



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

August 10, 2015

Camille M. Mulligan
Alcatel-Lucent
1 Robbins Road
Westford, MA 01886

RE: Compliance Extension Request

EM-SPRINT-008-130130	93 Old Amity Road	Bethany
EM-SPRINT-009-131008	8 Sky Edge Drive	Bethel
EM-SPRINT-017-131008	371 Terryville Avenue	Bristol
EM-SPRINT-018-130322	39 Carmen Hill Road	Brookfield
EM-SPRINT-033-130920	179 Shunpike Road	Cromwell
EM-SPRINT-034-130920	41 Padanaram Road	Danbury
EM-SPRINT-069-130409	246 East Franklin Street	Danielson
EM-SPRINT-035-130322	126 Ledge Road	Darien
EM-SPRINT-043-130311	310 Prestige Park Road	East Hartford
EM-SPRINT-047-131008	232 South Main Street	East Windsor
EM-SPRINT-051-130606	280 Morehouse Drive	Fairfield
EM-SPRINT-052-130606	45 Maple Ridge Road	Farmington
EM-SPRINT-057-120122	363 Riversville Road	Greenwich
EM-SPRINT-057-131127	9 Sound Shore Dr., a/k/a 12 Sound Shore Drive	Greenwich
EM-SPRINT-059-130819	99 Briar Road	Groton
EM-SPRINT-062-130509	Talmadge Road	Hamden
EM-SPRINT-068-121226	136 Bulls Bridge Road	Kent
EM-SPRINT-076-130819	135 New Road	Madison
EM-SPRINT-077-130828	Olcott Street a/k/a 250 Olcott Street	Manchester
EM-SPRINT-080-131024	21 West Peak Drive	Meriden
EM-SPRINT-081-130716	1 Service Road	Middlebury
EM-SPRINT-084-130124	528 Wheeler's Farm Rd.	Milford
EM-SPRINT-091-130606	302 Ball Pond Road	New Fairfield
EM-SPRINT-095-131008	26 Washinton Street	New London
EM-SPRINT-097-131008	8 Ferris Road	Newtown
EM-SPRINT-097-131129	201 South Main St.	Newtown
EM-SPRINT-103-121226	173/177 West Rocks Road	Norwalk
EM-SPRINT-104-131112	2 Hinkley Hill Road	Norwich
EM-SPRINT-108-130215	20 Great Oak Road	Oxford
EM-SPRINT-108-130401	133 Coppermine Road	Oxford
EM-SPRINT-108-130712	338 Oxford Road	Oxford
EM-SPRINT-119-130314	47 Inwood Road	Rocky Hill

EM-SPRINT-119-130819	52 New Britain Avenue	Rocky Hill
EM-SPRINT-120-130828	Lower County Road a/k/a 35 Lower County Road	Roxbury
EM-SPRINT-126-130325	219 Nells Rock Road	Shelton
EM-SPRINT-126-130515	70 Platt Road	Shelton
EM-SPRINT-128-131112	22 Wintonbury Road (aka 49a and 53 Wintonbury Road)	Simsbury
EM-SPRINT-130-130531	1432 Old Waterbury Road	Southbury
EM-SPRINT-135-130128	69 Guinea Road	Stamford
EM-SPRINT-135-131112	366 Old Long Ridge Road	Stamford
EM-SPRINT-143-130712	350 Burr Mountain Road	Torrington
EM-SPRINT-151-131209	184 Garden Circle	Waterbury
EM-SPRINT-155-130828	345 North Main Street a/k/a 333 North Main Street	West Hartford
EM-SPRINT-157-130701	56 Norfield Road	Weston
EM-SPRINT-164-130920	Windsor Avenue a/k/a 494 Windsor Avenue	Windsor
EM-SPRINT-NEXTEL-166-130116	164 County Road	Wolcott

Dear Ms. Mulligan:

The Connecticut Siting Council (Council) is in receipt of your letter dated August 10, 2015, submitted on behalf of Sprint, requesting an extension of time to submit notices of completion of construction and associated post modification inspection reports for the above-referenced exempt modifications that were approved in 2013.

Please be advised that Council approval of these exempt modifications has expired. Therefore, any additional changes to these facilities will require explicit notice to the Council pursuant to Regulations of Connecticut State Agencies Section 16-50j-73 and a filing fee.

Thank you for your attention to this matter.

Sincerely,



Melanie A. Bachman
Acting Executive Director

MAB/cm



STATE OF CONNECTICUT

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April 5, 2013

Brian McKay
Sprint
48 Spruce Street
Oakland, NJ 07436

RE: **EM-SPRINT-043-130311** – Sprint Spectrum notice of intent to modify an existing telecommunications facility located at 310 Prestige Park Road, East Hartford, Connecticut.

Dear Mr. McKay:

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

- Prior to antenna installation, the reinforcements identified in the American Tower Corporation's Structural Analysis Report dated January 2, 2013 and stamped by Hanming You and in the drawings prepared by American Tower Corporation and entitled, "302473 – EHFR – Prestige Park, CT, Modification for a 150' Monopole," dated January 17, 2013 and stamped by Jaime Reyes shall be implemented;
- Within 45 days following completion of the antenna installation, a signed letter from a Professional Engineer duly licensed in the State of Connecticut shall be submitted to the Council to certify that the recommended modifications have been completed and the structure and foundation do not exceed 100 percent of the post-construction structural rating.
- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated March 1, 2013. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies

electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

A handwritten signature in black ink, appearing to read "L. Roberts", is positioned above the typed name.

Linda Roberts
Executive Director

LR/CDM/cm

c: The Honorable Marcia A. Leclerc, Mayor, Town of East Hartford
Michael J. Dayton, Town Planner, Town of East Hartford

EM-SPRINT-043-130311



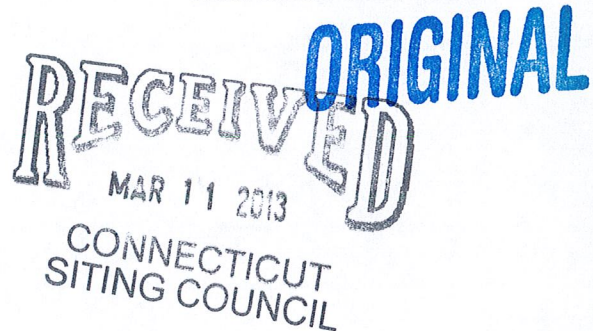
Together with Nextel

48 Spruce Street
Oakland, NJ 07436
Phone: (973)-652-6824
Brian McKay
Real Estate Consultant

March 1st 2013

Hand Delivered

Ms. Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051



RE: Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 310 Prestige Park Road East Hartford, CT. Known to Sprint Spectrum L.P. as site CT54XC784.

Dear Ms. Roberts:

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

CDMA employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel. LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

As part of the project the new multi-mode 800/1900 antenna will replace existing antennas. These antennas will provide more flexibility for optimization by allowing fast and easy electrical tilt adjustment from remote location and will enable the transmission of multiple technologies from a single antenna. As Sprint Nextel's network evolves to meet the demands of its customers, it is essential for Sprint Nextel to install modern equipment and antennas in order to provide reliable wireless voice and data services. The

proposed equipment will include multi-mode radios that will allow Sprint Nextel to transmit at different frequencies using different technologies, including LTE technology. Likewise, the proposed antennas are quad-pole multi-band high gain antennas that will allow Sprint to operate using its multiple frequency bands and technologies, including LTE technology. The proposed equipment and antennas will improve the reliability, coverage and capacity of Sprint Nextel's voice and data networks across Sprint Nextel's various FCC licensed frequency bands and significantly increase the data speeds of Sprint Nextel's network by utilizing the latest LTE technology. Without the proposed modifications Sprint Nextel will be unable to provide reliable wireless voice and data service using the latest technologies.

Sprint Spectrum L.P. will have an interim (testing) period during the modification/installation prior to the final configuration. This antenna configuration is shown on the attached drawings of the planned modifications. Also included is the power density calculation reflecting the change in Sprint's operations at the site and documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

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

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

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

Please feel free to call me at 973-652-6824 or email Bmckay@Transcendwireless.com with questions concerning this matter.
Thank you for your consideration.

Sincerely,

Brian McKay
Real Estate Consultant



Together with Nextel

48 Spruce Street
Oakland, NJ 07436
Phone: (973)-652-6824
Brian McKay
Real Estate Consultant

March 1st 2013

Hand Delivered

Ms. Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

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Please feel free to call me at 973-652-6824 or email Bmckay@Transcendwireless.com with questions concerning this matter.
Thank you for your consideration.

Sincerely,

Brian Mckay
Real Estate Consultant



EBI Consulting

environmental | engineering | due diligence

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

Sprint Existing Facility

Site ID: CT54XC784

Manchester Spectrasite
2 Prestige Park Drive
East Hartford, CT 06108

November 12, 2012

November 12, 2012

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

Re: Emissions Values for Site: **CT54XC784 – Manchester Spectrasite**

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 2 Prestige Park Drive, East Hartford, CT, for the purpose of determining whether the emissions from the proposed Sprint equipment upgrades on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the cellular band is approximately 567 $\mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS band is 1000 $\mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed upgrades to the existing Sprint Wireless antenna facility located at 2 Prestige Park Drive, East Hartford, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario. Actual values seen from this site will be dramatically less than those shown in this report. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

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

- 1) 5 CDMA Carriers (1900 MHz) were considered for each sector of the proposed installation.
- 2) 1 CDMA Carrier (850 MHz) was considered for each sector of the proposed installation
- 3) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 4) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
- 5) The antenna used in this modeling is the APXVSPP18-C-A20. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario.

- 6) The antenna mounting height centerline of the proposed antennas is **138 feet** above ground level (AGL)
- 7) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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

Summary

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

The anticipated Maximum Composite contributions from the Sprint facility are **25.720 % (8.573 % from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **25.720 %** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions

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



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 150 ft Monopole
ATC Site Name : E H F R - Prestige Park, CT
ATC Site Number : 302473
Engineering Number : 51574121
Proposed Carrier : Sprint Nextel
Carrier Site Name : N/A
Carrier Site Number : CT54XC784
Site Location : 310 Prestige Park Rd.
East Hartford, CT 06108-1206
41.788333,-72.600556
County : Hartford
Date : January 2, 2013
Max Usage : 114%
Result : Fail

Robert Keith
Project Engineer



1/2/13



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 150 ft Monopole
ATC Site Name : E H F R - Prestige Park, CT
ATC Site Number : 302473
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Robert Keith
Project Engineer



Eng. Number 51574121
January 2, 2013

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Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 150 ft monopole to reflect the change in loading by Sprint Nextel.

Supporting Documents

Tower Drawings	AT&T Specification AT-8935 Type "B" 150' Mast
Foundation Drawing	Girard & Co. Engineers drawing 38904 dated 4/20/83
Geotechnical Report	GeoTechnologies, Inc. Project No. 1-02-1122-EA dated 9/6/02

Analysis

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

Basic Wind Speed:	95 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
Structure Class:	II
Exposure Category:	B
Topographic Category:	1

Conclusion

Based on the analysis results, the structure does not meet the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report after the modifications listed below are completed:

- Reinforce the pole shaft and anchor bolts by installing (4) #20 Dywidag reinforcing bars from the foundation up to 85'.

If you have any questions or require additional information, please contact me via email at robert.keith@americantower.com or call 972-999-8923.

Existing and Reserved Equipment

Mount Elev. ¹ (ft)	Qty.	Antenna	Mount Type	Lines	Carrier
150.0	1	6' Omni	Platform	(1) 1 5/8" Coax	USA Mobility
	6	ADC DD1900		(12) 7/8" Coax (2) 19.7 mm Cable (1) 3/8" Control (1) 10 mm Cable	AT&T Mobility
	6	CSS DUO4-8670			
	6	Ericsson RRUS 11			
	6	Kathrein 860 10025			
	3	KMW AM-X-CD-16-65-00T-RET			
	1	Raycap DC6-48-60-18-8F			
138.0	6	Decibel DB980F65E-M	T-Arms	(6) 1 5/8" Coax	Sprint Nextel
128.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8" Coax	Metro PCS
118.0	3	Argus LLPX310R	Pipe	(6) 5/16" Coax (3) 1/2" Coax (1) 2" Conduit	Clearwire Corporation
	1	DragonWave A-ANT-23G-1-C			
	2	DragonWave A-ANT-23G-2-C			
	3	DragonWave Horizon Compact			
	1	Generic 12" x 12" Junction Box			
	3	NextNet BTS-2500			
35.0	1	PCTEL GPS-TMG-HR-26N	Stand-off	(1) 1/2" Coax	AT&T Mobility
34.0	1	GPS	Stand-off	(1) 1/2" Coax	Sprint Nextel

Proposed Equipment

Elevation ¹ (ft)		Qty.	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
138.0	138.0	6	Alcatel-Lucent 4X40W RRH	T-Arms	(3) 1 1/4" Hybriflex	Sprint Nextel
		3	Alcatel-Lucent 800 MHz RRH w/			
		2	RFS APXV9ERR18-C-A20			
		1	RFS APXVSPP18-C-A20			
		3	RFS IBC1900BB-1			
		3	RFS IBC1900HG-2A			

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

Install proposed lines inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	114%	Fail
Shaft	111%	Fail
Base Plate	95%	Pass

Foundations

Reaction Component	Analysis Reactions
Moment (Kips-Ft)	2,086.4
Axial (Kips)	50.0
Shear (Kips)	19.1

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.

The foundation and connections to the tower have factors of safety exceeding 2.0 with respect to wind.

Deflection and Sway*

Antenna Elevation (ft)	Deflection (ft)	Sway (Rotation) (°)
138.0	4.148	3.561

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



Standard Conditions

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

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

It is the responsibility of the client to ensure that the information provided to ATC 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.

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

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

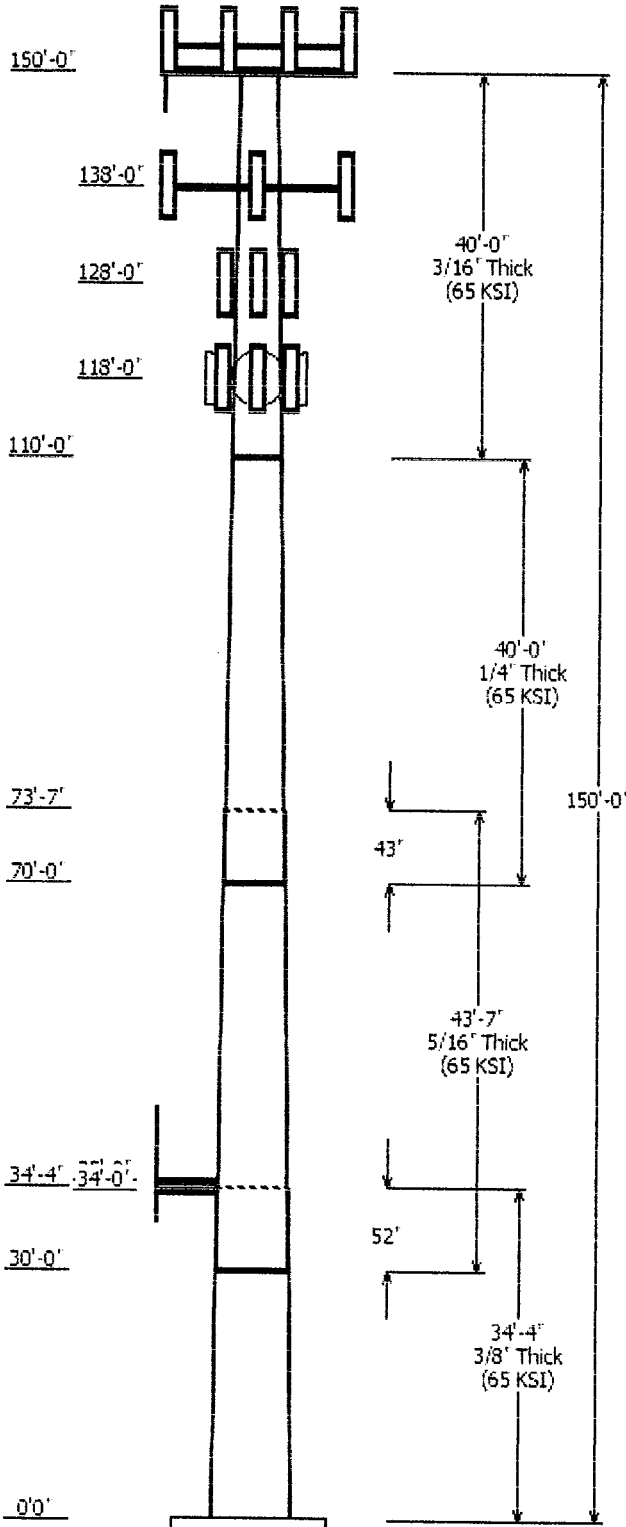
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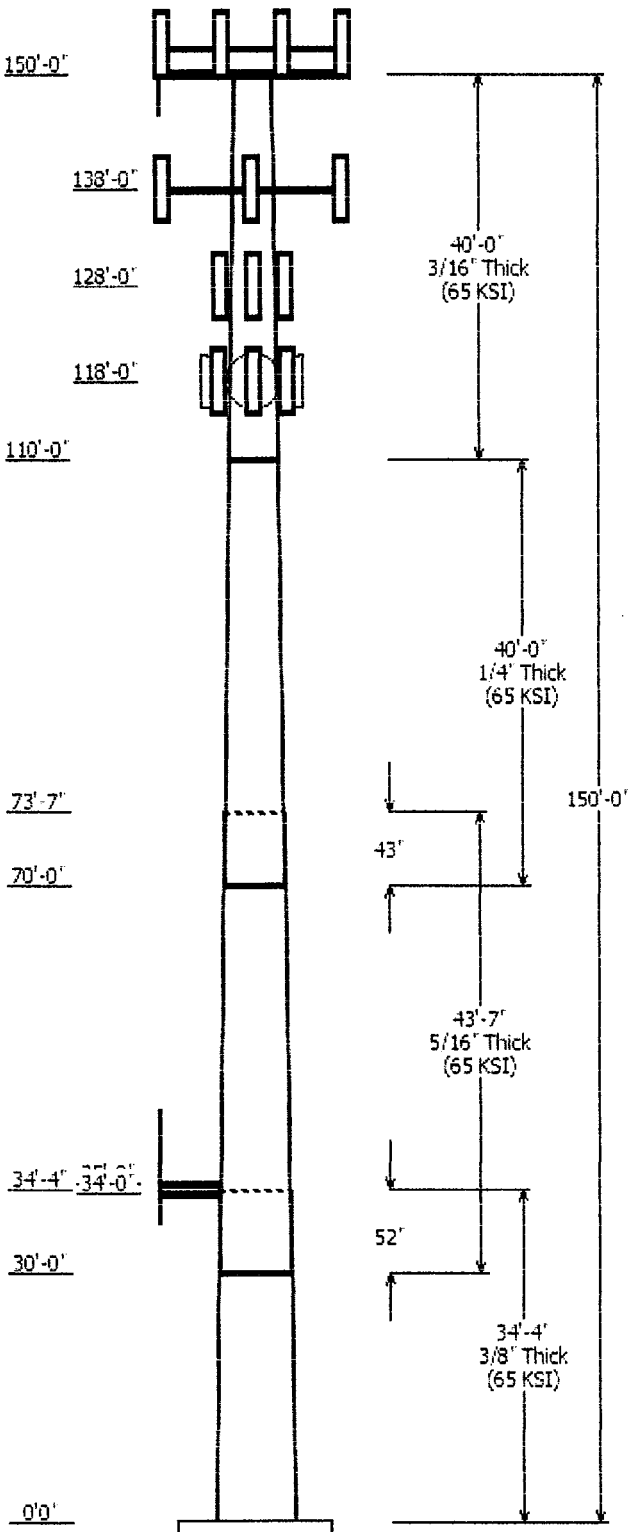
Job Information			
Pole :	302473	Code:	ANSI/TIA-222 Rev G
Description :	150' ITT Meyer Type "B" Monopole		
Client :	Sprint Nextel	Struct Class :	II
Location :	EHFR - Prestige Park, CT		
Shape :	12 Sides	Exposure :	B
Height :	150.00 (ft)	Topo :	1
Base Elev (ft):	0.00		
Taper:	0.15083(in/ft)		

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
		Across	Flats					
1	34.333	30.82	36.00	0.375		0.000	0.150831	65
2	43.583	25.52	32.10	0.313	Slip Joint	52.000	0.150831	65
3	40.000	20.53	26.56	0.250	Slip Joint	43.000	0.150831	65
4	40.000	14.50	20.53	0.188	Butt Joint	0.000	0.150831	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
150.000	153.000	6	Kathrein 860 10025	
150.000	153.000	6	ADC DD1900	
150.000	153.000	3	KMW AM-X-CD-16-65-00T-RET	
150.000	151.000	6	Ericsson RRUS 11	
150.000	151.000	1	Raycap DC6-48-60-18-8F	
150.000	153.000	6	CSS DUO4-8670	
150.000	150.000	1	6' Omni	
150.000	150.000	1	Platform	
138.000	138.000	3	Alcatel-Lucent 800 MHz RRH w/	
138.000	138.000	6	Alcatel-Lucent 4X40W RRH	
138.000	138.000	3	RFS IBC1900BB-1	
138.000	138.000	3	RFS IBC1900HG-2A	
138.000	138.000	1	RFS APXVSP18-C-A20	
138.000	138.000	2	RFS APXV9ERR18-C-A20	
138.000	138.000	6	Decibel DB980F65E-M	
138.000	138.000	3	T-Arms	
128.000	128.000	1	Flush Mounts	
128.000	128.000	3	RFS APXV18-206517S-C	
118.000	118.000	3	NextNet BTS-2500	
118.000	118.000	1	Generic 12" x 12" Junction Box	
118.000	118.000	3	DragonWave Horizon Compact	
118.000	118.000	2	DragonWave A-ANT-23G-2-C	
118.000	118.000	1	DragonWave A-ANT-23G-1-C	
118.000	118.000	1	Clearwire Mount	
118.000	118.000	3	Argus LLPX310R	
35.000	35.000	1	Stand-off	
35.000	35.000	1	PCTEL GPS-TMG-HR-26N	
34.000	34.000	1	Stand-off	
34.000	34.500	1	GPS	

Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
4.000	118.0	1/2" Coax	No
4.000	118.0	2" Conduit	No
4.000	118.0	5/16" Coax	No
4.000	128.0	1 5/8" Coax	Yes
4.000	34.000	1/2" Coax	Yes
0.000	35.000	1/2" Coax	Yes
0.000	138.0	1 1/4" Hybriflex	No
0.000	138.0	1 5/8" Coax	No





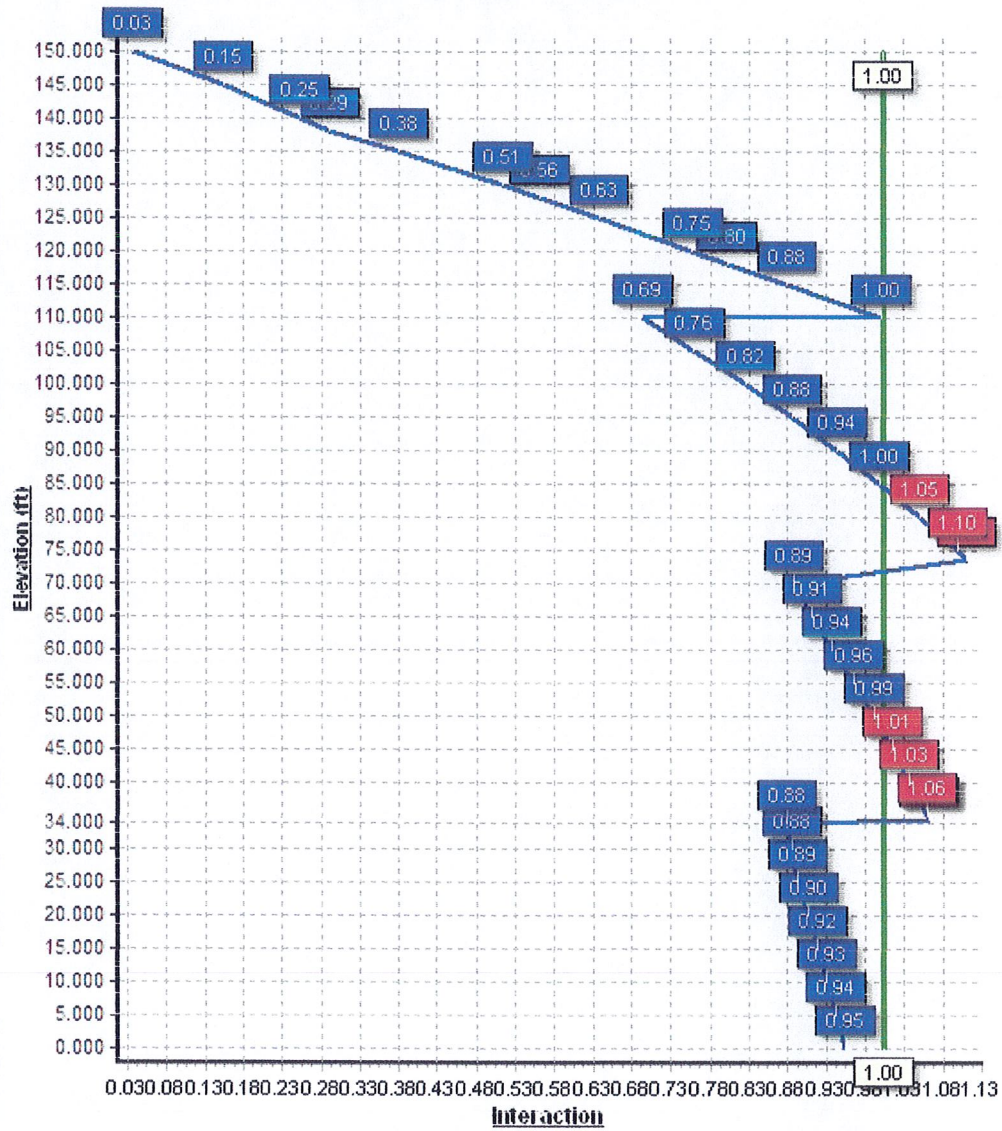
0.000	150.0	1 5/8" Coax	No
0.000	150.0	10 mm Cable	No
0.000	150.0	19.7 mm Cable	No
0.000	150.0	3/8" Control	No
0.000	150.0	7/8" Coax	No

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

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	2086.44	19.08	25.18
0.9D + 1.6W	2035.13	19.05	18.87
1.2D + 1.0Di + 1.0Wi	625.99	4.78	49.96
1.0D + 1.0W	515.71	4.75	21.03

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	118.00	35.725	3.091
1.0D + 1.0W	118.00	35.725	3.091

Load Case : 1.2D + 1.6W
Max Ratio 95.39% at 110.0ft

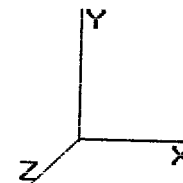


Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Slip			Bottom					Top							
				Joint Type	Joint Len (in)	Weight (lb)	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-12	34.333	0.3750	65		0.00	4,660	36.00	0.00	43.02	6968.5	23.58	96.00	30.82	34.33	36.76	4349.9	19.88	82.19	0.150831
2-12	43.583	0.3125	65	Slip	52.00	4,253	32.10	30.00	31.99	4125.4	25.38	102.72	25.52	73.58	25.37	2058.8	19.74	81.68	0.150831
3-12	40.000	0.2500	65	Slip	43.00	2,553	26.56	70.00	21.19	1872.8	26.33	106.27	20.53	110.00	16.33	857.5	19.86	82.13	0.150831
4-12	40.000	0.1875	65	Butt	0.00	1,424	20.53	110.00	12.28	649.1	27.20	109.51	14.50	150.00	8.64	226.0	18.58	77.33	0.150831
Shaft Weight						12,891													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
150.00	6' Omni	1	35.00	1.770	1.00	67.58	3.418	1.00	0.000	0.000
150.00	ADC DD1900	6	12.10	1.280	0.50	37.79	2.362	0.50	0.000	3.000
150.00	CSS DU04-8670	6	38.50	6.590	0.82	278.61	7.246	0.82	0.000	3.000
150.00	Ericsson RRUS 11	6	55.00	2.940	0.71	171.00	3.408	0.71	0.000	1.000
150.00	Kathrein 860 10025	6	1.20	0.180	1.00	18.66	0.484	1.00	0.000	3.000
150.00	KMW AM-X-CD-16-65-00T-Platform	3	48.50	8.260	0.75	317.43	9.784	0.75	0.000	3.000
150.00	Raycap DC6-48-60-18-8F	1	31.80	1.470	1.00	3,475.41	57.923	1.00	0.000	0.000
138.00	Alcatel-Lucent 4X40W RRH	6	59.50	2.710	0.50	114.23	2.403	1.00	0.000	1.000
138.00	Alcatel-Lucent 800 MHz RRH	3	61.80	2.910	0.50	194.59	3.235	0.50	0.000	0.000
138.00	Decibel DB980F65E-M	6	10.00	3.750	0.75	210.69	3.382	0.50	0.000	0.000
138.00	RFS APXV9ERR18-C-A20	2	62.00	8.260	0.83	144.28	5.163	0.75	0.000	0.000
138.00	RFS APXVSP18-C-A20	1	57.00	8.260	0.83	354.58	9.768	0.83	0.000	0.000
138.00	RFS IBC1900BB-1	3	22.00	1.130	0.50	337.68	9.768	0.83	0.000	0.000
138.00	RFS IBC1900HG-2A	3	22.00	1.130	0.50	74.96	1.559	0.50	0.000	0.000
138.00	T-Arms	3	250.00	6.000	0.75	74.96	1.559	0.50	0.000	0.000
128.00	Flush Mounts	1	200.00	3.500	1.00	526.92	12.757	0.75	0.000	0.000
128.00	RFS APXV18-206517S-C	3	26.40	5.160	0.74	658.07	8.310	1.00	0.000	0.000
118.00	Argus LLPX310R	3	28.60	4.830	0.69	195.39	6.825	0.74	0.000	0.000
118.00	Clearwire Mount	1	40.00	8.500	1.00	179.27	5.486	0.69	0.000	0.000
118.00	DragonWave A-ANT-23G-1-C	1	15.00	1.610	1.00	83.62	17.769	1.00	0.000	0.000
118.00	DragonWave A-ANT-23G-2-C	2	12.30	4.690	0.90	61.09	2.598	1.00	0.000	0.000
118.00	DragonWave Horizon	3	10.60	0.430	0.50	70.21	6.352	0.90	0.000	0.000
118.00	Generic 12" x 12" Junction	1	10.00	1.400	1.00	39.93	1.095	0.50	0.000	0.000
118.00	NextNet BTS-2500	3	35.00	2.120	0.73	64.33	2.504	1.00	0.000	0.000
35.00	PCTEL GPS-TMG-HR-26N	1	0.60	0.090	1.00	116.09	2.559	0.73	0.000	0.000
35.00	Stand-off	1	50.00	2.000	1.00	14.20	0.317	1.00	0.000	0.000
34.00	GPS	1	10.00	1.000	1.00	90.24	3.609	1.00	0.000	0.000
34.00	Stand-off	1	50.00	2.000	1.00	43.70	1.818	1.00	0.000	0.500
Totals		79	5020.50			16,226.25	3.605	1.00	0.000	0.000
										Number of Loadings : 29

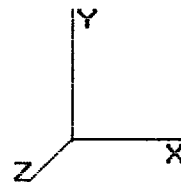
Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
0.00	150.00	(1) 1 5/8" Coax	0.00	N
0.00	150.00	(1) 10 mm Cable	0.00	N
0.00	150.00	(2) 19.7 mm Cable	0.00	N
0.00	150.00	(1) 3/8" Control	0.00	N

Pole : 302473
Location : EHFR - Prestige Park, CT
Height : 150.0 (ft)
Base Dia : 36.00 (in)
Top Dia : 14.50 (in)
Shape : 12 Sides
Taper : 0.150831 (in/ft)

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

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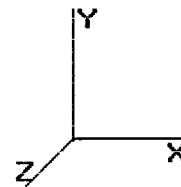


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0.00	150.00	(12) 7/8" Coax	0.00	N
0.00	138.00	(3) 1 1/4" Hybriflex	0.00	N
0.00	138.00	(6) 1 5/8" Coax	0.00	N
4.00	128.00	(6) 1 5/8" Coax	1.98	Y
4.00	118.00	(3) 1/2" Coax	0.00	N
4.00	118.00	(1) 2" Conduit	0.00	N
4.00	118.00	(6) 5/16" Coax	0.00	N
0.00	35.00	(1) 1/2" Coax	0.00	Y
4.00	34.00	(1) 1/2" Coax	0.63	Y

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

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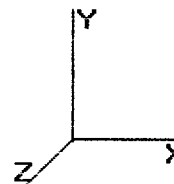
Segment Properties (Max Len : 5 ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	S (in3)	Weight (lb)
0.00		0.3750	36.000	43.017	6,968.5	23.58	96.00	79.0	373.9	0.0
5.00		0.3750	35.246	42.107	6,535.2	23.04	93.99	79.6	358.2	724.1
10.00		0.3750	34.492	41.196	6,120.3	22.50	91.98	80.2	342.8	708.6
15.00		0.3750	33.738	40.285	5,723.3	21.96	89.97	80.8	327.7	693.2
20.00		0.3750	32.983	39.375	5,343.9	21.42	87.96	81.3	313.0	677.7
25.00		0.3750	32.229	38.464	4,981.7	20.89	85.94	81.9	298.6	662.2
30.00	Bot - Section 2	0.3750	31.475	37.553	4,636.1	20.35	83.93	81.9	284.6	646.7
34.00		0.3750	30.872	36.825	4,371.5	19.92	82.32	81.9	273.6	937.4
34.33	Top - Section 1	0.3125	31.446	31.329	3,876.1	24.82	100.63	77.6	238.1	77.3
35.00		0.3125	31.346	31.227	3,838.7	24.73	100.31	77.7	236.6	71.0
40.00		0.3125	30.592	30.469	3,565.6	24.09	97.89	78.4	225.2	524.8
45.00		0.3125	29.838	29.710	3,305.7	23.44	95.48	79.1	214.0	511.9
50.00		0.3125	29.083	28.951	3,058.8	22.79	93.07	79.9	203.2	499.0
55.00		0.3125	28.329	28.192	2,824.5	22.15	90.65	80.6	192.6	486.1
60.00		0.3125	27.575	27.433	2,602.5	21.50	88.24	81.3	182.3	473.2
65.00		0.3125	26.821	26.674	2,392.5	20.85	85.83	81.9	172.3	460.3
70.00	Bot - Section 3	0.3125	26.067	25.915	2,194.0	20.21	83.41	81.9	162.6	447.4
73.58	Top - Section 2	0.2500	26.026	20.750	1,759.7	25.75	104.11	76.6	130.6	568.3
75.00		0.2500	25.813	20.578	1,716.3	25.52	103.25	76.9	128.5	99.6
80.00		0.2500	25.059	19.971	1,568.9	24.71	100.23	77.8	120.9	344.9
85.00		0.2500	24.304	19.364	1,430.1	23.91	97.22	78.6	113.7	334.6
90.00		0.2500	23.550	18.757	1,299.8	23.10	94.20	79.5	106.6	324.3
95.00		0.2500	22.796	18.150	1,177.6	22.29	91.18	80.4	99.8	314.0
100.0		0.2500	22.042	17.542	1,063.3	21.48	88.17	81.3	93.2	303.6
105.0		0.2500	21.288	16.935	956.7	20.67	85.15	81.9	86.8	293.3
110.0	Top - Section 3	0.2500	20.534	16.328	857.5	19.86	82.13	81.9	80.7	283.0
110.0	Bot - Section 4	0.1875	20.534	12.284	649.1	27.20	109.51	75.0	61.1	
115.0		0.1875	19.779	11.829	579.5	26.12	105.49	76.2	56.6	205.1
118.0		0.1875	19.327	11.555	540.3	25.48	103.08	76.9	54.0	119.4
120.0		0.1875	19.025	11.373	515.1	25.04	101.47	77.4	52.3	78.0
125.0		0.1875	18.271	10.918	455.7	23.97	97.45	78.6	48.2	189.6
128.0		0.1875	17.819	10.645	422.4	23.32	95.03	79.3	45.8	110.1
130.0		0.1875	17.517	10.463	401.1	22.89	93.42	79.8	44.2	71.8
135.0		0.1875	16.763	10.007	350.9	21.81	89.40	80.9	40.4	174.1
138.0		0.1875	16.310	9.734	323.0	21.16	86.99	81.6	38.3	100.8
140.0		0.1875	16.009	9.552	305.2	20.73	85.38	81.9	36.8	65.6
145.0		0.1875	15.255	9.097	263.6	19.66	81.36	81.9	33.4	158.6
150.0		0.1875	14.500	8.641	226.0	18.58	77.34	81.9	30.1	150.9
										12,890.6

Pole : 302473
 Location : E H F R - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.6W

95.00 mph with No Ice

32 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

Shaft Segment Forces (Factored)

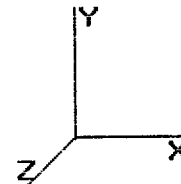
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	246.86	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	241.68	1.000	0.000	5.00	15.366	15.37	415.5	0.0	869.0
10.00		1.00	0.70	15.364	16.90	236.51	1.000	0.000	5.00	15.041	15.04	406.7	0.0	850.4
15.00		1.00	0.70	15.364	16.90	231.34	1.000	0.000	5.00	14.716	14.72	397.9	0.0	831.8
20.00		1.00	0.70	15.364	16.90	226.17	1.000	0.000	5.00	14.391	14.39	389.1	0.0	813.2
25.00		1.00	0.70	15.364	16.90	221.00	1.000	0.000	5.00	14.065	14.07	380.3	0.0	794.6
30.00	Bot - Section 2	1.00	0.70	15.377	16.91	215.92	1.000	0.000	5.00	13.740	13.74	371.9	0.0	776.0
34.00	Appertunance(s)	1.00	0.72	15.937	17.53	215.60	1.000	0.000	4.00	10.973	10.97	307.8	0.0	1,124.9
34.33	Top - Section 1	1.00	0.72	15.981	17.58	215.55	1.000	0.000	0.33	0.905	0.90	25.5	0.0	92.7
35.00	Appertunance(s)	1.00	0.73	16.070	17.67	219.82	1.000	0.000	0.67	1.806	1.81	51.1	0.0	85.1
40.00		1.00	0.76	16.694	18.36	218.66	1.000	0.000	5.00	13.359	13.36	392.5	0.0	629.8
45.00		1.00	0.78	17.266	18.99	216.89	1.000	0.000	5.00	13.034	13.03	396.1	0.0	614.3
50.00		1.00	0.81	17.793	19.57	214.62	1.000	0.000	5.00	12.708	12.71	398.0	0.0	598.8
55.00		1.00	0.83	18.285	20.11	211.92	1.000	0.000	5.00	12.383	12.38	398.5	0.0	583.3
60.00		1.00	0.85	18.745	20.61	208.85	1.000	0.000	5.00	12.058	12.06	397.8	0.0	567.8
65.00		1.00	0.87	19.179	21.09	205.48	1.000	0.000	5.00	11.732	11.73	396.0	0.0	552.3
70.00	Bot - Section 3	1.00	0.89	19.589	21.54	201.83	1.000	0.000	5.00	11.407	11.41	393.3	0.0	536.8
73.58	Top - Section 2	1.00	0.90	19.870	21.85	199.06	1.000	0.000	3.58	8.129	8.13	284.3	0.0	682.0
75.00		1.00	0.91	19.979	21.97	201.84	1.000	0.000	1.42	3.168	3.17	111.4	0.0	119.5
80.00		1.00	0.92	20.351	22.38	197.76	1.000	0.000	5.00	10.972	10.97	393.0	0.0	413.9
85.00		1.00	0.94	20.706	22.77	193.47	1.000	0.000	5.00	10.647	10.65	388.0	0.0	401.5
90.00		1.00	0.95	21.047	23.15	189.01	1.000	0.000	5.00	10.321	10.32	382.3	0.0	389.1
95.00		1.00	0.97	21.375	23.51	184.37	1.000	0.000	5.00	9.996	10.00	376.1	0.0	376.8
100.0		1.00	0.98	21.690	23.86	179.58	1.000	0.000	5.00	9.671	9.67	369.2	0.0	364.4
105.0		1.00	1.00	21.995	24.19	174.65	1.000	0.000	5.00	9.345	9.35	361.8	0.0	352.0
110.0	Top - Section 3	1.00	1.01	22.289	24.51	169.59	1.000	0.000	5.00	9.020	9.02	353.8	0.0	339.6
115.0		1.00	1.02	22.574	24.83	164.40	1.000	0.000	5.00	8.695	8.69	345.5	0.0	246.2
118.0	Appertunance(s)	1.00	1.03	22.741	25.01	161.23	1.000	0.000	3.00	5.061	5.06	202.6	0.0	143.2
120.0		1.00	1.04	22.850	25.13	159.10	1.000	0.000	2.00	3.309	3.31	133.1	0.0	93.6
125.0		1.00	1.05	23.118	25.43	153.68	1.008 *	0.000	5.00	8.044	8.11	329.8	0.0	227.6
128.0	Appertunance(s)	1.00	1.06	23.276	25.60	150.39	1.018 *	0.000	3.00	4.670	4.75	194.8	0.0	132.1
130.0		1.00	1.06	23.379	25.71	148.17	1.000	0.000	2.00	3.049	3.05	125.4	0.0	86.2
135.0		1.00	1.07	23.632	25.99	142.55	1.000	0.000	5.00	7.394	7.39	307.5	0.0	209.0
138.0	Appertunance(s)	1.00	1.08	23.781	26.15	139.14	1.000	0.000	3.00	4.280	4.28	179.1	0.0	120.9
140.0		1.00	1.08	23.879	26.26	136.85	1.000	0.000	2.00	2.788	2.79	117.2	0.0	78.8
145.0		1.00	1.09	24.120	26.53	131.06	1.000	0.000	5.00	6.743	6.74	286.2	0.0	190.4
150.0	Appertunance(s)	1.00	1.11	24.355	26.79	125.18	1.000	0.000	5.00	6.418	6.42	275.1	0.0	181.1
								Totals:		150.00		11,034.1	0.0	15,468.8

* = Cf Adjusted By Linear Load Ra Effect

Pole : 302473
 Location : E H F R - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.6W

95.00 mph with No Ice

32 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

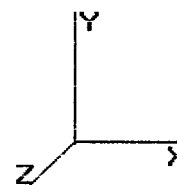
Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	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)
34.00	GPS	1	16.004	17.604	1.00	1.00	1.00	0.000	0.500	28.17	0.00	14.08	12.00
34.00	Stand-off	1	15.937	17.531	1.00	1.00	2.00	0.000	0.000	56.10	0.00	0.00	60.00
35.00	PCTEL GPS-TMG-HR-	1	16.070	17.676	1.00	1.00	0.09	0.000	0.000	2.55	0.00	0.00	0.72
35.00	Stand-off	1	16.070	17.676	1.00	1.00	2.00	0.000	0.000	56.56	0.00	0.00	60.00
118.0	Argus LLPX310R	3	22.741	25.015	0.55	0.80	8.00	0.000	0.000	320.13	0.00	0.00	102.96
118.0	Clearwire Mount	1	22.741	25.015	1.00	1.00	8.50	0.000	0.000	340.20	0.00	0.00	48.00
118.0	DragonWave A-ANT-	1	22.741	25.015	1.00	1.00	1.61	0.000	0.000	64.44	0.00	0.00	18.00
118.0	DragonWave A-ANT-	2	22.741	25.015	0.90	1.00	8.44	0.000	0.000	337.88	0.00	0.00	29.52
118.0	DragonWave Horizon	3	22.741	25.015	0.40	0.80	0.52	0.000	0.000	20.65	0.00	0.00	38.16
118.0	Generic 12" x 12" Ju	1	22.741	25.015	1.00	1.00	1.40	0.000	0.000	56.03	0.00	0.00	12.00
118.0	NextNet BTS-2500	3	22.741	25.015	0.58	0.80	3.71	0.000	0.000	148.66	0.00	0.00	126.00
128.0	Flush Mounts	1	23.276	25.603	1.00	1.00	3.50	0.000	0.000	143.38	0.00	0.00	240.00
128.0	RFS APXV18-206517S-	3	23.276	25.603	0.59	0.80	9.16	0.000	0.000	375.41	0.00	0.00	95.04
138.0	Alcatel-Lucent 4X40W	6	23.781	26.159	0.40	0.80	6.50	0.000	0.000	272.23	0.00	0.00	428.40
138.0	Alcatel-Lucent 800 M	3	23.781	26.159	0.40	0.80	3.49	0.000	0.000	146.16	0.00	0.00	222.48
138.0	Decibel DB980F65E-M	6	23.781	26.159	0.60	0.80	13.50	0.000	0.000	565.04	0.00	0.00	72.00
138.0	RFS APXV9ERR18-C-	2	23.781	26.159	0.66	0.80	10.97	0.000	0.000	459.12	0.00	0.00	148.80
138.0	RFS APXVSP18-C-	1	23.781	26.159	0.66	0.80	5.48	0.000	0.000	229.56	0.00	0.00	68.40
138.0	RFS IBC1900BB-1	3	23.781	26.159	0.40	0.80	1.36	0.000	0.000	56.76	0.00	0.00	79.20
138.0	RFS IBC1900HG-2A	3	23.781	26.159	0.40	0.80	1.36	0.000	0.000	56.76	0.00	0.00	79.20
138.0	T-Arms	3	23.781	26.159	0.56	0.75	10.13	0.000	0.000	423.78	0.00	0.00	900.00
150.0	6' Omni	1	24.355	26.790	1.00	1.00	1.77	0.000	0.000	75.87	0.00	0.00	42.00
150.0	ADC DD1900	6	24.493	26.942	0.40	0.80	3.07	0.000	3.000	132.43	0.00	397.28	87.12
150.0	CSS DUO4-8670	6	24.493	26.942	0.66	0.80	25.94	0.000	3.000	1,118.13	0.00	3,354.38	277.20
150.0	Ericsson RRUS 11	6	24.401	26.841	0.57	0.80	10.02	0.000	1.000	430.29	0.00	430.29	396.00
150.0	Kathrein 860 10025	6	24.493	26.942	1.00	1.00	1.08	0.000	3.000	46.56	0.00	139.67	8.64
150.0	KMW AM-X-CD-16-65-	3	24.493	26.942	0.60	0.80	14.87	0.000	3.000	640.92	0.00	1,922.76	174.60
150.0	Platform	1	24.355	26.790	1.00	1.00	30.00	0.000	0.000	1,285.92	0.00	0.00	2,160.00
150.0	Raycap DC6-48-60-18-	1	24.401	26.841	1.00	1.00	1.47	0.000	1.000	63.13	0.00	63.13	38.16
										7,952.80			6,024.60

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

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32 iterations

Wind Importance Factor : 1.00

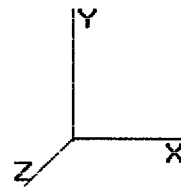
Wind Load Factor : 1.60

Seg Top Elev (ft)	Description	Exposed					Cf			FX (lb)	Dead Load (lb)	
		Exposed To Wind	Length (ft)	Ca	Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra			Adjust Factor
5.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.17	0.00	15.364	0.014	0.000	0.00	5.90
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.014	0.000	0.00	0.90
5.00	(1) 1/2" Coax	Yes	1.00	0.000	0.63	0.05	0.00	15.364	0.014	0.000	0.00	0.18
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.072	0.000	0.00	29.52
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.072	0.000	0.00	0.90
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.072	0.000	0.00	0.90
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.074	0.000	0.00	29.52
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.074	0.000	0.00	0.90
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.074	0.000	0.00	0.90
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.076	0.000	0.00	29.52
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.076	0.000	0.00	0.90
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.076	0.000	0.00	0.90
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.077	0.000	0.00	29.52
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.077	0.000	0.00	0.90
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.077	0.000	0.00	0.90
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.377	0.079	0.000	0.00	29.52
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.079	0.000	0.00	0.90
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.377	0.079	0.000	0.00	0.90
34.00	(6) 1 5/8" Coax	Yes	4.00	0.000	1.98	0.66	0.00	15.937	0.081	0.000	0.00	23.61
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.00	0.00	0.00	15.937	0.081	0.000	0.00	0.72
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.63	0.21	0.00	15.937	0.081	0.000	0.00	0.72
34.33	(6) 1 5/8" Coax	Yes	0.33	0.000	1.98	0.05	0.00	15.981	0.062	0.000	0.00	1.97
34.33	(1) 1/2" Coax	Yes	0.33	0.000	0.00	0.00	0.00	15.981	0.062	0.000	0.00	0.06
35.00	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.11	0.00	16.070	0.061	0.000	0.00	3.94
35.00	(1) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	16.070	0.061	0.000	0.00	0.12
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	16.694	0.062	0.000	0.00	29.52
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.266	0.063	0.000	0.00	29.52
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.793	0.065	0.000	0.00	29.52
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.285	0.067	0.000	0.00	29.52
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.745	0.068	0.000	0.00	29.52
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.179	0.070	0.000	0.00	29.52
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.589	0.072	0.000	0.00	29.52
73.58	(6) 1 5/8" Coax	Yes	3.58	0.000	1.98	0.59	0.00	19.870	0.074	0.000	0.00	21.15
75.00	(6) 1 5/8" Coax	Yes	1.42	0.000	1.98	0.23	0.00	19.979	0.074	0.000	0.00	8.36
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.351	0.075	0.000	0.00	29.52
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.706	0.077	0.000	0.00	29.52
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.047	0.080	0.000	0.00	29.52
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.375	0.083	0.000	0.00	29.52
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.690	0.085	0.000	0.00	29.52
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.995	0.088	0.000	0.00	29.52
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.289	0.091	0.000	0.00	29.52
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.83	0.00	22.574	0.095	0.000	0.00	29.52
118.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	22.741	0.098	0.000	0.00	17.71
120.0	(6) 1 5/8" Coax	Yes	2.00	0.000	1.98	0.33	0.00	22.850	0.100	0.000	0.00	11.81
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	23.118	0.103	1.008	0.00	29.52
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	23.276	0.106	1.018	0.00	17.71
Totals:										0.00	743.71	

Pole : 302473
 Location : E H F R - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.6W

95.00 mph with No Ice

32 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

Applied Segment Forces Summary

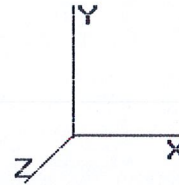
Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	415.52	965.37	0.00	0.00
10.00	406.73	992.09	0.00	0.00
15.00	397.93	973.50	0.00	0.00
20.00	389.13	954.91	0.00	0.00
25.00	380.34	936.31	0.00	0.00
30.00	371.85	917.71	0.00	0.00
34.00	392.06	1,310.29	0.00	14.08
34.33	25.45	102.14	0.00	0.00
35.00	110.18	164.65	0.00	0.00
40.00	392.51	769.72	0.00	0.00
45.00	396.06	754.23	0.00	0.00
50.00	397.98	738.74	0.00	0.00
55.00	398.50	723.24	0.00	0.00
60.00	397.79	707.75	0.00	0.00
65.00	396.01	692.26	0.00	0.00
70.00	393.27	676.75	0.00	0.00
73.58	284.30	782.28	0.00	0.00
75.00	111.40	159.18	0.00	0.00
80.00	392.99	553.85	0.00	0.00
85.00	388.00	541.45	0.00	0.00
90.00	382.34	529.06	0.00	0.00
95.00	376.05	516.66	0.00	0.00
100.0	369.18	504.27	0.00	0.00
105.0	361.77	491.87	0.00	0.00
110.0	353.85	479.47	0.00	0.00
115.0	345.45	386.07	0.00	0.00
118.0	1,490.55	601.81	0.00	0.00
120.0	133.07	139.10	0.00	0.00
125.0	329.82	341.25	0.00	0.00
128.0	713.55	535.33	0.00	0.00
130.0	125.44	119.86	0.00	0.00
135.0	307.52	293.14	0.00	0.00
138.0	2,388.54	2,169.90	0.00	0.00
140.0	117.18	93.42	0.00	0.00
145.0	286.24	227.03	0.00	0.00
150.0	4,068.33	3,401.45	0.00	6,307.51
Totals:	18,986.89	25,246.10	0.00	6,321.59

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.6W

95.00 mph with No Ice

32 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

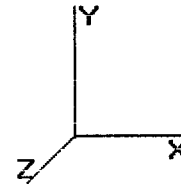
Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-25.18	-19.08	0.00	-2,086.44	0.00	2,086.44	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.950
5.00	-24.07	-18.84	0.00	-1,991.05	0.00	1,991.05	3,015.96	1,507.98	4,329.28	2,138.07	0.22	-0.42	0.939
10.00	-22.95	-18.59	0.00	-1,896.86	0.00	1,896.86	2,972.53	1,486.26	4,173.66	2,061.22	0.88	-0.84	0.928
15.00	-21.85	-18.34	0.00	-1,803.91	0.00	1,803.91	2,928.13	1,464.06	4,019.45	1,985.06	1.99	-1.27	0.916
20.00	-20.76	-18.09	0.00	-1,712.21	0.00	1,712.21	2,882.76	1,441.38	3,866.74	1,909.64	3.55	-1.71	0.904
25.00	-19.70	-17.83	0.00	-1,621.77	0.00	1,621.77	2,835.18	1,417.59	3,713.96	1,834.19	5.57	-2.15	0.891
30.00	-18.67	-17.55	0.00	-1,532.62	0.00	1,532.62	2,768.06	1,384.03	3,539.19	1,747.87	8.07	-2.60	0.884
34.00	-17.33	-17.16	0.00	-1,462.40	0.00	1,462.40	2,714.36	1,357.18	3,402.40	1,680.32	10.40	-2.97	0.877
34.33	-17.21	-17.14	0.00	-1,456.68	0.00	1,456.68	2,189.26	1,094.63	2,807.80	1,386.67	10.61	-3.00	1.059
35.00	-16.96	-17.11	0.00	-1,445.25	0.00	1,445.25	2,184.83	1,092.41	2,792.98	1,379.35	11.03	-3.06	1.056
40.00	-16.07	-16.82	0.00	-1,359.70	0.00	1,359.70	2,151.07	1,075.54	2,682.34	1,324.71	14.51	-3.58	1.034
45.00	-15.19	-16.52	0.00	-1,275.59	0.00	1,275.59	2,116.36	1,058.18	2,572.65	1,270.53	18.54	-4.11	1.011
50.00	-14.33	-16.20	0.00	-1,193.01	0.00	1,193.01	2,080.67	1,040.34	2,463.99	1,216.87	23.12	-4.64	0.988
55.00	-13.50	-15.87	0.00	-1,112.02	0.00	1,112.02	2,044.03	1,022.01	2,356.46	1,163.77	28.26	-5.18	0.962
60.00	-12.68	-15.52	0.00	-1,032.69	0.00	1,032.69	2,006.42	1,003.21	2,250.16	1,111.27	33.96	-5.72	0.936
65.00	-11.89	-15.17	0.00	-955.08	0.00	955.08	1,966.15	983.08	2,143.31	1,058.50	40.23	-6.26	0.909
70.00	-11.14	-14.80	0.00	-879.23	0.00	879.23	1,910.22	955.11	2,022.40	998.79	47.06	-6.80	0.886
73.58	-10.33	-14.47	0.00	-826.21	0.00	826.21	1,431.04	715.52	1,520.04	750.69	52.30	-7.20	1.108
75.00	-10.09	-14.41	0.00	-805.71	0.00	805.71	1,423.81	711.90	1,499.70	740.64	54.46	-7.36	1.095
80.00	-9.44	-14.05	0.00	-733.67	0.00	733.67	1,397.65	698.82	1,428.29	705.38	62.48	-8.00	1.047
85.00	-8.81	-13.69	0.00	-663.42	0.00	663.42	1,370.52	685.26	1,357.57	670.45	71.17	-8.63	0.996
90.00	-8.20	-13.32	0.00	-595.00	0.00	595.00	1,342.44	671.22	1,287.63	635.91	80.51	-9.26	0.942
95.00	-7.62	-12.94	0.00	-528.42	0.00	528.42	1,313.39	656.69	1,218.56	601.80	90.48	-9.87	0.884
100.00	-7.06	-12.56	0.00	-463.72	0.00	463.72	1,283.37	641.69	1,150.45	568.16	101.09	-10.47	0.822
105.00	-6.52	-12.18	0.00	-400.92	0.00	400.92	1,248.31	624.15	1,079.85	533.30	112.30	-11.05	0.757
110.00	-6.01	-11.79	0.00	-340.03	0.00	340.03	1,203.56	601.78	1,003.38	495.53	124.09	-11.60	0.692
110.00	-6.01	-11.79	0.00	-340.03	0.00	340.03	829.71	414.85	695.98	343.72	124.09	-11.60	0.997
115.00	-5.62	-11.42	0.00	-281.06	0.00	281.06	811.47	405.73	655.21	323.59	136.44	-12.12	0.876
118.00	-5.29	-9.87	0.00	-246.80	0.00	246.80	800.06	400.03	630.94	311.60	144.12	-12.50	0.799
120.00	-5.11	-9.74	0.00	-227.06	0.00	227.06	792.26	396.13	614.85	303.65	149.36	-12.75	0.755
125.00	-4.79	-9.38	0.00	-178.35	0.00	178.35	772.09	386.05	574.97	283.96	162.91	-13.31	0.635
128.00	-4.39	-8.58	0.00	-150.21	0.00	150.21	759.53	379.77	551.32	272.28	171.30	-13.62	0.558
130.00	-4.26	-8.45	0.00	-133.05	0.00	133.05	750.96	375.48	535.68	264.55	176.99	-13.81	0.509
135.00	-4.01	-8.10	0.00	-90.79	0.00	90.79	728.87	364.43	497.05	245.47	191.53	-14.21	0.376
138.00	-2.49	-5.26	0.00	-66.48	0.00	66.48	715.15	357.58	474.23	234.20	200.43	-14.40	0.288
140.00	-2.41	-5.13	0.00	-55.96	0.00	55.96	704.08	352.04	458.05	226.22	206.43	-14.51	0.251
145.00	-2.25	-4.80	0.00	-30.31	0.00	30.31	670.52	335.26	415.18	205.04	221.57	-14.71	0.151
150.00	0.00	-4.07	0.00	-6.31	0.00	6.31	636.96	318.48	374.42	184.91	236.87	-14.81	0.034

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

31 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	246.86	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	241.68	1.000	0.000	5.00	15.366	15.37	415.5	0.0	651.7
10.00		1.00	0.70	15.364	16.90	236.51	1.000	0.000	5.00	15.041	15.04	406.7	0.0	637.8
15.00		1.00	0.70	15.364	16.90	231.34	1.000	0.000	5.00	14.716	14.72	397.9	0.0	623.8
20.00		1.00	0.70	15.364	16.90	226.17	1.000	0.000	5.00	14.391	14.39	389.1	0.0	609.9
25.00		1.00	0.70	15.364	16.90	221.00	1.000	0.000	5.00	14.065	14.07	380.3	0.0	596.0
30.00	Bot - Section 2	1.00	0.70	15.377	16.91	215.92	1.000	0.000	5.00	13.740	13.74	371.9	0.0	582.0
34.00	Appertunance(s)	1.00	0.72	15.937	17.53	215.60	1.000	0.000	4.00	10.973	10.97	307.8	0.0	843.7
34.33	Top - Section 1	1.00	0.72	15.981	17.58	215.55	1.000	0.000	0.33	0.905	0.90	25.5	0.0	69.6
35.00	Appertunance(s)	1.00	0.73	16.070	17.67	219.82	1.000	0.000	0.67	1.806	1.81	51.1	0.0	63.9
40.00		1.00	0.76	16.694	18.36	218.66	1.000	0.000	5.00	13.359	13.36	392.5	0.0	472.4
45.00		1.00	0.78	17.266	18.99	216.89	1.000	0.000	5.00	13.034	13.03	396.1	0.0	460.7
50.00		1.00	0.81	17.793	19.57	214.62	1.000	0.000	5.00	12.708	12.71	398.0	0.0	449.1
55.00		1.00	0.83	18.285	20.11	211.92	1.000	0.000	5.00	12.383	12.38	398.5	0.0	437.5
60.00		1.00	0.85	18.745	20.61	208.85	1.000	0.000	5.00	12.058	12.06	397.8	0.0	425.9
65.00		1.00	0.87	19.179	21.09	205.48	1.000	0.000	5.00	11.732	11.73	396.0	0.0	414.3
70.00	Bot - Section 3	1.00	0.89	19.589	21.54	201.83	1.000	0.000	5.00	11.407	11.41	393.3	0.0	402.6
73.58	Top - Section 2	1.00	0.90	19.870	21.85	199.06	1.000	0.000	3.58	8.129	8.13	284.3	0.0	511.5
75.00		1.00	0.91	19.979	21.97	201.84	1.000	0.000	1.42	3.168	3.17	111.4	0.0	89.7
80.00		1.00	0.92	20.351	22.38	197.76	1.000	0.000	5.00	10.972	10.97	393.0	0.0	310.5
85.00		1.00	0.94	20.706	22.77	193.47	1.000	0.000	5.00	10.647	10.65	388.0	0.0	301.2
90.00		1.00	0.95	21.047	23.15	189.01	1.000	0.000	5.00	10.321	10.32	382.3	0.0	291.9
95.00		1.00	0.97	21.375	23.51	184.37	1.000	0.000	5.00	9.996	10.00	376.1	0.0	282.6
100.0		1.00	0.98	21.690	23.86	179.58	1.000	0.000	5.00	9.671	9.67	369.2	0.0	273.3
105.0		1.00	1.00	21.995	24.19	174.65	1.000	0.000	5.00	9.345	9.35	361.8	0.0	264.0
110.0	Top - Section 3	1.00	1.01	22.289	24.51	169.59	1.000	0.000	5.00	9.020	9.02	353.8	0.0	254.7
115.0		1.00	1.02	22.574	24.83	164.40	1.000	0.000	5.00	8.695	8.69	345.5	0.0	184.6
118.0	Appertunance(s)	1.00	1.03	22.741	25.01	161.23	1.000	0.000	3.00	5.061	5.06	202.6	0.0	107.4
120.0		1.00	1.04	22.850	25.13	159.10	1.000	0.000	2.00	3.309	3.31	133.1	0.0	70.2
125.0		1.00	1.05	23.118	25.43	153.68	1.000 *	0.000	5.00	8.044	8.04	327.3	0.0	170.7
128.0	Appertunance(s)	1.00	1.06	23.276	25.60	150.39	1.000 *	0.000	3.00	4.670	4.67	191.3	0.0	99.1
130.0		1.00	1.06	23.379	25.71	148.17	1.000	0.000	2.00	3.049	3.05	125.4	0.0	64.6
135.0		1.00	1.07	23.632	25.99	142.55	1.000	0.000	5.00	7.394	7.39	307.5	0.0	156.7
138.0	Appertunance(s)	1.00	1.08	23.781	26.15	139.14	1.000	0.000	3.00	4.280	4.28	179.1	0.0	90.7
140.0		1.00	1.08	23.879	26.26	136.85	1.000	0.000	2.00	2.788	2.79	117.2	0.0	59.1
145.0		1.00	1.09	24.120	26.53	131.06	1.000	0.000	5.00	6.743	6.74	286.2	0.0	142.8
150.0	Appertunance(s)	1.00	1.11	24.355	26.79	125.18	1.000	0.000	5.00	6.418	6.42	275.1	0.0	135.8

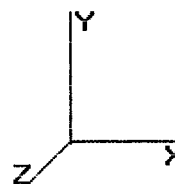
* = Cf Adjusted By Linear Load Ra Effect

Totals: 150.00 11,028.1 0.0 11,601.6

Pole : 302473
 Location : E HFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

31 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
34.00	GPS	1	16.004	17.604	1.00	1.00	1.00	0.000	0.500	28.17	0.00	14.08	9.00
34.00	Stand-off	1	15.937	17.531	1.00	1.00	2.00	0.000	0.000	56.10	0.00	0.00	45.00
35.00	PCTEL GPS-TMG-HR-	1	16.070	17.676	1.00	1.00	0.09	0.000	0.000	2.55	0.00	0.00	0.54
35.00	Stand-off	1	16.070	17.676	1.00	1.00	2.00	0.000	0.000	56.56	0.00	0.00	45.00
118.0	Argus LLPX310R	3	22.741	25.015	0.55	0.80	8.00	0.000	0.000	320.13	0.00	0.00	77.22
118.0	Clearwire Mount	1	22.741	25.015	1.00	1.00	8.50	0.000	0.000	340.20	0.00	0.00	36.00
118.0	DragonWave A-ANT-	1	22.741	25.015	1.00	1.00	1.61	0.000	0.000	64.44	0.00	0.00	13.50
118.0	DragonWave A-ANT-	2	22.741	25.015	0.90	1.00	8.44	0.000	0.000	337.88	0.00	0.00	22.14
118.0	DragonWave Horizon	3	22.741	25.015	0.40	0.80	0.52	0.000	0.000	20.65	0.00	0.00	28.62
118.0	Generic 12" x 12" Ju	1	22.741	25.015	1.00	1.00	1.40	0.000	0.000	56.03	0.00	0.00	9.00
118.0	NextNet BTS-2500	3	22.741	25.015	0.58	0.80	3.71	0.000	0.000	148.66	0.00	0.00	94.50
128.0	Flush Mounts	1	23.276	25.603	1.00	1.00	3.50	0.000	0.000	143.38	0.00	0.00	180.00
128.0	RFS APXV18-206517S-	3	23.276	25.603	0.59	0.80	9.16	0.000	0.000	375.41	0.00	0.00	71.28
138.0	Alcatel-Lucent 4X40W	6	23.781	26.159	0.40	0.80	6.50	0.000	0.000	272.23	0.00	0.00	321.30
138.0	Alcatel-Lucent 800 M	3	23.781	26.159	0.40	0.80	3.49	0.000	0.000	146.16	0.00	0.00	166.86
138.0	Decibel DB980F65E-M	6	23.781	26.159	0.60	0.80	13.50	0.000	0.000	565.04	0.00	0.00	54.00
138.0	RFS APXV9ERR18-C-	2	23.781	26.159	0.66	0.80	10.97	0.000	0.000	459.12	0.00	0.00	111.60
138.0	RFS APXVSP18-C-	1	23.781	26.159	0.66	0.80	5.48	0.000	0.000	229.56	0.00	0.00	51.30
138.0	RFS IBC1900BB-1	3	23.781	26.159	0.40	0.80	1.36	0.000	0.000	56.76	0.00	0.00	59.40
138.0	RFS IBC1900HG-2A	3	23.781	26.159	0.40	0.80	1.36	0.000	0.000	56.76	0.00	0.00	59.40
138.0	T-Arms	3	23.781	26.159	0.56	0.75	10.13	0.000	0.000	423.78	0.00	0.00	675.00
150.0	6' Omni	1	24.355	26.790	1.00	1.00	1.77	0.000	0.000	75.87	0.00	0.00	31.50
150.0	ADC DD1900	6	24.493	26.942	0.40	0.80	3.07	0.000	3.000	132.43	0.00	397.28	65.34
150.0	CSS DUO4-8670	6	24.493	26.942	0.66	0.80	25.94	0.000	3.000	1,118.13	0.00	3,354.38	207.90
150.0	Ericsson RRUS 11	6	24.401	26.841	0.57	0.80	10.02	0.000	1.000	430.29	0.00	430.29	297.00
150.0	Kathrein 860 10025	6	24.493	26.942	1.00	1.00	1.08	0.000	3.000	46.56	0.00	139.67	6.48
150.0	KMW AM-X-CD-16-65-	3	24.493	26.942	0.60	0.80	14.87	0.000	3.000	640.92	0.00	1,922.76	130.95
150.0	Platform	1	24.355	26.790	1.00	1.00	30.00	0.000	0.000	1,285.92	0.00	0.00	1,620.00
150.0	Raycap DC6-48-60-18-	1	24.401	26.841	1.00	1.00	1.47	0.000	1.000	63.13	0.00	63.13	28.62
										7,952.80			4,518.45

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

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Load Case: 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

31 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

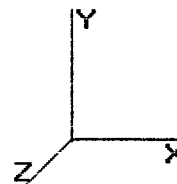
Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed					Cf			FX (lb)	Dead Load (lb)	
		Exposed To Wind	Length (ft)	Ca	Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra Adjust Factor			
5.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.17	0.00	15.364	0.014	0.000	0.00	4.43
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.014	0.000	0.00	0.68
5.00	(1) 1/2" Coax	Yes	1.00	0.000	0.63	0.05	0.00	15.364	0.014	0.000	0.00	0.14
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.072	0.000	0.00	22.14
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.072	0.000	0.00	0.68
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.072	0.000	0.00	0.68
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.074	0.000	0.00	22.14
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.074	0.000	0.00	0.68
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.074	0.000	0.00	0.68
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.076	0.000	0.00	22.14
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.076	0.000	0.00	0.68
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.076	0.000	0.00	0.68
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.077	0.000	0.00	22.14
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.364	0.077	0.000	0.00	0.68
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.077	0.000	0.00	0.68
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.377	0.079	0.000	0.00	22.14
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	15.377	0.079	0.000	0.00	0.67
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.377	0.079	0.000	0.00	0.67
34.00	(6) 1 5/8" Coax	Yes	4.00	0.000	1.98	0.66	0.00	15.937	0.081	0.000	0.00	17.71
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.00	0.00	0.00	15.937	0.081	0.000	0.00	0.54
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.63	0.21	0.00	15.937	0.081	0.000	0.00	0.54
34.33	(6) 1 5/8" Coax	Yes	0.33	0.000	1.98	0.05	0.00	15.981	0.062	0.000	0.00	1.48
34.33	(1) 1/2" Coax	Yes	0.33	0.000	0.00	0.00	0.00	15.981	0.062	0.000	0.00	0.04
35.00	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.11	0.00	16.070	0.061	0.000	0.00	2.95
35.00	(1) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	16.070	0.061	0.000	0.00	0.09
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	16.694	0.062	0.000	0.00	22.14
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.266	0.063	0.000	0.00	22.14
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.793	0.065	0.000	0.00	22.14
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.285	0.067	0.000	0.00	22.14
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.745	0.068	0.000	0.00	22.14
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.179	0.070	0.000	0.00	22.14
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.589	0.072	0.000	0.00	22.14
73.58	(6) 1 5/8" Coax	Yes	3.58	0.000	1.98	0.59	0.00	19.870	0.074	0.000	0.00	15.87
75.00	(6) 1 5/8" Coax	Yes	1.42	0.000	1.98	0.23	0.00	19.979	0.074	0.000	0.00	6.27
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.351	0.075	0.000	0.00	22.14
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.706	0.077	0.000	0.00	22.14
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.047	0.080	0.000	0.00	22.14
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.375	0.083	0.000	0.00	22.14
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.690	0.085	0.000	0.00	22.14
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.995	0.088	0.000	0.00	22.14
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.289	0.091	0.000	0.00	22.14
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.83	0.00	22.574	0.095	0.000	0.00	22.14
118.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	22.741	0.098	0.000	0.00	13.28
120.0	(6) 1 5/8" Coax	Yes	2.00	0.000	1.98	0.33	0.00	22.850	0.100	0.000	0.00	8.85
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	23.118	0.103	1.008	0.00	22.14
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	23.276	0.106	1.018	0.00	13.28
Totals:										0.00	557.78	

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

31 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

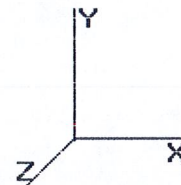
Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	415.52	724.03	0.00	0.00
10.00	406.73	744.07	0.00	0.00
15.00	397.93	730.12	0.00	0.00
20.00	389.13	716.18	0.00	0.00
25.00	380.34	702.24	0.00	0.00
30.00	371.85	688.29	0.00	0.00
34.00	392.06	982.71	0.00	14.08
34.33	25.45	76.60	0.00	0.00
35.00	110.18	123.48	0.00	0.00
40.00	392.51	577.29	0.00	0.00
45.00	396.06	565.67	0.00	0.00
50.00	397.98	554.05	0.00	0.00
55.00	398.50	542.43	0.00	0.00
60.00	397.79	530.81	0.00	0.00
65.00	396.01	519.19	0.00	0.00
70.00	393.27	507.56	0.00	0.00
73.58	284.30	586.71	0.00	0.00
75.00	111.40	119.39	0.00	0.00
80.00	392.99	415.39	0.00	0.00
85.00	388.00	406.09	0.00	0.00
90.00	382.34	396.79	0.00	0.00
95.00	376.05	387.50	0.00	0.00
100.0	369.18	378.20	0.00	0.00
105.0	361.77	368.90	0.00	0.00
110.0	353.85	359.60	0.00	0.00
115.0	345.45	289.55	0.00	0.00
118.0	1,490.55	451.36	0.00	0.00
120.0	133.07	104.33	0.00	0.00
125.0	327.30	255.94	0.00	0.00
128.0	710.11	401.49	0.00	0.00
130.0	125.44	89.89	0.00	0.00
135.0	307.52	219.85	0.00	0.00
138.0	2,388.54	1,627.43	0.00	0.00
140.0	117.18	70.06	0.00	0.00
145.0	286.24	170.27	0.00	0.00
150.0	4,068.33	2,551.09	0.00	6,307.51
Totals:	18,980.94	18,934.57	0.00	6,321.59

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

31 Iterations

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

Wind Importance Factor : 1.00

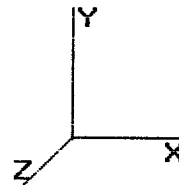
Calculated Forces

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	-18.87	-19.05	0.00	-2,035.13	0.00	2,035.13	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.925
5.00	-18.01	-18.76	0.00	-1,939.89	0.00	1,939.89	3,015.96	1,507.98	4,329.28	2,138.07	0.22	-0.41	0.913
10.00	-17.14	-18.47	0.00	-1,846.10	0.00	1,846.10	2,972.53	1,486.26	4,173.66	2,061.22	0.86	-0.82	0.902
15.00	-16.28	-18.18	0.00	-1,753.76	0.00	1,753.76	2,928.13	1,464.06	4,019.45	1,985.06	1.94	-1.24	0.889
20.00	-15.44	-17.89	0.00	-1,662.87	0.00	1,662.87	2,882.76	1,441.38	3,866.74	1,909.64	3.46	-1.66	0.876
25.00	-14.62	-17.59	0.00	-1,573.44	0.00	1,573.44	2,835.18	1,417.59	3,713.96	1,834.19	5.43	-2.09	0.863
30.00	-13.83	-17.29	0.00	-1,485.47	0.00	1,485.47	2,768.06	1,384.03	3,539.19	1,747.87	7.85	-2.53	0.855
34.00	-12.81	-16.90	0.00	-1,416.29	0.00	1,416.29	2,714.36	1,357.18	3,402.40	1,680.32	10.12	-2.88	0.848
34.33	-12.72	-16.88	0.00	-1,410.66	0.00	1,410.66	2,189.26	1,094.63	2,807.80	1,386.67	10.32	-2.91	1.023
35.00	-12.52	-16.82	0.00	-1,399.41	0.00	1,399.41	2,184.83	1,092.41	2,792.98	1,379.35	10.73	-2.98	1.021
40.00	-11.82	-16.50	0.00	-1,315.29	0.00	1,315.29	2,151.07	1,075.54	2,682.34	1,324.71	14.12	-3.48	0.999
45.00	-11.14	-16.17	0.00	-1,232.77	0.00	1,232.77	2,116.36	1,058.18	2,572.65	1,270.53	18.03	-3.99	0.976
50.00	-10.47	-15.83	0.00	-1,151.92	0.00	1,151.92	2,080.67	1,040.34	2,463.99	1,216.87	22.47	-4.50	0.952
55.00	-9.82	-15.48	0.00	-1,072.78	0.00	1,072.78	2,044.03	1,022.01	2,356.46	1,163.77	27.46	-5.02	0.927
60.00	-9.19	-15.12	0.00	-995.40	0.00	995.40	2,006.42	1,003.21	2,250.16	1,111.27	32.98	-5.54	0.901
65.00	-8.58	-14.75	0.00	-919.82	0.00	919.82	1,966.15	983.08	2,143.31	1,058.50	39.05	-6.06	0.874
70.00	-8.01	-14.36	0.00	-846.08	0.00	846.08	1,910.22	955.11	2,022.40	998.79	45.67	-6.59	0.852
73.58	-7.40	-14.05	0.00	-794.61	0.00	794.61	1,431.04	715.52	1,520.04	750.69	50.75	-6.97	1.064
75.00	-7.20	-13.97	0.00	-774.71	0.00	774.71	1,423.81	711.90	1,499.70	740.64	52.83	-7.12	1.051
80.00	-6.69	-13.60	0.00	-704.85	0.00	704.85	1,397.65	698.82	1,428.29	705.38	60.60	-7.74	1.004
85.00	-6.20	-13.23	0.00	-636.85	0.00	636.85	1,370.52	685.26	1,357.57	670.45	69.00	-8.34	0.955
90.00	-5.74	-12.85	0.00	-570.72	0.00	570.72	1,342.44	671.22	1,287.63	635.91	78.02	-8.94	0.902
95.00	-5.29	-12.47	0.00	-506.48	0.00	506.48	1,313.39	656.69	1,218.56	601.80	87.66	-9.53	0.846
100.00	-4.86	-12.09	0.00	-444.14	0.00	444.14	1,283.37	641.69	1,150.45	568.16	97.91	-10.11	0.786
105.00	-4.45	-11.71	0.00	-383.69	0.00	383.69	1,248.31	624.15	1,079.85	533.30	108.73	-10.66	0.723
110.00	-4.06	-11.33	0.00	-325.14	0.00	325.14	1,203.56	601.78	1,003.38	495.53	120.11	-11.19	0.660
110.00	-4.06	-11.33	0.00	-325.14	0.00	325.14	829.71	414.85	695.98	343.72	120.11	-11.19	0.952
115.00	-3.77	-10.96	0.00	-268.49	0.00	268.49	811.47	405.73	655.21	323.59	132.02	-11.68	0.835
118.00	-3.58	-9.43	0.00	-235.60	0.00	235.60	800.06	400.03	630.94	311.60	139.42	-12.05	0.761
120.00	-3.44	-9.30	0.00	-216.74	0.00	216.74	792.26	396.13	614.85	303.65	144.49	-12.29	0.719
125.00	-3.20	-8.95	0.00	-170.23	0.00	170.23	772.09	386.05	574.97	283.96	157.55	-12.82	0.604
128.00	-2.94	-8.18	0.00	-143.38	0.00	143.38	759.53	379.77	551.32	272.28	165.63	-13.12	0.531
130.00	-2.84	-8.05	0.00	-127.02	0.00	127.02	750.96	375.48	535.68	264.55	171.12	-13.30	0.484
135.00	-2.66	-7.71	0.00	-86.75	0.00	86.75	728.87	364.43	497.05	245.47	185.13	-13.68	0.358
138.00	-1.63	-5.01	0.00	-63.61	0.00	63.61	715.15	357.58	474.23	234.20	193.70	-13.86	0.274
140.00	-1.58	-4.89	0.00	-53.59	0.00	53.59	704.08	352.04	458.05	226.22	199.47	-13.97	0.239
145.00	-1.47	-4.57	0.00	-29.16	0.00	29.16	670.52	335.26	415.18	205.04	214.06	-14.16	0.145
150.00	0.00	-4.07	0.00	-6.31	0.00	6.31	636.96	318.48	374.42	184.91	228.80	-14.25	0.034

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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

32 Iterations

Gust Response Factor : 1.10

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Ice Importance Factor : 1.00

Wind Load Factor : 1.00

Shaft Segment Forces (Factored)

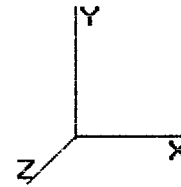
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.682	0.000	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	4.256	4.682	0.000	1.200	1.656	5.00	16.747	20.10	94.1	395.5	1,264.5
10.00		1.00	0.70	4.256	4.682	0.000	1.200	1.775	5.00	16.520	19.82	92.8	416.6	1,266.9
15.00		1.00	0.70	4.256	4.682	0.000	1.200	1.848	5.00	16.256	19.51	91.3	425.6	1,257.4
20.00		1.00	0.70	4.256	4.682	0.000	1.200	1.902	5.00	15.976	19.17	89.8	429.4	1,242.6
25.00		1.00	0.70	4.256	4.682	0.000	1.200	1.945	5.00	15.686	18.82	88.1	430.1	1,224.7
30.00	Bot - Section 2	1.00	0.70	4.260	4.686	0.000	1.200	1.981	5.00	15.391	18.47	86.5	428.7	1,204.7
34.00	Appertunance(s)	1.00	0.72	4.415	4.856	0.000	1.200	2.006	4.00	12.311	14.77	71.7	347.8	1,472.7
34.33	Top - Section 1	1.00	0.72	4.427	4.870	0.000	1.200	2.008	0.33	1.017	1.22	5.9	29.0	121.7
35.00	Appertunance(s)	1.00	0.73	4.451	4.897	0.000	1.200	2.012	0.67	2.029	2.44	11.9	57.9	143.0
40.00		1.00	0.76	4.625	5.087	0.000	1.200	2.039	5.00	15.058	18.07	91.9	430.3	1,060.1
45.00		1.00	0.78	4.783	5.261	0.000	1.200	2.063	5.00	14.753	17.70	93.1	425.6	1,040.0
50.00		1.00	0.81	4.929	5.422	0.000	1.200	2.085	5.00	14.446	17.33	94.0	420.2	1,019.1
55.00		1.00	0.83	5.065	5.572	0.000	1.200	2.105	5.00	14.137	16.96	94.5	414.2	997.6
60.00		1.00	0.85	5.193	5.712	0.000	1.200	2.123	5.00	13.827	16.59	94.8	407.7	975.6
65.00		1.00	0.87	5.313	5.844	0.000	1.200	2.140	5.00	13.516	16.22	94.8	400.8	953.1
70.00	Bot - Section 3	1.00	0.89	5.426	5.969	0.000	1.200	2.156	5.00	13.204	15.84	94.6	393.4	930.3
73.58	Top - Section 2	1.00	0.90	5.504	6.055	0.000	1.200	2.167	3.58	9.424	11.31	68.5	283.1	965.1
75.00		1.00	0.91	5.534	6.088	0.000	1.200	2.171	1.42	3.681	4.42	26.9	111.3	230.8
80.00		1.00	0.92	5.637	6.201	0.000	1.200	2.185	5.00	12.793	15.35	95.2	384.8	798.8
85.00		1.00	0.94	5.736	6.309	0.000	1.200	2.198	5.00	12.479	14.97	94.5	376.6	778.2
90.00		1.00	0.95	5.830	6.413	0.000	1.200	2.211	5.00	12.164	14.60	93.6	368.1	757.3
95.00		1.00	0.97	5.921	6.513	0.000	1.200	2.223	5.00	11.849	14.22	92.6	359.4	736.2
100.0		1.00	0.98	6.008	6.609	0.000	1.200	2.234	5.00	11.533	13.84	91.5	350.5	714.9
105.0		1.00	1.00	6.093	6.702	0.000	1.200	2.245	5.00	11.217	13.46	90.2	341.4	693.4
110.0	Top - Section 3	1.00	1.01	6.174	6.792	0.000	1.200	2.256	5.00	10.900	13.08	88.8	332.1	671.7
115.0		1.00	1.02	6.253	6.879	0.000	1.200	2.266	5.00	10.583	12.70	87.4	322.7	568.8
118.0	Appertunance(s)	1.00	1.03	6.299	6.929	0.000	1.200	2.272	3.00	6.197	7.44	51.5	190.1	333.4
120.0		1.00	1.04	6.330	6.963	0.000	1.200	2.276	2.00	4.067	4.88	34.0	125.2	218.8
125.0		1.00	1.05	6.404	7.044	0.000	1.200 *	2.285	5.00	9.948	11.94	84.1	303.3	530.9
128.0	Appertunance(s)	1.00	1.06	6.448	7.092	0.000	1.200 *	2.290	3.00	5.816	6.98	49.5	178.4	310.5
130.0		1.00	1.06	6.476	7.124	0.000	1.200	2.294	2.00	3.813	4.58	32.6	117.4	203.6
135.0		1.00	1.07	6.546	7.201	0.000	1.200	2.303	5.00	9.312	11.17	80.5	283.4	492.3
138.0	Appertunance(s)	1.00	1.08	6.588	7.246	0.000	1.200	2.308	3.00	5.434	6.52	47.3	166.4	287.3
140.0		1.00	1.08	6.615	7.276	0.000	1.200	2.311	2.00	3.559	4.27	31.1	109.3	188.0
145.0		1.00	1.09	6.681	7.350	0.000	1.200	2.319	5.00	8.675	10.41	76.5	263.0	453.4
150.0	Appertunance(s)	1.00	1.11	6.746	7.421	0.000	1.200	2.327	5.00	8.357	10.03	74.4	252.6	433.7
Totals:								150.00				2,680.5	11,072.1	26,540.8

* = Cf Adjusted By Linear Load Ra Effect

Pole : 302473
 Location : E H F R - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	32 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

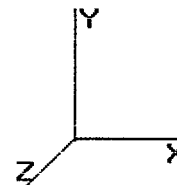
Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
34.00	GPS	1	4.433	4.876	1.00	1.00	1.82	0.000	0.500	8.87	0.00	4.43	37.46
34.00	Stand-off	1	4.415	4.856	1.00	1.00	3.60	0.000	0.000	17.51	0.00	0.00	75.12
35.00	PCTEL GPS-TMG-HR-	1	4.451	4.897	1.00	1.00	0.32	0.000	0.000	1.55	0.00	0.00	14.32
35.00	Stand-off	1	4.451	4.897	1.00	1.00	3.61	0.000	0.000	17.67	0.00	0.00	150.24
118.0	Argus LLPX310R	3	6.299	6.929	0.55	0.80	9.08	0.000	0.000	62.95	0.00	0.00	554.96
118.0	Clearwire Mount	1	6.299	6.929	1.00	1.00	17.77	0.000	0.000	123.13	0.00	0.00	81.62
118.0	DragonWave A-ANT-	1	6.299	6.929	1.00	1.00	2.60	0.000	0.000	18.00	0.00	0.00	53.99
118.0	DragonWave A-ANT-	2	6.299	6.929	0.90	1.00	11.43	0.000	0.000	79.23	0.00	0.00	59.74
118.0	DragonWave Horizon	3	6.299	6.929	0.40	0.80	1.31	0.000	0.000	9.11	0.00	0.00	106.95
118.0	Generic 12" x 12" Ju	1	6.299	6.929	1.00	1.00	2.50	0.000	0.000	17.35	0.00	0.00	76.33
118.0	NextNet BTS-2500	3	6.299	6.929	0.58	0.80	4.48	0.000	0.000	31.06	0.00	0.00	369.27
128.0	Flush Mounts	1	6.448	7.092	1.00	1.00	8.31	0.000	0.000	58.93	0.00	0.00	598.07
128.0	RFS APXV18-206517S-	3	6.448	7.092	0.59	0.80	12.12	0.000	0.000	85.97	0.00	0.00	602.00
138.0	Alcatel-Lucent 4X40W	6	6.588	7.246	0.40	0.80	7.76	0.000	0.000	56.26	0.00	0.00	1,238.92
138.0	Alcatel-Lucent 800 M	3	6.588	7.246	0.40	0.80	4.06	0.000	0.000	29.41	0.00	0.00	669.16
138.0	Decibel DB980F65E-M	6	6.588	7.246	0.60	0.80	18.59	0.000	0.000	134.69	0.00	0.00	877.66
138.0	RFS APXV9ERR18-C-	2	6.588	7.246	0.66	0.80	12.97	0.000	0.000	94.00	0.00	0.00	733.95
138.0	RFS APXVSPP18-C-	1	6.588	7.246	0.66	0.80	6.49	0.000	0.000	47.00	0.00	0.00	349.08
138.0	RFS IBC1900BB-1	3	6.588	7.246	0.40	0.80	1.87	0.000	0.000	13.55	0.00	0.00	238.07
138.0	RFS IBC1900HG-2A	3	6.588	7.246	0.40	0.80	1.87	0.000	0.000	13.55	0.00	0.00	238.07
138.0	T-Arms	3	6.588	7.246	0.56	0.75	21.53	0.000	0.000	155.99	0.00	0.00	1,538.75
150.0	6' Omni	1	6.746	7.421	1.00	1.00	3.42	0.000	0.000	25.36	0.00	0.00	57.58
150.0	ADC DD1900	6	6.785	7.463	0.40	0.80	5.67	0.000	3.000	42.30	0.00	126.91	115.86
150.0	CSS DUO4-8670	6	6.785	7.463	0.66	0.80	28.52	0.000	3.000	212.85	0.00	638.55	1,717.88
150.0	Ericsson RRUS 11	6	6.759	7.435	0.57	0.80	11.61	0.000	1.000	86.35	0.00	86.35	1,092.01
150.0	Kathrein 860 10025	6	6.785	7.463	1.00	1.00	2.90	0.000	3.000	21.65	0.00	64.95	113.38
150.0	KMW AM-X-CD-16-65-	3	6.785	7.463	0.60	0.80	17.61	0.000	3.000	131.44	0.00	394.32	981.40
150.0	Platform	1	6.746	7.421	1.00	1.00	57.92	0.000	0.000	429.85	0.00	0.00	3,135.41
150.0	Raycap DC6-48-60-18-	1	6.759	7.435	1.00	1.00	2.40	0.000	1.000	17.87	0.00	17.87	102.89
										2,043.47			15,980.11

Pole : 302473
 Location : E HFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.0Di + 1.0Wi		50.00 mph with 1.00 in Radial Ice	32 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00	
Dead Load Factor : 1.20		Ice Importance Factor : 1.00	
Wind Load Factor : 1.00			

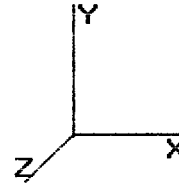
Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.44	0.00	4.256	0.014	0.000	0.00	26.52
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.014	0.000	0.00	21.88
5.00	(1) 1/2" Coax	Yes	1.00	0.000	0.63	0.33	0.00	4.256	0.014	0.000	0.00	4.38
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.30	0.00	4.256	0.072	0.000	0.00	140.58
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.072	0.000	0.00	24.66
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.74	0.00	4.256	0.072	0.000	0.00	24.66
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.37	0.00	4.256	0.074	0.000	0.00	145.60
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.074	0.000	0.00	26.46
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.80	0.00	4.256	0.074	0.000	0.00	26.46
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.41	0.00	4.256	0.076	0.000	0.00	149.32
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.076	0.000	0.00	27.83
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.85	0.00	4.256	0.076	0.000	0.00	27.83
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.45	0.00	4.256	0.077	0.000	0.00	152.32
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.256	0.077	0.000	0.00	28.95
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.88	0.00	4.256	0.077	0.000	0.00	28.95
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.48	0.00	4.260	0.079	0.000	0.00	154.83
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	4.260	0.079	0.000	0.00	29.89
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.91	0.00	4.260	0.079	0.000	0.00	29.89
34.00	(6) 1 5/8" Coax	Yes	4.00	0.000	1.98	2.00	0.00	4.415	0.081	0.000	0.00	125.27
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.00	0.00	0.00	4.415	0.081	0.000	0.00	24.45
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.63	1.55	0.00	4.415	0.081	0.000	0.00	24.45
34.33	(6) 1 5/8" Coax	Yes	0.33	0.000	1.98	0.17	0.00	4.427	0.062	0.000	0.00	10.45
34.33	(1) 1/2" Coax	Yes	0.33	0.000	0.00	0.00	0.00	4.427	0.062	0.000	0.00	2.04
35.00	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.33	0.00	4.451	0.061	0.000	0.00	20.93
35.00	(1) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	4.451	0.061	0.000	0.00	4.10
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.52	0.00	4.625	0.062	0.000	0.00	158.92
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.54	0.00	4.783	0.063	0.000	0.00	160.64
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.56	0.00	4.929	0.065	0.000	0.00	162.20
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.58	0.00	5.065	0.067	0.000	0.00	163.64
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.59	0.00	5.193	0.068	0.000	0.00	164.96
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.61	0.00	5.313	0.070	0.000	0.00	166.20
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.62	0.00	5.426	0.072	0.000	0.00	167.35
73.58	(6) 1 5/8" Coax	Yes	3.58	0.000	1.98	1.89	0.00	5.504	0.074	0.000	0.00	120.49
75.00	(6) 1 5/8" Coax	Yes	1.42	0.000	1.98	0.75	0.00	5.534	0.074	0.000	0.00	47.72
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.65	0.00	5.637	0.075	0.000	0.00	169.46
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.66	0.00	5.736	0.077	0.000	0.00	170.43
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.67	0.00	5.830	0.080	0.000	0.00	171.35
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.68	0.00	5.921	0.083	0.000	0.00	172.23
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.69	0.00	6.008	0.085	0.000	0.00	173.07
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.70	0.00	6.093	0.088	0.000	0.00	173.87
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.70	0.00	6.174	0.091	0.000	0.00	174.64
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.71	0.00	6.253	0.095	0.000	0.00	175.39
118.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	1.63	0.00	6.299	0.098	0.000	0.00	105.49
120.0	(6) 1 5/8" Coax	Yes	2.00	0.000	1.98	1.09	0.00	6.330	0.100	0.000	0.00	70.44
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.73	0.00	6.404	0.103	1.008	0.00	176.79
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	1.64	0.00	6.448	0.106	1.018	0.00	106.31
Totals:											0.00	4,434.25

Pole : 302473
 Location : E H F R - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	32 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

Applied Segment Forces Summary

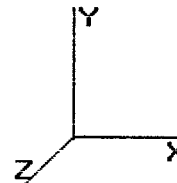
Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	94.08	1,406.68	0.00	0.00
10.00	92.81	1,567.22	0.00	0.00
15.00	91.33	1,566.31	0.00	0.00
20.00	89.75	1,557.94	0.00	0.00
25.00	88.12	1,545.28	0.00	0.00
30.00	86.54	1,529.75	0.00	0.00
34.00	98.11	1,847.78	0.00	4.43
34.33	5.94	141.56	0.00	0.00
35.00	31.15	347.34	0.00	0.00
40.00	91.92	1,329.45	0.00	0.00
45.00	93.14	1,311.00	0.00	0.00
50.00	93.99	1,291.67	0.00	0.00
55.00	94.52	1,271.61	0.00	0.00
60.00	94.77	1,250.93	0.00	0.00
65.00	94.78	1,229.71	0.00	0.00
70.00	94.57	1,208.01	0.00	0.00
73.58	68.47	1,164.69	0.00	0.00
75.00	26.89	309.84	0.00	0.00
80.00	95.20	1,078.62	0.00	0.00
85.00	94.48	1,058.97	0.00	0.00
90.00	93.61	1,039.02	0.00	0.00
95.00	92.61	1,018.80	0.00	0.00
100.0	91.47	998.33	0.00	0.00
105.0	90.21	977.63	0.00	0.00
110.0	88.84	956.71	0.00	0.00
115.0	87.36	854.60	0.00	0.00
118.0	392.36	1,807.95	0.00	0.00
120.0	33.98	322.96	0.00	0.00
125.0	84.10	791.82	0.00	0.00
128.0	194.40	1,667.38	0.00	0.00
130.0	32.60	237.22	0.00	0.00
135.0	80.47	576.52	0.00	0.00
138.0	591.72	6,221.46	0.00	0.00
140.0	31.07	202.71	0.00	0.00
145.0	76.51	490.01	0.00	0.00
150.0	1,042.09	7,786.75	0.00	1,328.95
Totals:	4,723.94	49,964.22	0.00	1,333.38

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	32 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

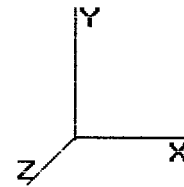
Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-49.96	-4.78	0.00	-625.99	0.00	625.99	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.299
5.00	-48.54	-4.79	0.00	-602.10	0.00	602.10	3,015.96	1,507.98	4,329.28	2,138.07	0.07	-0.13	0.298
10.00	-46.96	-4.80	0.00	-578.15	0.00	578.15	2,972.53	1,486.26	4,173.66	2,061.22	0.27	-0.25	0.296
15.00	-45.39	-4.80	0.00	-554.15	0.00	554.15	2,928.13	1,464.06	4,019.45	1,985.06	0.60	-0.39	0.295
20.00	-43.82	-4.81	0.00	-530.13	0.00	530.13	2,882.76	1,441.38	3,866.74	1,909.64	1.08	-0.52	0.293
25.00	-42.26	-4.81	0.00	-506.10	0.00	506.10	2,835.18	1,417.59	3,713.96	1,834.19	1.69	-0.66	0.291
30.00	-40.72	-4.79	0.00	-482.07	0.00	482.07	2,768.06	1,384.03	3,539.19	1,747.87	2.46	-0.80	0.291
34.00	-38.87	-4.71	0.00	-462.90	0.00	462.90	2,714.36	1,357.18	3,402.40	1,680.32	3.18	-0.92	0.290
34.33	-38.73	-4.71	0.00	-461.33	0.00	461.33	2,189.26	1,094.63	2,807.80	1,386.67	3.24	-0.93	0.350
35.00	-38.38	-4.74	0.00	-458.19	0.00	458.19	2,184.83	1,092.41	2,792.98	1,379.35	3.37	-0.95	0.350
40.00	-37.03	-4.73	0.00	-434.51	0.00	434.51	2,151.07	1,075.54	2,682.34	1,324.71	4.45	-1.11	0.345
45.00	-35.71	-4.71	0.00	-410.87	0.00	410.87	2,116.36	1,058.18	2,572.65	1,270.53	5.70	-1.28	0.340
50.00	-34.41	-4.69	0.00	-387.31	0.00	387.31	2,080.67	1,040.34	2,463.99	1,216.87	7.13	-1.45	0.335
55.00	-33.13	-4.67	0.00	-363.84	0.00	363.84	2,044.03	1,022.01	2,356.46	1,163.77	8.75	-1.63	0.329
60.00	-31.86	-4.63	0.00	-340.51	0.00	340.51	2,006.42	1,003.21	2,250.16	1,111.27	10.54	-1.80	0.322
65.00	-30.62	-4.59	0.00	-317.35	0.00	317.35	1,966.15	983.08	2,143.31	1,058.50	12.53	-1.98	0.315
70.00	-29.41	-4.54	0.00	-294.38	0.00	294.38	1,910.22	955.11	2,022.40	998.79	14.70	-2.16	0.310
73.58	-28.24	-4.47	0.00	-278.12	0.00	278.12	1,431.04	715.52	1,520.04	750.69	16.37	-2.30	0.390
75.00	-27.92	-4.50	0.00	-271.79	0.00	271.79	1,423.81	711.90	1,499.70	740.64	17.06	-2.35	0.387
80.00	-26.83	-4.46	0.00	-249.31	0.00	249.31	1,397.65	698.82	1,428.29	705.38	19.64	-2.57	0.373
85.00	-25.76	-4.41	0.00	-227.03	0.00	227.03	1,370.52	685.26	1,357.57	670.45	22.44	-2.78	0.357
90.00	-24.71	-4.36	0.00	-204.99	0.00	204.99	1,342.44	671.22	1,287.63	635.91	25.47	-3.00	0.341
95.00	-23.68	-4.29	0.00	-183.21	0.00	183.21	1,313.39	656.69	1,218.56	601.80	28.73	-3.21	0.323
100.00	-22.68	-4.23	0.00	-161.74	0.00	161.74	1,283.37	641.69	1,150.45	568.16	32.20	-3.42	0.302
105.00	-21.69	-4.15	0.00	-140.61	0.00	140.61	1,248.31	624.15	1,079.85	533.30	35.88	-3.62	0.281
110.00	-20.73	-4.07	0.00	-119.85	0.00	119.85	1,203.56	601.78	1,003.38	495.53	39.78	-3.81	0.259
110.00	-20.73	-4.07	0.00	-119.85	0.00	119.85	829.71	414.85	695.98	343.72	39.78	-3.81	0.374
115.00	-19.87	-3.98	0.00	-99.50	0.00	99.50	811.47	405.73	655.21	323.59	43.87	-4.00	0.332
118.00	-18.09	-3.49	0.00	-87.57	0.00	87.57	800.06	400.03	630.94	311.60	46.42	-4.13	0.304
120.00	-17.76	-3.48	0.00	-80.58	0.00	80.58	792.26	396.13	614.85	303.65	48.17	-4.22	0.288
125.00	-16.97	-3.38	0.00	-63.16	0.00	63.16	772.09	386.05	574.97	283.96	52.70	-4.42	0.244
128.00	-15.32	-3.08	0.00	-53.01	0.00	53.01	759.53	379.77	551.32	272.28	55.51	-4.53	0.215
130.00	-15.08	-3.06	0.00	-46.84	0.00	46.84	750.96	375.48	535.68	264.55	57.42	-4.60	0.197
135.00	-14.51	-2.96	0.00	-31.54	0.00	31.54	728.87	364.43	497.05	245.47	62.31	-4.74	0.148
138.00	-8.35	-1.86	0.00	-22.67	0.00	22.67	715.15	357.58	474.23	234.20	65.31	-4.80	0.109
140.00	-8.15	-1.82	0.00	-18.95	0.00	18.95	704.08	352.04	458.05	226.22	67.32	-4.84	0.095
145.00	-7.67	-1.71	0.00	-9.86	0.00	9.86	670.52	335.26	415.18	205.04	72.42	-4.91	0.060
150.00	0.00	-1.04	0.00	-1.33	0.00	1.33	636.96	318.48	374.42	184.91	77.58	-4.94	0.007

Pole : 302473
 Location : E HFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.0D + 1.0W

60.00 mph Serviceability

30 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

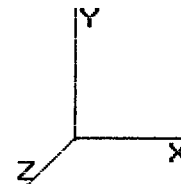
Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	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	155.91	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	6.129	6.742	152.64	1.000	0.000	5.00	15.366	15.37	103.6	0.0	724.1
10.00		1.00	0.70	6.129	6.742	149.37	1.000	0.000	5.00	15.041	15.04	101.4	0.0	708.6
15.00		1.00	0.70	6.129	6.742	146.11	1.000	0.000	5.00	14.716	14.72	99.2	0.0	693.2
20.00		1.00	0.70	6.129	6.742	142.84	1.000	0.000	5.00	14.391	14.39	97.0	0.0	677.7
25.00		1.00	0.70	6.129	6.742	139.58	1.000	0.000	5.00	14.065	14.07	94.8	0.0	662.2
30.00	Bot - Section 2	1.00	0.70	6.134	6.747	136.37	1.000	0.000	5.00	13.740	13.74	92.7	0.0	646.7
34.00	Appertunance(s)	1.00	0.72	6.357	6.993	136.17	1.000	0.000	4.00	10.973	10.97	76.7	0.0	937.4
34.33	Top - Section 1	1.00	0.72	6.375	7.012	136.13	1.000	0.000	0.33	0.905	0.90	6.3	0.0	77.3
35.00	Appertunance(s)	1.00	0.73	6.410	7.051	138.83	1.000	0.000	0.67	1.806	1.81	12.7	0.0	71.0
40.00		1.00	0.76	6.659	7.325	138.10	1.000	0.000	5.00	13.359	13.36	97.9	0.0	524.8
45.00		1.00	0.78	6.887	7.576	136.98	1.000	0.000	5.00	13.034	13.03	98.7	0.0	511.9
50.00		1.00	0.81	7.098	7.807	135.54	1.000	0.000	5.00	12.708	12.71	99.2	0.0	499.0
55.00		1.00	0.83	7.294	8.023	133.84	1.000	0.000	5.00	12.383	12.38	99.3	0.0	486.1
60.00		1.00	0.85	7.477	8.225	131.91	1.000	0.000	5.00	12.058	12.06	99.2	0.0	473.2
65.00		1.00	0.87	7.650	8.415	129.77	1.000	0.000	5.00	11.732	11.73	98.7	0.0	460.3
70.00	Bot - Section 3	1.00	0.89	7.814	8.595	127.47	1.000	0.000	5.00	11.407	11.41	98.0	0.0	447.4
73.58	Top - Section 2	1.00	0.90	7.926	8.719	125.72	1.000	0.000	3.58	8.129	8.13	70.9	0.0	568.3
75.00		1.00	0.91	7.969	8.766	127.47	1.000	0.000	1.42	3.168	3.17	27.8	0.0	99.6
80.00		1.00	0.92	8.118	8.930	124.90	1.000	0.000	5.00	10.972	10.97	98.0	0.0	344.9
85.00		1.00	0.94	8.260	9.086	122.19	1.000	0.000	5.00	10.647	10.65	96.7	0.0	334.6
90.00		1.00	0.95	8.396	9.235	119.37	1.000	0.000	5.00	10.321	10.32	95.3	0.0	324.3
95.00		1.00	0.97	8.526	9.379	116.44	1.000	0.000	5.00	9.996	10.00	93.8	0.0	314.0
100.00		1.00	0.98	8.652	9.517	113.42	1.000	0.000	5.00	9.671	9.67	92.0	0.0	303.6
105.00		1.00	1.00	8.774	9.651	110.30	1.000	0.000	5.00	9.345	9.35	90.2	0.0	293.3
110.00	Top - Section 3	1.00	1.01	8.891	9.780	107.11	1.000	0.000	5.00	9.020	9.02	88.2	0.0	283.0
115.00		1.00	1.02	9.005	9.905	103.83	1.000	0.000	5.00	8.695	8.69	86.1	0.0	205.1
118.00	Appertunance(s)	1.00	1.03	9.071	9.978	101.83	1.000	0.000	3.00	5.061	5.06	50.5	0.0	119.4
120.00		1.00	1.04	9.115	10.02	100.48	1.000	0.000	2.00	3.309	3.31	33.2	0.0	78.0
125.00		1.00	1.05	9.222	10.14	97.066	1.000 *	0.000	5.00	8.044	8.04	81.6	0.0	189.6
128.00	Appertunance(s)	1.00	1.06	9.284	10.21	94.983	1.000 *	0.000	3.00	4.670	4.67	47.7	0.0	110.1
130.00		1.00	1.06	9.326	10.25	93.582	1.000	0.000	2.00	3.049	3.05	31.3	0.0	71.8
135.00		1.00	1.07	9.427	10.36	90.037	1.000	0.000	5.00	7.394	7.39	76.7	0.0	174.1
138.00	Appertunance(s)	1.00	1.08	9.486	10.43	87.882	1.000	0.000	3.00	4.280	4.28	44.7	0.0	100.8
140.00		1.00	1.08	9.525	10.47	86.434	1.000	0.000	2.00	2.788	2.79	29.2	0.0	65.6
145.00		1.00	1.09	9.621	10.58	82.776	1.000	0.000	5.00	6.743	6.74	71.4	0.0	158.6
150.00	Appertunance(s)	1.00	1.11	9.715	10.68	79.066	1.000	0.000	5.00	6.418	6.42	68.6	0.0	150.9
* = Cf Adjusted By Linear Load Ra Effect								Totals:	150.00			2,749.4	0.0	12,890.6

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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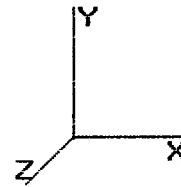
Load Case: 1.0D + 1.0W	60.00 mph Serviceability	30 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	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)
34.00	GPS	1	6.384	7.022	1.00	1.00	1.00	0.000	0.500	7.02	0.00	3.51	10.00
34.00	Stand-off	1	6.357	6.993	1.00	1.00	2.00	0.000	0.000	13.99	0.00	0.00	50.00
35.00	PCTEL GPS-TMG-HR-	1	6.410	7.051	1.00	1.00	0.09	0.000	0.000	0.63	0.00	0.00	0.60
35.00	Stand-off	1	6.410	7.051	1.00	1.00	2.00	0.000	0.000	14.10	0.00	0.00	50.00
118.0	Argus LLPX310R	3	9.071	9.978	0.55	0.80	8.00	0.000	0.000	79.81	0.00	0.00	85.80
118.0	Clearwire Mount	1	9.071	9.978	1.00	1.00	8.50	0.000	0.000	84.82	0.00	0.00	40.00
118.0	DragonWave A-ANT-	1	9.071	9.978	1.00	1.00	1.61	0.000	0.000	16.07	0.00	0.00	15.00
118.0	DragonWave A-ANT-	2	9.071	9.978	0.90	1.00	8.44	0.000	0.000	84.24	0.00	0.00	24.60
118.0	DragonWave Horizon	3	9.071	9.978	0.40	0.80	0.52	0.000	0.000	5.15	0.00	0.00	31.80
118.0	Generic 12" x 12" Ju	1	9.071	9.978	1.00	1.00	1.40	0.000	0.000	13.97	0.00	0.00	10.00
118.0	NextNet BTS-2500	3	9.071	9.978	0.58	0.80	3.71	0.000	0.000	37.06	0.00	0.00	105.00
128.0	Flush Mounts	1	9.284	10.213	1.00	1.00	3.50	0.000	0.000	35.75	0.00	0.00	200.00
128.0	RFS APXV18-206517S-	3	9.284	10.213	0.59	0.80	9.16	0.000	0.000	93.59	0.00	0.00	79.20
138.0	Alcatel-Lucent 4X40W	6	9.486	10.435	0.40	0.80	6.50	0.000	0.000	67.87	0.00	0.00	357.00
138.0	Alcatel-Lucent 800 M	3	9.486	10.435	0.40	0.80	3.49	0.000	0.000	36.44	0.00	0.00	185.40
138.0	Decibel DB980F65E-M	6	9.486	10.435	0.60	0.80	13.50	0.000	0.000	140.87	0.00	0.00	60.00
138.0	RFS APXV9ERR18-C-	2	9.486	10.435	0.66	0.80	10.97	0.000	0.000	114.46	0.00	0.00	124.00
138.0	RFS APXVSPP18-C-	1	9.486	10.435	0.66	0.80	5.48	0.000	0.000	57.23	0.00	0.00	57.00
138.0	RFS IBC1900BB-1	3	9.486	10.435	0.40	0.80	1.36	0.000	0.000	14.15	0.00	0.00	66.00
138.0	RFS IBC1900HG-2A	3	9.486	10.435	0.40	0.80	1.36	0.000	0.000	14.15	0.00	0.00	66.00
138.0	T-Arms	3	9.486	10.435	0.56	0.75	10.13	0.000	0.000	105.65	0.00	0.00	750.00
150.0	6' Omni	1	9.715	10.686	1.00	1.00	1.77	0.000	0.000	18.91	0.00	0.00	35.00
150.0	ADC DD1900	6	9.770	10.747	0.40	0.80	3.07	0.000	3.000	33.01	0.00	99.04	72.60
150.0	CSS DUO4-8670	6	9.770	10.747	0.66	0.80	25.94	0.000	3.000	278.76	0.00	836.27	231.00
150.0	Ericsson RRUS 11	6	9.733	10.707	0.57	0.80	10.02	0.000	1.000	107.28	0.00	107.28	330.00
150.0	Kathrein 860 10025	6	9.770	10.747	1.00	1.00	1.08	0.000	3.000	11.61	0.00	34.82	7.20
150.0	KMW AM-X-CD-16-65-	3	9.770	10.747	0.60	0.80	14.87	0.000	3.000	159.79	0.00	479.36	145.50
150.0	Platform	1	9.715	10.686	1.00	1.00	30.00	0.000	0.000	320.59	0.00	0.00	1,800.00
150.0	Raycap DC6-48-60-18-	1	9.733	10.707	1.00	1.00	1.47	0.000	1.000	15.74	0.00	15.74	31.80
										1,982.69			5,020.50

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

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30 Iterations

Wind Importance Factor : 1.00

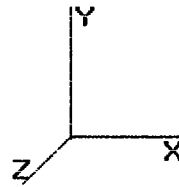
Wind Load Factor : 1.00

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Exposed			Cf			F X (lb)	Dead Load (lb)	
				Ca	Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra			Adjust Factor
5.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.17	0.00	6.129	0.014	0.000	0.00	4.92
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.014	0.000	0.00	0.75
5.00	(1) 1/2" Coax	Yes	1.00	0.000	0.63	0.05	0.00	6.129	0.014	0.000	0.00	0.15
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.072	0.000	0.00	24.60
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.072	0.000	0.00	0.75
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.072	0.000	0.00	0.75
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.074	0.000	0.00	24.60
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.074	0.000	0.00	0.75
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.074	0.000	0.00	0.75
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.076	0.000	0.00	24.60
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.076	0.000	0.00	0.75
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.076	0.000	0.00	0.75
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.077	0.000	0.00	24.60
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.129	0.077	0.000	0.00	0.75
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.077	0.000	0.00	0.75
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.134	0.079	0.000	0.00	24.60
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.134	0.079	0.000	0.00	0.75
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.134	0.079	0.000	0.00	0.75
34.00	(6) 1 5/8" Coax	Yes	4.00	0.000	1.98	0.66	0.00	6.357	0.081	0.000	0.00	19.68
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.00	0.00	0.00	6.357	0.081	0.000	0.00	0.60
34.00	(1) 1/2" Coax	Yes	4.00	0.000	0.63	0.21	0.00	6.357	0.081	0.000	0.00	0.60
34.33	(6) 1 5/8" Coax	Yes	0.33	0.000	1.98	0.05	0.00	6.375	0.062	0.000	0.00	1.64
34.33	(1) 1/2" Coax	Yes	0.33	0.000	0.00	0.00	0.00	6.375	0.062	0.000	0.00	0.05
35.00	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.11	0.00	6.410	0.061	0.000	0.00	3.28
35.00	(1) 1/2" Coax	Yes	0.67	0.000	0.00	0.00	0.00	6.410	0.061	0.000	0.00	0.10
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.659	0.062	0.000	0.00	24.60
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.887	0.063	0.000	0.00	24.60
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.098	0.065	0.000	0.00	24.60
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.294	0.067	0.000	0.00	24.60
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.477	0.068	0.000	0.00	24.60
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.650	0.070	0.000	0.00	24.60
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.814	0.072	0.000	0.00	24.60
73.58	(6) 1 5/8" Coax	Yes	3.58	0.000	1.98	0.59	0.00	7.926	0.074	0.000	0.00	17.63
75.00	(6) 1 5/8" Coax	Yes	1.42	0.000	1.98	0.23	0.00	7.969	0.074	0.000	0.00	6.97
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.118	0.075	0.000	0.00	24.60
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.260	0.077	0.000	0.00	24.60
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.396	0.080	0.000	0.00	24.60
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.526	0.083	0.000	0.00	24.60
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.652	0.085	0.000	0.00	24.60
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.774	0.088	0.000	0.00	24.60
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.891	0.091	0.000	0.00	24.60
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.83	0.00	9.005	0.095	0.000	0.00	24.60
118.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	9.071	0.098	0.000	0.00	14.76
120.0	(6) 1 5/8" Coax	Yes	2.00	0.000	1.98	0.33	0.00	9.115	0.100	0.000	0.00	9.84
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	9.222	0.103	1.008	0.00	24.60
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	9.284	0.106	1.018	0.00	14.76
Totals:											0.00	619.76

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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Load Case: 1.0D + 1.0W

60.00 mph Serviceability

30 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

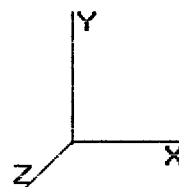
Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	103.59	804.48	0.00	0.00
10.00	101.40	826.74	0.00	0.00
15.00	99.21	811.25	0.00	0.00
20.00	97.01	795.75	0.00	0.00
25.00	94.82	780.26	0.00	0.00
30.00	92.71	764.76	0.00	0.00
34.00	97.74	1,091.90	0.00	3.51
34.33	6.35	85.11	0.00	0.00
35.00	27.47	137.20	0.00	0.00
40.00	97.86	641.44	0.00	0.00
45.00	98.74	628.52	0.00	0.00
50.00	99.22	615.61	0.00	0.00
55.00	99.35	602.70	0.00	0.00
60.00	99.17	589.79	0.00	0.00
65.00	98.73	576.88	0.00	0.00
70.00	98.04	563.96	0.00	0.00
73.58	70.88	651.90	0.00	0.00
75.00	27.77	132.65	0.00	0.00
80.00	97.98	461.54	0.00	0.00
85.00	96.73	451.21	0.00	0.00
90.00	95.32	440.88	0.00	0.00
95.00	93.75	430.55	0.00	0.00
100.0	92.04	420.22	0.00	0.00
105.0	90.19	409.89	0.00	0.00
110.0	88.22	399.56	0.00	0.00
115.0	86.12	321.72	0.00	0.00
118.0	371.61	501.51	0.00	0.00
120.0	33.17	115.92	0.00	0.00
125.0	81.60	284.37	0.00	0.00
128.0	177.04	446.10	0.00	0.00
130.0	31.27	99.88	0.00	0.00
135.0	76.67	244.28	0.00	0.00
138.0	595.48	1,808.25	0.00	0.00
140.0	29.21	77.85	0.00	0.00
145.0	71.36	189.19	0.00	0.00
150.0	1,014.27	2,834.55	0.00	1,572.51
Totals:	4,732.09	21,038.41	0.00	1,576.02

Pole : 302473
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Load Case: 1.0D + 1.0W

60.00 mph Serviceability

30 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

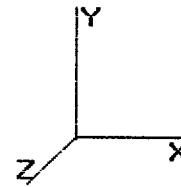
Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-21.03	-4.75	0.00	-515.71	0.00	515.71	3,058.44	1,529.22	4,486.20	2,215.57	0.00	0.00	0.240
5.00	-20.22	-4.68	0.00	-491.96	0.00	491.96	3,015.96	1,507.98	4,329.28	2,138.07	0.05	-0.10	0.237
10.00	-19.39	-4.61	0.00	-468.55	0.00	468.55	2,972.53	1,486.26	4,173.66	2,061.22	0.22	-0.21	0.234
15.00	-18.57	-4.55	0.00	-445.47	0.00	445.47	2,928.13	1,464.06	4,019.45	1,985.06	0.49	-0.31	0.231
20.00	-17.76	-4.48	0.00	-422.74	0.00	422.74	2,882.76	1,441.38	3,866.74	1,909.64	0.88	-0.42	0.228
25.00	-16.98	-4.41	0.00	-400.35	0.00	400.35	2,835.18	1,417.59	3,713.96	1,834.19	1.38	-0.53	0.224
30.00	-16.20	-4.34	0.00	-378.30	0.00	378.30	2,768.06	1,384.03	3,539.19	1,747.87	1.99	-0.64	0.222
34.00	-15.11	-4.24	0.00	-360.94	0.00	360.94	2,714.36	1,357.18	3,402.40	1,680.32	2.57	-0.73	0.220
34.33	-15.02	-4.24	0.00	-359.53	0.00	359.53	2,189.26	1,094.63	2,807.80	1,386.67	2.62	-0.74	0.266
35.00	-14.88	-4.23	0.00	-356.71	0.00	356.71	2,184.83	1,092.41	2,792.98	1,379.35	2.73	-0.76	0.265
40.00	-14.23	-4.15	0.00	-335.58	0.00	335.58	2,151.07	1,075.54	2,682.34	1,324.71	3.59	-0.88	0.260
45.00	-13.60	-4.07	0.00	-314.83	0.00	314.83	2,116.36	1,058.18	2,572.65	1,270.53	4.58	-1.01	0.254
50.00	-12.97	-3.99	0.00	-294.47	0.00	294.47	2,080.67	1,040.34	2,463.99	1,216.87	5.71	-1.15	0.248
55.00	-12.36	-3.91	0.00	-274.52	0.00	274.52	2,044.03	1,022.01	2,356.46	1,163.77	6.98	-1.28	0.242
60.00	-11.77	-3.82	0.00	-254.98	0.00	254.98	2,006.42	1,003.21	2,250.16	1,111.27	8.39	-1.41	0.235
65.00	-11.19	-3.73	0.00	-235.87	0.00	235.87	1,966.15	983.08	2,143.31	1,058.50	9.94	-1.55	0.229
70.00	-10.62	-3.64	0.00	-217.20	0.00	217.20	1,910.22	955.11	2,022.40	998.79	11.63	-1.68	0.223
73.58	-9.96	-3.56	0.00	-204.15	0.00	204.15	1,431.04	715.52	1,520.04	750.69	12.93	-1.78	0.279
75.00	-9.83	-3.55	0.00	-199.10	0.00	199.10	1,423.81	711.90	1,499.70	740.64	13.46	-1.82	0.276
80.00	-9.36	-3.46	0.00	-181.36	0.00	181.36	1,397.65	698.82	1,428.29	705.38	15.45	-1.98	0.264
85.00	-8.90	-3.37	0.00	-164.05	0.00	164.05	1,370.52	685.26	1,357.57	670.45	17.60	-2.13	0.251
90.00	-8.46	-3.28	0.00	-147.19	0.00	147.19	1,342.44	671.22	1,287.63	635.91	19.92	-2.29	0.238
95.00	-8.02	-3.19	0.00	-130.77	0.00	130.77	1,313.39	656.69	1,218.56	601.80	22.39	-2.44	0.223
100.00	-7.60	-3.10	0.00	-114.81	0.00	114.81	1,283.37	641.69	1,150.45	568.16	25.03	-2.59	0.208
105.00	-7.18	-3.01	0.00	-99.30	0.00	99.30	1,248.31	624.15	1,079.85	533.30	27.81	-2.73	0.192
110.00	-6.78	-2.92	0.00	-84.25	0.00	84.25	1,203.56	601.78	1,003.38	495.53	30.74	-2.87	0.176
110.00	-6.78	-2.92	0.00	-84.25	0.00	84.25	829.71	414.85	695.98	343.72	30.74	-2.87	0.253
115.00	-6.46	-2.83	0.00	-69.66	0.00	69.66	811.47	405.73	655.21	323.59	33.81	-2.99	0.223
118.00	-5.98	-2.44	0.00	-61.17	0.00	61.17	800.06	400.03	630.94	311.60	35.73	-3.09	0.204
120.00	-5.86	-2.41	0.00	-56.29	0.00	56.29	792.26	396.13	614.85	303.65	37.03	-3.15	0.193
125.00	-5.57	-2.32	0.00	-44.24	0.00	44.24	772.09	386.05	574.97	283.96	40.41	-3.29	0.163
128.00	-5.14	-2.13	0.00	-37.28	0.00	37.28	759.53	379.77	551.32	272.28	42.50	-3.37	0.144
130.00	-5.04	-2.10	0.00	-33.02	0.00	33.02	750.96	375.48	535.68	264.55	43.92	-3.41	0.132
135.00	-4.79	-2.01	0.00	-22.55	0.00	22.55	728.87	364.43	497.05	245.47	47.55	-3.51	0.098
138.00	-3.03	-1.31	0.00	-16.52	0.00	16.52	715.15	357.58	474.23	234.20	49.77	-3.56	0.075
140.00	-2.95	-1.27	0.00	-13.91	0.00	13.91	704.08	352.04	458.05	226.22	51.27	-3.59	0.066
145.00	-2.76	-1.19	0.00	-7.54	0.00	7.54	670.52	335.26	415.18	205.04	55.05	-3.64	0.041
150.00	0.00	-1.01	0.00	-1.57	0.00	1.57	636.96	318.48	374.42	184.91	58.88	-3.66	0.009

Pole : 302473
 Location : EHFR - Prestige Park, CT
 Height : 150.0 (ft)
 Base Dia : 36.00 (in)
 Top Dia : 14.50 (in)
 Shape : 12 Sides
 Taper : 0.150831 (in/ft)

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

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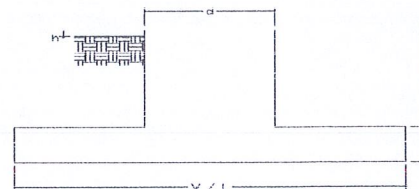
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Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	19.08	0.00	25.18	0.00	0.00	2086.44	73.58	1.11
0.9D + 1.6W	19.05	0.00	18.87	0.00	0.00	2035.13	73.58	1.06
1.2D + 1.0Di + 1.0Wi	4.78	0.00	49.96	0.00	0.00	625.99	73.58	0.39
1.0D + 1.0W	4.75	0.00	21.03	0.00	0.00	515.71	73.58	0.28

Site Name: E H F R - Prestige Park, CT
 Site Number: 302473
 Engineering Number: 51574121
 Engineer: R. Keith
 Date: 01/02/13
 Tower Type: MP

Program Last Updated: 6/1/2010



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

Foundation Mapped:	N		
Compression/Leg:	25.2 k	Concrete Strength (f'_c):	4000 psi
Uplift/Leg:	0.0 k	Pad Tension Steel Depth:	32.00 in
Total Shear:	19.1 k	ϕ_{Shear} :	0.75
Moment:	2086.4 k-ft	$\phi_{\text{Flexure / Tension}}$:	0.90
Tower + Appurtenance Weight:	25.2 k	$\phi_{\text{Compression}}$:	0.65
Depth to Base of Foundation:	8.00 ft	β :	0.85
Diameter of Pier (d):	4.33 ft	Bottom Pad Rebar Size #:	8
Height of Pier above Ground (h):	0.50	# of Bottom Pad Rebar:	40
Width of Pad (W):	18.00 ft	Pad Bottom Steel Area:	31.60 in ²
Length of Pad (L):	18.00 ft	Pad Steel F_y :	60000 psi
Thickness of Pad (t):	3.00 ft	Top Pad Rebar Size #:	8
Tower Leg Center to Center:	0.00 ft	# of Top Pad Rebar:	36
Number of Tower Legs:	1.0 (1 if MP or GT)	Pad Top Steel Area:	28.44 in ²
Tower Center from Mat Center:	0.00 ft	Pier Rebar Size #:	11
Depth Below Ground Surface to Water Table:	99.00 ft	Pier Steel Area (Single Bar):	1.56 in ²
Unit Weight of Concrete:	150.0 pcf	# of Pier Rebar:	14
Unit Weight of Soil Above Water Table:	115.0 pcf	Pier Steel F_y :	60000 psi
Unit Weight of Water:	62.4 pcf	Pier Cage Diameter:	44.0 in
Unit Weight of Soil Below Water Table:	50.0 pcf	Rebar Strain Limit:	0.008
Friction Angle of Uplift:	0.0 Degrees	Steel Elastic Modulus:	29000 ksi
Ultimate Coefficient of Shear Friction:	0.35	Tie Rebar Size #:	4
Ultimate Compressive Bearing Pressure:	6000.0 psf	Tie Steel Area (Single Bar):	0.20 in ²
Ultimate Passive Pressure on Pad Face:	0.0 psf	Tie Spacing:	12 in
$\phi_{\text{Soil and Concrete Weight}}$:	0.9	Tie Steel F_y :	60000 psi
ϕ_{Soil} :	0.75		

Required Mat / Pier Dimensions & