smartlink

August 14, 2014

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

Re: **Notice of Exempt Modification**
Proposal to Add Three (3) Remote Radio Heads
Property Address: **790 Willis Street, Bristol, CT 06010 (the "Property")**
Applicant: **New Cingular Wireless PCS, LLC ("AT&T")**

Dear Ms. Bachman:

AT&T currently maintains a wireless telecommunications facility on an existing 127-foot Self Support tower location on the Property, owned by American Tower, Inc. (the "Tower"). AT&T's facility consists of nine (9) wireless telecommunication antennas at a height of 128 feet.

The Connecticut Siting Council (the "Council) approved AT&T's use of the tower in the following prior decisions; EM-CING-017-020730, EM-CING-017-060728 and EM-AT&T-017-120507. In its decision dated March 7, 2012, (the "Decision"), the Council approved AT&T to install six (6) Remote Radio Heads ("RRUs"), but AT&T installed only three (3) RRUs. AT&T now intends to install the remaining RRUs to complete the installation. This exempt modification notification is necessary because the Decision is over one year old. Please refer to Tab 1 for further specifications of the RRUs.

Please accept this correspondence as notification pursuant to R.C.S.A. §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16-50j-72(b)(2). In accordance with R.C.S.A. §16-50j-73, a copy of this letter is being sent to the Mayor for the Town of Bristol, Ken Cockayne and to the land owner, American Tower, Inc.

The planned modifications to AT&T's facility fall squarely within those activities explicitly provided for in R.C.S.A. §16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the Tower. AT&T's new RRUs will be installed at or below the height of its existing antennas currently on the Tower.

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2. The proposed modifications will not involve any changes to ground-mounted equipment and, therefore, will not require and extension of the site boundary.
3. The proposed modifications will not increase the noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A RF emissions calculation for AT&T's modified facility was provided in the application which led to the - Decision. See Tab 2 attached.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The Tower and its foundation can support AT&T's proposed modifications. (See Structural Analysis Report included in Tab 3).

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

Sincerely,

Adam F. Braillard

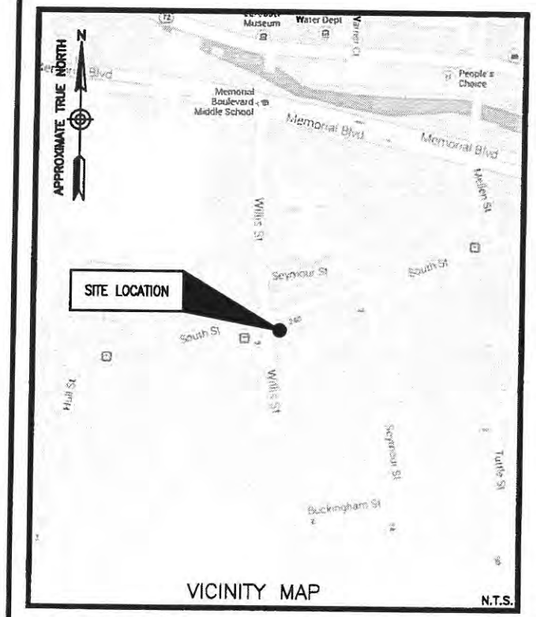
cc: Mayor Ken Cockayne, 111 North Main Street, 3rd Floor, Bristol, CT 06010
American Tower Corporation, 10 Presidential Way, Woburn, MA 01801

33 Boston Post Road West, Marlborough, Massachusetts 01752
p: 508.954.7702 • adam.braillard@smartlinkllc.com
www.smartlinkllc.com

TAB 1

at&t Mobility

SITE NAME: BRISTOL
SITE NUMBER: CT1055
1 WILLIS STREET,
BRISTOL, CT 06010



VICINITY MAP N.T.S.

DIRECTIONS FROM 500 ENTERPRISE DRIVE, ROCKY HILL, CT:

TURN LEFT TO MERGE ONTO I-91 S. TAKE EXIT 22N TO MERGE ONTO CT-9 N TOWARD NEW BRITAIN. TAKE EXIT 28 ON THE LEFT TO MERGE ONTO CT-72 W TOWARD BRISTOL. MERGE ONTO CT-72 W/I-84. TAKE EXIT 33 FOR CONNECTICUT 72 W TOWARD BRISTOL. KEEP LEFT AT THE FORK AND MERGE ONTO CT-72 W. CONTINUE ONTO PINE ST. CONTINUE ONTO MOUNTAIN RD. SLIGHT LEFT TO STAY ON MOUNTAIN RD. CONTINUE ONTO SOUTH ST. TURN LEFT ONTO WILLIS ST. DESTINATION WILL BE ON THE RIGHT.

SITE COORDINATES:
LATITUDE: N 41° 38' 56.67"
LONGITUDE: W 72° 56' 52.9"
(PER EXISTING AT&T PLANS)

ELEVATION DATA
GRADE ELEVATION AT TOWER = 1,027'± A.M.S.L
ELEVATION BASED UPON VELOROUTES.ORG

ANTENNA ELEVATION (TO TOP OF ANTENNA)
ALPHA SECTOR: 127'-10"± A.G.L.
BETA SECTOR: 127'-10"± A.G.L.
GAMMA SECTOR: 127'-10"± A.G.L.

SITE INFORMATION

- ADD (1) NEW RRUS-11 PER SECTOR FOR A TOTAL OF (3) NEW RRUS-11.

PROJECT DESCRIPTION

SITE NAME:
BRISTOL

SITE NUMBER:
CT1055

LOCATION:
1 WILLIS STREET
BRISTOL, CT 06010
HARTFORD COUNTY

LANDLORD:
CROWN CASTLE TOWERS 05 LLC
12725 MORRIS ROAD EXTENSION, STE 400
ALPHARETTA, GA 30004

APPLICANT/LESSEE:
AT&T MOBILITY
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CONNECTICUT 06067

PROJECT INFORMATION

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

SHEET NUMBER	DESCRIPTION
T-1	TITLE SHEET
G-1	GENERAL NOTES
C-1	SITE PLAN & EQUIPMENT PLANS
C-2	ANTENNA LAYOUTS & ELEVATIONS
C-3	ANTENNA SCHEDULE & CONSTRUCTION DETAILS
E-1	GROUNDING NOTES & DETAILS

SHEET INDEX

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

smartlink
1997 ANNAPOLIS EXCHANGE PARKWAY
SUITE 200
ANNAPOLIS, MD 21401

CT1055
BRISTOL

CONSTRUCTION DRAWINGS

Q	08/11/14	ISSUED AS REV Q

Dewberry
Dewberry Engineers Inc.
600 PARSIPPANY ROAD
SUITE 301
PARSIPPANY, NJ 07054
PHONE: 973.739.9400
FAX: 973.739.9710

STATE OF CONNECTICUT
JIANG YU
LICENSED PROFESSIONAL ENGINEER

JIANG YU
CT LICENSE No. PEN.0023222

DRAWN BY:	FG
REVIEWED BY:	PD
CHECKED BY:	GHN
PROJECT NUMBER:	50063024
JOB NUMBER:	50083029
SITE ADDRESS:	

1 WILLIS STREET
BRISTOL, CT 06010
HARTFORD COUNTY

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   PROJECT MANAGEMENT – SMARTLINK
   CONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – AT&T MOBILITY
   OEM – ORIGINAL EQUIPMENT MANUFACTURER
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF PROJECT MANAGEMENT.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
5. DRAWINGS PROVIDED HERE ARE NOT TO SCALE UNLESS OTHERWISE NOTED AND ARE INTENDED TO SHOW OUTLINE ONLY.
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY PROJECT MANAGEMENT.
9. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. CONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. CONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH PROJECT MANAGEMENT.
10. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
11. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
14. CONTRACTOR SHALL NOTIFY DEWBERRY 48 HOURS IN ADVANCE OF POURING CONCRETE, OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS & POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEER REVIEW.
15. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. CONTRACTOR SHALL NOTIFY PROJECT MANAGEMENT OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
16. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY CONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH LAND LORD. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
17. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

1. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO:
   A) FALL PROTECTION
   B) CONFINED SPACE
   C) ELECTRICAL SAFETY
   D) TRENCHING & EXCAVATION.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES, TOP SOIL AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE AT&T SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE TRANSMISSION EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION, SEE SOIL COMPACTION NOTES.
11. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
12. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL JURISDICTION'S GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000 PSI) MAY BE USED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE (UNO). SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF.....1 1/2 IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....3/4 IN.
   BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
7. CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC 1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TESTS PERFORMED AT THE SUPPLIER'S PLANT,
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
   FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
8. AS AN ALTERNATIVE TO ITEM 7, TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS UNLESS NOTED OTHERWISE. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"Ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.
7. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL EXPOSE UNDISTURBED NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
3. AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
4. COMPACTED SUBBASE SHALL BE UNIFORM & LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.
5. AS AN ALTERNATIVE TO ITEMS 2 AND 3 PROOFROLL THE SUBGRADE SOILS WITH 5 PASSES OF A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). ANY SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL, AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:
   CONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, AT&T ANTENNA PLATFORM LOCATION AND ANTENNAS TO BE REPLACED.
2. COORDINATION OF WORK:
   CONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH PROJECT MANAGEMENT.
3. CABLE LADDER RACK:
   CONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
2. CONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. CONTRACTOR SHALL SUBMIT MODIFICATIONS TO PROJECT MANAGEMENT FOR APPROVAL.
3. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
4. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
5. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
6. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
7. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.
8. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
9. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
10. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
11. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (SIZE 14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL.) PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS.
13. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (SIZE 6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
14. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
15. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (SIZE 14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
16. ALL POWER AND POWER GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
17. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
18. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
19. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
20. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
21. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
22. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
23. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
24. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
25. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
26. CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
27. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
28. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
29. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
30. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
31. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM PROJECT MANAGEMENT BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
32. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

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CONSTRUCTION DRAWINGS		
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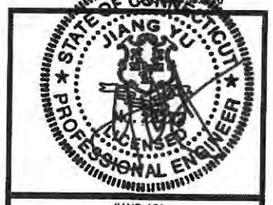


JIANG YU
CT LICENSE No. PEN.0023222

DRAWN BY:	FG
REVIEWED BY:	PD
CHECKED BY:	GHN
PROJECT NUMBER:	50063024
JOB NUMBER:	50083029
SITE ADDRESS:	

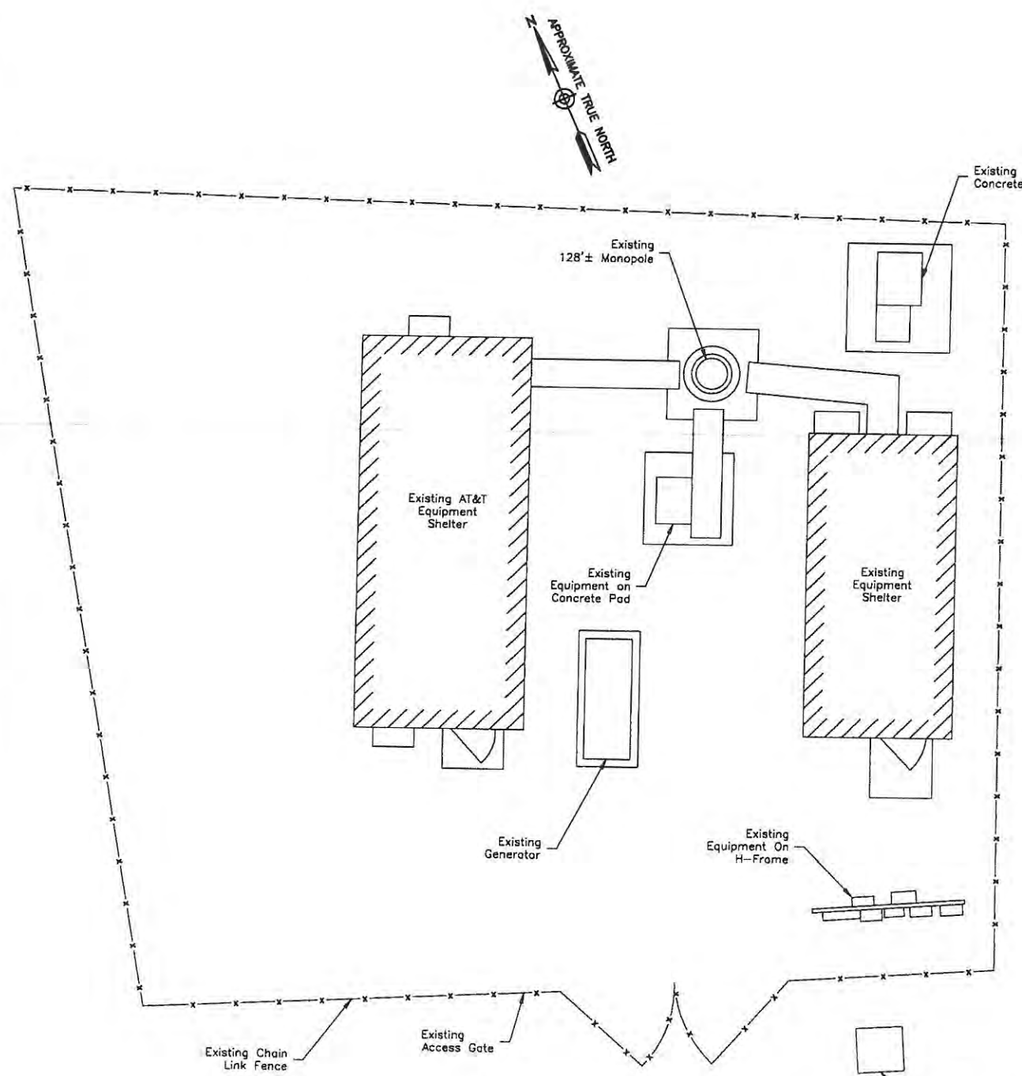
1 WILLIS STREET
BRISTOL, CT 06010
HARTFORD COUNTY

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

G-1

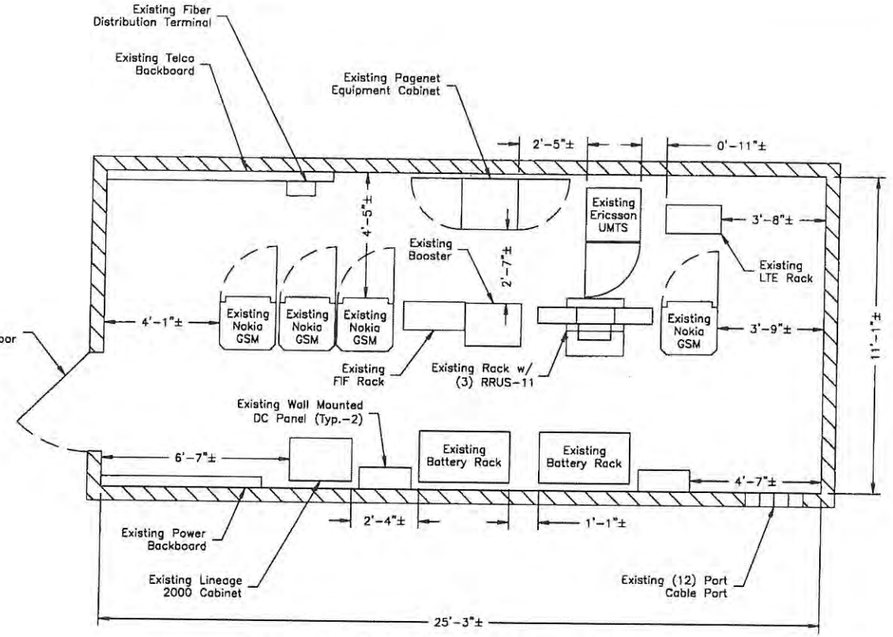


SITE PLAN

SCALE: 1"=10' FOR 11"x17"
1"=5' FOR 22"x34"

0' 5' 10'

1

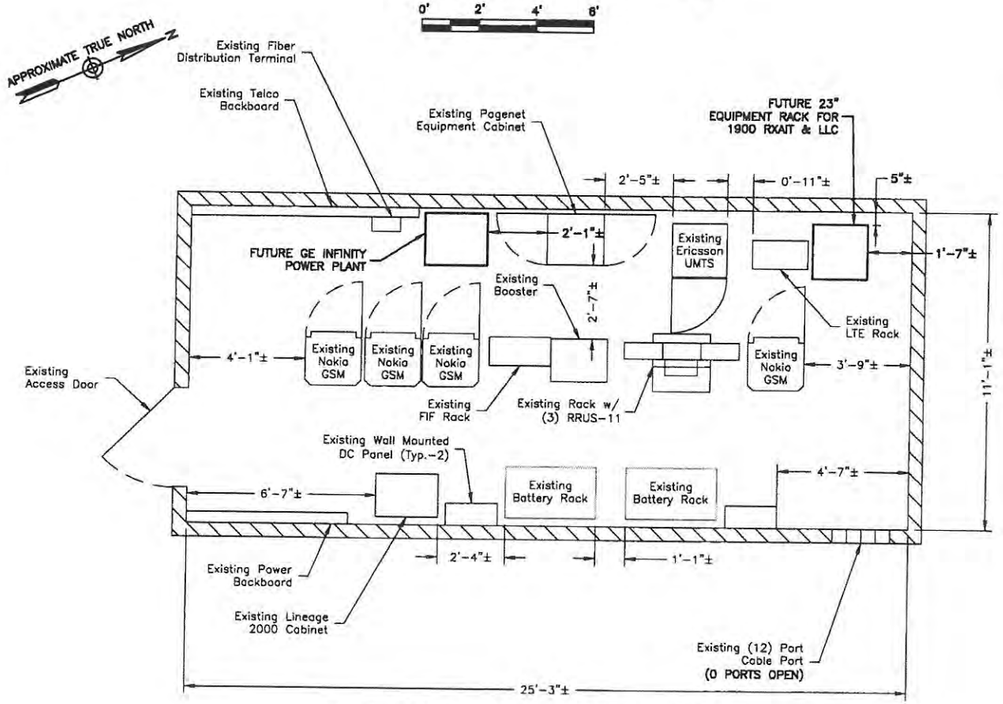


EXISTING EQUIPMENT PLAN

SCALE: 3/16"=1' FOR 11"x17"
3/8"=1' FOR 22"x34"

0' 2' 4' 6'

2



PROPOSED EQUIPMENT PLAN

SCALE: 3/16"=1' FOR 11"x17"
3/8"=1' FOR 22"x34"

0' 2' 4' 6'

3

NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. MOUNT ALL ANTENNAS, COAX, SURGE ARRESTORS, RRUS, ETC. IN ACCORDANCE WITH STRUCTURAL ANALYSIS BY OTHERS.
3. NOT ALL INFORMATION IS SHOWN FOR CLARITY.

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STATE OF CONNECTICUT
JIANG YU
No. 23222
LICENSED PROFESSIONAL ENGINEER

JIANG YU
CT LICENSE No. PEN.0023222

DRAWN BY:	FG
REVIEWED BY:	PD
CHECKED BY:	GHN
PROJECT NUMBER:	50063024
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SITE ADDRESS:	

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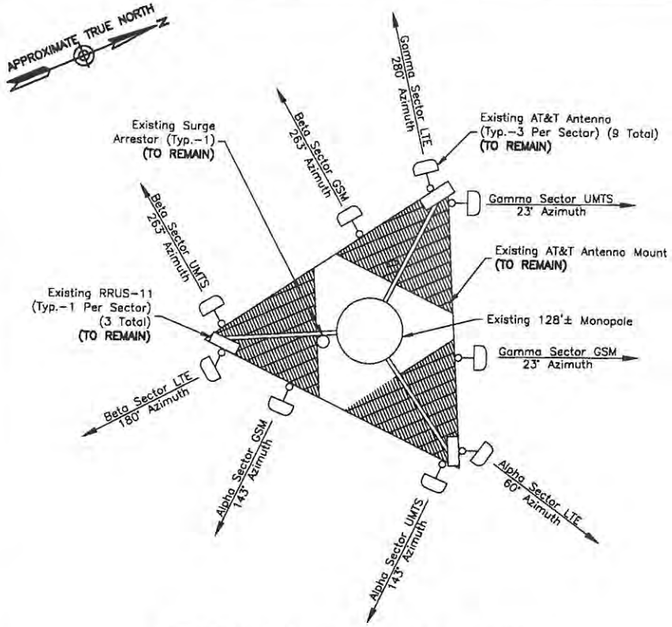
SHEET TITLE

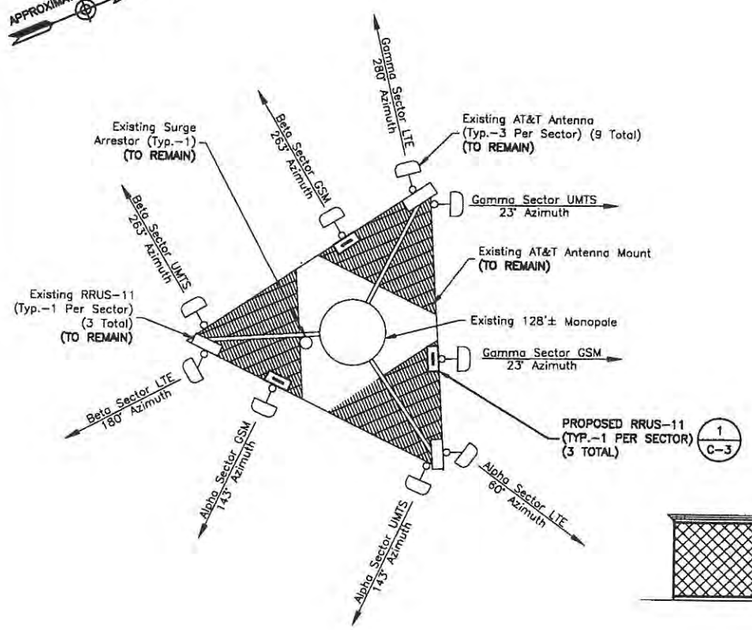
SITE PLAN &
EQUIPMENT PLANS

SHEET NUMBER

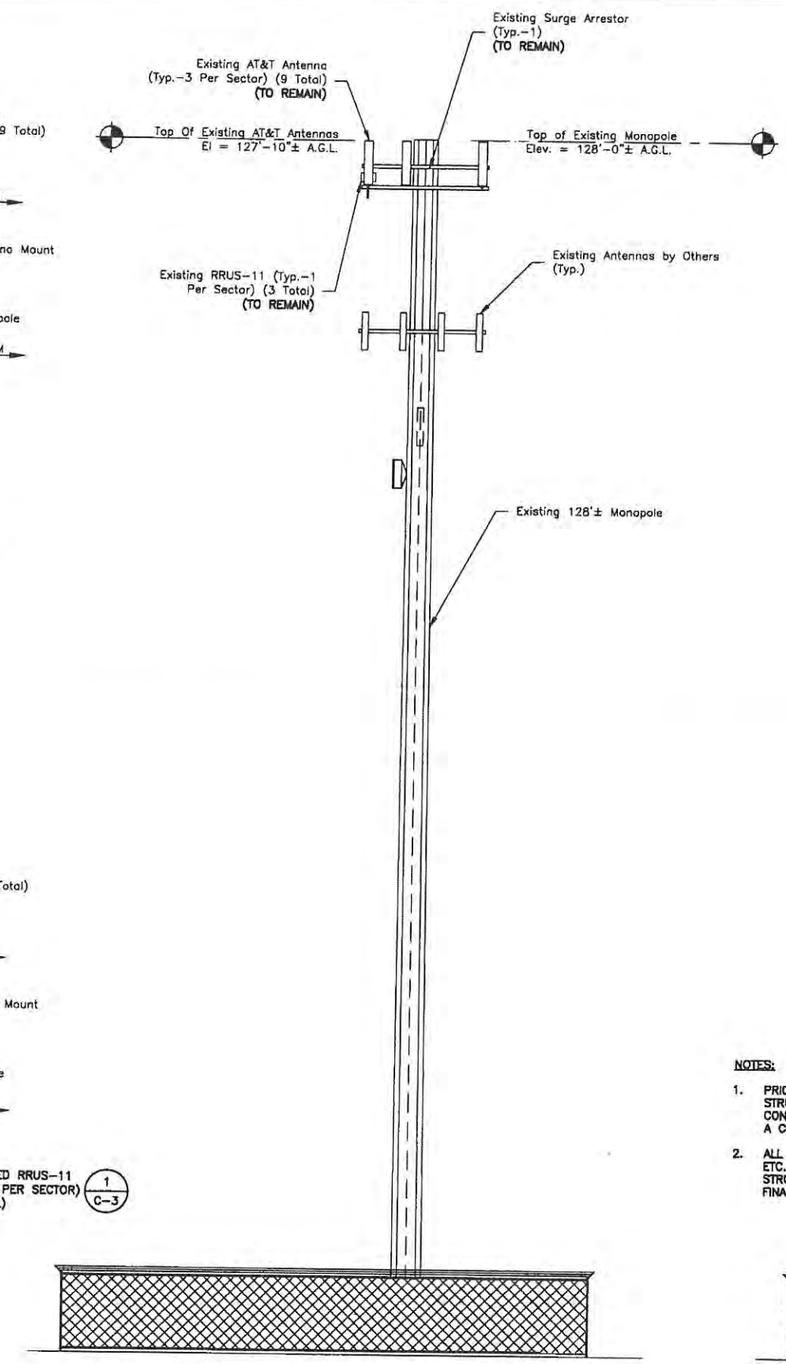
C-1



EXISTING ANTENNA LAYOUT (1)
SCALE: N.T.S.

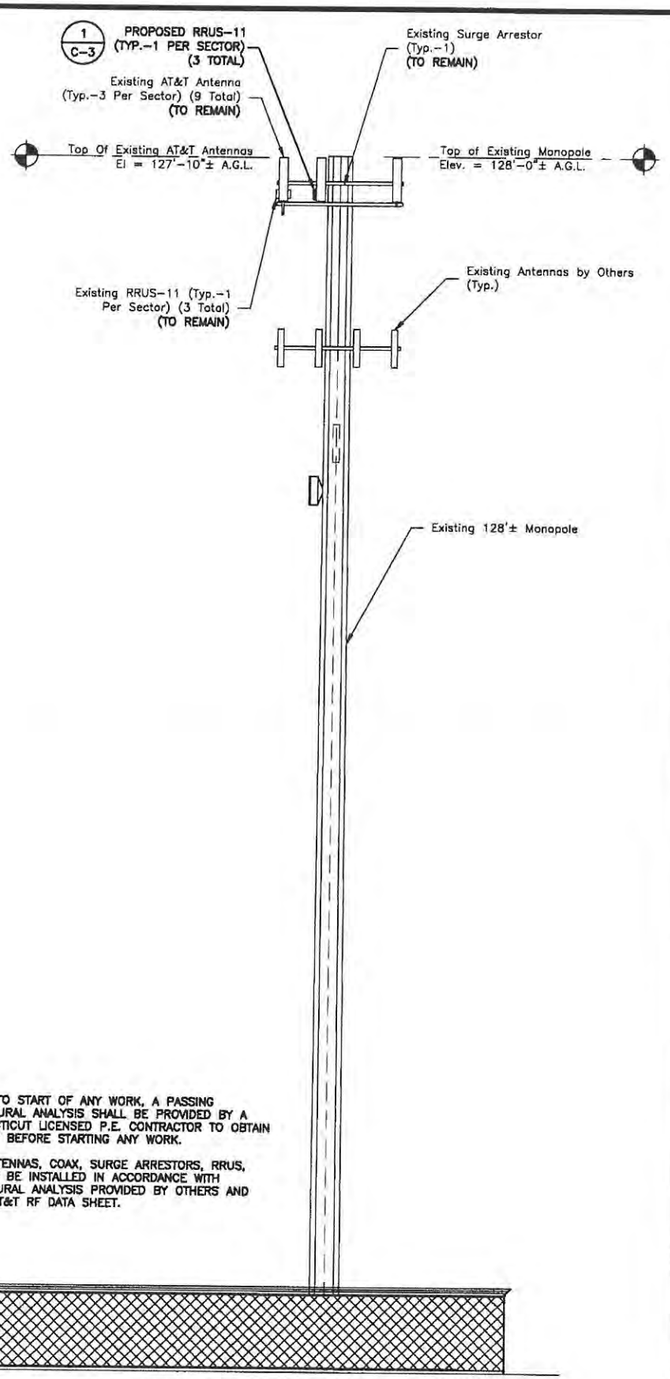


PROPOSED ANTENNA LAYOUT (2)
SCALE: N.T.S.



EXISTING ELEVATION (3)
SCALE: 1/16"=1' FOR 11"x17"
1/8"=1' FOR 22"x34"

0' 4' 8' 16'



PROPOSED ELEVATION (4)
SCALE: 1/16"=1' FOR 11"x17"
1/8"=1' FOR 22"x34"

0' 4' 8' 16'

NOTES:

1. PRIOR TO START OF ANY WORK, A PASSING STRUCTURAL ANALYSIS SHALL BE PROVIDED BY A CONNECTICUT LICENSED P.E. CONTRACTOR TO OBTAIN A COPY BEFORE STARTING ANY WORK.
2. ALL ANTENNAS, COAX, SURGE ARRESTORS, RRUS, ETC. TO BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ANALYSIS PROVIDED BY OTHERS AND FINAL AT&T RF DATA SHEET.

