00	403.88	3,151.11	1,575.56	4,846.18	2,393.35	5.66	-0.73	0.175
85.00	-20.03	-5.74	0.00	-374.48	0.00	374.48	3,100.74	1,550.37	4,647.44	2,295.20	6.46	-0.80	0.170
87.50	-19.58	-5.67	0.00	-360.13	0.00	360.13	3,074.99	1,537.50	4,548.71	2,246.44	6.89	-0.83	0.167
90.00	-18.82	-5.60	0.00	-345.94	0.00	345.94	3,048.88	1,524.44	4,450.47	2,197.92	7.34	-0.87	0.164
93.00	-17.92	-5.51	0.00	-329.14	0.00	329.14	2,367.81	1,183.91	3,474.51	1,715.93	7.90	-0.91	0.199
95.00	-17.61	-5.47	0.00	-318.11	0.00	318.11	2,354.00	1,177.00	3,417.42	1,687.73	8.28	-0.94	0.196
100.00	-16.84	-5.33	0.00	-290.78	0.00	290.78	2,318.41	1,159.21	3,275.08	1,617.44	9.31	-1.02	0.187
105.00	-16.10	-5.20	0.00	-264.13	0.00	264.13	2,281.33	1,140.66	3,133.47	1,547.50	10.41	-1.09	0.178
110.00	-15.37	-5.06	0.00	-238.14	0.00	238.14	2,242.75	1,121.37	2,992.76	1,478.01	11.60	-1.17	0.168
115.00	-14.66	-4.93	0.00	-212.83	0.00	212.83	2,202.67	1,101.33	2,853.13	1,409.05	12.86	-1.24	0.158
120.00	-13.96	-4.80	0.00	-188.18	0.00	188.18	2,161.09	1,080.55	2,714.76	1,340.72	14.20	-1.31	0.147
125.00	-13.28	-4.66	0.00	-164.20	0.00	164.20	2,118.02	1,059.01	2,577.82	1,273.09	15.61	-1.38	0.135
130.00	-12.62	-4.53	0.00	-140.89	0.00	140.89	2,073.45	1,036.73	2,442.48	1,206.25	17.10	-1.45	0.123
133.42	-12.18	-4.40	0.00	-125.42	0.00	125.42	2,042.13	1,021.07	2,351.01	1,161.07	18.15	-1.49	0.114
135.00	-11.87	-4.34	0.00	-118.46	0.00	118.46	2,027.39	1,013.69	2,308.93	1,140.29	18.65	-1.51	0.110
138.00	-8.32	-3.28	0.00	-104.62	0.00	104.62	1,999.03	999.51	2,229.72	1,101.18	19.61	-1.54	0.099
138.00	-8.32	-3.28	0.00	-104.61	0.00	104.61	1,223.81	611.90	1,396.77	689.81	19.61	-1.54	0.158
140.00	-8.13	-3.21	0.00	-98.06	0.00	98.06	1,215.85	607.93	1,368.67	675.93	20.26	-1.57	0.152
145.00	-7.67	-3.02	0.00	-82.02	0.00	82.02	1,194.90	597.45	1,298.35	641.21	21.94	-1.64	0.134
150.00	-7.22	-2.84	0.00	-66.90	0.00	66.90	1,172.46	586.23	1,228.11	606.52	23.69	-1.70	0.116
155.00	-6.78	-2.66	0.00	-52.69	0.00	52.69	1,148.52	574.26	1,158.11	571.95	25.50	-1.76	0.098
160.00	-6.36	-2.49	0.00	-39.37	0.00	39.37	1,123.08	561.54	1,088.54	537.59	27.37	-1.81	0.079
165.00	-5.94	-2.31	0.00	-26.94	0.00	26.94	1,096.15	548.08	1,019.56	503.52	29.29	-1.85	0.059
169.00	-3.27	-1.30	0.00	-16.66	0.00	16.66	1,073.53	536.76	964.93	476.54	30.85	-1.87	0.038
170.00	-3.21	-1.28	0.00	-15.35	0.00	15.35	1,067.72	533.86	951.36	469.84	31.24	-1.88	0.036
175.00	-2.91	-1.17	0.00	-8.95	0.00	8.95	1,037.79	518.90	884.11	436.63	33.22	-1.90	0.023
180.00	-2.62	-1.06	0.00	-3.10	0.00	3.10	1,006.37	503.18	817.98	403.97	35.22	-1.91	0.010
182.00	-0.14	-0.06	0.00	-0.18	0.00	0.18	993.38	496.69	791.88	391.08	36.02	-1.91	0.001
185.00	0.00	-0.06	0.00	0.00	0.00	0.00	973.45	486.72	753.15	371.95	37.22	-1.91	0.000

Pole : 302537
Location : Middletown CT 3, CT
Height : 185.0 (ft)
Base Dia : 52.00 (in)
Top Dia : 19.03 (in)
Shape : 12 Sides
Taper : 0.188014 (in/ft)

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



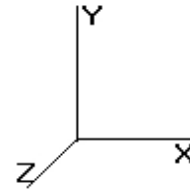
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Load Case: 1.0D + 1.0W	60.00 mph Serviceability	26 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Pole : 302537
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Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	34.66	0.00	53.45	0.00	0.00	4064.17	93.00	0.79
0.9D + 1.6W	31.48	0.00	41.17	0.00	0.00	3787.54	93.00	0.75
1.2D + 1.0Di + 1.0Wi	7.63	0.00	101.12	0.00	0.00	1021.60	93.00	0.24
1.0D + 1.0W	7.94	0.00	45.30	0.00	0.00	963.96	93.00	0.20

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Upper Termination Connectors				Lower Termination Connectors				Max Member		
			VQ/I (lb/in)	Applied (kips)	Shear phiVn (kips)	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Pu (kip)	phiPn (kip)	Ratio
0.00	22.5	(4) SOL-#20 All Thre	163.4	4.9	16.8	0.0	12.0	0	12	0.0	12.0	0	0	215.4	330.5	0.652
22.5	52.5	(4) SOL-#20 All Thre	193.8	5.8	16.8	0.0	12.0	0	12	0.0	12.0	0	0	204.1	330.5	0.618
52.5	65.0	(4) SOL-#20 All Thre	200.2	6.0	16.8	183.5	12.0	16	24	0.0	12.0	0	0	197.3	330.5	0.597

Base/Flange Plate	Plate Type	Baseplate
	Pole Diameter	52 in
	Pole Thickness	0.4375 in
	Plate Diameter	66.34 in
	Plate Thickness	2.75 in
	Plate Fy	60 ksi
	Weld Length	0.3125 in
	ϕ_s Resistance	1042.40 k-in
	Applied	382.64 k-in
Stiffeners	#	0

Code Rev. **G**

Date **5/30/2014**
 Engineer **ZSP**
 Site # **302537**
 Carrier **Sprint Nextel**

Moment **4064.2 k-ft**
 Axial **53.5 k**

Bolts	#	16
	Bolt Circle (R)adial / (S)quare	60.34 in R
	Diameter	2.25 in
	Hole Diameter	2.625 in
	Type	A615-75
	Fy	75 ksi
	Fu	100 ksi
	ϕ_s Resistance	259.82 k
	Applied	150.35 k
Reinforcement	#	4
	DYW. Circle	60 in
	Offset Angle	-11°
	Type	#20
	Diameter	2.5 in
Fu	100 ksi	
Extra Bolts O	#	0

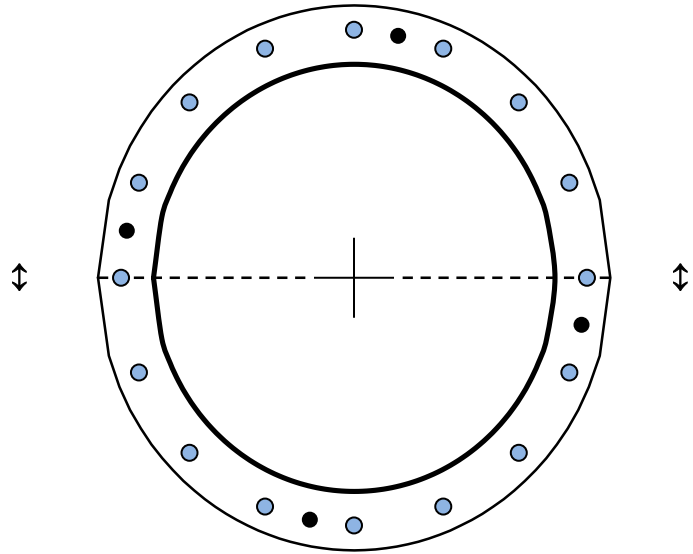


Plate Stress Ratio:
0.37 (Pass)

Bolt Stress Ratio:
0.58 (Pass)