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JIANG YU
No. 21410
LICENSED PROFESSIONAL ENGINEER

CT LICENSE No. PEN.0023222

DRAWN BY:	FG
REVIEWED BY:	PD
CHECKED BY:	GHN
PROJECT NUMBER:	50083024
JOB NUMBER:	50083029
SITE ADDRESS:	

1 WILLIS STREET
BRISTOL, CT 06010
HARTFORD COUNTY

SHEET TITLE

ANTENNA LAYOUTS
& ELEVATIONS

SHEET NUMBER

C-2

EXISTING ANTENNA SCHEDULE

SECTOR	MAKE	MODEL #	SIZE (INCHES)
ALPHA:	POWERWAVE	7770	55x11x5
	ANDREW	SBNH-1D6565C	96.4x11.9x7.1
	POWERWAVE	7770	55X11x5
BETA:	POWERWAVE	7770	55x11x5
	KMW	AM-X-CD-16-65-00T-RET	72x11.8x5.9
	POWERWAVE	7770	55x11x5
GAMMA:	POWERWAVE	7770	55x11x5
	ANDREW	SBNH-1D6565C	96.4x11.9x7.1
	POWERWAVE	7770	55X11x5

PROPOSED ANTENNA SCHEDULE

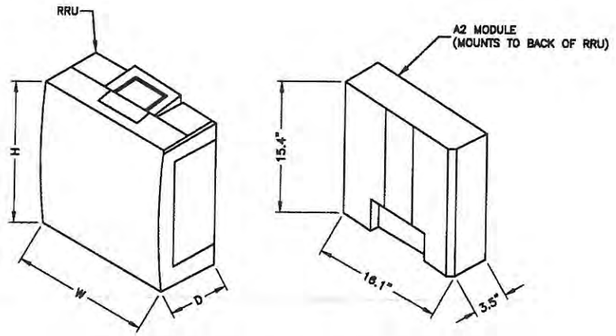
SECTOR	MAKE	MODEL #	SIZE (INCHES)
ALPHA:	POWERWAVE	7770	55x11x5
	ANDREW	SBNH-1D6565C	96.4x11.9x7.1
	POWERWAVE	7770	55X11x5
BETA:	POWERWAVE	7770	55x11x5
	KMW	AM-X-CD-16-65-00T-RET	72x11.8x5.9
	POWERWAVE	7770	55x11x5
GAMMA:	POWERWAVE	7770	55x11x5
	ANDREW	SBNH-1D6565C	96.4x11.9x7.1
	POWERWAVE	7770	55X11x5

EXISTING RRUS SCHEDULE

SECTOR	MAKE	MODEL #	SIZE (INCHES)
ALPHA:	ERICSSON	RRUS-11	19.7x17.0x7.2
BETA:	ERICSSON	RRUS-11	19.7x17.0x7.2
GAMMA:	ERICSSON	RRUS-11	19.7x17.0x7.2

PROPOSED RRUS SCHEDULE

SECTOR	MAKE	MODEL #	SIZE (INCHES)
ALPHA:	ERICSSON	RRUS-11	19.7x17.0x7.2
	ERICSSON	RRUS-11	19.7x17.0x7.2
BETA:	ERICSSON	RRUS-11	19.7x17.0x7.2
	ERICSSON	RRUS-11	19.7x17.0x7.2
GAMMA:	ERICSSON	RRUS-11	19.7x17.0x7.2
	ERICSSON	RRUS-11	19.7x17.0x7.2



RRU MODEL & DIMENSIONS	
ERICSSON MODEL #	DIMENSIONS (HxWxD)
RRUS-11	19.7"x17.0"x7.2"
RRUS-12	20.4"x18.5"x7.5"
RRUS-E2	20.4"x18.5"x7.5"
RRUS-32	29.9"13.3"x6.7"

NOTES:

1. GROUND EQUIPMENT AND MOUNTS PER MANUFACTURER'S RECOMMENDATIONS AND AT&T STANDARDS.
2. MOUNT EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.
3. CONFIRM REQUIRED EQUIPMENT WITH LATEST RFDS.

RRU & A2 MODULE (1)
SCALE: N.T.S.

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STATE OF CONNECTICUT
JIANG YU
No. 23222
LICENSED PROFESSIONAL ENGINEER

CT LICENSE No. PEN.0023222

DRAWN BY:	FG
REVIEWED BY:	PD
CHECKED BY:	GHN
PROJECT NUMBER:	50063024
JOB NUMBER:	50063029

SITE ADDRESS:

1 WILLIS STREET
BRISTOL, CT 06010
HARTFORD COUNTY

SHEET TITLE

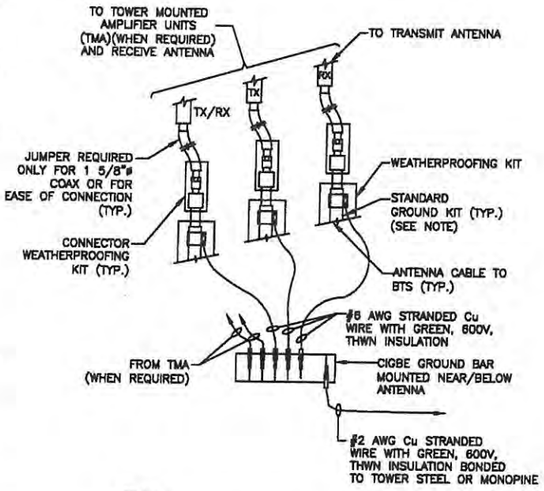
ANTENNA SCHEDULE &
CONSTRUCTION DETAILS

SHEET NUMBER

C-3

GROUNDING NOTES:

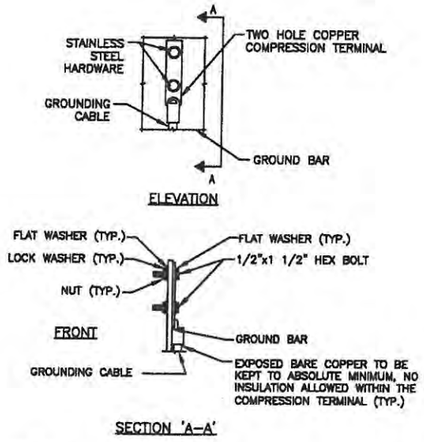
1. THE CONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ). THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE CONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE ENGINEER FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS. ALL AVAILABLE GROUNDING ELECTRODES SHALL BE CONNECTED TOGETHER IN ACCORDANCE WITH THE NEC.
3. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. USE OF OTHER METHODS MUST BE PRE-APPROVED BY THE ENGINEER IN WRITING.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS ON TOWER SITES AND 10 OHMS OR LESS ON ROOFTOP SITES. WHEN ADDING ELECTRODES, CONTRACTOR SHALL MAINTAIN A MINIMUM DISTANCE BETWEEN THE ADDED ELECTRODE AND ANY OTHER EXISTING ELECTRODE EQUAL TO THE BURIED LENGTH OF THE ROD. IDEALLY, CONTRACTOR SHALL STRIVE TO KEEP THE SEPARATION DISTANCE EQUAL TO TWICE THE BURIED LENGTH OF THE RODS.
5. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
6. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE AND UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
7. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO TRANSMISSION EQUIPMENT.
8. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK-TO-BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. IN ALL CASES, BENDS SHALL BE MADE WITH A MINIMUM BEND RADIUS OF 8 INCHES.
11. EACH INTERIOR TRANSMISSION CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH 6 AWG STRANDED, GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRE UNLESS NOTED OTHERWISE IN THE DETAILS. EACH OUTDOOR CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER WIRE UNLESS NOTED OTHERWISE IN THE DETAILS.
12. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE 2 AWG SOLID TIN-PLATED COPPER UNLESS OTHERWISE INDICATED.
13. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE. CONNECTIONS TO ABOVE GRADE UNITS SHALL BE MADE WITH EXOTHERMIC WELDS WHERE PRACTICAL OR WITH 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS. HIGH PRESSURE CRIMP CONNECTORS MAY ONLY BE USED WITH WRITTEN PERMISSION FROM SMARTLINK MARKET REPRESENTATIVE.
14. EXOTHERMIC WELDS SHALL BE PERMITTED ON TOWERS ONLY WITH THE EXPRESS APPROVAL OF THE TOWER MANUFACTURER OR THE CONTRACTORS STRUCTURAL ENGINEER.
15. ALL WIRE TO WIRE GROUND CONNECTIONS TO THE INTERIOR GROUND RING SHALL BE FORMED USING HIGH PRESS CRIMPS OR SPLIT BOLT CONNECTORS WHERE INDICATED IN THE DETAILS.
16. ON ROOFTOP SITES WHERE EXOTHERMIC WELDS ARE A FIRE HAZARD COPPER COMPRESSION CAP CONNECTORS MAY BE USED FOR WIRE TO WIRE CONNECTORS. 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS SHALL BE USED FOR CONNECTION TO ALL ROOFTOP TRANSMISSION EQUIPMENT AND STRUCTURAL STEEL.
17. COAX BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR USING TWO-HOLE MECHANICAL TYPE BRASS CONNECTORS AND STAINLESS STEEL HARDWARE.
18. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
19. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
20. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
21. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER GROUND CONDUCTOR. DURING EXCAVATION FOR NEW GROUND CONDUCTORS, IF EXISTING GROUND CONDUCTORS ARE ENCOUNTERED, BOND EXISTING GROUND CONDUCTORS TO NEW CONDUCTORS.
22. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT WITH LISTED BONDING FITTINGS.



NOTE:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

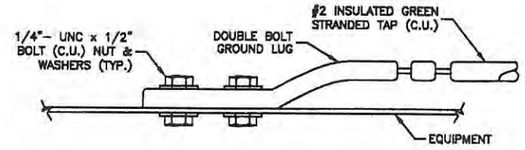
CONNECTION OF GROUND WIRES TO GROUNDING BAR (CIGBE) 1
SCALE: N.T.S.



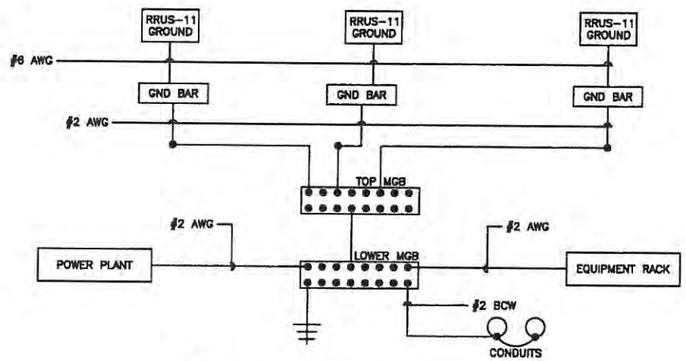
NOTES:

1. DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL 2
SCALE: N.T.S.



CONNECTION TO EQUIPMENT DETAIL 3
SCALE: N.T.S.



NOTES:

1. BOND ANTENNA GROUNDING KIT CABLE TO TOP CIGBE
2. BOND ANTENNA GROUNDING KIT CABLE TO BOTTOM CIGBE.
3. SCHEMATIC GROUNDING DIAGRAM IS TYPICAL FOR EACH SECTOR.
4. GROUND ALL EQUIPMENT PER MANUFACTURER RECOMMENDATIONS.

SCHEMATIC GROUNDING DIAGRAM 4
SCALE: N.T.S.

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STATE OF CONNECTICUT
JIANG YU
No. 23222
LICENSED PROFESSIONAL ENGINEER

JIANG YU
CT LICENSE No. PEN.0023222

DRAWN BY:	FG
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PROJECT NUMBER:	50063024
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SITE ADDRESS:	

1 WILLIS STREET
BRISTOL, CT 06010
HARTFORD COUNTY

SHEET TITLE

GROUNDING NOTES & DETAILS

SHEET NUMBER

E-1

TAB 2

Power Density Calculations

Control Number	Site	Carrier	#Channels	ERP/Ch	Ant Ht	Power Density (I	MHz	S	%MPE	Site Total
EM-CING-017-120507	Bristol - 790 Willis Street (SNET)	AT&T UMTS	2	875	126	0.0396	1900	1.0000	3.96%	
EM-CING-017-120507	Bristol - 790 Willis Street (SNET)	AT&T UMTS	2	565	126	0.0256	880	0.5867	4.36%	
EM-CING-017-120507	Bristol - 790 Willis Street (SNET)	AT&T GSM	4	525	126	0.0476	1900	1.0000	4.76%	
EM-CING-017-120507	Bristol - 790 Willis Street (SNET)	AT&T GSM	1	283	126	0.0064	880	0.5867	1.09%	
EM-CING-017-120507	Bristol - 790 Willis Street (SNET)	AT&T LTE	1	1375	126	0.0311	734	0.4893	6.36%	
EM-Clearwire-017-090923	Bristol - Willis Street (760 Beecher)	Clearwire antennas	2	153	90	0.0136	2496	1.0000	1.36%	
EM-Clearwire-017-090923	Bristol - Willis Street (760 Beecher)	Clearwire microwave dishes	1	211	90	0.0094	11 GHz	1.0000	0.94%	
EM-Clearwire-017-090923	Bristol - Willis Street (760 Beecher)	Clearwire microwave dishes	1	211	90	0.0094	11 GHz	1.0000	0.94%	
EM-MetroPCS-017-121228A-MA	Bristol - 790 Willis Street	MetroPCS CDMA	3	727	100	0.0784	2135	1.0000	7.84%	
EM-MetroPCS-017-121228A-MA	Bristol - 790 Willis Street	MetroPCS LTE	1	1200	100	0.0431	2130	1.0000	4.31%	
EM-Spectra-017-011005	Bristol - Willis Street (SNET)	Nextel	9	100	110	0.0267	851	0.5673	4.71%	40.64%

TAB 3

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	**120 ft Valmont Monopole**
ATC Site Name	:	**Brst - Bristol, CT**
ATC Site Number	:	**302500**
Proposed Carrier	:	**AT&T Mobility**
Carrier Site Name	:	**Bristol**
Carrier Site Number	:	**CT1055 / 10035029**
County	:	**Hartford**
Eng. Number	:	**49070621**
Date	:	**April 5, 2012 ***
Usage	:	**98%**
Portholes Required	:	**No**
Result	:	**Pass**

Submitted by:
Worth L. Godwin III
Project Engineer

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

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 120 ft Valmont Monopole located at 760 Beecher Rd., Bristol, CT 06010, Hartford County (ATC site #302500). The tower was originally designed and manufactured by Valmont (Drawing #DC1671Z, dated December 29, 1993). The tower has been modified per design by Spectrasite Communications (Site # CT 0036, Rev.2, Dated July 22, 2002).

Analysis

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

Basic Wind Speed: 95 mph (3-Second Gust)
Radial Ice: 40 mph (3-Second Gust) w/ 1" ice
Code: TIA-222-G / 2003 IBC w/ 2005 CT Supplements & 2009 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
124.0	6	Powerwave 7770.00	Platform w/ Handrails	(12) 1 1/4"	AT&T Mobility
	6	Powerwave LGP 2140X			
110.0	9	48" x 12" Panel	T-Arm w/ Working Platform	(12) 1 5/8"	Sprint Nextel
	3	72" x 12" Panel			
100.0	2	Kathrein 742 213	Flush	(6) 1 5/8"	Youghiogheny
	1	RFS APXV18-206517S-C			
90.0	3	Argus LLPX310R	Side Arms	(4) 1/2" (6) 5/16" (2) 2" Conduit	Clearwire
	3	DragonWave A-ANT-11G-2.5-C			
	1	DragonWave A-ANT-18G-2			
	4	DragonWave Horizon Compact			
	3	NextNet BTS-2500			

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
124.0	1	Andrew SBNH-1D6565C	Platform with Handrails	(2) 19.7 mm (1) 10 mm	AT&T Mobility
	6	Ericsson RRUS-11 1900 MHz			
	2	Powerwave P65-17-XLH-RR			
	1	Raycap DC6-48-60-18-8F			

Install proposed coax on outside of monopole.

Results

The maximum structure usage is: 98%

Pole Reactions	Current Analysis Reactions
Moment (ft-kip)	1636.0
Axial (kips)	23.1
Shear (kips)	19.6

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

Conclusion

Based on the analysis results, the structure meets the requirements per the TIA-222-G standard and the 2003 IBC with 2005 CT Supplements and 2009 CT Amendments. The tower and foundation can support the existing and proposed antennas with the transmission line distribution as described in this report.

If you have any questions or require additional information, please call 919-466-5527.

Standard Conditions

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

-- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.

-- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

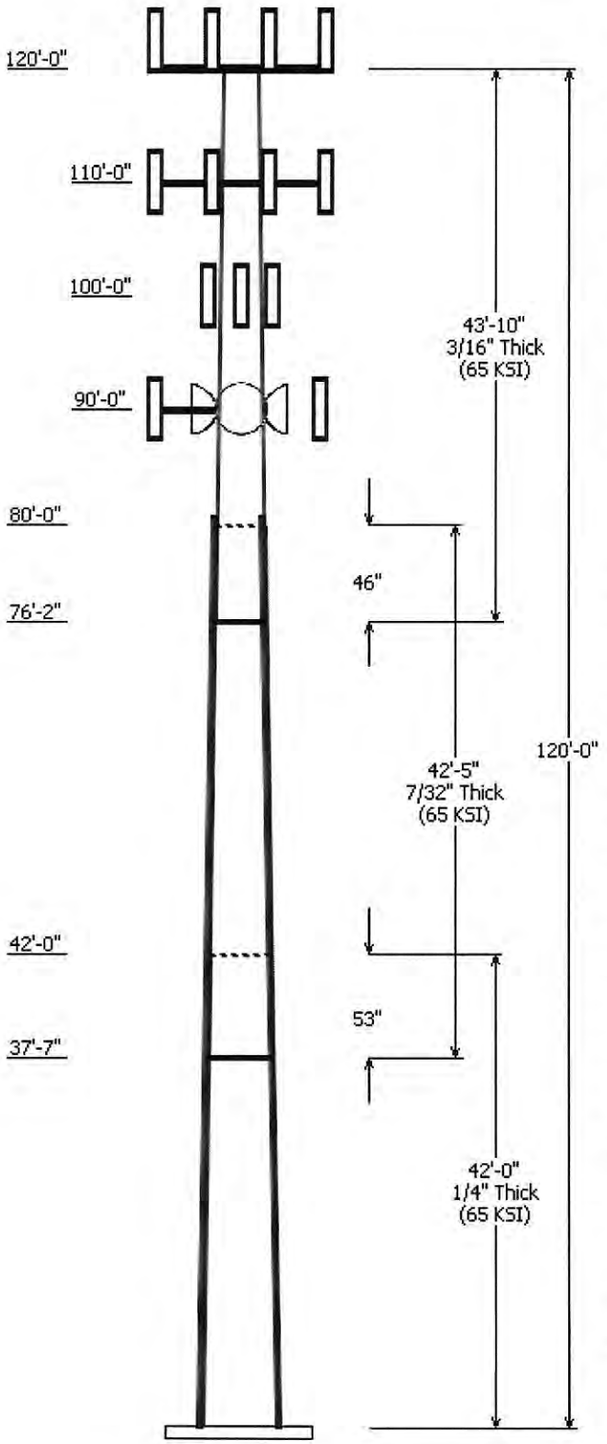
It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with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

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

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

Job Information

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Description :	120' Valmont Monopole		Struct Class : II
Client :	AT&T Mobility		Exposure : B
Location :	Brst Bristol, CT		Topo : 1
Shape :	12 Sides	Base Elev (ft): 0.00	
Height :	120.00 (ft)	Taper: 0.145033(in/ft)	



Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	42.000	24.90	31.00	0.250		0.000	0.145033	65
2	42.417	19.83	25.98	0.219	Slip Joint	53.000	0.145033	65
3	43.833	14.41	20.76	0.188	Slip Joint	46.000	0.145033	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
120.000	124.000	1	Raycap DC6-48-60-18-8F
120.000	124.000	1	Andrew SBNH-1D6565C
120.000	124.000	2	Powerwave P65-17-XLH-RR
120.000	124.000	6	Ericsson RRUS-11 1900 MHz
120.000	124.000	6	Powerwave LGP 2140X
120.000	124.000	6	Powerwave 7770.00
120.000	120.000	1	Flat Platform with Handrails
110.000	110.000	3	72" x 12" Panel
110.000	110.000	3	T-Arm w/ Working Platform
110.000	110.000	9	48" x 12" Panel
100.000	100.000	1	RFS APXV18-206517S-C
100.000	100.000	2	Kathrein 742 213
90.000	90.000	3	DragonWave A-ANT-11G-2.5-C
90.000	90.000	1	Side Arms
90.000	90.000	3	Argus LLPX310R
90.000	90.000	3	NextNet BTS-2500
90.000	90.000	4	DragonWave Horizon Compact
90.000	90.000	1	DragonWave A-ANT-18G-2

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
5.000	90.000	1/2" Coax	No
5.000	90.000	2" Conduit	Yes
5.000	90.000	5/16" Coax	No
5.000	100.0	1 5/8" Coax	Yes
5.000	110.0	1 5/8" Coax	No
5.000	124.0	1 1/4" Coax	No
5.000	124.0	10 mm Cable	No
5.000	124.0	19.7 mm Cable	No
0.000	92.000	#20	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
1.2D + 1.0E	Dead Load with Seismic
0.9D + 1.0E	Dead Load with Seismic (Reduced DL)
1.0D + 1.0W	60.00 mph Serviceability

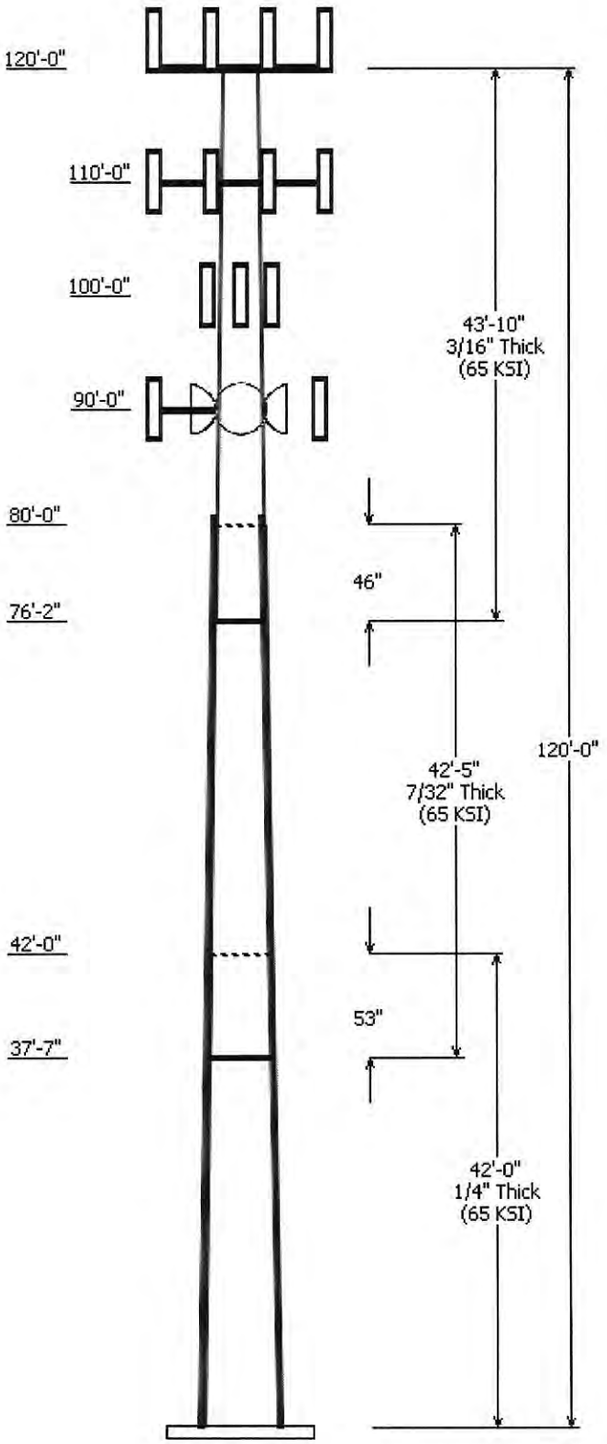
Reactions

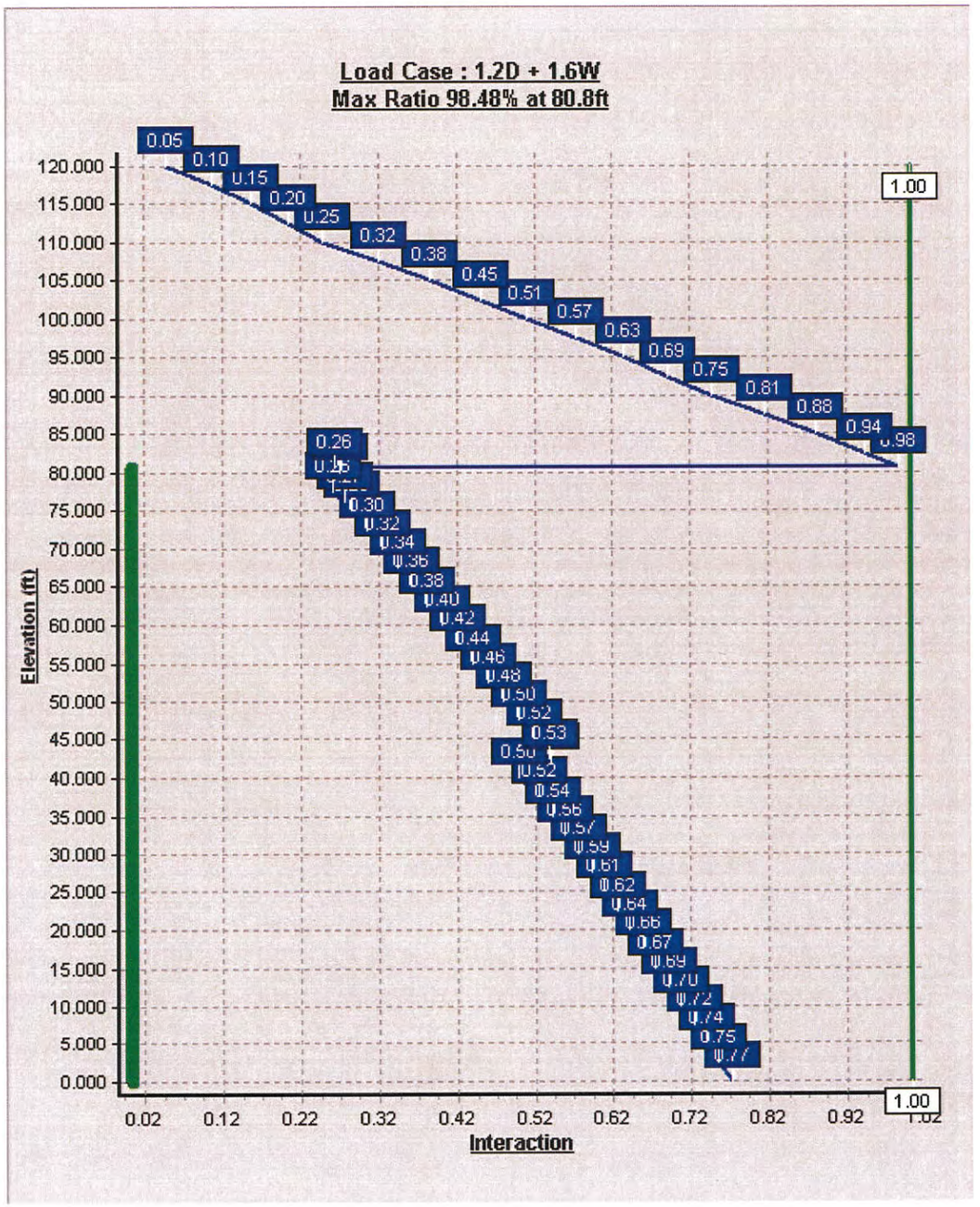
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W	1636.01	19.60	23.09

0.9D + 1.6W	1618.15	19.58	18.66
1.2D + 1.0Di + 1.0Wi	437.87	4.90	46.44
1.2D + 1.0E	282.80	2.58	23.12
0.9D + 1.0E	279.19	2.58	18.69
1.0D + 1.0W	405.71	4.88	20.17

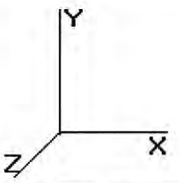
Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	90.00	13.662	1.475
1.0D + 1.0W	90.00	13.662	1.475




Load Case : 1.2D + 1.6W
Max Ratio 98.48% at 80.8ft
Elevation (ft)
Interaction
1.00
1.00
0.05
0.10
0.15
0.20
0.25
0.32
0.38
0.45
0.51
0.57
0.63
0.69
0.75
0.81
0.88
0.94
0.98
0.26
0.30
0.32
0.34
0.38
0.40
0.42
0.44
0.46
0.48
0.50
0.52
0.53
0.54
0.56
0.57
0.59
0.61
0.62
0.64
0.66
0.67
0.69
0.72
0.74
0.75
0.77
120.000
115.000
110.000
105.000
100.000
95.000
90.000
85.000
80.000
75.000
70.000
65.000
60.000
55.000
50.000
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
0.02
0.12
0.22
0.32
0.42
0.52
0.62
0.72
0.82
0.92

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:42 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 1
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Slip Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (sqin)	Bottom Ix (in^4)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (sqin)	Top Ix (in^4)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-12	42.000	0.2500	65		0.00	3,187	31.00	0.00	24.75	2987.6	30.55	124.00	24.90	42.00	19.85	1540.6	24.02	99.63	0.145033
2-12	42.417	0.2190	65	Slip	53.00	2,310	25.98	37.58	18.17	1540.0	29.12	118.66	19.83	80.00	13.83	679.4	21.59	90.57	0.145033
3-12	43.833	0.1880	65	Slip	46.00	1,571	20.76	76.17	12.46	673.4	26.92	110.46	14.41	120.00	8.61	222.3	17.86	76.65	0.145033
				Shaft Weight		7,068													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
120.00	Andrew SBNH-1D6565C	1	66.10	11.440	0.70	429.09	13.625	0.70	0.000	4.000
120.00	Ericsson RRUS-11 1900 MHz	6	44.00	2.940	0.67	156.67	3.386	0.67	0.000	4.000
120.00	Flat Platform with Handrails	1	2000.00	42.400	1.00	3,856.87	69.802	1.00	0.000	0.000
120.00	Powerwave 7770.00	6	35.00	5.880	0.65	223.62	6.917	0.65	0.000	4.000
120.00	Powerwave LGP 2140X	6	14.10	1.260	0.50	63.33	1.727	0.50	0.000	4.000
120.00	Powerwave P65-17-XLH-RR	2	59.00	11.460	0.67	404.07	13.644	0.67	0.000	4.000
120.00	Raycap DC6-48-60-18-8F	1	31.80	1.470	1.00	161.46	3.075	1.00	0.000	4.000
110.00	48" x 12" Panel	9	30.00	5.600	0.75	213.37	6.366	0.75	0.000	0.000
110.00	72" x 12" Panel	3	45.00	8.400	0.67	307.37	9.842	0.67	0.000	0.000
110.00	T-Arm w/ Working Platform	3	250.00	12.900	0.67	520.71	23.493	0.67	0.000	0.000
100.00	Kathrein 742 213	2	22.00	5.140	0.78	179.99	6.810	0.78	0.000	0.000
100.00	RFS APXV18-206517S-C	1	26.40	5.160	0.80	189.79	6.783	0.80	0.000	0.000
90.00	Argus LLPX310R	3	28.60	4.830	0.63	174.07	5.451	0.63	0.000	0.000
90.00	DragonWave A-ANT-11G-2.5-	3	66.10	8.670	0.90	290.88	10.863	0.90	0.000	0.000
90.00	DragonWave A-ANT-18G-2	1	27.10	4.690	0.90	150.99	6.308	0.90	0.000	0.000
90.00	DragonWave Horizon	4	10.60	0.430	0.50	53.10	0.761	0.50	0.000	0.000
90.00	NextNet BTS-2500	3	35.00	2.120	0.67	113.15	2.536	0.67	0.000	0.000
90.00	Side Arms	1	40.00	8.500	1.00	82.45	17.521	1.00	0.000	0.000
	Totals	56	4498.50			15,051.78			Number of Loadings :	18

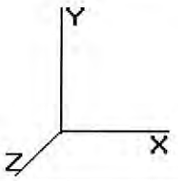
Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
5.00	124.00	(12) 1 1/4" Coax	0.00	N
5.00	124.00	(1) 10 mm Cable	0.00	N
5.00	124.00	(2) 19.7 mm Cable	0.00	N
5.00	110.00	(12) 1 5/8" Coax	0.00	N
5.00	100.00	(6) 1 5/8" Coax	3.96	Y
0.00	92.00	(4) #20 Reinforcement	3.50	Y
5.00	90.00	(4) 1/2" Coax	0.00	N
5.00	90.00	(2) 2" Conduit	1.50	Y
5.00	90.00	(6) 5/16" Coax	0.00	N

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connections — Description	Spacing (in)	Len (in)	Connectors	Continuation?
0.00	80.75	4	SOL #20 All Thread	80	1.81	6" Angle Bracket	30.0	30.0	5/8" A36 U-Bolt	No

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:42 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 2
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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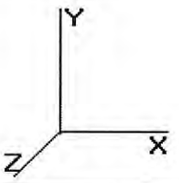

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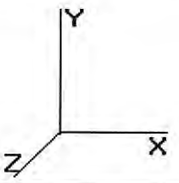
Segment Properties (Max Len : 2.ft)

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)	Additional Reinforcing Ix (in^4)	Additional Reinforcing Weight (lb)
0.00		0.2500	31.000	24.754	2,987.6	30.55	124.00	71.4	186.2	0.0	19.64	3,468	0.0
2.50		0.2500	30.637	24.462	2,883.1	30.16	122.55	71.8	181.8	209.3	19.64	3,399	167.0
5.00		0.2500	30.275	24.170	2,781.1	29.77	121.10	72.2	177.5	206.9	19.64	3,331	167.0
7.50		0.2500	29.912	23.878	2,681.6	29.38	119.65	72.7	173.2	204.4	19.64	3,263	167.0
10.00		0.2500	29.550	23.586	2,584.5	28.99	118.20	73.1	169.0	201.9	19.64	3,196	167.0
12.50		0.2500	29.187	23.294	2,489.7	28.60	116.75	73.5	164.8	199.4	19.64	3,130	167.0
15.00		0.2500	28.825	23.002	2,397.3	28.21	115.30	73.9	160.7	196.9	19.64	3,065	167.0
17.50		0.2500	28.462	22.711	2,307.2	27.83	113.85	74.4	156.6	194.4	19.64	3,000	167.0
20.00		0.2500	28.099	22.419	2,219.4	27.44	112.40	74.8	152.6	192.0	19.64	2,936	167.0
22.50		0.2500	27.737	22.127	2,133.8	27.05	110.95	75.2	148.6	189.5	19.64	2,873	167.0
25.00		0.2500	27.374	21.835	2,050.5	26.66	109.50	75.6	144.7	187.0	19.64	2,810	167.0
27.50		0.2500	27.012	21.543	1,969.3	26.27	108.05	76.1	140.8	184.5	19.64	2,748	167.0
30.00		0.2500	26.649	21.251	1,890.4	25.88	106.60	76.5	137.0	182.0	19.64	2,687	167.0
32.50		0.2500	26.286	20.959	1,813.5	25.49	105.15	76.9	133.3	179.5	19.64	2,627	167.0
35.00		0.2500	25.924	20.667	1,738.8	25.11	103.70	77.3	129.6	177.1	19.64	2,567	167.0
37.50		0.2500	25.561	20.376	1,666.2	24.72	102.25	77.8	125.9	174.6	19.64	2,508	167.0
37.58	Bot - Section 2	0.2500	25.549	20.366	1,663.8	24.70	102.20	77.8	125.8	5.8	19.64	2,506	5.6
40.00		0.2500	25.199	20.084	1,595.6	24.33	100.79	78.2	122.3	314.7	19.64	2,520	161.4
42.00	Top - Section 1	0.2190	25.347	17.719	1,428.0	28.33	115.74	73.8	108.8	257.2	19.64	2,473	133.6
42.50		0.2190	25.274	17.668	1,415.7	28.24	115.41	73.9	108.2	30.1	19.64	2,461	33.4
45.00		0.2190	24.911	17.413	1,355.1	27.80	113.75	74.4	105.1	149.2	19.64	2,403	167.0
47.50		0.2190	24.549	17.157	1,296.3	27.36	112.10	74.9	102.0	147.0	19.64	2,346	167.0
50.00		0.2190	24.186	16.901	1,239.2	26.91	110.44	75.4	99.0	144.9	19.64	2,289	167.0
52.50		0.2190	23.824	16.646	1,183.8	26.47	108.78	75.8	96.0	142.7	19.64	2,234	167.0
55.00		0.2190	23.461	16.390	1,130.1	26.03	107.13	76.3	93.1	140.5	19.64	2,178	167.0
57.50		0.2190	23.099	16.134	1,078.0	25.58	105.47	76.8	90.2	138.3	19.64	2,124	167.0
60.00		0.2190	22.736	15.879	1,027.6	25.14	103.82	77.3	87.3	136.2	19.64	2,070	167.0
62.50		0.2190	22.373	15.623	978.7	24.69	102.16	77.8	84.5	134.0	19.64	2,017	167.0
65.00		0.2190	22.011	15.367	931.5	24.25	100.51	78.3	81.8	131.8	19.64	1,965	167.0
67.50		0.2190	21.648	15.111	885.7	23.81	98.85	78.7	79.0	129.6	19.64	1,913	167.0
70.00		0.2190	21.286	14.856	841.5	23.36	97.19	79.2	76.4	127.5	19.64	1,862	167.0
72.50		0.2190	20.923	14.600	798.8	22.92	95.54	79.7	73.8	125.3	19.64	1,812	167.0
75.00		0.2190	20.561	14.344	757.6	22.48	93.88	80.2	71.2	123.1	19.64	1,762	167.0
76.17	Bot - Section 3	0.2190	20.391	14.225	738.8	22.27	93.11	80.4	70.0	56.7	19.64	1,739	77.9
77.50		0.2190	20.198	14.089	717.8	22.03	92.23	80.7	68.7	120.5	19.64	1,764	89.1
80.00	Top - Section 2	0.1880	20.211	12.121	620.3	26.13	107.51	76.2	59.3	222.8	19.64	1,715	167.0
80.75	Reinf. Top	0.1880	20.103	12.055	610.3	25.97	106.93	76.4	58.6	30.9	19.64	1,700	50.1
82.50		0.1880	19.849	11.902	587.2	25.61	105.58	76.8	57.2	71.3			
85.00		0.1880	19.486	11.682	555.3	25.09	103.65	77.3	55.1	100.3			
87.50		0.1880	19.124	11.463	524.6	24.58	101.72	77.9	53.0	98.4			
90.00		0.1880	18.761	11.243	495.0	24.06	99.79	78.5	51.0	96.6			
92.50		0.1880	18.398	11.024	466.6	23.54	97.86	79.0	49.0	94.7			
95.00		0.1880	18.036	10.804	439.3	23.03	95.94	79.6	47.1	92.8			
97.50		0.1880	17.673	10.585	413.1	22.51	94.01	80.2	45.2	91.0			
100.0		0.1880	17.311	10.365	387.9	21.99	92.08	80.7	43.3	89.1			
102.5		0.1880	16.948	10.146	363.8	21.48	90.15	81.3	41.5	87.2			
105.0		0.1880	16.586	9.926	340.7	20.96	88.22	81.9	39.7	85.4			
107.5		0.1880	16.223	9.707	318.6	20.44	86.29	81.9	37.9	83.5			
110.0		0.1880	15.860	9.487	297.4	19.93	84.36	81.9	36.2	81.6			
112.5		0.1880	15.498	9.268	277.3	19.41	82.43	81.9	34.6	79.8			
115.0		0.1880	15.135	9.048	258.0	18.89	80.51	81.9	32.9	77.9			
117.5		0.1880	14.773	8.829	239.7	18.38	78.58	81.9	31.3	76.0			
120.0		0.1880	14.410	8.609	222.3	17.86	76.65	81.9	29.8	74.2			
										7,068.1			5,394.1

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:42 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 4
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

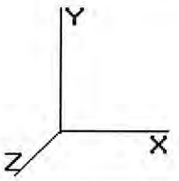
Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf		Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	212.57	1.000		0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.50		1.00	0.70	15.364	16.90	210.08	1.029	*	0.000	2.50	6.647	6.84	185.0	0.0	418.2
5.00		1.00	0.70	15.364	16.90	207.60	1.033	*	0.000	2.50	6.569	6.79	183.5	0.0	415.2
7.50		1.00	0.70	15.364	16.90	205.11	1.200	*	0.000	2.50	6.491	7.79	210.6	0.0	412.2
10.00		1.00	0.70	15.364	16.90	202.62	1.200	*	0.000	2.50	6.412	7.69	208.1	0.0	409.3
12.50		1.00	0.70	15.364	16.90	200.14	1.200	*	0.000	2.50	6.334	7.60	205.5	0.0	406.3
15.00		1.00	0.70	15.364	16.90	197.65	1.200	*	0.000	2.50	6.256	7.51	203.0	0.0	403.3
17.50		1.00	0.70	15.364	16.90	195.16	1.200	*	0.000	2.50	6.178	7.41	200.5	0.0	400.3
20.00		1.00	0.70	15.364	16.90	192.68	1.200	*	0.000	2.50	6.100	7.32	197.9	0.0	397.3
22.50		1.00	0.70	15.364	16.90	190.19	1.200	*	0.000	2.50	6.021	7.23	195.4	0.0	394.4
25.00		1.00	0.70	15.364	16.90	187.71	1.200	*	0.000	2.50	5.943	7.13	192.9	0.0	391.4
27.50		1.00	0.70	15.364	16.90	185.22	1.200	*	0.000	2.50	5.865	7.04	190.3	0.0	388.4
30.00		1.00	0.70	15.377	16.91	182.81	1.200	*	0.000	2.50	5.787	6.94	187.9	0.0	385.4
32.50		1.00	0.71	15.733	17.30	182.40	1.200	*	0.000	2.50	5.709	6.85	189.7	0.0	382.4
35.00		1.00	0.73	16.070	17.67	181.80	1.200	*	0.000	2.50	5.630	6.76	191.1	0.0	379.5
37.50		1.00	0.74	16.389	18.02	181.03	1.200	*	0.000	2.50	5.552	6.66	192.2	0.0	376.5
37.58	Bot - Section 2	1.00	0.74	16.400	18.04	181.00	1.200	*	0.000	0.08	0.184	0.22	6.4	0.0	12.5
40.00		1.00	0.76	16.694	18.36	180.11	1.200	*	0.000	2.42	5.382	6.46	189.7	0.0	539.1
42.00	Top - Section 1	1.00	0.77	16.929	18.62	179.29	1.200	*	0.000	2.00	4.398	5.28	157.3	0.0	442.2
42.50		1.00	0.77	16.986	18.68	182.22	1.200	*	0.000	0.50	1.092	1.31	39.2	0.0	69.5
45.00		1.00	0.78	17.266	18.99	181.08	1.200	*	0.000	2.50	5.412	6.49	197.4	0.0	346.1
47.50		1.00	0.79	17.535	19.28	179.83	1.200	*	0.000	2.50	5.334	6.40	197.5	0.0	343.4
50.00		1.00	0.81	17.793	19.57	178.48	1.200	*	0.000	2.50	5.256	6.31	197.5	0.0	340.8
52.50		1.00	0.82	18.043	19.84	177.03	1.200	*	0.000	2.50	5.177	6.21	197.3	0.0	338.2
55.00		1.00	0.83	18.285	20.11	175.50	1.200	*	0.000	2.50	5.099	6.12	196.9	0.0	335.6
57.50		1.00	0.84	18.518	20.37	173.89	1.200	*	0.000	2.50	5.021	6.03	196.4	0.0	333.0
60.00		1.00	0.85	18.745	20.61	172.20	1.200	*	0.000	2.50	4.943	5.93	195.7	0.0	330.4
62.50		1.00	0.86	18.965	20.86	170.45	1.200	*	0.000	2.50	4.865	5.84	194.8	0.0	327.8
65.00		1.00	0.87	19.179	21.09	168.63	1.200	*	0.000	2.50	4.786	5.74	193.9	0.0	325.2
67.50		1.00	0.88	19.386	21.32	166.75	1.200	*	0.000	2.50	4.708	5.65	192.8	0.0	322.6
70.00		1.00	0.89	19.589	21.54	164.81	1.200	*	0.000	2.50	4.630	5.56	191.6	0.0	320.0
72.50		1.00	0.90	19.786	21.76	162.81	1.200	*	0.000	2.50	4.552	5.46	190.2	0.0	317.3
75.00		1.00	0.91	19.979	21.97	160.77	1.200	*	0.000	2.50	4.474	5.37	188.8	0.0	314.7
76.17	Bot - Section 3	1.00	0.91	20.067	22.07	159.80	1.200	*	0.000	1.17	2.061	2.47	87.3	0.0	146.0
77.50		1.00	0.91	20.167	22.18	158.67	1.200	*	0.000	1.33	2.378	2.85	101.3	0.0	233.7
80.00	Top - Section 2	1.00	0.92	20.351	22.38	156.53	1.200	*	0.000	2.50	4.398	5.28	189.0	0.0	434.4
80.75	Reinf. Top	1.00	0.93	20.405	22.44	158.86	1.200	*	0.000	0.75	1.304	1.57	56.2	0.0	87.1
82.50		1.00	0.93	20.530	22.58	157.33	1.200	*	0.000	1.75	3.016	3.62	130.8	0.0	85.6
85.00		1.00	0.94	20.706	22.77	155.12	1.200	*	0.000	2.50	4.242	5.09	185.5	0.0	120.4
87.50		1.00	0.95	20.879	22.96	152.86	1.200	*	0.000	2.50	4.164	5.00	183.6	0.0	118.1
90.00	Appertunance(s)	1.00	0.95	21.047	23.15	150.57	1.200	*	0.000	2.50	4.086	4.90	181.6	0.0	115.9
92.50		1.00	0.96	21.213	23.33	148.24	1.200	*	0.000	2.50	4.007	4.81	179.5	0.0	113.7
95.00		1.00	0.97	21.375	23.51	145.87	1.200	*	0.000	2.50	3.929	4.71	177.4	0.0	111.4
97.50		1.00	0.98	21.534	23.68	143.47	1.200	*	0.000	2.50	3.851	4.62	175.1	0.0	109.2
100.0	Appertunance(s)	1.00	0.98	21.690	23.86	141.04	1.200	*	0.000	2.50	3.773	4.53	172.8	0.0	106.9
102.5		1.00	0.99	21.844	24.02	138.57	1.000		0.000	2.50	3.695	3.69	142.0	0.0	104.7
105.0		1.00	1.00	21.995	24.19	136.07	1.000		0.000	2.50	3.616	3.62	140.0	0.0	102.5
107.5		1.00	1.00	22.143	24.35	133.55	1.000		0.000	2.50	3.538	3.54	137.9	0.0	100.2
110.0	Appertunance(s)	1.00	1.01	22.289	24.51	130.99	1.000		0.000	2.50	3.460	3.46	135.7	0.0	98.0
112.5		1.00	1.02	22.433	24.67	128.41	1.000		0.000	2.50	3.382	3.38	133.5	0.0	95.7
115.0		1.00	1.02	22.574	24.83	125.80	1.000		0.000	2.50	3.303	3.30	131.2	0.0	93.5

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:43 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 5
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

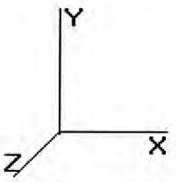
Gust Response Factor : 1.10 — Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

117.5		1.00	1.03	22.713	24.98	123.16	1.000	0.000	2.50	3.225	3.23	128.9	0.0	91.2
120.0	Appertunance(s)	1.00	1.04	22.850	25.13	120.50	1.000	0.000	2.50	3.147	3.15	126.6	0.0	89.0
* = Cf Adjusted By Linear Load Ra Effect						Totals:		120.00				8,752.9	0.0	13,875.8

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:43 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 6
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

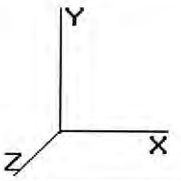
Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	21.047	23.152	0.50	0.80	7.30	0.000	0.000	270.52	0.00	0.00	102.96
90.00	DragonWave A-ANT-	3	21.047	23.152	0.72	0.80	18.73	0.000	0.000	693.72	0.00	0.00	237.96
90.00	DragonWave A-ANT-	1	21.047	23.152	0.72	0.80	3.38	0.000	0.000	125.09	0.00	0.00	32.52
90.00	DragonWave Horizon	4	21.047	23.152	0.40	0.80	0.69	0.000	0.000	25.49	0.00	0.00	50.88
90.00	NextNet BTS-2500	3	21.047	23.152	0.54	0.80	3.41	0.000	0.000	126.28	0.00	0.00	126.00
90.00	Side Arms	1	21.047	23.152	1.00	1.00	8.50	0.000	0.000	314.87	0.00	0.00	48.00
100.0	Kathrein 742 213	2	21.690	23.860	0.78	1.00	8.02	0.000	0.000	306.10	0.00	0.00	52.80
100.0	RFS APXV18-206517S-	1	21.690	23.860	0.80	1.00	4.13	0.000	0.000	157.59	0.00	0.00	31.68
110.0	48" x 12" Panel	9	22.289	24.518	0.60	0.80	30.24	0.000	0.000	1,186.29	0.00	0.00	324.00
110.0	72" x 12" Panel	3	22.289	24.518	0.54	0.80	13.51	0.000	0.000	529.88	0.00	0.00	162.00
110.0	T-Arm w/ Working Pla	3	22.289	24.518	0.50	0.75	19.45	0.000	0.000	762.88	0.00	0.00	900.00
120.0	Andrew SBNH-	1	23.065	25.372	0.56	0.80	6.41	0.000	4.000	260.07	0.00	1,040.27	79.32
120.0	Ericsson RRUS-11 190	6	23.065	25.372	0.54	0.80	9.46	0.000	4.000	383.83	0.00	1,535.31	316.80
120.0	Flat Platform with H	1	22.850	25.135	1.00	1.00	42.40	0.000	0.000	1,705.18	0.00	0.00	2,400.00
120.0	Powerwave 7770.00	6	23.065	25.372	0.52	0.80	18.35	0.000	4.000	744.74	0.00	2,978.97	252.00
120.0	Powerwave LGP	6	23.065	25.372	0.40	0.80	3.02	0.000	4.000	122.76	0.00	491.04	101.52
120.0	Powerwave P65-17-	2	23.065	25.372	0.54	0.80	12.29	0.000	4.000	498.72	0.00	1,994.86	141.60
120.0	Raycap DC6-48-60-18-	1	23.065	25.372	0.80	0.80	1.18	0.000	4.000	47.74	0.00	190.96	38.16
										8,261.73			5,398.20

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:43 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 7
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

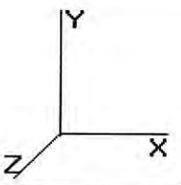
Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

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)
2.50	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	0.73	0.00	15.364	0.110	1.029	0.00	0.00
5.00	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	0.73	0.00	15.364	0.111	1.033	0.00	0.00
7.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.288	0.000	26.77	14.76
7.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.288	0.000	23.66	0.00
7.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.288	0.000	10.14	21.90
10.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.291	0.000	26.77	14.76
10.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.291	0.000	23.66	0.00
10.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.291	0.000	10.14	21.90
12.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.295	0.000	26.77	14.76
12.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.295	0.000	23.66	0.00
12.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.295	0.000	10.14	21.90
15.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.298	0.000	26.77	14.76
15.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.298	0.000	23.66	0.00
15.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.298	0.000	10.14	21.90
17.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.302	0.000	26.77	14.76
17.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.302	0.000	23.66	0.00
17.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.302	0.000	10.14	21.90
20.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.306	0.000	26.77	14.76
20.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.306	0.000	23.66	0.00
20.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.306	0.000	10.14	21.90
22.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.310	0.000	26.77	14.76
22.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.310	0.000	23.66	0.00
22.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.310	0.000	10.14	21.90
25.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.314	0.000	26.77	14.76
25.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.314	0.000	23.66	0.00
25.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.314	0.000	10.14	21.90
27.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.318	0.000	26.77	14.76
27.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.318	0.000	23.66	0.00
27.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.318	0.000	10.14	21.90
30.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.377	0.323	0.000	26.79	14.76
30.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.377	0.323	0.000	23.68	0.00
30.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.377	0.323	0.000	10.15	21.90
32.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.733	0.327	0.000	27.41	14.76
32.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.733	0.327	0.000	24.23	0.00
32.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.733	0.327	0.000	10.38	21.90
35.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	16.070	0.332	0.000	28.00	14.76
35.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	16.070	0.332	0.000	24.75	0.00
35.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	16.070	0.332	0.000	10.61	21.90
37.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	16.389	0.336	0.000	28.56	14.76
37.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	16.389	0.336	0.000	25.24	0.00
37.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	16.389	0.336	0.000	10.82	21.90
37.58	(6) 1 5/8" Coax	Yes	0.08	1.200	3.96	0.03	0.03	16.400	0.339	0.000	0.95	0.49
37.58	(4) #20 Reinforcement	Yes	0.08	1.200	3.50	0.02	0.03	16.400	0.339	0.000	0.84	0.00
37.58	(2) 2" Conduit	Yes	0.08	1.200	1.50	0.01	0.01	16.400	0.339	0.000	0.36	0.73
40.00	(6) 1 5/8" Coax	Yes	2.42	1.200	3.96	0.80	0.96	16.694	0.341	0.000	28.12	14.27
40.00	(4) #20 Reinforcement	Yes	2.42	1.200	3.50	0.70	0.85	16.694	0.341	0.000	24.85	0.00
40.00	(2) 2" Conduit	Yes	2.42	1.200	1.50	0.30	0.36	16.694	0.341	0.000	10.65	21.17
42.00	(6) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	16.929	0.345	0.000	23.60	11.81
42.00	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	0.58	0.70	16.929	0.345	0.000	20.86	0.00
42.00	(2) 2" Conduit	Yes	2.00	1.200	1.50	0.25	0.30	16.929	0.345	0.000	8.94	17.52
42.50	(6) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.17	0.20	16.986	0.342	0.000	5.92	2.95

Pole :	302500				Code: ANSI/TIA-222 Rev G						4/5/2012 5:23:43 PM	
Location :	Brst Bristol, CT				Struct Class : II						Page: 8	
Height :	120.0 (ft)				Exposure Category : B							
Base Dia :	31.00 (in)				Topographic Category : 1							
Top Dia :	14.41 (in)				Base Elev : 0.000 (ft)							
Shape :	12 Sides											
Taper :	0.145033 (in/ft)											

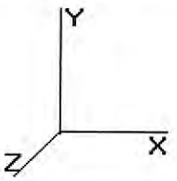


Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60
Wind Importance Factor : 1.00

42.50	(4) #20 Reinforcement	Yes	0.50	1.200	3.50	0.15	0.17	16.986	0.342	0.000	5.23	0.00
42.50	(2) 2" Conduit	Yes	0.50	1.200	1.50	0.06	0.08	16.986	0.342	0.000	2.24	4.38
45.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	17.266	0.345	0.000	30.08	14.76
45.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	17.266	0.345	0.000	26.59	0.00
45.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	17.266	0.345	0.000	11.40	21.90
47.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	17.535	0.350	0.000	30.55	14.76
47.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	17.535	0.350	0.000	27.00	0.00
47.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	17.535	0.350	0.000	11.57	21.90
50.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	17.793	0.355	0.000	31.00	14.76
50.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	17.793	0.355	0.000	27.40	0.00
50.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	17.793	0.355	0.000	11.74	21.90
52.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.043	0.361	0.000	31.44	14.76
52.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.043	0.361	0.000	27.79	0.00
52.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.043	0.361	0.000	11.91	21.90
55.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.285	0.366	0.000	31.86	14.76
55.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.285	0.366	0.000	28.16	0.00
55.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.285	0.366	0.000	12.07	21.90
57.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.518	0.372	0.000	32.27	14.76
57.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.518	0.372	0.000	28.52	0.00
57.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.518	0.372	0.000	12.22	21.90
60.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.745	0.378	0.000	32.66	14.76
60.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.745	0.378	0.000	28.87	0.00
60.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.745	0.378	0.000	12.37	21.90
62.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.965	0.384	0.000	33.04	14.76
62.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.965	0.384	0.000	29.21	0.00
62.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.965	0.384	0.000	12.52	21.90
65.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.179	0.390	0.000	33.42	14.76
65.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.179	0.390	0.000	29.53	0.00
65.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.179	0.390	0.000	12.66	21.90
67.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.386	0.396	0.000	33.78	14.76
67.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.386	0.396	0.000	29.86	0.00
67.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.386	0.396	0.000	12.80	21.90
70.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.589	0.403	0.000	34.13	14.76
70.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.589	0.403	0.000	30.17	0.00
70.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.589	0.403	0.000	12.93	21.90
72.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.786	0.410	0.000	34.48	14.76
72.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.786	0.410	0.000	30.47	0.00
72.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.786	0.410	0.000	13.06	21.90
75.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.979	0.417	0.000	34.81	14.76
75.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.979	0.417	0.000	30.77	0.00
75.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.979	0.417	0.000	13.19	21.90
76.17	(6) 1 5/8" Coax	Yes	1.17	1.200	3.96	0.38	0.46	20.067	0.423	0.000	16.32	6.89
76.17	(4) #20 Reinforcement	Yes	1.17	1.200	3.50	0.34	0.41	20.067	0.423	0.000	14.42	0.00
76.17	(2) 2" Conduit	Yes	1.17	1.200	1.50	0.15	0.17	20.067	0.423	0.000	6.18	10.22
77.50	(6) 1 5/8" Coax	Yes	1.33	1.200	3.96	0.44	0.53	20.167	0.426	0.000	18.74	7.87
77.50	(4) #20 Reinforcement	Yes	1.33	1.200	3.50	0.39	0.47	20.167	0.426	0.000	16.56	0.00
77.50	(2) 2" Conduit	Yes	1.33	1.200	1.50	0.17	0.20	20.167	0.426	0.000	7.10	11.68
80.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	20.351	0.432	0.000	35.46	14.76
80.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.87	20.351	0.432	0.000	31.34	0.00
80.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.37	20.351	0.432	0.000	13.43	21.90
80.75	(6) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.25	0.30	20.405	0.429	0.000	10.67	4.43
80.75	(4) #20 Reinforcement	Yes	0.75	1.200	3.50	0.22	0.26	20.405	0.429	0.000	9.43	0.00
80.75	(2) 2" Conduit	Yes	0.75	1.200	1.50	0.09	0.11	20.405	0.429	0.000	4.04	6.57
82.50	(6) 1 5/8" Coax	Yes	1.75	1.200	3.96	0.58	0.69	20.530	0.433	0.000	25.04	10.33
82.50	(4) #20 Reinforcement	Yes	1.75	1.200	3.50	0.51	0.61	20.530	0.433	0.000	22.13	0.00
82.50	(2) 2" Conduit	Yes	1.75	1.200	1.50	0.22	0.26	20.530	0.433	0.000	9.49	15.33
85.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	20.706	0.440	0.000	36.08	14.76

Pole :	302500	Code:	ANSI/TIA-222 Rev G
Location :	Brst Bristol, CT	Struct Class :	II
Height :	120.0 (ft)	Exposure Category :	B
Base Dia :	31.00 (in)	Topographic Category :	1
Top Dia :	14.41 (in)	Base Elev :	0.000 (ft)
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



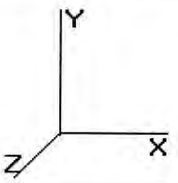
Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

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

Wind Importance Factor : 1.00

85.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	20.706	0.440	0.000	31.89	0.00
85.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	20.706	0.440	0.000	13.67	21.90
87.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	20.879	0.448	0.000	36.38	14.76
87.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	20.879	0.448	0.000	32.15	0.00
87.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	20.879	0.448	0.000	13.78	21.90
90.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.047	0.457	0.000	36.67	14.76
90.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	21.047	0.457	0.000	32.41	0.00
90.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	21.047	0.457	0.000	13.89	21.90
92.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.213	0.351	0.000	36.96	14.76
92.50	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	0.58	0.70	21.213	0.351	0.000	26.13	0.00
95.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.375	0.210	0.000	37.24	14.76
97.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.534	0.214	0.000	37.52	14.76
100.0	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.690	0.219	0.000	37.79	14.76
										Totals:	2,549.52	1,305.41

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:43 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 10
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

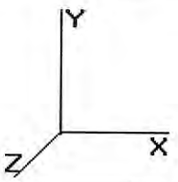
Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Applied Segment Forces Summary

Seg 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
2.50	184.97	418.20	0.00	0.00
5.00	183.49	415.22	0.00	0.00
7.50	271.19	507.46	0.00	0.00
10.00	268.65	504.48	0.00	0.00
12.50	266.11	501.50	0.00	0.00
15.00	263.57	498.52	0.00	0.00
17.50	261.04	495.54	0.00	0.00
20.00	258.50	492.56	0.00	0.00
22.50	255.96	489.58	0.00	0.00
25.00	253.42	486.60	0.00	0.00
27.50	250.89	483.62	0.00	0.00
30.00	248.56	480.64	0.00	0.00
32.50	251.71	477.66	0.00	0.00
35.00	254.44	474.68	0.00	0.00
37.50	256.80	471.70	0.00	0.00
37.58	8.52	15.67	0.00	0.00
40.00	253.37	631.14	0.00	0.00
42.00	210.65	518.38	0.00	0.00
42.50	52.56	88.57	0.00	0.00
45.00	265.42	441.27	0.00	0.00
47.50	266.66	438.66	0.00	0.00
50.00	267.66	436.05	0.00	0.00
52.50	268.43	433.44	0.00	0.00
55.00	269.01	430.83	0.00	0.00
57.50	269.38	428.22	0.00	0.00
60.00	269.58	425.61	0.00	0.00
62.50	269.61	423.00	0.00	0.00
65.00	269.49	420.39	0.00	0.00
67.50	269.21	417.78	0.00	0.00
70.00	268.78	415.17	0.00	0.00
72.50	268.22	412.56	0.00	0.00
75.00	267.53	409.95	0.00	0.00
76.17	124.26	190.40	0.00	0.00
77.50	143.69	284.44	0.00	0.00
80.00	269.27	529.57	0.00	0.00
80.75	80.35	115.69	0.00	0.00
82.50	187.43	152.25	0.00	0.00
85.00	267.14	215.59	0.00	0.00
87.50	265.91	213.35	0.00	0.00
90.00	1,820.55	809.43	0.00	0.00
92.50	242.63	184.36	0.00	0.00
95.00	214.62	182.12	0.00	0.00
97.50	212.66	179.88	0.00	0.00
100.0	674.31	262.11	0.00	0.00
102.5	142.04	160.64	0.00	0.00
105.0	139.99	158.40	0.00	0.00
107.5	137.89	156.15	0.00	0.00
110.0	2,614.77	1,539.91	0.00	0.00
112.5	133.52	122.16	0.00	0.00

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:43 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 11
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



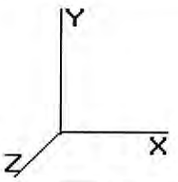
Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

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

Wind Importance Factor : 1.00

115.0		131.25	119.92	0.00	0.00
117.5		128.93	117.68	0.00	0.00
120.0		3,889.60	3,444.83	0.00	8,231.42
	Totals:	19,564.19	23,123.48	0.00	8,231.42

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

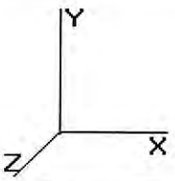
Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-23.09	-19.60	0.00	-1,636.01	0.00	1,636.01	1,590.66	795.33	2,018.74	996.98	0.00	0.00	0.768
2.50	-22.61	-19.48	0.00	-1,587.01	0.00	1,587.01	1,581.24	790.62	1,982.92	979.29	0.05	-0.18	0.752
5.00	-22.14	-19.37	0.00	-1,538.30	0.00	1,538.30	1,571.59	785.80	1,947.12	961.61	0.19	-0.35	0.736
7.50	-21.58	-19.16	0.00	-1,489.88	0.00	1,489.88	1,561.72	780.86	1,911.33	943.93	0.42	-0.53	0.720
10.00	-21.02	-18.95	0.00	-1,441.99	0.00	1,441.99	1,551.63	775.81	1,875.57	926.27	0.75	-0.71	0.704
12.50	-20.46	-18.74	0.00	-1,394.61	0.00	1,394.61	1,541.31	770.66	1,839.85	908.63	1.17	-0.88	0.688
15.00	-19.91	-18.53	0.00	-1,347.77	0.00	1,347.77	1,530.78	765.39	1,804.18	891.02	1.67	-1.05	0.671
17.50	-19.37	-18.31	0.00	-1,301.46	0.00	1,301.46	1,520.01	760.01	1,768.57	873.43	2.27	-1.23	0.655
20.00	-18.83	-18.10	0.00	-1,255.67	0.00	1,255.67	1,509.03	754.52	1,733.02	855.87	2.96	-1.40	0.639
22.50	-18.29	-17.89	0.00	-1,210.42	0.00	1,210.42	1,497.83	748.91	1,697.56	838.36	3.74	-1.57	0.622
25.00	-17.76	-17.67	0.00	-1,165.71	0.00	1,165.71	1,486.40	743.20	1,662.18	820.89	4.61	-1.74	0.606
27.50	-17.23	-17.45	0.00	-1,121.53	0.00	1,121.53	1,474.74	737.37	1,626.91	803.47	5.56	-1.90	0.589
30.00	-16.71	-17.24	0.00	-1,077.90	0.00	1,077.90	1,462.87	731.44	1,591.74	786.10	6.60	-2.07	0.573
32.50	-16.20	-17.01	0.00	-1,034.80	0.00	1,034.80	1,450.77	725.39	1,556.69	768.79	7.73	-2.23	0.556
35.00	-15.69	-16.79	0.00	-992.27	0.00	992.27	1,438.45	719.23	1,521.78	751.55	8.95	-2.40	0.539
37.50	-15.20	-16.53	0.00	-950.31	0.00	950.31	1,425.91	712.96	1,487.00	734.37	10.25	-2.56	0.523
37.58	-15.16	-16.54	0.00	-948.93	0.00	948.93	1,425.49	712.74	1,485.84	733.80	10.29	-2.56	0.522
40.00	-14.51	-16.29	0.00	-908.95	0.00	908.95	1,413.15	706.57	1,452.37	717.27	11.63	-2.72	0.497
42.00	-13.98	-16.08	0.00	-876.36	0.00	876.36	1,177.15	588.58	1,220.08	602.55	12.79	-2.84	0.539
42.50	-13.86	-16.04	0.00	-868.33	0.00	868.33	1,175.29	587.65	1,214.60	599.85	13.09	-2.87	0.535
45.00	-13.39	-15.79	0.00	-828.22	0.00	828.22	1,165.87	582.93	1,187.28	586.35	14.63	-3.03	0.515
47.50	-12.93	-15.54	0.00	-788.74	0.00	788.74	1,156.22	578.11	1,160.01	572.88	16.26	-3.18	0.496
50.00	-12.47	-15.28	0.00	-749.90	0.00	749.90	1,146.35	573.17	1,132.81	559.45	17.97	-3.33	0.476
52.50	-12.02	-15.01	0.00	-711.70	0.00	711.70	1,136.25	568.13	1,105.70	546.06	19.75	-3.48	0.457
55.00	-11.57	-14.75	0.00	-674.17	0.00	674.17	1,125.94	562.97	1,078.67	532.72	21.61	-3.62	0.438
57.50	-11.12	-14.48	0.00	-637.30	0.00	637.30	1,115.40	557.70	1,051.75	519.42	23.54	-3.76	0.418
60.00	-10.68	-14.21	0.00	-601.11	0.00	601.11	1,104.64	552.32	1,024.94	506.18	25.55	-3.90	0.399
62.50	-10.24	-13.93	0.00	-565.59	0.00	565.59	1,093.65	546.83	998.25	493.00	27.62	-4.03	0.380
65.00	-9.81	-13.65	0.00	-530.76	0.00	530.76	1,082.45	541.22	971.69	479.88	29.77	-4.16	0.360
67.50	-9.39	-13.38	0.00	-496.63	0.00	496.63	1,071.02	535.51	945.28	466.84	31.98	-4.29	0.341
70.00	-8.97	-13.09	0.00	-463.19	0.00	463.19	1,059.36	529.68	919.01	453.87	34.26	-4.41	0.322
72.50	-8.55	-12.81	0.00	-430.45	0.00	430.45	1,047.49	523.74	892.91	440.97	36.60	-4.53	0.303
75.00	-8.15	-12.52	0.00	-398.42	0.00	398.42	1,035.39	517.69	866.98	428.17	39.00	-4.64	0.284
76.17	-7.95	-12.39	0.00	-383.81	0.00	383.81	1,029.67	514.83	854.94	422.22	40.14	-4.69	0.275
77.50	-7.67	-12.24	0.00	-367.28	0.00	367.28	1,023.07	511.53	841.23	415.45	41.46	-4.75	0.259
80.00	-7.15	-11.93	0.00	-336.69	0.00	336.69	831.49	415.75	686.29	338.93	43.97	-4.85	0.268
80.75	-7.03	-11.85	0.00	-327.74	0.00	327.74	828.81	414.40	680.33	335.99	44.73	-4.88	0.262
80.75	-7.03	-11.85	0.00	-327.74	0.00	327.74	828.81	414.40	680.33	335.99	44.73	-4.88	0.985
82.50	-6.85	-11.67	0.00	-307.01	0.00	307.01	822.47	411.24	666.44	329.13	46.53	-4.95	0.942
85.00	-6.59	-11.43	0.00	-277.82	0.00	277.82	813.23	406.62	646.68	319.37	49.22	-5.30	0.879
87.50	-6.34	-11.18	0.00	-249.25	0.00	249.25	803.77	401.88	627.03	309.67	52.08	-5.64	0.814
90.00	-5.67	-9.32	0.00	-221.30	0.00	221.30	794.08	397.04	607.50	300.02	55.12	-5.96	0.745
92.50	-5.46	-9.09	0.00	-198.00	0.00	198.00	784.17	392.08	588.09	290.43	58.31	-6.26	0.689
95.00	-5.26	-8.88	0.00	-175.29	0.00	175.29	774.04	387.02	568.81	280.91	61.66	-6.55	0.631
97.50	-5.07	-8.67	0.00	-153.09	0.00	153.09	763.68	381.84	549.68	271.47	65.15	-6.81	0.571
100.00	-4.86	-7.99	0.00	-131.42	0.00	131.42	753.10	376.55	530.71	262.10	68.78	-7.06	0.508
102.50	-4.69	-7.84	0.00	-111.46	0.00	111.46	742.30	371.15	511.90	252.81	72.52	-7.28	0.448
105.00	-4.53	-7.70	0.00	-91.85	0.00	91.85	731.28	365.64	493.27	243.61	76.38	-7.48	0.384
107.50	-4.37	-7.55	0.00	-72.60	0.00	72.60	715.50	357.75	471.83	233.02	80.33	-7.65	0.318
110.00	-3.18	-4.76	0.00	-53.72	0.00	53.72	699.32	349.66	450.61	222.54	84.36	-7.79	0.246
112.50	-3.07	-4.62	0.00	-41.81	0.00	41.81	683.14	341.57	429.88	212.30	88.46	-7.90	0.202

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:43 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 13
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



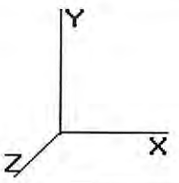
Load Case: 1.2D + 1.6W — 95.00 mph with No Ice — 27 Iterations

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

Wind Importance Factor : 1.00

115.00	-2.97	-4.48	0.00	-30.26	0.00	30.26	666.96	333.48	409.64	202.31	92.61	-8.00	0.154
117.50	-2.86	-4.34	0.00	-19.07	0.00	19.07	650.78	325.39	389.89	192.55	96.81	-8.06	0.104
120.00	0.00	-3.89	0.00	-8.23	0.00	8.23	634.60	317.30	370.62	183.04	101.03	-8.11	0.045

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:43 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 14
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

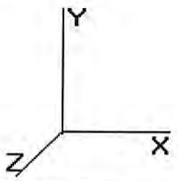
Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf		Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	212.57	1.000		0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.50		1.00	0.70	15.364	16.90	210.08	1.000	*	0.000	2.50	6.647	6.65	179.7	0.0	355.4
5.00		1.00	0.70	15.364	16.90	207.60	1.000	*	0.000	2.50	6.569	6.57	177.6	0.0	353.2
7.50		1.00	0.70	15.364	16.90	205.11	1.200	*	0.000	2.50	6.491	7.79	210.6	0.0	350.9
10.00		1.00	0.70	15.364	16.90	202.62	1.200	*	0.000	2.50	6.412	7.69	208.1	0.0	348.7
12.50		1.00	0.70	15.364	16.90	200.14	1.200	*	0.000	2.50	6.334	7.60	205.5	0.0	346.5
15.00		1.00	0.70	15.364	16.90	197.65	1.200	*	0.000	2.50	6.256	7.51	203.0	0.0	344.2
17.50		1.00	0.70	15.364	16.90	195.16	1.200	*	0.000	2.50	6.178	7.41	200.5	0.0	342.0
20.00		1.00	0.70	15.364	16.90	192.68	1.200	*	0.000	2.50	6.100	7.32	197.9	0.0	339.8
22.50		1.00	0.70	15.364	16.90	190.19	1.200	*	0.000	2.50	6.021	7.23	195.4	0.0	337.5
25.00		1.00	0.70	15.364	16.90	187.71	1.200	*	0.000	2.50	5.943	7.13	192.9	0.0	335.3
27.50		1.00	0.70	15.364	16.90	185.22	1.200	*	0.000	2.50	5.865	7.04	190.3	0.0	333.1
30.00		1.00	0.70	15.377	16.91	182.81	1.200	*	0.000	2.50	5.787	6.94	187.9	0.0	330.8
32.50		1.00	0.71	15.733	17.30	182.40	1.200	*	0.000	2.50	5.709	6.85	189.7	0.0	328.6
35.00		1.00	0.73	16.070	17.67	181.80	1.200	*	0.000	2.50	5.630	6.76	191.1	0.0	326.4
37.50		1.00	0.74	16.389	18.02	181.03	1.200	*	0.000	2.50	5.552	6.66	192.2	0.0	324.1
37.58	Bot - Section 2	1.00	0.74	16.400	18.04	181.00	1.200	*	0.000	0.08	0.184	0.22	6.4	0.0	10.8
40.00		1.00	0.76	16.694	18.36	180.11	1.200	*	0.000	2.42	5.382	6.46	189.7	0.0	444.7
42.00	Top - Section 1	1.00	0.77	16.929	18.62	179.29	1.200	*	0.000	2.00	4.398	5.28	157.3	0.0	365.1
42.50		1.00	0.77	16.986	18.68	182.22	1.200	*	0.000	0.50	1.092	1.31	39.2	0.0	60.5
45.00		1.00	0.78	17.266	18.99	181.08	1.200	*	0.000	2.50	5.412	6.49	197.4	0.0	301.3
47.50		1.00	0.79	17.535	19.28	179.83	1.200	*	0.000	2.50	5.334	6.40	197.5	0.0	299.3
50.00		1.00	0.81	17.793	19.57	178.48	1.200	*	0.000	2.50	5.256	6.31	197.5	0.0	297.4
52.50		1.00	0.82	18.043	19.84	177.03	1.200	*	0.000	2.50	5.177	6.21	197.3	0.0	295.4
55.00		1.00	0.83	18.285	20.11	175.50	1.200	*	0.000	2.50	5.099	6.12	196.9	0.0	293.5
57.50		1.00	0.84	18.518	20.37	173.89	1.200	*	0.000	2.50	5.021	6.03	196.4	0.0	291.5
60.00		1.00	0.85	18.745	20.61	172.20	1.200	*	0.000	2.50	4.943	5.93	195.7	0.0	289.5
62.50		1.00	0.86	18.965	20.86	170.45	1.200	*	0.000	2.50	4.865	5.84	194.8	0.0	287.6
65.00		1.00	0.87	19.179	21.09	168.63	1.200	*	0.000	2.50	4.786	5.74	193.9	0.0	285.6
67.50		1.00	0.88	19.386	21.32	166.75	1.200	*	0.000	2.50	4.708	5.65	192.8	0.0	283.7
70.00		1.00	0.89	19.589	21.54	164.81	1.200	*	0.000	2.50	4.630	5.56	191.6	0.0	281.7
72.50		1.00	0.90	19.786	21.76	162.81	1.200	*	0.000	2.50	4.552	5.46	190.2	0.0	279.8
75.00		1.00	0.91	19.979	21.97	160.77	1.200	*	0.000	2.50	4.474	5.37	188.8	0.0	277.8
76.17	Bot - Section 3	1.00	0.91	20.067	22.07	159.80	1.200	*	0.000	1.17	2.061	2.47	87.3	0.0	129.0
77.50		1.00	0.91	20.167	22.18	158.67	1.200	*	0.000	1.33	2.378	2.85	101.3	0.0	197.5
80.00	Top - Section 2	1.00	0.92	20.351	22.38	156.53	1.200	*	0.000	2.50	4.398	5.28	189.0	0.0	367.5
80.75	Reinf. Top	1.00	0.93	20.405	22.44	158.86	1.200	*	0.000	0.75	1.304	1.57	56.2	0.0	77.9
82.50		1.00	0.93	20.530	22.58	157.33	1.200	*	0.000	1.75	3.016	3.62	130.8	0.0	64.2
85.00		1.00	0.94	20.706	22.77	155.12	1.200	*	0.000	2.50	4.242	5.09	185.5	0.0	90.3
87.50		1.00	0.95	20.879	22.96	152.86	1.200	*	0.000	2.50	4.164	5.00	183.6	0.0	88.6
90.00	Appertunance(s)	1.00	0.95	21.047	23.15	150.57	1.200	*	0.000	2.50	4.086	4.90	181.6	0.0	86.9
92.50		1.00	0.96	21.213	23.33	148.24	1.200	*	0.000	2.50	4.007	4.81	179.5	0.0	85.2
95.00		1.00	0.97	21.375	23.51	145.87	1.200	*	0.000	2.50	3.929	4.71	177.4	0.0	83.6
97.50		1.00	0.98	21.534	23.68	143.47	1.200	*	0.000	2.50	3.851	4.62	175.1	0.0	81.9
100.0	Appertunance(s)	1.00	0.98	21.690	23.86	141.04	1.200	*	0.000	2.50	3.773	4.53	172.8	0.0	80.2
102.5		1.00	0.99	21.844	24.02	138.57	1.000		0.000	2.50	3.695	3.69	142.0	0.0	78.5
105.0		1.00	1.00	21.995	24.19	136.07	1.000		0.000	2.50	3.616	3.62	140.0	0.0	76.8
107.5		1.00	1.00	22.143	24.35	133.55	1.000		0.000	2.50	3.538	3.54	137.9	0.0	75.2
110.0	Appertunance(s)	1.00	1.01	22.289	24.51	130.99	1.000		0.000	2.50	3.460	3.46	135.7	0.0	73.5
112.5		1.00	1.02	22.433	24.67	128.41	1.000		0.000	2.50	3.382	3.38	133.5	0.0	71.8
115.0		1.00	1.02	22.574	24.83	125.80	1.000		0.000	2.50	3.303	3.30	131.2	0.0	70.1

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:44 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 15
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



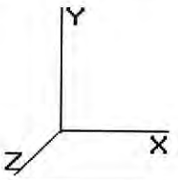
Load Case: 0.9D + 1.6W — 95.00 mph with No Ice (Reduced DL) — 27 Iterations

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

Wind Importance Factor : 1.00

117.5		1.00	1.03	22.713	24.98	123.16	1.000	0.000	2.50	3.225	3.23	128.9	0.0	68.4
120.0	Appertunance(s)	1.00	1.04	22.850	25.13	120.50	1.000	0.000	2.50	3.147	3.15	126.6	0.0	66.8
* = Cf Adjusted By Linear Load Ra Effect						Totals:		120.00				8,741.9	0.0	11,755.4

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:44 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 16
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

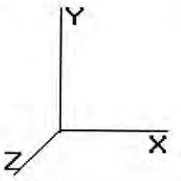
Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	21.047	23.152	0.50	0.80	7.30	0.000	0.000	270.52	0.00	0.00	77.22
90.00	DragonWave A-ANT-	3	21.047	23.152	0.72	0.80	18.73	0.000	0.000	693.72	0.00	0.00	178.47
90.00	DragonWave A-ANT-	1	21.047	23.152	0.72	0.80	3.38	0.000	0.000	125.09	0.00	0.00	24.39
90.00	DragonWave Horizon	4	21.047	23.152	0.40	0.80	0.69	0.000	0.000	25.49	0.00	0.00	38.16
90.00	NextNet BTS-2500	3	21.047	23.152	0.54	0.80	3.41	0.000	0.000	126.28	0.00	0.00	94.50
90.00	Side Arms	1	21.047	23.152	1.00	1.00	8.50	0.000	0.000	314.87	0.00	0.00	36.00
100.0	Kathrein 742 213	2	21.690	23.860	0.78	1.00	8.02	0.000	0.000	306.10	0.00	0.00	39.60
100.0	RFS APXV18-206517S-	1	21.690	23.860	0.80	1.00	4.13	0.000	0.000	157.59	0.00	0.00	23.76
110.0	48" x 12" Panel	9	22.289	24.518	0.60	0.80	30.24	0.000	0.000	1,186.29	0.00	0.00	243.00
110.0	72" x 12" Panel	3	22.289	24.518	0.54	0.80	13.51	0.000	0.000	529.88	0.00	0.00	121.50
110.0	T-Arm w/ Working Pla	3	22.289	24.518	0.50	0.75	19.45	0.000	0.000	762.88	0.00	0.00	675.00
120.0	Andrew SBNH-	1	23.065	25.372	0.56	0.80	6.41	0.000	4.000	260.07	0.00	1,040.27	59.49
120.0	Ericsson RRUS-11 190	6	23.065	25.372	0.54	0.80	9.46	0.000	4.000	383.83	0.00	1,535.31	237.60
120.0	Flat Platform with H	1	22.850	25.135	1.00	1.00	42.40	0.000	0.000	1,705.18	0.00	0.00	1,800.00
120.0	Powerwave 7770.00	6	23.065	25.372	0.52	0.80	18.35	0.000	4.000	744.74	0.00	2,978.97	189.00
120.0	Powerwave LGP	6	23.065	25.372	0.40	0.80	3.02	0.000	4.000	122.76	0.00	491.04	76.14
120.0	Powerwave P65-17-	2	23.065	25.372	0.54	0.80	12.29	0.000	4.000	498.72	0.00	1,994.86	106.20
120.0	Raycap DC6-48-60-18-	1	23.065	25.372	0.80	0.80	1.18	0.000	4.000	47.74	0.00	190.96	28.62
										8,261.73			4,048.65

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:44 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 17
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

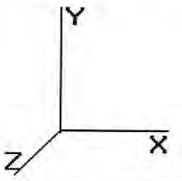
Wind Importance Factor : 1.00

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)
2.50	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	0.73	0.00	15.364	0.110	1.029	0.00	0.00
5.00	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	0.73	0.00	15.364	0.111	1.033	0.00	0.00
7.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.288	0.000	26.77	11.07
7.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.288	0.000	23.66	0.00
7.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.288	0.000	10.14	16.42
10.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.291	0.000	26.77	11.07
10.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.291	0.000	23.66	0.00
10.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.291	0.000	10.14	16.42
12.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.295	0.000	26.77	11.07
12.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.295	0.000	23.66	0.00
12.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.295	0.000	10.14	16.42
15.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.298	0.000	26.77	11.07
15.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.298	0.000	23.66	0.00
15.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.298	0.000	10.14	16.42
17.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.302	0.000	26.77	11.07
17.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.302	0.000	23.66	0.00
17.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.302	0.000	10.14	16.42
20.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.306	0.000	26.77	11.07
20.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.306	0.000	23.66	0.00
20.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.306	0.000	10.14	16.42
22.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.310	0.000	26.77	11.07
22.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.310	0.000	23.66	0.00
22.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.310	0.000	10.14	16.42
25.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.314	0.000	26.77	11.07
25.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.314	0.000	23.66	0.00
25.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.314	0.000	10.14	16.42
27.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.364	0.318	0.000	26.77	11.07
27.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.364	0.318	0.000	23.66	0.00
27.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.364	0.318	0.000	10.14	16.42
30.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.377	0.323	0.000	26.79	11.07
30.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.377	0.323	0.000	23.68	0.00
30.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.377	0.323	0.000	10.15	16.42
32.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	15.733	0.327	0.000	27.41	11.07
32.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	15.733	0.327	0.000	24.23	0.00
32.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	15.733	0.327	0.000	10.38	16.42
35.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	16.070	0.332	0.000	28.00	11.07
35.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	16.070	0.332	0.000	24.75	0.00
35.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	16.070	0.332	0.000	10.61	16.42
37.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	16.389	0.336	0.000	28.56	11.07
37.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	16.389	0.336	0.000	25.24	0.00
37.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	16.389	0.336	0.000	10.82	16.42
37.58	(6) 1 5/8" Coax	Yes	0.08	1.200	3.96	0.03	0.03	16.400	0.339	0.000	0.95	0.37
37.58	(4) #20 Reinforcement	Yes	0.08	1.200	3.50	0.02	0.03	16.400	0.339	0.000	0.84	0.00
37.58	(2) 2" Conduit	Yes	0.08	1.200	1.50	0.01	0.01	16.400	0.339	0.000	0.36	0.55
40.00	(6) 1 5/8" Coax	Yes	2.42	1.200	3.96	0.80	0.96	16.694	0.341	0.000	28.12	10.70
40.00	(4) #20 Reinforcement	Yes	2.42	1.200	3.50	0.70	0.85	16.694	0.341	0.000	24.85	0.00
40.00	(2) 2" Conduit	Yes	2.42	1.200	1.50	0.30	0.36	16.694	0.341	0.000	10.65	15.88
42.00	(6) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	16.929	0.345	0.000	23.60	8.85
42.00	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	0.58	0.70	16.929	0.345	0.000	20.86	0.00
42.00	(2) 2" Conduit	Yes	2.00	1.200	1.50	0.25	0.30	16.929	0.345	0.000	8.94	13.14
42.50	(6) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.17	0.20	16.986	0.342	0.000	5.92	2.21

Pole : 302500
Location : Brst Bristol, CT
Height : 120.0 (ft)
Base Dia : 31.00 (in)
Top Dia : 14.41 (in)
Shape : 12 Sides
Taper : 0.145033 (in/ft)

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



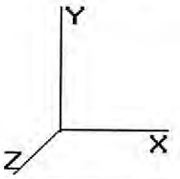
Load Case: 0.9D + 1.6W — 95.00 mph with No Ice (Reduced DL) — 27 Iterations

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

Wind Importance Factor : 1.00

42.50	(4) #20 Reinforcement	Yes	0.50	1.200	3.50	0.15	0.17	16.986	0.342	0.000	5.23	0.00
42.50	(2) 2" Conduit	Yes	0.50	1.200	1.50	0.06	0.08	16.986	0.342	0.000	2.24	3.29
45.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	17.266	0.345	0.000	30.08	11.07
45.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	17.266	0.345	0.000	26.59	0.00
45.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	17.266	0.345	0.000	11.40	16.42
47.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	17.535	0.350	0.000	30.55	11.07
47.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	17.535	0.350	0.000	27.00	0.00
47.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	17.535	0.350	0.000	11.57	16.42
50.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	17.793	0.355	0.000	31.00	11.07
50.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	17.793	0.355	0.000	27.40	0.00
50.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	17.793	0.355	0.000	11.74	16.42
52.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.043	0.361	0.000	31.44	11.07
52.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.043	0.361	0.000	27.79	0.00
52.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.043	0.361	0.000	11.91	16.42
55.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.285	0.366	0.000	31.86	11.07
55.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.285	0.366	0.000	28.16	0.00
55.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.285	0.366	0.000	12.07	16.42
57.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.518	0.372	0.000	32.27	11.07
57.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.518	0.372	0.000	28.52	0.00
57.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.518	0.372	0.000	12.22	16.42
60.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.745	0.378	0.000	32.66	11.07
60.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.745	0.378	0.000	28.87	0.00
60.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.745	0.378	0.000	12.37	16.42
62.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	18.965	0.384	0.000	33.04	11.07
62.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	18.965	0.384	0.000	29.21	0.00
62.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	18.965	0.384	0.000	12.52	16.42
65.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.179	0.390	0.000	33.42	11.07
65.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.179	0.390	0.000	29.53	0.00
65.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.179	0.390	0.000	12.66	16.42
67.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.386	0.396	0.000	33.78	11.07
67.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.386	0.396	0.000	29.86	0.00
67.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.386	0.396	0.000	12.80	16.42
70.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.589	0.403	0.000	34.13	11.07
70.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.589	0.403	0.000	30.17	0.00
70.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.589	0.403	0.000	12.93	16.42
72.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.786	0.410	0.000	34.48	11.07
72.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.786	0.410	0.000	30.47	0.00
72.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.786	0.410	0.000	13.06	16.42
75.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	19.979	0.417	0.000	34.81	11.07
75.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	19.979	0.417	0.000	30.77	0.00
75.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	19.979	0.417	0.000	13.19	16.42
76.17	(6) 1 5/8" Coax	Yes	1.17	1.200	3.96	0.38	0.46	20.067	0.423	0.000	16.32	5.17
76.17	(4) #20 Reinforcement	Yes	1.17	1.200	3.50	0.34	0.41	20.067	0.423	0.000	14.42	0.00
76.17	(2) 2" Conduit	Yes	1.17	1.200	1.50	0.15	0.17	20.067	0.423	0.000	6.18	7.66
77.50	(6) 1 5/8" Coax	Yes	1.33	1.200	3.96	0.44	0.53	20.167	0.426	0.000	18.74	5.90
77.50	(4) #20 Reinforcement	Yes	1.33	1.200	3.50	0.39	0.47	20.167	0.426	0.000	16.56	0.00
77.50	(2) 2" Conduit	Yes	1.33	1.200	1.50	0.17	0.20	20.167	0.426	0.000	7.10	8.76
80.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	20.351	0.432	0.000	35.46	11.07
80.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.87	20.351	0.432	0.000	31.34	0.00
80.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.37	20.351	0.432	0.000	13.43	16.42
80.75	(6) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.25	0.30	20.405	0.429	0.000	10.67	3.32
80.75	(4) #20 Reinforcement	Yes	0.75	1.200	3.50	0.22	0.26	20.405	0.429	0.000	9.43	0.00
80.75	(2) 2" Conduit	Yes	0.75	1.200	1.50	0.09	0.11	20.405	0.429	0.000	4.04	4.93
82.50	(6) 1 5/8" Coax	Yes	1.75	1.200	3.96	0.58	0.69	20.530	0.433	0.000	25.04	7.75
82.50	(4) #20 Reinforcement	Yes	1.75	1.200	3.50	0.51	0.61	20.530	0.433	0.000	22.13	0.00
82.50	(2) 2" Conduit	Yes	1.75	1.200	1.50	0.22	0.26	20.530	0.433	0.000	9.49	11.50
85.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	20.706	0.440	0.000	36.08	11.07

Pole :	302500	Code:	ANSI/TIA-222 Rev G
Location :	Brst Bristol, CT	Struct Class :	II
Height :	120.0 (ft)	Exposure Category :	B
Base Dia :	31.00 (in)	Topographic Category :	1
Top Dia :	14.41 (in)	Base Elev :	0.000 (ft)
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		

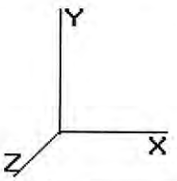


Load Case: 0.9D + 1.6W — 95.00 mph with No Ice (Reduced DL) — 27 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.00

85.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	20.706	0.440	0.000	31.89	0.00
85.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	20.706	0.440	0.000	13.67	16.42
87.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	20.879	0.448	0.000	36.38	11.07
87.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	20.879	0.448	0.000	32.15	0.00
87.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	20.879	0.448	0.000	13.78	16.42
90.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.047	0.457	0.000	36.67	11.07
90.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	21.047	0.457	0.000	32.41	0.00
90.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	21.047	0.457	0.000	13.89	16.42
92.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.213	0.351	0.000	36.96	11.07
92.50	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	0.58	0.70	21.213	0.351	0.000	26.13	0.00
95.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.375	0.210	0.000	37.24	11.07
97.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.534	0.214	0.000	37.52	11.07
100.0	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	21.690	0.219	0.000	37.79	11.07
										Totals:	2,549.52	979.06

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

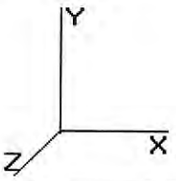
Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60

Wind Importance Factor : 1.00

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
2.50	179.74	355.40	0.00	0.00
5.00	177.63	353.17	0.00	0.00
7.50	271.19	422.34	0.00	0.00
10.00	268.65	420.11	0.00	0.00
12.50	266.11	417.87	0.00	0.00
15.00	263.57	415.64	0.00	0.00
17.50	261.04	413.40	0.00	0.00
20.00	258.50	411.17	0.00	0.00
22.50	255.96	408.93	0.00	0.00
25.00	253.42	406.70	0.00	0.00
27.50	250.89	404.46	0.00	0.00
30.00	248.56	402.23	0.00	0.00
32.50	251.71	399.99	0.00	0.00
35.00	254.44	397.76	0.00	0.00
37.50	256.80	395.52	0.00	0.00
37.58	8.52	13.15	0.00	0.00
40.00	253.37	513.72	0.00	0.00
42.00	210.65	422.18	0.00	0.00
42.50	52.56	74.78	0.00	0.00
45.00	265.42	372.70	0.00	0.00
47.50	266.66	370.74	0.00	0.00
50.00	267.66	368.79	0.00	0.00
52.50	268.43	366.83	0.00	0.00
55.00	269.01	364.87	0.00	0.00
57.50	269.38	362.91	0.00	0.00
60.00	269.58	360.96	0.00	0.00
62.50	269.61	359.00	0.00	0.00
65.00	269.49	357.04	0.00	0.00
67.50	269.21	355.08	0.00	0.00
70.00	268.78	353.13	0.00	0.00
72.50	268.22	351.17	0.00	0.00
75.00	267.53	349.21	0.00	0.00
76.17	124.26	162.29	0.00	0.00
77.50	143.69	235.60	0.00	0.00
80.00	269.27	438.93	0.00	0.00
80.75	80.35	99.30	0.00	0.00
82.50	187.43	114.18	0.00	0.00
85.00	267.14	161.69	0.00	0.00
87.50	265.91	160.01	0.00	0.00
90.00	1,820.55	607.07	0.00	0.00
92.50	242.63	138.27	0.00	0.00
95.00	214.62	136.59	0.00	0.00
97.50	212.66	134.91	0.00	0.00
100.0	674.31	196.59	0.00	0.00
102.5	142.04	120.48	0.00	0.00
105.0	139.99	118.80	0.00	0.00
107.5	137.89	117.12	0.00	0.00
110.0	2,614.77	1,154.94	0.00	0.00
112.5	133.52	91.62	0.00	0.00

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:44 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 21
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



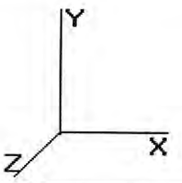
Load Case: 0.9D + 1.6W — 95.00 mph with No Ice (Reduced DL) — 27 Iterations

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

Wind Importance Factor : 1.00

115.0		131.25	89.94	0.00	0.00
117.5		128.93	88.26	0.00	0.00
120.0		3,889.60	2,583.63	0.00	8,231.42
	Totals:	19,553.10	18,691.12	0.00	8,231.42

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:44 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 22
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



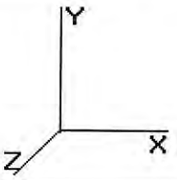
Load Case: 0.9D + 1.6W — 95.00 mph with No Ice (Reduced DL) — 27 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.00

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	-18.66	-19.58	0.00	-1,618.15	0.00	1,618.15	1,590.66	795.33	2,018.74	996.98	0.00	0.00	0.758
2.50	-18.25	-19.46	0.00	-1,569.20	0.00	1,569.20	1,581.24	790.62	1,982.92	979.29	0.05	-0.18	0.742
5.00	-17.83	-19.33	0.00	-1,520.55	0.00	1,520.55	1,571.59	785.80	1,947.12	961.61	0.19	-0.35	0.726
7.50	-17.36	-19.11	0.00	-1,472.22	0.00	1,472.22	1,561.72	780.86	1,911.33	943.93	0.42	-0.52	0.710
10.00	-16.88	-18.89	0.00	-1,424.45	0.00	1,424.45	1,551.63	775.81	1,875.57	926.27	0.74	-0.70	0.694
12.50	-16.41	-18.67	0.00	-1,377.23	0.00	1,377.23	1,541.31	770.66	1,839.85	908.63	1.15	-0.87	0.678
15.00	-15.95	-18.44	0.00	-1,330.56	0.00	1,330.56	1,530.78	765.39	1,804.18	891.02	1.66	-1.04	0.662
17.50	-15.48	-18.22	0.00	-1,284.45	0.00	1,284.45	1,520.01	760.01	1,768.57	873.43	2.25	-1.21	0.645
20.00	-15.03	-18.00	0.00	-1,238.90	0.00	1,238.90	1,509.03	754.52	1,733.02	855.87	2.93	-1.38	0.629
22.50	-14.57	-17.77	0.00	-1,193.91	0.00	1,193.91	1,497.83	748.91	1,697.56	838.36	3.70	-1.55	0.613
25.00	-14.12	-17.55	0.00	-1,149.48	0.00	1,149.48	1,486.40	743.20	1,662.18	820.89	4.55	-1.72	0.596
27.50	-13.68	-17.32	0.00	-1,105.61	0.00	1,105.61	1,474.74	737.37	1,626.91	803.47	5.50	-1.88	0.580
30.00	-13.23	-17.10	0.00	-1,062.30	0.00	1,062.30	1,462.87	731.44	1,591.74	786.10	6.52	-2.04	0.563
32.50	-12.80	-16.87	0.00	-1,019.55	0.00	1,019.55	1,450.77	725.39	1,556.69	768.79	7.64	-2.21	0.547
35.00	-12.36	-16.63	0.00	-977.37	0.00	977.37	1,438.45	719.23	1,521.78	751.55	8.84	-2.37	0.530
37.50	-11.96	-16.38	0.00	-935.79	0.00	935.79	1,425.91	712.96	1,487.00	734.37	10.12	-2.52	0.513
37.58	-11.92	-16.38	0.00	-934.43	0.00	934.43	1,425.49	712.74	1,485.84	733.80	10.16	-2.53	0.513
40.00	-11.38	-16.14	0.00	-894.83	0.00	894.83	1,413.15	706.57	1,452.37	717.27	11.48	-2.68	0.488
42.00	-10.95	-15.92	0.00	-862.56	0.00	862.56	1,177.15	588.58	1,220.08	602.55	12.63	-2.80	0.529
42.50	-10.85	-15.88	0.00	-854.60	0.00	854.60	1,175.29	587.65	1,214.60	599.85	12.93	-2.83	0.525
45.00	-10.45	-15.62	0.00	-814.90	0.00	814.90	1,165.87	582.93	1,187.28	586.35	14.45	-2.98	0.506
47.50	-10.05	-15.36	0.00	-775.84	0.00	775.84	1,156.22	578.11	1,160.01	572.88	16.05	-3.13	0.487
50.00	-9.66	-15.10	0.00	-737.43	0.00	737.43	1,146.35	573.17	1,132.81	559.45	17.73	-3.28	0.467
52.50	-9.27	-14.84	0.00	-699.68	0.00	699.68	1,136.25	568.13	1,105.70	546.06	19.49	-3.43	0.448
55.00	-8.89	-14.57	0.00	-662.59	0.00	662.59	1,125.94	562.97	1,078.67	532.72	21.32	-3.57	0.429
57.50	-8.51	-14.29	0.00	-626.17	0.00	626.17	1,115.40	557.70	1,051.75	519.42	23.23	-3.71	0.410
60.00	-8.14	-14.02	0.00	-590.44	0.00	590.44	1,104.64	552.32	1,024.94	506.18	25.21	-3.84	0.391
62.50	-7.77	-13.74	0.00	-555.39	0.00	555.39	1,093.65	546.83	998.25	493.00	27.26	-3.97	0.372
65.00	-7.40	-13.47	0.00	-521.02	0.00	521.02	1,082.45	541.22	971.69	479.88	29.37	-4.10	0.353
67.50	-7.04	-13.19	0.00	-487.36	0.00	487.36	1,071.02	535.51	945.28	466.84	31.55	-4.23	0.334
70.00	-6.68	-12.91	0.00	-454.39	0.00	454.39	1,059.36	529.68	919.01	453.87	33.79	-4.35	0.315
72.50	-6.32	-12.63	0.00	-422.12	0.00	422.12	1,047.49	523.74	892.91	440.97	36.10	-4.46	0.296
75.00	-5.98	-12.34	0.00	-390.56	0.00	390.56	1,035.39	517.69	866.98	428.17	38.46	-4.57	0.277
76.17	-5.82	-12.21	0.00	-376.16	0.00	376.16	1,029.67	514.83	854.94	422.22	39.59	-4.62	0.269
77.50	-5.58	-12.05	0.00	-359.88	0.00	359.88	1,023.07	511.53	841.23	415.45	40.88	-4.68	0.253
80.00	-5.15	-11.75	0.00	-329.75	0.00	329.75	831.49	415.75	686.29	338.93	43.36	-4.78	0.262
80.75	-5.05	-11.67	0.00	-320.94	0.00	320.94	828.81	414.40	680.33	335.99	44.11	-4.81	0.255
80.75	-5.05	-11.67	0.00	-320.94	0.00	320.94	828.81	414.40	680.33	335.99	44.11	-4.81	0.962
82.50	-4.91	-11.49	0.00	-300.51	0.00	300.51	822.47	411.24	666.44	329.13	45.89	-4.87	0.920
85.00	-4.70	-11.24	0.00	-271.78	0.00	271.78	813.23	406.62	646.68	319.37	48.53	-5.22	0.858
87.50	-4.51	-10.99	0.00	-243.68	0.00	243.68	803.77	401.88	627.03	309.67	51.35	-5.55	0.793
90.00	-4.04	-9.13	0.00	-216.22	0.00	216.22	794.08	397.04	607.50	300.02	54.33	-5.86	0.726
92.50	-3.88	-8.90	0.00	-193.38	0.00	193.38	784.17	392.08	588.09	290.43	57.48	-6.16	0.671
95.00	-3.73	-8.69	0.00	-171.14	0.00	171.14	774.04	387.02	568.81	280.91	60.77	-6.43	0.615
97.50	-3.58	-8.48	0.00	-149.42	0.00	149.42	763.68	381.84	549.68	271.47	64.20	-6.69	0.556
100.00	-3.43	-7.80	0.00	-128.23	0.00	128.23	753.10	376.55	530.71	262.10	67.76	-6.93	0.494
102.50	-3.30	-7.65	0.00	-108.73	0.00	108.73	742.30	371.15	511.90	252.81	71.44	-7.15	0.435
105.00	-3.18	-7.51	0.00	-89.60	0.00	89.60	731.28	365.64	493.27	243.61	75.23	-7.34	0.373
107.50	-3.06	-7.37	0.00	-70.82	0.00	70.82	715.50	357.75	471.83	233.02	79.11	-7.51	0.309
110.00	-2.25	-4.63	0.00	-52.41	0.00	52.41	699.32	349.66	450.61	222.54	83.07	-7.65	0.239
112.50	-2.17	-4.49	0.00	-40.84	0.00	40.84	683.14	341.57	429.88	212.30	87.09	-7.76	0.196

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:44 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 23
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



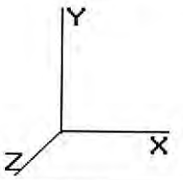
Load Case: 0.9D + 1.6W — 95.00 mph with No Ice (Reduced DL) — 27 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 1.60
Wind Importance Factor : 1.00

115.00	-2.10	-4.35	0.00	-29.62	0.00	29.62	666.96	333.48	409.64	202.31	91.17	-7.85	0.150
117.50	-2.02	-4.21	0.00	-18.75	0.00	18.75	650.78	325.39	389.89	192.55	95.29	-7.92	0.101
120.00	0.00	-3.89	0.00	-8.23	0.00	8.23	634.60	317.30	370.62	183.04	99.43	-7.96	0.045

Pole : 302500
Location : Brst Bristol, CT
Height : 120.0 (ft)
Base Dia : 31.00 (in)
Top Dia : 14.41 (in)
Shape : 12 Sides
Taper : 0.145033 (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 — 26 Iterations

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

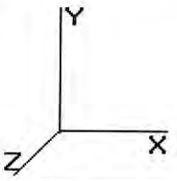
Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
Ice Importance Factor : 1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf		Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.682	0.000	1.200		0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.50		1.00	0.70	4.256	4.682	0.000	1.200	*	1.545	2.50	7.291	8.75	41.0	160.9	579.1
5.00		1.00	0.70	4.256	4.682	0.000	1.200	*	1.656	2.50	7.259	8.71	40.8	171.1	586.3
7.50		1.00	0.70	4.256	4.682	0.000	1.200	*	1.725	2.50	7.209	8.65	40.5	176.5	588.7
10.00		1.00	0.70	4.256	4.682	0.000	1.200	*	1.775	2.50	7.152	8.58	40.2	179.8	589.1
12.50		1.00	0.70	4.256	4.682	0.000	1.200	*	1.815	2.50	7.090	8.51	39.8	182.0	588.3
15.00		1.00	0.70	4.256	4.682	0.000	1.200	*	1.848	2.50	7.026	8.43	39.5	183.4	586.7
17.50		1.00	0.70	4.256	4.682	0.000	1.200	*	1.877	2.50	6.960	8.35	39.1	184.2	584.5
20.00		1.00	0.70	4.256	4.682	0.000	1.200	*	1.902	2.50	6.892	8.27	38.7	184.6	581.9
22.50		1.00	0.70	4.256	4.682	0.000	1.200	*	1.925	2.50	6.823	8.19	38.3	184.6	579.0
25.00		1.00	0.70	4.256	4.682	0.000	1.200	*	1.945	2.50	6.754	8.10	37.9	184.4	575.8
27.50		1.00	0.70	4.256	4.682	0.000	1.200	*	1.964	2.50	6.683	8.02	37.5	184.0	572.4
30.00		1.00	0.70	4.260	4.686	0.000	1.200	*	1.981	2.50	6.612	7.93	37.2	183.4	568.8
32.50		1.00	0.71	4.358	4.794	0.000	1.200	*	1.997	2.50	6.541	7.85	37.6	182.6	565.1
35.00		1.00	0.73	4.451	4.897	0.000	1.200	*	2.012	2.50	6.469	7.76	38.0	181.7	561.2
37.50		1.00	0.74	4.540	4.994	0.000	1.200	*	2.026	2.50	6.396	7.68	38.3	180.7	557.2
37.58	Bot - Section 2	1.00	0.74	4.543	4.997	0.000	1.200	*	2.026	0.08	0.212	0.25	1.3	6.0	18.5
40.00		1.00	0.76	4.625	5.087	0.000	1.200	*	2.039	2.42	6.203	7.44	37.9	176.3	715.4
42.00	Top - Section 1	1.00	0.77	4.689	5.158	0.000	1.200	*	2.049	2.00	5.081	6.10	31.5	145.2	587.4
42.50		1.00	0.77	4.705	5.176	0.000	1.200	*	2.051	0.50	1.263	1.52	7.8	36.2	105.8
45.00		1.00	0.78	4.783	5.261	0.000	1.200	*	2.063	2.50	6.272	7.53	39.6	179.9	525.9
47.50		1.00	0.79	4.857	5.343	0.000	1.200	*	2.074	2.50	6.198	7.44	39.7	178.5	521.9
50.00		1.00	0.81	4.929	5.422	0.000	1.200	*	2.085	2.50	6.124	7.35	39.8	177.0	517.9
52.50		1.00	0.82	4.998	5.498	0.000	1.200	*	2.095	2.50	6.050	7.26	39.9	175.5	513.7
55.00		1.00	0.83	5.065	5.572	0.000	1.200	*	2.105	2.50	5.976	7.17	40.0	173.9	509.5
57.50		1.00	0.84	5.130	5.643	0.000	1.200	*	2.114	2.50	5.902	7.08	40.0	172.3	505.3
60.00		1.00	0.85	5.193	5.712	0.000	1.200	*	2.123	2.50	5.828	6.99	39.9	170.6	501.0
62.50		1.00	0.86	5.253	5.779	0.000	1.200	*	2.132	2.50	5.753	6.90	39.9	168.8	496.6
65.00		1.00	0.87	5.313	5.844	0.000	1.200	*	2.140	2.50	5.678	6.81	39.8	167.0	492.2
67.50		1.00	0.88	5.370	5.907	0.000	1.200	*	2.148	2.50	5.603	6.72	39.7	165.2	487.7
70.00		1.00	0.89	5.426	5.969	0.000	1.200	*	2.156	2.50	5.528	6.63	39.6	163.3	483.3
72.50		1.00	0.90	5.481	6.029	0.000	1.200	*	2.164	2.50	5.453	6.54	39.5	161.4	478.7
75.00		1.00	0.91	5.534	6.088	0.000	1.200	*	2.171	2.50	5.378	6.45	39.3	159.4	474.2
76.17	Bot - Section 3	1.00	0.91	5.559	6.115	0.000	1.200	*	2.174	1.17	2.484	2.98	18.2	74.0	219.9
77.50		1.00	0.91	5.586	6.145	0.000	1.200	*	2.178	1.33	2.862	3.43	21.1	85.4	319.1
80.00	Top - Section 2	1.00	0.92	5.637	6.201	0.000	1.200	*	2.185	2.50	5.309	6.37	39.5	158.1	592.4
80.75	Reinf. Top	1.00	0.93	5.652	6.218	0.000	1.200	*	2.187	0.75	1.578	1.89	11.8	47.2	134.4
82.50		1.00	0.93	5.687	6.256	0.000	1.200	*	2.192	1.75	3.655	4.39	27.4	109.2	194.8
85.00		1.00	0.94	5.736	6.309	0.000	1.200	*	2.198	2.50	5.158	6.19	39.1	154.0	274.4
87.50		1.00	0.95	5.784	6.362	0.000	1.200	*	2.205	2.50	5.082	6.10	38.8	151.9	270.0
90.00	Appertunance(s)	1.00	0.95	5.830	6.413	0.000	1.200	*	2.211	2.50	5.007	6.01	38.5	149.7	265.6
92.50		1.00	0.96	5.876	6.464	0.000	1.200	*	2.217	2.50	4.931	5.92	38.2	147.6	261.3
95.00		1.00	0.97	5.921	6.513	0.000	1.200	*	2.223	2.50	4.855	5.83	37.9	145.4	256.8
97.50		1.00	0.98	5.965	6.562	0.000	1.200	*	2.229	2.50	4.780	5.74	37.6	143.2	252.4
100.0	Appertunance(s)	1.00	0.98	6.008	6.609	0.000	1.200	*	2.234	2.50	4.704	5.64	37.3	141.0	247.9
102.5		1.00	0.99	6.051	6.656	0.000	1.200		2.240	2.50	4.628	5.55	37.0	138.7	243.4
105.0		1.00	1.00	6.093	6.702	0.000	1.200		2.245	2.50	4.552	5.46	36.6	136.5	238.9
107.5		1.00	1.00	6.134	6.747	0.000	1.200		2.251	2.50	4.476	5.37	36.2	134.2	234.4
110.0	Appertunance(s)	1.00	1.01	6.174	6.792	0.000	1.200		2.256	2.50	4.400	5.28	35.9	131.9	229.9
112.5		1.00	1.02	6.214	6.835	0.000	1.200		2.261	2.50	4.324	5.19	35.5	129.6	225.3
115.0		1.00	1.02	6.253	6.879	0.000	1.200		2.266	2.50	4.248	5.10	35.1	127.2	220.7

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:45 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 25
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.0Di + 1.0Wi — 50.00 mph with 1.00 in Radial Ice — 26 Iterations

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

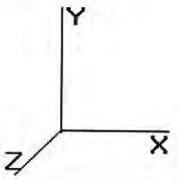
Dead Load Factor : 1.20 — Ice Importance Factor : 1.00

Wind Load Factor : 1.00

117.5		1.00	1.03	6.292	6.921	0.000	1.200	2.271	2.50	4.171	5.01	34.6	124.9	216.1
120.0	Appertunance(s)	1.00	1.04	6.330	6.963	0.000	1.200	2.276	2.50	4.095	4.91	34.2	122.5	211.5
* = Cf Adjusted By Linear Load Ra Effect							Totals:		120.00			1,850.3	7,832.6	21,708.5

Pole : 302500
Location : Brst Bristol, CT
Height : 120.0 (ft)
Base Dia : 31.00 (in)
Top Dia : 14.41 (in)
Shape : 12 Sides
Taper : 0.145033 (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 — 26 Iterations

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

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
Ice Importance Factor : 1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	5.830	6.413	0.50	0.80	8.24	0.000	0.000	52.86	0.00	0.00	539.37
90.00	DragonWave A-ANT-	3	5.830	6.413	0.72	0.80	23.46	0.000	0.000	150.48	0.00	0.00	759.60
90.00	DragonWave A-ANT-	1	5.830	6.413	0.72	0.80	4.54	0.000	0.000	29.13	0.00	0.00	128.41
90.00	DragonWave Horizon	4	5.830	6.413	0.40	0.80	1.22	0.000	0.000	7.81	0.00	0.00	220.90
90.00	NextNet BTS-2500	3	5.830	6.413	0.54	0.80	4.08	0.000	0.000	26.15	0.00	0.00	360.45
90.00	Side Arms	1	5.830	6.413	1.00	1.00	17.52	0.000	0.000	112.37	0.00	0.00	80.45
100.0	Kathrein 742 213	2	6.008	6.609	0.78	1.00	10.62	0.000	0.000	70.21	0.00	0.00	368.77
100.0	RFS APXV18-206517S-	1	6.008	6.609	0.80	1.00	5.43	0.000	0.000	35.86	0.00	0.00	195.07
110.0	48" x 12" Panel	9	6.174	6.792	0.60	0.80	34.38	0.000	0.000	233.49	0.00	0.00	1,974.36
110.0	72" x 12" Panel	3	6.174	6.792	0.54	0.80	15.83	0.000	0.000	107.48	0.00	0.00	949.11
110.0	T-Arm w/ Working Pla	3	6.174	6.792	0.50	0.75	35.42	0.000	0.000	240.53	0.00	0.00	1,520.12
120.0	Andrew SBNH-	1	6.389	7.028	0.56	0.80	7.63	0.000	4.000	53.63	0.00	214.51	442.31
120.0	Ericsson RRUS-11 190	6	6.389	7.028	0.54	0.80	10.89	0.000	4.000	76.53	0.00	306.11	992.80
120.0	Flat Platform with H	1	6.330	6.963	1.00	1.00	69.80	0.000	0.000	486.01	0.00	0.00	3,806.87
120.0	Powerwave 7770.00	6	6.389	7.028	0.52	0.80	21.58	0.000	4.000	151.67	0.00	606.67	1,383.72
120.0	Powerwave LGP	6	6.389	7.028	0.40	0.80	4.14	0.000	4.000	29.13	0.00	116.51	396.91
120.0	Powerwave P65-17-	2	6.389	7.028	0.54	0.80	14.63	0.000	4.000	102.80	0.00	411.19	831.73
120.0	Raycap DC6-48-60-18-	1	6.389	7.028	0.80	0.80	2.46	0.000	4.000	17.29	0.00	69.16	167.82
										1,983.41			15,118.78

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:45 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 27
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
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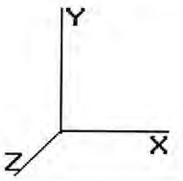


Load Case: 1.2D + 1.0Di + 1.0Wi — 50.00 mph with 1.00 in Radial Ice — 26 Iterations

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

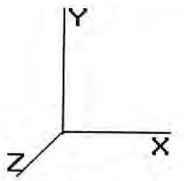
Wind Load Factor : 1.00

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)
2.50	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	1.37	0.00	4.256	0.110	1.029	0.00	42.55
5.00	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	1.42	0.00	4.256	0.111	1.033	0.00	45.79
7.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.54	1.85	4.256	0.288	0.000	8.67	68.59
7.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.45	1.74	4.256	0.288	0.000	8.13	47.83
7.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.03	1.24	4.256	0.288	0.000	5.79	49.31
10.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.56	1.88	4.256	0.291	0.000	8.79	70.29
10.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.47	1.76	4.256	0.291	0.000	8.25	49.35
10.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.05	1.26	4.256	0.291	0.000	5.91	50.31
12.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.58	1.90	4.256	0.295	0.000	8.88	71.65
12.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.49	1.78	4.256	0.295	0.000	8.34	50.57
12.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.07	1.28	4.256	0.295	0.000	6.00	51.12
15.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.60	1.91	4.256	0.298	0.000	8.96	72.80
15.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.50	1.80	4.256	0.298	0.000	8.42	51.59
15.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.08	1.30	4.256	0.298	0.000	6.08	51.81
17.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.61	1.93	4.256	0.302	0.000	9.03	73.79
17.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.51	1.81	4.256	0.302	0.000	8.49	52.48
17.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.09	1.31	4.256	0.302	0.000	6.15	52.40
20.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.62	1.94	4.256	0.306	0.000	9.09	74.66
20.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.52	1.83	4.256	0.306	0.000	8.55	53.26
20.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.11	1.33	4.256	0.306	0.000	6.21	52.92
22.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.63	1.95	4.256	0.310	0.000	9.14	75.45
22.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.53	1.84	4.256	0.310	0.000	8.60	53.96
22.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.11	1.34	4.256	0.310	0.000	6.26	53.40
25.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.64	1.96	4.256	0.314	0.000	9.19	76.16
25.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.54	1.85	4.256	0.314	0.000	8.65	54.60
25.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.12	1.35	4.256	0.314	0.000	6.31	53.83
27.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.64	1.97	4.256	0.318	0.000	9.23	76.81
27.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.55	1.86	4.256	0.318	0.000	8.69	55.18
27.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.13	1.36	4.256	0.318	0.000	6.35	54.22
30.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.65	1.98	4.260	0.323	0.000	9.28	77.41
30.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.55	1.87	4.260	0.323	0.000	8.74	55.72
30.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.14	1.37	4.260	0.323	0.000	6.40	54.59
32.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.66	1.99	4.358	0.327	0.000	9.53	77.98
32.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.56	1.87	4.358	0.327	0.000	8.98	56.23
32.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.14	1.37	4.358	0.327	0.000	6.58	54.93
35.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.66	2.00	4.451	0.332	0.000	9.77	78.50
35.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.57	1.88	4.451	0.332	0.000	9.21	56.70
35.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.15	1.38	4.451	0.332	0.000	6.76	55.25
37.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.67	2.00	4.540	0.336	0.000	10.00	78.99
37.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.57	1.89	4.540	0.336	0.000	9.43	57.14
37.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.16	1.39	4.540	0.336	0.000	6.93	55.55
37.58	(6) 1 5/8" Coax	Yes	0.08	1.200	3.96	0.06	0.07	4.543	0.339	0.000	0.33	2.63
37.58	(4) #20 Reinforcement	Yes	0.08	1.200	3.50	0.05	0.06	4.543	0.339	0.000	0.31	1.91
37.58	(2) 2" Conduit	Yes	0.08	1.200	1.50	0.04	0.05	4.543	0.339	0.000	0.23	1.85
40.00	(6) 1 5/8" Coax	Yes	2.42	1.200	3.96	1.62	1.94	4.625	0.341	0.000	9.88	76.81
40.00	(4) #20 Reinforcement	Yes	2.42	1.200	3.50	1.53	1.83	4.625	0.341	0.000	9.32	55.64
40.00	(2) 2" Conduit	Yes	2.42	1.200	1.50	1.12	1.35	4.625	0.341	0.000	6.86	53.97
42.00	(6) 1 5/8" Coax	Yes	2.00	1.200	3.96	1.34	1.61	4.689	0.345	0.000	8.31	63.85
42.00	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	1.27	1.52	4.689	0.345	0.000	7.84	46.30
42.00	(2) 2" Conduit	Yes	2.00	1.200	1.50	0.93	1.12	4.689	0.345	0.000	5.77	44.84
42.50	(6) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.34	0.40	4.705	0.342	0.000	2.09	15.98

Pole : 302500
Location : Brst Bristol, CT
Height : 120.0 (ft)
Base Dia : 31.00 (in)
Top Dia : 14.41 (in)
Shape : 12 Sides
Taper : 0.145033 (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 — 26 Iterations

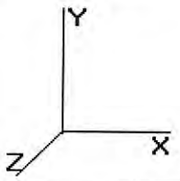
Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
Ice Importance Factor : 1.00

42.50	(4) #20 Reinforcement	Yes	0.50	1.200	3.50	0.32	0.38	4.705	0.342	0.000	1.97	11.59
42.50	(2) 2" Conduit	Yes	0.50	1.200	1.50	0.23	0.28	4.705	0.342	0.000	1.45	11.22
45.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.68	2.02	4.783	0.345	0.000	10.64	80.32
45.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.59	1.91	4.783	0.345	0.000	10.03	58.33
45.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.17	1.41	4.783	0.345	0.000	7.40	56.36
47.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.69	2.03	4.857	0.350	0.000	10.83	80.72
47.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.59	1.91	4.857	0.350	0.000	10.22	58.69
47.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.18	1.41	4.857	0.350	0.000	7.54	56.60
50.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.69	2.03	4.929	0.355	0.000	11.02	81.10
50.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.60	1.92	4.929	0.355	0.000	10.40	59.03
50.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.18	1.42	4.929	0.355	0.000	7.69	56.84
52.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.70	2.04	4.998	0.361	0.000	11.20	81.47
52.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.60	1.92	4.998	0.361	0.000	10.57	59.36
52.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.19	1.42	4.998	0.361	0.000	7.82	57.06
55.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.70	2.04	5.065	0.366	0.000	11.38	81.82
55.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.61	1.93	5.065	0.366	0.000	10.74	59.67
55.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.19	1.43	5.065	0.366	0.000	7.95	57.28
57.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.71	2.05	5.130	0.372	0.000	11.55	82.16
57.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.61	1.93	5.130	0.372	0.000	10.90	59.98
57.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.19	1.43	5.130	0.372	0.000	8.08	57.48
60.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.71	2.05	5.193	0.378	0.000	11.72	82.48
60.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.61	1.94	5.193	0.378	0.000	11.06	60.27
60.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.20	1.44	5.193	0.378	0.000	8.21	57.68
62.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.71	2.06	5.253	0.384	0.000	11.88	82.79
62.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.62	1.94	5.253	0.384	0.000	11.22	60.55
62.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.20	1.44	5.253	0.384	0.000	8.33	57.88
65.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.72	2.06	5.313	0.390	0.000	12.04	83.10
65.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.62	1.95	5.313	0.390	0.000	11.37	60.82
65.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.20	1.45	5.313	0.390	0.000	8.45	58.06
67.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.72	2.06	5.370	0.396	0.000	12.19	83.39
67.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.62	1.95	5.370	0.396	0.000	11.51	61.09
67.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.21	1.45	5.370	0.396	0.000	8.56	58.25
70.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.72	2.07	5.426	0.403	0.000	12.34	83.67
70.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.63	1.95	5.426	0.403	0.000	11.66	61.34
70.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.21	1.45	5.426	0.403	0.000	8.67	58.42
72.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.73	2.07	5.481	0.410	0.000	12.49	83.95
72.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.63	1.96	5.481	0.410	0.000	11.80	61.59
72.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.21	1.46	5.481	0.410	0.000	8.78	58.59
75.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.73	2.08	5.534	0.417	0.000	12.64	84.22
75.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.63	1.96	5.534	0.417	0.000	11.94	61.83
75.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.22	1.46	5.534	0.417	0.000	8.89	58.76
76.17	(6) 1 5/8" Coax	Yes	1.17	1.200	3.96	0.81	0.97	5.559	0.423	0.000	5.93	39.36
76.17	(4) #20 Reinforcement	Yes	1.17	1.200	3.50	0.76	0.92	5.559	0.423	0.000	5.60	28.90
76.17	(2) 2" Conduit	Yes	1.17	1.200	1.50	0.57	0.68	5.559	0.423	0.000	4.17	27.45
77.50	(6) 1 5/8" Coax	Yes	1.33	1.200	3.96	0.92	1.11	5.586	0.426	0.000	6.81	45.06
77.50	(4) #20 Reinforcement	Yes	1.33	1.200	3.50	0.87	1.05	5.586	0.426	0.000	6.44	33.10
77.50	(2) 2" Conduit	Yes	1.33	1.200	1.50	0.65	0.78	5.586	0.426	0.000	4.80	31.42
80.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.74	2.08	5.637	0.432	0.000	12.91	84.73
80.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.64	1.97	5.637	0.432	0.000	12.20	62.29
80.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.22	1.47	5.637	0.432	0.000	9.10	59.07
80.75	(6) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.52	0.63	5.652	0.429	0.000	3.89	25.44
80.75	(4) #20 Reinforcement	Yes	0.75	1.200	3.50	0.49	0.59	5.652	0.429	0.000	3.67	18.71
80.75	(2) 2" Conduit	Yes	0.75	1.200	1.50	0.37	0.44	5.652	0.429	0.000	2.74	17.74
82.50	(6) 1 5/8" Coax	Yes	1.75	1.200	3.96	1.22	1.46	5.687	0.433	0.000	9.13	59.48
82.50	(4) #20 Reinforcement	Yes	1.75	1.200	3.50	1.15	1.38	5.687	0.433	0.000	8.63	43.76
82.50	(2) 2" Conduit	Yes	1.75	1.200	1.50	0.86	1.03	5.687	0.433	0.000	6.44	41.46
85.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.74	2.09	5.736	0.440	0.000	13.18	85.21

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:45 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 29
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.0Di + 1.0Wi — 50.00 mph with 1.00 in Radial Ice — 26 Iterations

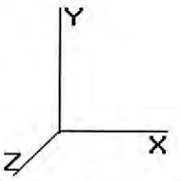
Gust Response Factor : 1.10 — Ice Dead Load Factor : 1.00 — Wind Importance Factor : 1.00

Dead Load Factor : 1.20 — Ice Importance Factor : 1.00

Wind Load Factor : 1.00

85.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.65	1.97	5.736	0.440	0.000	12.46	62.73
85.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.23	1.47	5.736	0.440	0.000	9.30	59.37
87.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.74	2.09	5.784	0.448	0.000	13.31	85.45
87.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.65	1.98	5.784	0.448	0.000	12.58	62.94
87.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.23	1.48	5.784	0.448	0.000	9.40	59.52
90.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.75	2.10	5.830	0.457	0.000	13.44	85.67
90.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	1.65	1.98	5.830	0.457	0.000	12.70	63.14
90.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	1.23	1.48	5.830	0.457	0.000	9.50	59.66
92.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.75	2.10	5.876	0.351	0.000	13.56	85.90
92.50	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	1.32	1.59	5.876	0.351	0.000	10.26	50.67
95.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.75	2.10	5.921	0.210	0.000	13.69	86.11
97.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.75	2.10	5.965	0.214	0.000	13.81	86.33
100.0	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	1.76	2.11	6.008	0.219	0.000	13.93	86.53
										Totals:	1,043.45	7,072.43

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:45 PM
Height :	120.0 (ft)	Exposure Category : B	Page : 30
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.0Di + 1.0Wi — 50.00 mph with 1.00 in Radial Ice — 26 Iterations

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

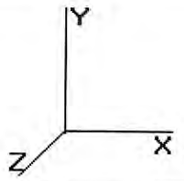
Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
Ice Importance Factor : 1.00

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
2.50	40.96	621.66	0.00	0.00
5.00	40.78	632.10	0.00	0.00
7.50	63.10	813.03	0.00	0.00
10.00	63.13	817.62	0.00	0.00
12.50	63.07	820.18	0.00	0.00
15.00	62.94	821.42	0.00	0.00
17.50	62.77	821.72	0.00	0.00
20.00	62.57	821.32	0.00	0.00
22.50	62.34	820.35	0.00	0.00
25.00	62.09	818.95	0.00	0.00
27.50	61.82	817.17	0.00	0.00
30.00	61.60	815.09	0.00	0.00
32.50	62.73	812.74	0.00	0.00
35.00	63.75	810.16	0.00	0.00
37.50	64.69	807.39	0.00	0.00
37.58	2.15	26.86	0.00	0.00
40.00	63.92	958.46	0.00	0.00
42.00	53.38	789.20	0.00	0.00
42.50	13.35	156.27	0.00	0.00
45.00	67.66	779.50	0.00	0.00
47.50	68.33	776.51	0.00	0.00
50.00	68.95	773.39	0.00	0.00
52.50	69.51	770.17	0.00	0.00
55.00	70.03	766.85	0.00	0.00
57.50	70.50	763.44	0.00	0.00
60.00	70.93	759.95	0.00	0.00
62.50	71.32	756.38	0.00	0.00
65.00	71.67	752.74	0.00	0.00
67.50	71.99	749.03	0.00	0.00
70.00	72.27	745.25	0.00	0.00
72.50	72.53	741.42	0.00	0.00
75.00	72.75	737.52	0.00	0.00
76.17	33.92	342.98	0.00	0.00
77.50	39.16	459.87	0.00	0.00
80.00	73.72	857.08	0.00	0.00
80.75	22.07	213.83	0.00	0.00
82.50	51.65	380.51	0.00	0.00
85.00	73.99	540.22	0.00	0.00
87.50	74.09	536.47	0.00	0.00
90.00	452.96	2,621.86	0.00	0.00
92.50	62.07	453.76	0.00	0.00
95.00	51.64	398.89	0.00	0.00
97.50	51.44	394.66	0.00	0.00
100.0	157.31	954.25	0.00	0.00
102.5	36.96	299.38	0.00	0.00
105.0	36.61	294.88	0.00	0.00
107.5	36.24	290.35	0.00	0.00
110.0	617.36	4,729.40	0.00	0.00
112.5	35.47	251.72	0.00	0.00

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:45 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 31
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.0Di + 1.0Wi — 50.00 mph with 1.00 in Radial Ice — 26 Iterations

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

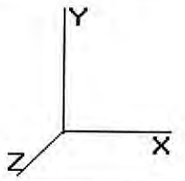
Dead Load Factor : 1.20 — Ice Importance Factor : 1.00

Wind Load Factor : 1.00

115.0		35.06	247.14	0.00	0.00
117.5		34.64	242.54	0.00	0.00
120.0		951.26	8,260.08	0.00	1,724.14
	Totals:	4,877.18	46,443.72	0.00	1,724.14

Pole : 302500
Location : Brst Bristol, CT
Height : 120.0 (ft)
Base Dia : 31.00 (in)
Top Dia : 14.41 (in)
Shape : 12 Sides
Taper : 0.145033 (in/ft)

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



4/5/2012 5:23:45 PM
Page: 32

Load Case: 1.2D + 1.0Di + 1.0Wi — 50.00 mph with 1.00 in Radial Ice — 26 Iterations

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

Ice Dead Load Factor : 1.00

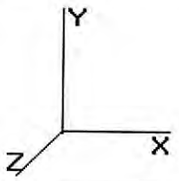
Wind Importance Factor : 1.00
Ice Importance Factor : 1.00

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	-46.44	-4.90	0.00	-437.87	0.00	437.87	1,590.66	795.33	2,018.74	996.98	0.00	0.00	0.220
2.50	-45.82	-4.89	0.00	-425.64	0.00	425.64	1,581.24	790.62	1,982.92	979.29	0.01	-0.05	0.216
5.00	-45.18	-4.89	0.00	-413.40	0.00	413.40	1,571.59	785.80	1,947.12	961.61	0.05	-0.10	0.212
7.50	-44.36	-4.86	0.00	-401.18	0.00	401.18	1,561.72	780.86	1,911.33	943.93	0.11	-0.14	0.207
10.00	-43.54	-4.83	0.00	-389.03	0.00	389.03	1,551.63	775.81	1,875.57	926.27	0.20	-0.19	0.203
12.50	-42.72	-4.80	0.00	-376.96	0.00	376.96	1,541.31	770.66	1,839.85	908.63	0.31	-0.24	0.199
15.00	-41.89	-4.77	0.00	-364.96	0.00	364.96	1,530.78	765.39	1,804.18	891.02	0.45	-0.28	0.195
17.50	-41.07	-4.73	0.00	-353.04	0.00	353.04	1,520.01	760.01	1,768.57	873.43	0.61	-0.33	0.190
20.00	-40.24	-4.70	0.00	-341.21	0.00	341.21	1,509.03	754.52	1,733.02	855.87	0.80	-0.38	0.186
22.50	-39.42	-4.66	0.00	-329.46	0.00	329.46	1,497.83	748.91	1,697.56	838.36	1.01	-0.42	0.181
25.00	-38.60	-4.62	0.00	-317.81	0.00	317.81	1,486.40	743.20	1,662.18	820.89	1.24	-0.47	0.177
27.50	-37.78	-4.59	0.00	-306.25	0.00	306.25	1,474.74	737.37	1,626.91	803.47	1.50	-0.51	0.173
30.00	-36.96	-4.55	0.00	-294.78	0.00	294.78	1,462.87	731.44	1,591.74	786.10	1.78	-0.56	0.168
32.50	-36.14	-4.50	0.00	-283.42	0.00	283.42	1,450.77	725.39	1,556.69	768.79	2.09	-0.61	0.163
35.00	-35.33	-4.46	0.00	-272.17	0.00	272.17	1,438.45	719.23	1,521.78	751.55	2.42	-0.65	0.159
37.50	-34.52	-4.40	0.00	-261.02	0.00	261.02	1,425.91	712.96	1,487.00	734.37	2.77	-0.69	0.154
37.58	-34.49	-4.41	0.00	-260.66	0.00	260.66	1,425.49	712.74	1,485.84	733.80	2.78	-0.70	0.154
40.00	-33.53	-4.35	0.00	-250.01	0.00	250.01	1,413.15	706.57	1,452.37	717.27	3.14	-0.74	0.147
42.00	-32.74	-4.30	0.00	-241.30	0.00	241.30	1,177.15	588.58	1,220.08	602.55	3.46	-0.77	0.160
42.50	-32.58	-4.30	0.00	-239.15	0.00	239.15	1,175.29	587.65	1,214.60	599.85	3.54	-0.78	0.159
45.00	-31.80	-4.25	0.00	-228.39	0.00	228.39	1,165.87	582.93	1,187.28	586.35	3.96	-0.82	0.153
47.50	-31.02	-4.19	0.00	-217.78	0.00	217.78	1,156.22	578.11	1,160.01	572.88	4.40	-0.86	0.148
50.00	-30.25	-4.13	0.00	-207.31	0.00	207.31	1,146.35	573.17	1,132.81	559.45	4.87	-0.91	0.142
52.50	-29.48	-4.07	0.00	-196.98	0.00	196.98	1,136.25	568.13	1,105.70	546.06	5.35	-0.95	0.137
55.00	-28.71	-4.01	0.00	-186.81	0.00	186.81	1,125.94	562.97	1,078.67	532.72	5.86	-0.99	0.131
57.50	-27.94	-3.94	0.00	-176.79	0.00	176.79	1,115.40	557.70	1,051.75	519.42	6.39	-1.03	0.126
60.00	-27.18	-3.87	0.00	-166.94	0.00	166.94	1,104.64	552.32	1,024.94	506.18	6.94	-1.06	0.120
62.50	-26.43	-3.81	0.00	-157.26	0.00	157.26	1,093.65	546.83	998.25	493.00	7.50	-1.10	0.115
65.00	-25.67	-3.73	0.00	-147.74	0.00	147.74	1,082.45	541.22	971.69	479.88	8.09	-1.14	0.109
67.50	-24.92	-3.66	0.00	-138.41	0.00	138.41	1,071.02	535.51	945.28	466.84	8.70	-1.17	0.104
70.00	-24.18	-3.59	0.00	-129.25	0.00	129.25	1,059.36	529.68	919.01	453.87	9.32	-1.21	0.099
72.50	-23.44	-3.51	0.00	-120.28	0.00	120.28	1,047.49	523.74	892.91	440.97	9.96	-1.24	0.093
75.00	-22.70	-3.43	0.00	-111.49	0.00	111.49	1,035.39	517.69	866.98	428.17	10.62	-1.27	0.088
76.17	-22.36	-3.40	0.00	-107.49	0.00	107.49	1,029.67	514.83	854.94	422.22	10.93	-1.29	0.085
77.50	-21.90	-3.36	0.00	-102.96	0.00	102.96	1,023.07	511.53	841.23	415.45	11.29	-1.30	0.081
80.00	-21.04	-3.27	0.00	-94.56	0.00	94.56	831.49	415.75	686.29	338.93	11.98	-1.33	0.084
80.75	-20.83	-3.25	0.00	-92.11	0.00	92.11	828.81	414.40	680.33	335.99	12.19	-1.34	0.082
80.75	-20.83	-3.25	0.00	-92.11	0.00	92.11	828.81	414.40	680.33	335.99	12.19	-1.34	0.299
82.50	-20.44	-3.21	0.00	-86.42	0.00	86.42	822.47	411.24	666.44	329.13	12.69	-1.36	0.287
85.00	-19.90	-3.16	0.00	-78.40	0.00	78.40	813.23	406.62	646.68	319.37	13.42	-1.46	0.270
87.50	-19.36	-3.10	0.00	-70.51	0.00	70.51	803.77	401.88	627.03	309.67	14.21	-1.55	0.252
90.00	-16.75	-2.60	0.00	-62.76	0.00	62.76	794.08	397.04	607.50	300.02	15.05	-1.64	0.230
92.50	-16.29	-2.55	0.00	-56.26	0.00	56.26	784.17	392.08	588.09	290.43	15.93	-1.73	0.215
95.00	-15.89	-2.51	0.00	-49.89	0.00	49.89	774.04	387.02	568.81	280.91	16.86	-1.81	0.198
97.50	-15.50	-2.46	0.00	-43.63	0.00	43.63	763.68	381.84	549.68	271.47	17.83	-1.89	0.181
100.00	-14.54	-2.29	0.00	-37.47	0.00	37.47	753.10	376.55	530.71	262.10	18.83	-1.96	0.162
102.50	-14.24	-2.26	0.00	-31.75	0.00	31.75	742.30	371.15	511.90	252.81	19.88	-2.02	0.145
105.00	-13.95	-2.22	0.00	-26.11	0.00	26.11	731.28	365.64	493.27	243.61	20.95	-2.08	0.126
107.50	-13.66	-2.19	0.00	-20.55	0.00	20.55	715.50	357.75	471.83	233.02	22.05	-2.12	0.107
110.00	-8.95	-1.40	0.00	-15.09	0.00	15.09	699.32	349.66	450.61	222.54	23.17	-2.16	0.081
112.50	-8.70	-1.36	0.00	-11.59	0.00	11.59	683.14	341.57	429.88	212.30	24.31	-2.20	0.067

Pole : 302500
Location : Brst Bristol, CT
Height : 120.0 (ft)
Base Dia : 31.00 (in)
Top Dia : 14.41 (in)
Shape : 12 Sides
Taper : 0.145033 (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 — 26 Iterations

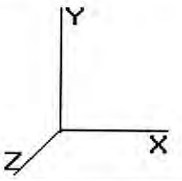
Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
Ice Importance Factor : 1.00

115.00	-8.46	-1.32	0.00	-8.20	0.00	8.20	666.96	333.48	409.64	202.31	25.47	-2.22	0.053
117.50	-8.22	-1.27	0.00	-4.91	0.00	4.91	650.78	325.39	389.89	192.55	26.64	-2.24	0.038
120.00	0.00	-0.95	0.00	-1.72	0.00	1.72	634.60	317.30	370.62	183.04	27.81	-2.25	0.009

Pole :	302500	Code:	ANSI/TIA-222 Rev G
Location :	Brst Bristol, CT	Struct Class :	II
Height :	120.0 (ft)	Exposure Category :	B
Base Dia :	31.00 (in)	Topographic Category :	1
Top Dia :	14.41 (in)	Base Elev :	0.000 (ft)
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.0E — Dead Load with Seismic — 25 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 0.00

Seismic Load Factor : 1.00
Structure Frequency : 0.2149

Sds : 0.41
Sd1 : 0.15
SA : 0.03

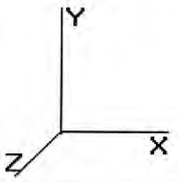
Ss : 0.25
S1 : 0.06
Seismic Importance Factor : 1.00

Total Segment Forces (Factored)

R : 1.50

Seg Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)
0.00		0.00	0.00	0.00	0.00	0.00
2.50		209.34	0.00	0.02	0.01	9.35
5.00		206.85	0.00	0.04	0.02	13.05
7.50		204.37	0.01	0.05	0.03	14.99
10.00		201.89	0.01	0.06	0.03	16.07
12.50		199.41	0.02	0.06	0.04	16.64
15.00		196.92	0.03	0.07	0.04	16.93
17.50		194.44	0.04	0.07	0.04	17.05
20.00		191.96	0.05	0.07	0.04	17.11
22.50		189.47	0.07	0.07	0.04	17.14
25.00		186.99	0.08	0.07	0.04	17.18
27.50		184.51	0.10	0.07	0.04	17.26
30.00		182.02	0.12	0.07	0.03	17.36
32.50		179.54	0.14	0.07	0.03	17.47
35.00		177.06	0.16	0.07	0.03	17.57
37.50		174.58	0.18	0.06	0.03	17.62
37.58	Bot - Section 2	5.78	0.19	0.06	0.03	0.58
40.00		314.73	0.21	0.06	0.02	32.10
42.00	Top - Section 1	257.17	0.23	0.06	0.02	26.25
42.50		30.10	0.24	0.06	0.02	3.07
45.00		149.22	0.27	0.05	0.02	14.93
47.50		147.04	0.30	0.05	0.01	14.03
50.00		144.87	0.33	0.04	0.01	12.56
52.50		142.69	0.36	0.03	0.01	10.35
55.00		140.52	0.40	0.02	0.01	7.26
57.50		138.34	0.43	0.01	0.01	3.33
60.00		136.17	0.47	-0.01	0.01	-1.11
62.50		133.99	0.51	-0.02	0.01	-5.47
65.00		131.82	0.55	-0.04	0.01	-9.19
67.50		129.64	0.60	-0.05	0.01	-11.96
70.00		127.46	0.64	-0.07	0.02	-13.75
72.50		125.29	0.69	-0.08	0.03	-14.68
75.00		123.11	0.74	-0.10	0.04	-14.89
76.17	Bot - Section 3	56.71	0.76	-0.10	0.04	-6.86
77.50		120.49	0.79	-0.11	0.05	-14.43
80.00	Top - Section 2	222.81	0.84	-0.12	0.07	-25.47
80.75	Reinf. Top	30.85	0.86	-0.12	0.07	-3.45
82.50		71.33	0.89	-0.12	0.08	-7.48
85.00		100.31	0.95	-0.12	0.11	-9.19
87.50		98.45	1.00	-0.11	0.13	-7.34
90.00	Appertunance(s)	2839.28	1.06	-0.09	0.17	-152.80
92.50		94.71	1.12	-0.06	0.20	-2.78
95.00		92.85	1.18	-0.01	0.24	-0.10
97.50		90.98	1.25	0.05	0.29	2.82
100.0	Appertunance(s)	419.21	1.31	0.14	0.35	28.08
102.5		87.24	1.38	0.25	0.41	9.34
105.0		85.38	1.45	0.38	0.48	12.90
107.5		83.51	1.52	0.54	0.56	16.65
110.0	Appertunance(s)	2411.74	1.59	0.74	0.65	607.62
112.5		79.78	1.66	0.98	0.76	24.64
115.0		77.91	1.74	1.26	0.87	28.84

Pole :	302500	Code:	ANSI/TIA-222 Rev G
Location :	Brst Bristol, CT	Struct Class :	II
Height :	120.0 (ft)	Exposure Category :	B
Base Dia :	31.00 (in)	Topographic Category :	1
Top Dia :	14.41 (in)	Base Elev :	0.000 (ft)
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



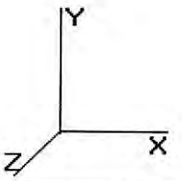
Load Case: 1.2D + 1.0E — Dead Load with Seismic — 25 Iterations

Gust Response Factor : 1.10			Sds : 0.41	Ss : 0.25
Dead Load Factor : 1.20	Seismic Load Factor : 1.00		Sd1 : 0.15	S1 : 0.06
Wind Load Factor : 0.00	Structure Frequency : 0.2149		SA : 0.03	Seismic Importance Factor : 1.00

117.5		76.04	1.81	1.59	1.00	33.15	
120.0	Appertunance(s)	2848.67	1.89	1.98	1.14	1442.64	
	Totals:	15,245.53				2,272.99	Total Wind : 19,564.2

Seismic Base Shear Not Tested Due To User Override - Analysis Required

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:46 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 36
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



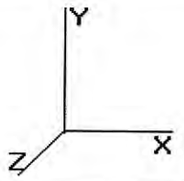
Load Case: 1.2D + 1.0E — Dead Load with Seismic — 25 Iterations

Gust Response Factor : 1.10		Sds : 0.41		Ss : 0.25
Dead Load Factor : 1.20	Seismic Load Factor : 1.00	Sd1 : 0.15		S1 : 0.06
Wind Load Factor : 0.00	Structure Frequency : 0.2149	SA : 0.03		Seismic Importance Factor : 1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-23.12	-2.58	0.00	-282.80	0.00	282.80	1,590.66	795.33	2,018.74	996.98	0.00	0.00	0.139
2.50	-22.70	-2.58	0.00	-276.35	0.00	276.35	1,581.24	790.62	1,982.92	979.29	0.01	-0.03	0.137
5.00	-22.29	-2.58	0.00	-269.90	0.00	269.90	1,571.59	785.80	1,947.12	961.61	0.03	-0.06	0.136
7.50	-21.78	-2.58	0.00	-263.45	0.00	263.45	1,561.72	780.86	1,911.33	943.93	0.07	-0.09	0.134
10.00	-21.27	-2.57	0.00	-257.01	0.00	257.01	1,551.63	775.81	1,875.57	926.27	0.13	-0.12	0.132
12.50	-20.77	-2.56	0.00	-250.58	0.00	250.58	1,541.31	770.66	1,839.85	908.63	0.20	-0.16	0.129
15.00	-20.27	-2.56	0.00	-244.17	0.00	244.17	1,530.78	765.39	1,804.18	891.02	0.29	-0.19	0.127
17.50	-19.77	-2.55	0.00	-237.78	0.00	237.78	1,520.01	760.01	1,768.57	873.43	0.40	-0.22	0.125
20.00	-19.28	-2.54	0.00	-231.41	0.00	231.41	1,509.03	754.52	1,733.02	855.87	0.52	-0.25	0.123
22.50	-18.79	-2.53	0.00	-225.06	0.00	225.06	1,497.83	748.91	1,697.56	838.36	0.66	-0.28	0.121
25.00	-18.30	-2.52	0.00	-218.73	0.00	218.73	1,486.40	743.20	1,662.18	820.89	0.82	-0.31	0.119
27.50	-17.81	-2.51	0.00	-212.43	0.00	212.43	1,474.74	737.37	1,626.91	803.47	0.99	-0.34	0.117
30.00	-17.33	-2.50	0.00	-206.15	0.00	206.15	1,462.87	731.44	1,591.74	786.10	1.18	-0.38	0.114
32.50	-16.85	-2.49	0.00	-199.90	0.00	199.90	1,450.77	725.39	1,556.69	768.79	1.38	-0.41	0.112
35.00	-16.38	-2.48	0.00	-193.68	0.00	193.68	1,438.45	719.23	1,521.78	751.55	1.60	-0.44	0.110
37.50	-15.91	-2.46	0.00	-187.48	0.00	187.48	1,425.91	712.96	1,487.00	734.37	1.84	-0.47	0.108
37.58	-15.89	-2.46	0.00	-187.28	0.00	187.28	1,425.49	712.74	1,485.84	733.80	1.85	-0.47	0.108
40.00	-15.26	-2.43	0.00	-181.32	0.00	181.32	1,413.15	706.57	1,452.37	717.27	2.10	-0.50	0.103
42.00	-14.74	-2.41	0.00	-176.46	0.00	176.46	1,177.15	588.58	1,220.08	602.55	2.31	-0.53	0.113
42.50	-14.65	-2.41	0.00	-175.25	0.00	175.25	1,175.29	587.65	1,214.60	599.85	2.37	-0.53	0.113
45.00	-14.21	-2.40	0.00	-169.23	0.00	169.23	1,165.87	582.93	1,187.28	586.35	2.65	-0.56	0.110
47.50	-13.77	-2.39	0.00	-163.24	0.00	163.24	1,156.22	578.11	1,160.01	572.88	2.96	-0.60	0.107
50.00	-13.33	-2.38	0.00	-157.28	0.00	157.28	1,146.35	573.17	1,132.81	559.45	3.28	-0.63	0.104
52.50	-12.90	-2.37	0.00	-151.34	0.00	151.34	1,136.25	568.13	1,105.70	546.06	3.62	-0.66	0.101
55.00	-12.46	-2.36	0.00	-145.42	0.00	145.42	1,125.94	562.97	1,078.67	532.72	3.97	-0.69	0.098
57.50	-12.03	-2.36	0.00	-139.52	0.00	139.52	1,115.40	557.70	1,051.75	519.42	4.34	-0.72	0.095
60.00	-11.61	-2.36	0.00	-133.62	0.00	133.62	1,104.64	552.32	1,024.94	506.18	4.72	-0.75	0.092
62.50	-11.18	-2.36	0.00	-127.72	0.00	127.72	1,093.65	546.83	998.25	493.00	5.12	-0.78	0.089
65.00	-10.76	-2.36	0.00	-121.81	0.00	121.81	1,082.45	541.22	971.69	479.88	5.54	-0.81	0.086
67.50	-10.34	-2.36	0.00	-115.91	0.00	115.91	1,071.02	535.51	945.28	466.84	5.97	-0.84	0.083
70.00	-9.93	-2.36	0.00	-110.02	0.00	110.02	1,059.36	529.68	919.01	453.87	6.42	-0.87	0.079
72.50	-9.51	-2.36	0.00	-104.12	0.00	104.12	1,047.49	523.74	892.91	440.97	6.88	-0.90	0.076
75.00	-9.10	-2.35	0.00	-98.23	0.00	98.23	1,035.39	517.69	866.98	428.17	7.36	-0.92	0.073
76.17	-8.91	-2.35	0.00	-95.48	0.00	95.48	1,029.67	514.83	854.94	422.22	7.58	-0.94	0.071
77.50	-8.63	-2.35	0.00	-92.35	0.00	92.35	1,023.07	511.53	841.23	415.45	7.85	-0.95	0.068
80.00	-8.10	-2.34	0.00	-86.47	0.00	86.47	831.49	415.75	686.29	338.93	8.35	-0.98	0.072
80.75	-7.98	-2.34	0.00	-84.71	0.00	84.71	828.81	414.40	680.33	335.99	8.50	-0.98	0.070
80.75	-7.98	-2.34	0.00	-84.71	0.00	84.71	828.81	414.40	680.33	335.99	8.50	-0.98	0.262
82.50	-7.82	-2.35	0.00	-80.61	0.00	80.61	822.47	411.24	666.44	329.13	8.87	-1.00	0.254
85.00	-7.61	-2.36	0.00	-74.74	0.00	74.74	813.23	406.62	646.68	319.37	9.42	-1.10	0.243
87.50	-7.39	-2.37	0.00	-68.84	0.00	68.84	803.77	401.88	627.03	309.67	10.02	-1.19	0.232
90.00	-6.58	-2.36	0.00	-62.93	0.00	62.93	794.08	397.04	607.50	300.02	10.66	-1.28	0.218
92.50	-6.39	-2.36	0.00	-57.03	0.00	57.03	784.17	392.08	588.09	290.43	11.35	-1.36	0.205
95.00	-6.20	-2.37	0.00	-51.13	0.00	51.13	774.04	387.02	568.81	280.91	12.09	-1.44	0.190
97.50	-6.02	-2.37	0.00	-45.21	0.00	45.21	763.68	381.84	549.68	271.47	12.87	-1.52	0.174
100.00	-5.76	-2.34	0.00	-39.29	0.00	39.29	753.10	376.55	530.71	262.10	13.68	-1.60	0.158
102.50	-5.59	-2.33	0.00	-33.44	0.00	33.44	742.30	371.15	511.90	252.81	14.54	-1.66	0.140
105.00	-5.43	-2.32	0.00	-27.61	0.00	27.61	731.28	365.64	493.27	243.61	15.42	-1.72	0.121
107.50	-5.27	-2.30	0.00	-21.81	0.00	21.81	715.50	357.75	471.83	233.02	16.34	-1.77	0.101
110.00	-3.75	-1.65	0.00	-16.05	0.00	16.05	699.32	349.66	450.61	222.54	17.28	-1.82	0.078
112.50	-3.63	-1.62	0.00	-11.93	0.00	11.93	683.14	341.57	429.88	212.30	18.24	-1.85	0.062

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:46 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 37
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 1.2D + 1.0E — Dead Load with Seismic — 25 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 1.20
Wind Load Factor : 0.00

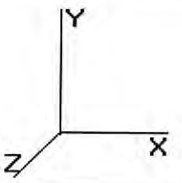
Seismic Load Factor : 1.00
Structure Frequency : 0.2149

Sds : 0.41
Sd1 : 0.15
SA : 0.03

Ss : 0.25
S1 : 0.06
Seismic Importance Factor : 1.00

115.00	-3.51	-1.59	0.00	-7.87	0.00	7.87	666.96	333.48	409.64	202.31	19.22	-1.87	0.044
117.50	-3.40	-1.56	0.00	-3.89	0.00	3.89	650.78	325.39	389.89	192.55	20.20	-1.89	0.025
120.00	0.00	-1.44	0.00	0.00	0.00	0.00	634.60	317.30	370.62	183.04	21.20	-1.90	0.000

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:46 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 38
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 0.9D + 1.0E — Dead Load with Seismic (Reduced DL) — 25 Iterations

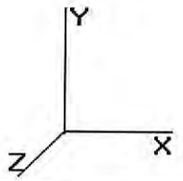
Gust Response Factor : 1.10		Sds : 0.41	Ss : 0.25
Dead Load Factor : 0.90	Seismic Load Factor : 1.00	Sd1 : 0.15	S1 : 0.06
Wind Load Factor : 0.00	Structure Frequency : 0.2149	SA : 0.03	Seismic Importance Factor : 1.00

Total Segment Forces (Factored)

R : 1.50

Seg Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)
0.00		0.00	0.00	0.00	0.00	0.00
2.50		209.34	0.00	0.02	0.01	9.35
5.00		206.85	0.00	0.04	0.02	13.05
7.50		204.37	0.01	0.05	0.03	14.99
10.00		201.89	0.01	0.06	0.03	16.07
12.50		199.41	0.02	0.06	0.04	16.64
15.00		196.92	0.03	0.07	0.04	16.93
17.50		194.44	0.04	0.07	0.04	17.05
20.00		191.96	0.05	0.07	0.04	17.11
22.50		189.47	0.07	0.07	0.04	17.14
25.00		186.99	0.08	0.07	0.04	17.18
27.50		184.51	0.10	0.07	0.04	17.26
30.00		182.02	0.12	0.07	0.03	17.36
32.50		179.54	0.14	0.07	0.03	17.47
35.00		177.06	0.16	0.07	0.03	17.57
37.50		174.58	0.18	0.06	0.03	17.62
37.58	Bot - Section 2	5.78	0.19	0.06	0.03	0.58
40.00		314.73	0.21	0.06	0.02	32.10
42.00	Top - Section 1	257.17	0.23	0.06	0.02	26.25
42.50		30.10	0.24	0.06	0.02	3.07
45.00		149.22	0.27	0.05	0.02	14.93
47.50		147.04	0.30	0.05	0.01	14.03
50.00		144.87	0.33	0.04	0.01	12.56
52.50		142.69	0.36	0.03	0.01	10.35
55.00		140.52	0.40	0.02	0.01	7.26
57.50		138.34	0.43	0.01	0.01	3.33
60.00		136.17	0.47	-0.01	0.01	-1.11
62.50		133.99	0.51	-0.02	0.01	-5.47
65.00		131.82	0.55	-0.04	0.01	-9.19
67.50		129.64	0.60	-0.05	0.01	-11.96
70.00		127.46	0.64	-0.07	0.02	-13.75
72.50		125.29	0.69	-0.08	0.03	-14.68
75.00		123.11	0.74	-0.10	0.04	-14.89
76.17	Bot - Section 3	56.71	0.76	-0.10	0.04	-6.86
77.50		120.49	0.79	-0.11	0.05	-14.43
80.00	Top - Section 2	222.81	0.84	-0.12	0.07	-25.47
80.75	Reinf. Top	30.85	0.86	-0.12	0.07	-3.45
82.50		71.33	0.89	-0.12	0.08	-7.48
85.00		100.31	0.95	-0.12	0.11	-9.19
87.50		98.45	1.00	-0.11	0.13	-7.34
90.00	Appertunance(s)	2839.28	1.06	-0.09	0.17	-152.80
92.50		94.71	1.12	-0.06	0.20	-2.78
95.00		92.85	1.18	-0.01	0.24	-0.10
97.50		90.98	1.25	0.05	0.29	2.82
100.0	Appertunance(s)	419.21	1.31	0.14	0.35	28.08
102.5		87.24	1.38	0.25	0.41	9.34
105.0		85.38	1.45	0.38	0.48	12.90
107.5		83.51	1.52	0.54	0.56	16.65
110.0	Appertunance(s)	2411.74	1.59	0.74	0.65	607.62
112.5		79.78	1.66	0.98	0.76	24.64
115.0		77.91	1.74	1.26	0.87	28.84

Pole :	302500	Code:	ANSI/TIA-222 Rev G
Location :	Brst Bristol, CT	Struct Class :	II
Height :	120.0 (ft)	Exposure Category :	B
Base Dia :	31.00 (in)	Topographic Category :	1
Top Dia :	14.41 (in)	Base Elev :	0.000 (ft)
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



Load Case: 0.9D + 1.0E — Dead Load with Seismic (Reduced DL) — 25 Iterations

Gust Response Factor : 1.10
Dead Load Factor : 0.90
Wind Load Factor : 0.00

Seismic Load Factor : 1.00
Structure Frequency : 0.2149

Sds : 0.41
Sd1 : 0.15
SA : 0.03

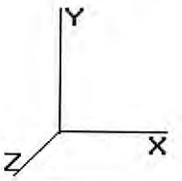
Ss : 0.25
S1 : 0.06
Seismic Importance Factor : 1.00

117.5		76.04	1.81	1.59	1.00	33.15	
120.0	Appertunance(s)	2848.67	1.89	1.98	1.14	1442.64	
	Totals:	15,245.53				2,272.99	

Total Wind : 19,564.2

Seismic Base Shear Not Tested Due To User Override - Analysis Required

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	4/5/2012 5:23:47 PM
Height :	120.0 (ft)	Exposure Category : B	Page: 40
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



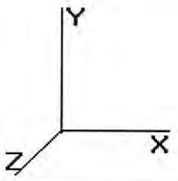
Load Case: 0.9D + 1.0E — Dead Load with Seismic (Reduced DL) — 25 Iterations

Gust Response Factor : 1.10		Sds : 0.41		Ss : 0.25
Dead Load Factor : 0.90	Seismic Load Factor : 1.00	Sd1 : 0.15		S1 : 0.06
Wind Load Factor : 0.00	Structure Frequency : 0.2149	SA : 0.03		Seismic Importance Factor : 1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-18.69	-2.58	0.00	-279.19	0.00	279.19	1,590.66	795.33	2,018.74	996.98	0.00	0.00	0.136
2.50	-18.33	-2.58	0.00	-272.74	0.00	272.74	1,581.24	790.62	1,982.92	979.29	0.01	-0.03	0.134
5.00	-17.98	-2.57	0.00	-266.30	0.00	266.30	1,571.59	785.80	1,947.12	961.61	0.03	-0.06	0.132
7.50	-17.56	-2.57	0.00	-259.86	0.00	259.86	1,561.72	780.86	1,911.33	943.93	0.07	-0.09	0.130
10.00	-17.13	-2.56	0.00	-253.44	0.00	253.44	1,551.63	775.81	1,875.57	926.27	0.13	-0.12	0.128
12.50	-16.71	-2.55	0.00	-247.04	0.00	247.04	1,541.31	770.66	1,839.85	908.63	0.20	-0.15	0.126
15.00	-16.30	-2.54	0.00	-240.67	0.00	240.67	1,530.78	765.39	1,804.18	891.02	0.29	-0.18	0.124
17.50	-15.88	-2.53	0.00	-234.31	0.00	234.31	1,520.01	760.01	1,768.57	873.43	0.39	-0.21	0.122
20.00	-15.47	-2.52	0.00	-227.98	0.00	227.98	1,509.03	754.52	1,733.02	855.87	0.52	-0.25	0.120
22.50	-15.06	-2.51	0.00	-221.68	0.00	221.68	1,497.83	748.91	1,697.56	838.36	0.65	-0.28	0.118
25.00	-14.65	-2.50	0.00	-215.40	0.00	215.40	1,486.40	743.20	1,662.18	820.89	0.81	-0.31	0.116
27.50	-14.25	-2.49	0.00	-209.15	0.00	209.15	1,474.74	737.37	1,626.91	803.47	0.98	-0.34	0.114
30.00	-13.84	-2.48	0.00	-202.93	0.00	202.93	1,462.87	731.44	1,591.74	786.10	1.16	-0.37	0.112
32.50	-13.44	-2.46	0.00	-196.74	0.00	196.74	1,450.77	725.39	1,556.69	768.79	1.36	-0.40	0.109
35.00	-13.04	-2.45	0.00	-190.58	0.00	190.58	1,438.45	719.23	1,521.78	751.55	1.58	-0.43	0.107
37.50	-12.65	-2.43	0.00	-184.46	0.00	184.46	1,425.91	712.96	1,487.00	734.37	1.82	-0.46	0.105
37.58	-12.63	-2.43	0.00	-184.26	0.00	184.26	1,425.49	712.74	1,485.84	733.80	1.82	-0.46	0.105
40.00	-12.12	-2.40	0.00	-178.38	0.00	178.38	1,413.15	706.57	1,452.37	717.27	2.07	-0.49	0.101
42.00	-11.70	-2.38	0.00	-173.57	0.00	173.57	1,177.15	588.58	1,220.08	602.55	2.28	-0.52	0.110
42.50	-11.62	-2.38	0.00	-172.38	0.00	172.38	1,175.29	587.65	1,214.60	599.85	2.33	-0.52	0.110
45.00	-11.25	-2.36	0.00	-166.44	0.00	166.44	1,165.87	582.93	1,187.28	586.35	2.62	-0.56	0.107
47.50	-10.88	-2.35	0.00	-160.52	0.00	160.52	1,156.22	578.11	1,160.01	572.88	2.92	-0.59	0.104
50.00	-10.51	-2.34	0.00	-154.64	0.00	154.64	1,146.35	573.17	1,132.81	559.45	3.23	-0.62	0.101
52.50	-10.14	-2.33	0.00	-148.78	0.00	148.78	1,136.25	568.13	1,105.70	546.06	3.56	-0.65	0.098
55.00	-9.77	-2.33	0.00	-142.95	0.00	142.95	1,125.94	562.97	1,078.67	532.72	3.91	-0.68	0.096
57.50	-9.41	-2.32	0.00	-137.13	0.00	137.13	1,115.40	557.70	1,051.75	519.42	4.27	-0.71	0.093
60.00	-9.05	-2.32	0.00	-131.32	0.00	131.32	1,104.64	552.32	1,024.94	506.18	4.65	-0.74	0.090
62.50	-8.68	-2.32	0.00	-125.51	0.00	125.51	1,093.65	546.83	998.25	493.00	5.05	-0.77	0.087
65.00	-8.33	-2.32	0.00	-119.70	0.00	119.70	1,082.45	541.22	971.69	479.88	5.46	-0.80	0.084
67.50	-7.97	-2.32	0.00	-113.89	0.00	113.89	1,071.02	535.51	945.28	466.84	5.88	-0.83	0.080
70.00	-7.62	-2.32	0.00	-108.09	0.00	108.09	1,059.36	529.68	919.01	453.87	6.32	-0.85	0.077
72.50	-7.26	-2.32	0.00	-102.28	0.00	102.28	1,047.49	523.74	892.91	440.97	6.78	-0.88	0.074
75.00	-6.91	-2.32	0.00	-96.49	0.00	96.49	1,035.39	517.69	866.98	428.17	7.25	-0.91	0.071
76.17	-6.75	-2.32	0.00	-93.78	0.00	93.78	1,029.67	514.83	854.94	422.22	7.47	-0.92	0.069
77.50	-6.51	-2.31	0.00	-90.70	0.00	90.70	1,023.07	511.53	841.23	415.45	7.73	-0.93	0.066
80.00	-6.08	-2.31	0.00	-84.91	0.00	84.91	831.49	415.75	686.29	338.93	8.22	-0.96	0.069
80.75	-5.98	-2.31	0.00	-83.18	0.00	83.18	828.81	414.40	680.33	335.99	8.38	-0.97	0.068
80.75	-5.98	-2.31	0.00	-83.18	0.00	83.18	828.81	414.40	680.33	335.99	8.38	-0.97	0.255
82.50	-5.86	-2.31	0.00	-79.14	0.00	79.14	822.47	411.24	666.44	329.13	8.73	-0.99	0.248
85.00	-5.69	-2.32	0.00	-73.37	0.00	73.37	813.23	406.62	646.68	319.37	9.27	-1.08	0.237
87.50	-5.53	-2.32	0.00	-67.57	0.00	67.57	803.77	401.88	627.03	309.67	9.86	-1.17	0.225
90.00	-4.92	-2.32	0.00	-61.76	0.00	61.76	794.08	397.04	607.50	300.02	10.50	-1.26	0.212
92.50	-4.78	-2.32	0.00	-55.97	0.00	55.97	784.17	392.08	588.09	290.43	11.18	-1.34	0.199
95.00	-4.64	-2.32	0.00	-50.16	0.00	50.16	774.04	387.02	568.81	280.91	11.90	-1.42	0.185
97.50	-4.50	-2.32	0.00	-44.35	0.00	44.35	763.68	381.84	549.68	271.47	12.67	-1.50	0.169
100.00	-4.30	-2.30	0.00	-38.54	0.00	38.54	753.10	376.55	530.71	262.10	13.47	-1.57	0.153
102.50	-4.18	-2.29	0.00	-32.80	0.00	32.80	742.30	371.15	511.90	252.81	14.31	-1.63	0.135
105.00	-4.06	-2.28	0.00	-27.08	0.00	27.08	731.28	365.64	493.27	243.61	15.18	-1.69	0.117
107.50	-3.94	-2.26	0.00	-21.39	0.00	21.39	715.50	357.75	471.83	233.02	16.08	-1.74	0.097
110.00	-2.80	-1.62	0.00	-15.74	0.00	15.74	699.32	349.66	450.61	222.54	17.01	-1.78	0.075
112.50	-2.71	-1.59	0.00	-11.70	0.00	11.70	683.14	341.57	429.88	212.30	17.95	-1.82	0.059

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:47 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 41
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		

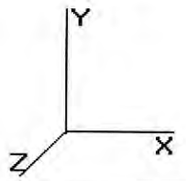


Load Case: 0.9D + 1.0E — Dead Load with Seismic (Reduced DL) — 25 Iterations

Gust Response Factor : 1.10 | Sds : 0.41 | Ss : 0.25
Dead Load Factor : 0.90 | Seismic Load Factor : 1.00 | Sd1 : 0.15 | S1 : 0.06
Wind Load Factor : 0.00 | Structure Frequency : 0.2149 | SA : 0.03 | Seismic Importance Factor : 1.00

115.00	-2.62	-1.56	0.00	-7.72	0.00	7.72	666.96	333.48	409.64	202.31	18.91	-1.84	0.042
117.50	-2.54	-1.53	0.00	-3.81	0.00	3.81	650.78	325.39	389.89	192.55	19.88	-1.86	0.024
120.00	0.00	-1.44	0.00	0.00	0.00	0.00	634.60	317.30	370.62	183.04	20.85	-1.86	0.000

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:47 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 42
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

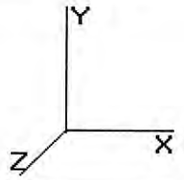
Gust Response Factor : 1.10
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf		Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	6.129	6.742	134.25	1.000		0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.50		1.00	0.70	6.129	6.742	132.68	1.000	*	0.000	2.50	6.647	6.65	44.8	0.0	376.3
5.00		1.00	0.70	6.129	6.742	131.11	1.000	*	0.000	2.50	6.569	6.57	44.3	0.0	373.9
7.50		1.00	0.70	6.129	6.742	129.54	1.200	*	0.000	2.50	6.491	7.79	52.5	0.0	371.4
10.00		1.00	0.70	6.129	6.742	127.97	1.200	*	0.000	2.50	6.412	7.69	51.9	0.0	368.9
12.50		1.00	0.70	6.129	6.742	126.40	1.200	*	0.000	2.50	6.334	7.60	51.2	0.0	366.4
15.00		1.00	0.70	6.129	6.742	124.83	1.200	*	0.000	2.50	6.256	7.51	50.6	0.0	363.9
17.50		1.00	0.70	6.129	6.742	123.26	1.200	*	0.000	2.50	6.178	7.41	50.0	0.0	361.4
20.00		1.00	0.70	6.129	6.742	121.69	1.200	*	0.000	2.50	6.100	7.32	49.3	0.0	359.0
22.50		1.00	0.70	6.129	6.742	120.12	1.200	*	0.000	2.50	6.021	7.23	48.7	0.0	356.5
25.00		1.00	0.70	6.129	6.742	118.55	1.200	*	0.000	2.50	5.943	7.13	48.1	0.0	354.0
27.50		1.00	0.70	6.129	6.742	116.98	1.200	*	0.000	2.50	5.865	7.04	47.4	0.0	351.5
30.00		1.00	0.70	6.134	6.747	115.46	1.200	*	0.000	2.50	5.787	6.94	46.9	0.0	349.0
32.50		1.00	0.71	6.276	6.903	115.20	1.200	*	0.000	2.50	5.709	6.85	47.3	0.0	346.5
35.00		1.00	0.73	6.410	7.051	114.82	1.200	*	0.000	2.50	5.630	6.76	47.6	0.0	344.1
37.50		1.00	0.74	6.538	7.191	114.33	1.200	*	0.000	2.50	5.552	6.66	47.9	0.0	341.6
37.58	Bot - Section 2	1.00	0.74	6.542	7.196	114.31	1.200	*	0.000	0.08	0.184	0.22	1.6	0.0	11.3
40.00		1.00	0.76	6.659	7.325	113.75	1.200	*	0.000	2.42	5.382	6.46	47.3	0.0	476.2
42.00	Top - Section 1	1.00	0.77	6.753	7.428	113.23	1.200	*	0.000	2.00	4.398	5.28	39.2	0.0	390.8
42.50		1.00	0.77	6.776	7.453	115.09	1.200	*	0.000	0.50	1.092	1.31	9.8	0.0	63.5
45.00		1.00	0.78	6.887	7.576	114.37	1.200	*	0.000	2.50	5.412	6.49	49.2	0.0	316.2
47.50		1.00	0.79	6.994	7.694	113.58	1.200	*	0.000	2.50	5.334	6.40	49.2	0.0	314.0
50.00		1.00	0.81	7.098	7.807	112.72	1.200	*	0.000	2.50	5.256	6.31	49.2	0.0	311.9
52.50		1.00	0.82	7.197	7.917	111.81	1.200	*	0.000	2.50	5.177	6.21	49.2	0.0	309.7
55.00		1.00	0.83	7.294	8.023	110.84	1.200	*	0.000	2.50	5.099	6.12	49.1	0.0	307.5
57.50		1.00	0.84	7.387	8.126	109.82	1.200	*	0.000	2.50	5.021	6.03	49.0	0.0	305.3
60.00		1.00	0.85	7.477	8.225	108.76	1.200	*	0.000	2.50	4.943	5.93	48.8	0.0	303.2
62.50		1.00	0.86	7.565	8.321	107.65	1.200	*	0.000	2.50	4.865	5.84	48.6	0.0	301.0
65.00		1.00	0.87	7.650	8.415	106.50	1.200	*	0.000	2.50	4.786	5.74	48.3	0.0	298.8
67.50		1.00	0.88	7.733	8.506	105.31	1.200	*	0.000	2.50	4.708	5.65	48.1	0.0	296.6
70.00		1.00	0.89	7.814	8.595	104.09	1.200	*	0.000	2.50	4.630	5.56	47.8	0.0	294.5
72.50		1.00	0.90	7.893	8.682	102.83	1.200	*	0.000	2.50	4.552	5.46	47.4	0.0	292.3
75.00		1.00	0.91	7.969	8.766	101.54	1.200	*	0.000	2.50	4.474	5.37	47.1	0.0	290.1
76.17	Bot - Section 3	1.00	0.91	8.005	8.805	100.92	1.200	*	0.000	1.17	2.061	2.47	21.8	0.0	134.6
77.50		1.00	0.91	8.044	8.849	100.21	1.200	*	0.000	1.33	2.378	2.85	25.2	0.0	209.6
80.00	Top - Section 2	1.00	0.92	8.118	8.930	98.867	1.200	*	0.000	2.50	4.398	5.28	47.1	0.0	389.8
80.75	Reinf. Top	1.00	0.93	8.139	8.953	100.33	1.200	*	0.000	0.75	1.304	1.57	14.0	0.0	81.0
82.50		1.00	0.93	8.189	9.008	99.370	1.200	*	0.000	1.75	3.016	3.62	32.6	0.0	71.3
85.00		1.00	0.94	8.260	9.086	97.971	1.200	*	0.000	2.50	4.242	5.09	46.2	0.0	100.3
87.50		1.00	0.95	8.328	9.161	96.547	1.200	*	0.000	2.50	4.164	5.00	45.8	0.0	98.4
90.00	Appertunance(s)	1.00	0.95	8.396	9.235	95.099	1.200	*	0.000	2.50	4.086	4.90	45.3	0.0	96.6
92.50		1.00	0.96	8.462	9.308	93.627	1.200	*	0.000	2.50	4.007	4.81	44.8	0.0	94.7
95.00		1.00	0.97	8.526	9.379	92.132	1.200	*	0.000	2.50	3.929	4.71	44.2	0.0	92.8
97.50		1.00	0.98	8.590	9.449	90.615	1.200	*	0.000	2.50	3.851	4.62	43.7	0.0	91.0
100.0	Appertunance(s)	1.00	0.98	8.652	9.517	89.078	1.200	*	0.000	2.50	3.773	4.53	43.1	0.0	89.1
102.5		1.00	0.99	8.713	9.585	87.520	1.000		0.000	2.50	3.695	3.69	35.4	0.0	87.2
105.0		1.00	1.00	8.774	9.651	85.943	1.000		0.000	2.50	3.616	3.62	34.9	0.0	85.4
107.5		1.00	1.00	8.833	9.716	84.347	1.000		0.000	2.50	3.538	3.54	34.4	0.0	83.5
110.0	Appertunance(s)	1.00	1.01	8.891	9.780	82.733	1.000		0.000	2.50	3.460	3.46	33.8	0.0	81.6
112.5		1.00	1.02	8.948	9.843	81.102	1.000		0.000	2.50	3.382	3.38	33.3	0.0	79.8
115.0		1.00	1.02	9.005	9.905	79.454	1.000		0.000	2.50	3.303	3.30	32.7	0.0	77.9

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

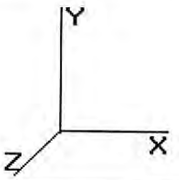
Gust Response Factor : 1.10 — Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

117.5		1.00	1.03	9.060	9.966	77.789	1.000	0.000	2.50	3.225	3.23	32.1	0.0	76.0
120.0	Appertunance(s)	1.00	1.04	9.115	10.02	76.108	1.000	0.000	2.50	3.147	3.15	31.6	0.0	74.2
* = Cf Adjusted By Linear Load Ra Effect						Totals:		360.00				41,307.8	0.0	38,093.4

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:47 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 44
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



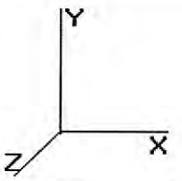
Load Case: 1.0D + 1.0W — 60.00 mph Serviceability — 26 Iterations

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

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	8.396	9.235	0.50	0.80	7.30	0.000	0.000	67.44	0.00	0.00	85.80
90.00	DragonWave A-ANT-	3	8.396	9.235	0.72	0.80	18.73	0.000	0.000	172.95	0.00	0.00	198.30
90.00	DragonWave A-ANT-	1	8.396	9.235	0.72	0.80	3.38	0.000	0.000	31.19	0.00	0.00	27.10
90.00	DragonWave Horizon	4	8.396	9.235	0.40	0.80	0.69	0.000	0.000	6.35	0.00	0.00	42.40
90.00	NextNet BTS-2500	3	8.396	9.235	0.54	0.80	3.41	0.000	0.000	31.48	0.00	0.00	105.00
90.00	Side Arms	1	8.396	9.235	1.00	1.00	8.50	0.000	0.000	78.50	0.00	0.00	40.00
100.0	Kathrein 742 213	2	8.652	9.517	0.78	1.00	8.02	0.000	0.000	76.31	0.00	0.00	44.00
100.0	RFS APXV18-206517S-	1	8.652	9.517	0.80	1.00	4.13	0.000	0.000	39.29	0.00	0.00	26.40
110.0	48" x 12" Panel	9	8.891	9.780	0.60	0.80	30.24	0.000	0.000	295.75	0.00	0.00	270.00
110.0	72" x 12" Panel	3	8.891	9.780	0.54	0.80	13.51	0.000	0.000	132.10	0.00	0.00	135.00
110.0	T-Arm w/ Working Pla	3	8.891	9.780	0.50	0.75	19.45	0.000	0.000	190.19	0.00	0.00	750.00
120.0	Andrew SBNH-	1	9.201	10.121	0.56	0.80	6.41	0.000	4.000	64.84	0.00	259.35	66.10
120.0	Ericsson RRUS-11 190	6	9.201	10.121	0.54	0.80	9.46	0.000	4.000	95.69	0.00	382.77	264.00
120.0	Flat Platform with H	1	9.115	10.026	1.00	1.00	42.40	0.000	0.000	425.11	0.00	0.00	2,000.00
120.0	Powerwave 7770.00	6	9.201	10.121	0.52	0.80	18.35	0.000	4.000	185.67	0.00	742.68	210.00
120.0	Powerwave LGP	6	9.201	10.121	0.40	0.80	3.02	0.000	4.000	30.60	0.00	122.42	84.60
120.0	Powerwave P65-17-	2	9.201	10.121	0.54	0.80	12.29	0.000	4.000	124.33	0.00	497.33	118.00
120.0	Raycap DC6-48-60-18-	1	9.201	10.121	0.80	0.80	1.18	0.000	4.000	11.90	0.00	47.61	31.80
										2,059.71			13,945.35

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:47 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 45
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

Gust Response Factor : 1.10 — Wind Importance Factor : 1.00

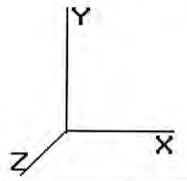
Dead Load Factor : 1.00

Wind Load Factor : 1.00

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)
2.50	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	0.73	0.00	6.129	0.110	1.029	0.00	0.00
5.00	(4) #20 Reinforcement	Yes	2.50	0.000	3.50	0.73	0.00	6.129	0.111	1.033	0.00	0.00
7.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.288	0.000	6.67	12.30
7.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.288	0.000	5.90	0.00
7.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.288	0.000	2.53	18.25
10.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.291	0.000	6.67	12.30
10.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.291	0.000	5.90	0.00
10.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.291	0.000	2.53	18.25
12.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.295	0.000	6.67	12.30
12.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.295	0.000	5.90	0.00
12.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.295	0.000	2.53	18.25
15.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.298	0.000	6.67	12.30
15.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.298	0.000	5.90	0.00
15.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.298	0.000	2.53	18.25
17.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.302	0.000	6.67	12.30
17.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.302	0.000	5.90	0.00
17.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.302	0.000	2.53	18.25
20.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.306	0.000	6.67	12.30
20.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.306	0.000	5.90	0.00
20.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.306	0.000	2.53	18.25
22.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.310	0.000	6.67	12.30
22.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.310	0.000	5.90	0.00
22.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.310	0.000	2.53	18.25
25.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.314	0.000	6.67	12.30
25.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.314	0.000	5.90	0.00
25.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.314	0.000	2.53	18.25
27.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.129	0.318	0.000	6.67	12.30
27.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.129	0.318	0.000	5.90	0.00
27.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.129	0.318	0.000	2.53	18.25
30.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.134	0.323	0.000	6.68	12.30
30.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.134	0.323	0.000	5.90	0.00
30.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.134	0.323	0.000	2.53	18.25
32.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.276	0.327	0.000	6.83	12.30
32.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.276	0.327	0.000	6.04	0.00
32.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.276	0.327	0.000	2.59	18.25
35.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.410	0.332	0.000	6.98	12.30
35.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.410	0.332	0.000	6.17	0.00
35.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.410	0.332	0.000	2.64	18.25
37.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.538	0.336	0.000	7.12	12.30
37.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.538	0.336	0.000	6.29	0.00
37.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.538	0.336	0.000	2.70	18.25
37.58	(6) 1 5/8" Coax	Yes	0.08	1.200	3.96	0.03	0.03	6.542	0.339	0.000	0.24	0.41
37.58	(4) #20 Reinforcement	Yes	0.08	1.200	3.50	0.02	0.03	6.542	0.339	0.000	0.21	0.00
37.58	(2) 2" Conduit	Yes	0.08	1.200	1.50	0.01	0.01	6.542	0.339	0.000	0.09	0.61
40.00	(6) 1 5/8" Coax	Yes	2.42	1.200	3.96	0.80	0.96	6.659	0.341	0.000	7.01	11.89
40.00	(4) #20 Reinforcement	Yes	2.42	1.200	3.50	0.70	0.85	6.659	0.341	0.000	6.20	0.00
40.00	(2) 2" Conduit	Yes	2.42	1.200	1.50	0.30	0.36	6.659	0.341	0.000	2.66	17.64
42.00	(6) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	6.753	0.345	0.000	5.88	9.84
42.00	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	0.58	0.70	6.753	0.345	0.000	5.20	0.00
42.00	(2) 2" Conduit	Yes	2.00	1.200	1.50	0.25	0.30	6.753	0.345	0.000	2.23	14.60
42.50	(6) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.17	0.20	6.776	0.342	0.000	1.48	2.46

Pole :	302500				Code: ANSI/TIA-222 Rev G						4/5/2012 5:23:47 PM	
Location :	Brst Bristol, CT				Struct Class : II						Page: 46	
Height :	120.0 (ft)				Exposure Category : B							
Base Dia :	31.00 (in)				Topographic Category : 1							
Top Dia :	14.41 (in)				Base Elev : 0.000 (ft)							
Shape :	12 Sides											
Taper :	0.145033 (in/ft)											



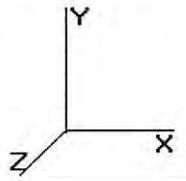
Load Case: 1.0D + 1.0W — 60.00 mph Serviceability — 26 Iterations

Gust Response Factor : 1.10 — Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

42.50	(4) #20 Reinforcement	Yes	0.50	1.200	3.50	0.15	0.17	6.776	0.342	0.000	1.30	0.00
42.50	(2) 2" Conduit	Yes	0.50	1.200	1.50	0.06	0.08	6.776	0.342	0.000	0.56	3.65
45.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.887	0.345	0.000	7.50	12.30
45.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.887	0.345	0.000	6.63	0.00
45.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.887	0.345	0.000	2.84	18.25
47.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	6.994	0.350	0.000	7.62	12.30
47.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	6.994	0.350	0.000	6.73	0.00
47.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	6.994	0.350	0.000	2.89	18.25
50.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.098	0.355	0.000	7.73	12.30
50.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.098	0.355	0.000	6.83	0.00
50.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.098	0.355	0.000	2.93	18.25
52.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.197	0.361	0.000	7.84	12.30
52.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.197	0.361	0.000	6.93	0.00
52.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.197	0.361	0.000	2.97	18.25
55.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.294	0.366	0.000	7.94	12.30
55.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.294	0.366	0.000	7.02	0.00
55.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.294	0.366	0.000	3.01	18.25
57.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.387	0.372	0.000	8.04	12.30
57.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.387	0.372	0.000	7.11	0.00
57.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.387	0.372	0.000	3.05	18.25
60.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.477	0.378	0.000	8.14	12.30
60.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.477	0.378	0.000	7.20	0.00
60.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.477	0.378	0.000	3.08	18.25
62.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.565	0.384	0.000	8.24	12.30
62.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.565	0.384	0.000	7.28	0.00
62.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.565	0.384	0.000	3.12	18.25
65.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.650	0.390	0.000	8.33	12.30
65.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.650	0.390	0.000	7.36	0.00
65.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.650	0.390	0.000	3.16	18.25
67.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.733	0.396	0.000	8.42	12.30
67.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.733	0.396	0.000	7.44	0.00
67.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.733	0.396	0.000	3.19	18.25
70.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.814	0.403	0.000	8.51	12.30
70.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.814	0.403	0.000	7.52	0.00
70.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.814	0.403	0.000	3.22	18.25
72.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.893	0.410	0.000	8.60	12.30
72.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.893	0.410	0.000	7.60	0.00
72.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.893	0.410	0.000	3.26	18.25
75.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	7.969	0.417	0.000	8.68	12.30
75.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	7.969	0.417	0.000	7.67	0.00
75.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	7.969	0.417	0.000	3.29	18.25
76.17	(6) 1 5/8" Coax	Yes	1.17	1.200	3.96	0.38	0.46	8.005	0.423	0.000	4.07	5.74
76.17	(4) #20 Reinforcement	Yes	1.17	1.200	3.50	0.34	0.41	8.005	0.423	0.000	3.60	0.00
76.17	(2) 2" Conduit	Yes	1.17	1.200	1.50	0.15	0.17	8.005	0.423	0.000	1.54	8.52
77.50	(6) 1 5/8" Coax	Yes	1.33	1.200	3.96	0.44	0.53	8.044	0.426	0.000	4.67	6.56
77.50	(4) #20 Reinforcement	Yes	1.33	1.200	3.50	0.39	0.47	8.044	0.426	0.000	4.13	0.00
77.50	(2) 2" Conduit	Yes	1.33	1.200	1.50	0.17	0.20	8.044	0.426	0.000	1.77	9.73
80.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.118	0.432	0.000	8.84	12.30
80.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.87	8.118	0.432	0.000	7.81	0.00
80.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.37	8.118	0.432	0.000	3.35	18.25
80.75	(6) 1 5/8" Coax	Yes	0.75	1.200	3.96	0.25	0.30	8.139	0.429	0.000	2.66	3.69
80.75	(4) #20 Reinforcement	Yes	0.75	1.200	3.50	0.22	0.26	8.139	0.429	0.000	2.35	0.00
80.75	(2) 2" Conduit	Yes	0.75	1.200	1.50	0.09	0.11	8.139	0.429	0.000	1.01	5.48
82.50	(6) 1 5/8" Coax	Yes	1.75	1.200	3.96	0.58	0.69	8.189	0.433	0.000	6.24	8.61
82.50	(4) #20 Reinforcement	Yes	1.75	1.200	3.50	0.51	0.61	8.189	0.433	0.000	5.52	0.00
82.50	(2) 2" Conduit	Yes	1.75	1.200	1.50	0.22	0.26	8.189	0.433	0.000	2.36	12.78
85.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.260	0.440	0.000	8.99	12.30



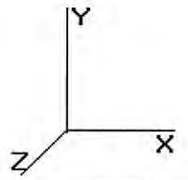
Load Case: 1.0D + 1.0W — 60.00 mph Serviceability — 26 Iterations

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

Wind Importance Factor : 1.00

85.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	8.260	0.440	0.000	7.95	0.00
85.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	8.260	0.440	0.000	3.41	18.25
87.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.328	0.448	0.000	9.07	12.30
87.50	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	8.328	0.448	0.000	8.02	0.00
87.50	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	8.328	0.448	0.000	3.44	18.25
90.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.396	0.457	0.000	9.14	12.30
90.00	(4) #20 Reinforcement	Yes	2.50	1.200	3.50	0.73	0.88	8.396	0.457	0.000	8.08	0.00
90.00	(2) 2" Conduit	Yes	2.50	1.200	1.50	0.31	0.38	8.396	0.457	0.000	3.46	18.25
92.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.462	0.351	0.000	9.21	12.30
92.50	(4) #20 Reinforcement	Yes	2.00	1.200	3.50	0.58	0.70	8.462	0.351	0.000	6.52	0.00
95.00	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.526	0.210	0.000	9.29	12.30
97.50	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.590	0.214	0.000	9.35	12.30
100.0	(6) 1 5/8" Coax	Yes	2.50	1.200	3.96	0.82	0.99	8.652	0.219	0.000	9.42	12.30
										Totals:	635.61	3,372.31

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



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

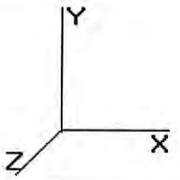
Gust Response Factor : 1.10
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Wind Importance 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
2.50	44.81	376.34	0.00	0.00
5.00	44.28	373.85	0.00	0.00
7.50	67.61	450.71	0.00	0.00
10.00	66.98	448.23	0.00	0.00
12.50	66.34	445.75	0.00	0.00
15.00	65.71	443.26	0.00	0.00
17.50	65.08	440.78	0.00	0.00
20.00	64.45	438.30	0.00	0.00
22.50	63.81	435.81	0.00	0.00
25.00	63.18	433.33	0.00	0.00
27.50	62.55	430.85	0.00	0.00
30.00	61.97	428.37	0.00	0.00
32.50	62.75	425.88	0.00	0.00
35.00	63.43	423.40	0.00	0.00
37.50	64.02	420.92	0.00	0.00
37.58	2.12	13.99	0.00	0.00
40.00	63.17	552.86	0.00	0.00
42.00	52.52	454.25	0.00	0.00
42.50	13.10	79.37	0.00	0.00
45.00	66.17	395.56	0.00	0.00
47.50	66.48	393.38	0.00	0.00
50.00	66.73	391.21	0.00	0.00
52.50	66.92	389.03	0.00	0.00
55.00	67.06	386.86	0.00	0.00
57.50	67.16	384.68	0.00	0.00
60.00	67.21	382.51	0.00	0.00
62.50	67.22	380.33	0.00	0.00
65.00	67.18	378.16	0.00	0.00
67.50	67.11	375.98	0.00	0.00
70.00	67.01	373.81	0.00	0.00
72.50	66.87	371.63	0.00	0.00
75.00	66.70	369.46	0.00	0.00
76.17	30.98	171.66	0.00	0.00
77.50	35.82	251.88	0.00	0.00
80.00	67.13	469.14	0.00	0.00
80.75	20.03	104.76	0.00	0.00
82.50	46.73	126.87	0.00	0.00
85.00	66.60	179.66	0.00	0.00
87.50	66.29	177.79	0.00	0.00
90.00	453.88	674.52	0.00	0.00
92.50	60.49	153.63	0.00	0.00
95.00	53.51	151.76	0.00	0.00
97.50	53.02	149.90	0.00	0.00
100.0	168.11	218.43	0.00	0.00
102.5	35.41	133.86	0.00	0.00
105.0	34.90	132.00	0.00	0.00
107.5	34.38	130.13	0.00	0.00
110.0	651.88	1,283.26	0.00	0.00
112.5	33.29	101.80	0.00	0.00

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



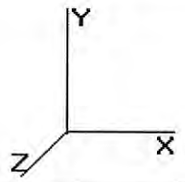
Load Case: 1.0D + 1.0W — 60.00 mph Serviceability — 26 Iterations

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

Wind Importance Factor : 1.00

115.0		32.72	99.93	0.00	0.00
117.5		32.14	98.06	0.00	0.00
120.0		969.71	2,870.70	0.00	2,052.15
	Totals:	9,420.72	61,983.17	0.00	2,052.15

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:47 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 50
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		



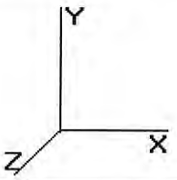
Load Case: 1.0D + 1.0W — 60.00 mph Serviceability — 26 Iterations

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

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-20.17	-4.88	0.00	-405.71	0.00	405.71	1,590.66	795.33	2,018.74	996.98	0.00	0.00	0.195
2.50	-19.79	-4.85	0.00	-393.50	0.00	393.50	1,581.24	790.62	1,982.92	979.29	0.01	-0.04	0.191
5.00	-19.41	-4.82	0.00	-381.37	0.00	381.37	1,571.59	785.80	1,947.12	961.61	0.05	-0.09	0.187
7.50	-18.95	-4.77	0.00	-369.32	0.00	369.32	1,561.72	780.86	1,911.33	943.93	0.10	-0.13	0.183
10.00	-18.50	-4.71	0.00	-357.40	0.00	357.40	1,551.63	775.81	1,875.57	926.27	0.19	-0.18	0.179
12.50	-18.05	-4.66	0.00	-345.61	0.00	345.61	1,541.31	770.66	1,839.85	908.63	0.29	-0.22	0.175
15.00	-17.61	-4.61	0.00	-333.96	0.00	333.96	1,530.78	765.39	1,804.18	891.02	0.42	-0.26	0.171
17.50	-17.16	-4.55	0.00	-322.45	0.00	322.45	1,520.01	760.01	1,768.57	873.43	0.56	-0.30	0.167
20.00	-16.72	-4.50	0.00	-311.07	0.00	311.07	1,509.03	754.52	1,733.02	855.87	0.73	-0.35	0.162
22.50	-16.28	-4.44	0.00	-299.83	0.00	299.83	1,497.83	748.91	1,697.56	838.36	0.93	-0.39	0.158
25.00	-15.85	-4.39	0.00	-288.73	0.00	288.73	1,486.40	743.20	1,662.18	820.89	1.14	-0.43	0.154
27.50	-15.41	-4.33	0.00	-277.76	0.00	277.76	1,474.74	737.37	1,626.91	803.47	1.38	-0.47	0.150
30.00	-14.98	-4.28	0.00	-266.93	0.00	266.93	1,462.87	731.44	1,591.74	786.10	1.64	-0.51	0.146
32.50	-14.56	-4.22	0.00	-256.24	0.00	256.24	1,450.77	725.39	1,556.69	768.79	1.92	-0.55	0.141
35.00	-14.13	-4.16	0.00	-245.69	0.00	245.69	1,438.45	719.23	1,521.78	751.55	2.22	-0.59	0.137
37.50	-13.71	-4.10	0.00	-235.28	0.00	235.28	1,425.91	712.96	1,487.00	734.37	2.54	-0.63	0.133
37.58	-13.69	-4.10	0.00	-234.94	0.00	234.94	1,425.49	712.74	1,485.84	733.80	2.55	-0.63	0.133
40.00	-13.14	-4.04	0.00	-225.02	0.00	225.02	1,413.15	706.57	1,452.37	717.27	2.88	-0.67	0.126
42.00	-12.68	-3.99	0.00	-216.95	0.00	216.95	1,177.15	588.58	1,220.08	602.55	3.17	-0.70	0.137
42.50	-12.60	-3.98	0.00	-214.95	0.00	214.95	1,175.29	587.65	1,214.60	599.85	3.24	-0.71	0.136
45.00	-12.21	-3.91	0.00	-205.01	0.00	205.01	1,165.87	582.93	1,187.28	586.35	3.63	-0.75	0.131
47.50	-11.81	-3.85	0.00	-195.22	0.00	195.22	1,156.22	578.11	1,160.01	572.88	4.03	-0.79	0.126
50.00	-11.42	-3.79	0.00	-185.60	0.00	185.60	1,146.35	573.17	1,132.81	559.45	4.45	-0.82	0.121
52.50	-11.03	-3.72	0.00	-176.13	0.00	176.13	1,136.25	568.13	1,105.70	546.06	4.89	-0.86	0.116
55.00	-10.64	-3.65	0.00	-166.84	0.00	166.84	1,125.94	562.97	1,078.67	532.72	5.36	-0.90	0.111
57.50	-10.25	-3.59	0.00	-157.70	0.00	157.70	1,115.40	557.70	1,051.75	519.42	5.83	-0.93	0.106
60.00	-9.87	-3.52	0.00	-148.74	0.00	148.74	1,104.64	552.32	1,024.94	506.18	6.33	-0.97	0.101
62.50	-9.49	-3.45	0.00	-139.94	0.00	139.94	1,093.65	546.83	998.25	493.00	6.85	-1.00	0.097
65.00	-9.11	-3.38	0.00	-131.32	0.00	131.32	1,082.45	541.22	971.69	479.88	7.38	-1.03	0.092
67.50	-8.73	-3.31	0.00	-122.86	0.00	122.86	1,071.02	535.51	945.28	466.84	7.93	-1.06	0.087
70.00	-8.36	-3.24	0.00	-114.58	0.00	114.58	1,059.36	529.68	919.01	453.87	8.49	-1.09	0.082
72.50	-7.99	-3.17	0.00	-106.48	0.00	106.48	1,047.49	523.74	892.91	440.97	9.07	-1.12	0.077
75.00	-7.62	-3.10	0.00	-98.55	0.00	98.55	1,035.39	517.69	866.98	428.17	9.67	-1.15	0.072
76.17	-7.45	-3.07	0.00	-94.93	0.00	94.93	1,029.67	514.83	854.94	422.22	9.95	-1.16	0.070
77.50	-7.19	-3.03	0.00	-90.84	0.00	90.84	1,023.07	511.53	841.23	415.45	10.28	-1.18	0.066
80.00	-6.73	-2.95	0.00	-83.27	0.00	83.27	831.49	415.75	686.29	338.93	10.90	-1.20	0.068
80.75	-6.62	-2.93	0.00	-81.05	0.00	81.05	828.81	414.40	680.33	335.99	11.09	-1.21	0.067
80.75	-6.62	-2.93	0.00	-81.05	0.00	81.05	828.81	414.40	680.33	335.99	11.09	-1.21	0.249
82.50	-6.49	-2.89	0.00	-75.92	0.00	75.92	822.47	411.24	666.44	329.13	11.53	-1.23	0.239
85.00	-6.31	-2.83	0.00	-68.69	0.00	68.69	813.23	406.62	646.68	319.37	12.20	-1.31	0.223
87.50	-6.13	-2.77	0.00	-61.62	0.00	61.62	803.77	401.88	627.03	309.67	12.91	-1.40	0.207
90.00	-5.46	-2.30	0.00	-54.70	0.00	54.70	794.08	397.04	607.50	300.02	13.66	-1.48	0.189
92.50	-5.31	-2.25	0.00	-48.94	0.00	48.94	784.17	392.08	588.09	290.43	14.45	-1.55	0.175
95.00	-5.16	-2.20	0.00	-43.32	0.00	43.32	774.04	387.02	568.81	280.91	15.29	-1.62	0.161
97.50	-5.01	-2.14	0.00	-37.83	0.00	37.83	763.68	381.84	549.68	271.47	16.15	-1.69	0.146
100.00	-4.79	-1.97	0.00	-32.47	0.00	32.47	753.10	376.55	530.71	262.10	17.05	-1.75	0.130
102.50	-4.66	-1.94	0.00	-27.54	0.00	27.54	742.30	371.15	511.90	252.81	17.98	-1.80	0.115
105.00	-4.52	-1.90	0.00	-22.70	0.00	22.70	731.28	365.64	493.27	243.61	18.94	-1.85	0.099
107.50	-4.39	-1.87	0.00	-17.94	0.00	17.94	715.50	357.75	471.83	233.02	19.92	-1.89	0.083
110.00	-3.13	-1.17	0.00	-13.27	0.00	13.27	699.32	349.66	450.61	222.54	20.92	-1.93	0.064
112.50	-3.03	-1.14	0.00	-10.33	0.00	10.33	683.14	341.57	429.88	212.30	21.93	-1.96	0.053

Pole :	302500	Code: ANSI/TIA-222 Rev G	4/5/2012 5:23:47 PM
Location :	Brst Bristol, CT	Struct Class : II	Page: 51
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		

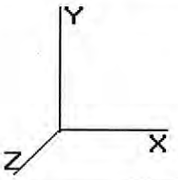


Load Case: 1.0D + 1.0W — 60.00 mph Serviceability — 26 Iterations

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

115.00	-2.93	-1.10	0.00	-7.49	0.00	7.49	666.96	333.48	409.64	202.31	22.97	-1.98	0.041
117.50	-2.84	-1.07	0.00	-4.73	0.00	4.73	650.78	325.39	389.89	192.55	24.01	-2.00	0.029
120.00	0.00	-0.97	0.00	-2.05	0.00	2.05	634.60	317.30	370.62	183.04	25.05	-2.01	0.011

Pole :	302500	Code: ANSI/TIA-222 Rev G	
Location :	Brst Bristol, CT	Struct Class : II	
Height :	120.0 (ft)	Exposure Category : B	
Base Dia :	31.00 (in)	Topographic Category : 1	
Top Dia :	14.41 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.145033 (in/ft)		

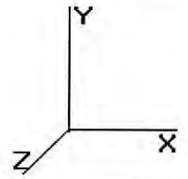


Analysis Summary

	Reactions						Max Usage	
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	19.60	0.00	23.09	0.00	0.00	1636.01	80.75	0.98
0.9D + 1.6W	19.58	0.00	18.66	0.00	0.00	1618.15	80.75	0.96
1.2D + 1.0Di + 1.0Wi	4.90	0.00	46.44	0.00	0.00	437.87	80.75	0.30
1.2D + 1.0E	2.58	0.00	23.12	0.00	0.00	282.80	80.75	0.26
0.9D + 1.0E	2.58	0.00	18.69	0.00	0.00	279.19	80.75	0.25
1.0D + 1.0W	4.88	0.00	20.17	0.00	0.00	405.71	80.75	0.25

Additional Steel Summary

			Intermediate Connectors			Upper Termination Connectors				Lower Termination Connectors				Max Member		
Elev From (ft)	Elev To (ft)	Member	VQ/I (lb/in)	Shear 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	80.7	(4) SOL-#20 All Thre	330.5	9.9	16.8	109.7	12.0	10	8	0.0	12.0	0	0	282.9	330.5	0.856



Base Summary

Reactions

Original Design			Analysis			
Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment Design %
794.00	9.62	10.32	1,636.01	46.44	19.60	206.05

Base Plate

Yield (ksi)	Thick (in)	Width (in)	Style	Poly Sides	Clip Len (in)	Effective Len (in)	Mu (kip-in)	Phi Mn (kip-in)	Ratio
60.0	2.125	44.590	Polygon	12	0.00	12.460	612.16	759.55	0.81

Anchor Bolts

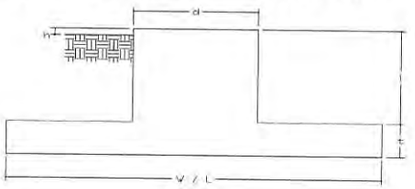
								Start	Compression			Tension		
Bolt Circle	Num Bolts	Bolt Type	Bolt Dia (in)	Yield (ksi)	Ultimate (ksi)	Arrange	Cluster Dist (in)	Angle (deg)	Force (kip)	Allow (kip)	Ratio	Force (kip)	Allow (kip)	Ratio
38.59	08	2.25" 18J	2.25	75.00	100.00	Radial	0.00	0.0	155.51	260.00	0.60	143.90	260.00	0.55

Additional Bolts

								Start	Compression			Tension		
			Area (sqin)	Capacity (kip)	Arrange	Cluster Dist (in)	Angle (deg)	Force (kip)	Allow (kip)	Ratio	Force (kip)	Allow (kip)	Ratio
37.125	4.00	#20	4.91	235.62	Radial		22.50	217.585	392.700	0.554	217.585	392.700	0.554

Site Name:	Brst Bristol, CT
Site Number:	302500
Engineering Number:	49070621
Engineer:	W. Godwin
Date:	04/05/12
Tower Type:	MP

Program Last Updated: *6/1/2010*



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

Foundation Mapped:	Y	
Compression/Leg:		k
Uplift/Leg:		k
Total Shear:	19.6	k
Moment:	1636.0	k-ft
Tower + Appurtenance Weight:	23.1	k
Depth to Base of Foundation (l + t - h):	6.50	ft
Diameter of Pier (d):	6.00	ft
Height of Pier above Ground (h):	0.50	
Width of Pad (W):	17.50	ft
Length of Pad (L):	17.60	ft
Thickness of Pad (t):	2.50	ft
Tower Leg Center to Center:	0.00	ft
Number of Tower Legs:	1.0	(1 if MP or GT)
Tower Center from Mat Center:	0.00	ft
Depth Below Ground Surface to Water Table:	20.00	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Soil Above Water Table:	120.0	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	65.0	pcf
Friction Angle of Uplift:	15.0	Degrees
Ultimate Coefficient of Shear Friction:	0.50	
Ultimate Compressive Bearing Pressure:	16000.0	psf
Ultimate Passive Pressure on Pad Face:	0.0	psf
$\phi_{Soil\ and\ Concrete\ Weight}$:	0.9	
ϕ_{Soil}:	0.75	

Overturning Moment Usage

Design OTM:	1773.2	k-ft
OTM Resistance:	2463.3	k-ft
Design OTM / OTM Resistance:	0.72	Result: OK

Soil Bearing Pressure Usage:

Total Weight (Foundation, Soil, Tower):	288.1	k
Net Bearing Pressure:	3339	psf
Nominal Bearing Pressure:	12000	psf
Net Bearing Pressure/Nominal Bearing Pressure:	0.28	Result: OK
Load Direction Controling Design Bearing Pressure:	Diagonal to Pad Edge	

Sliding Factor of Safety

Total Factored Sliding Resistance:	108.0	k
Sliding Design / Sliding Resistance:	0.18	Result: OK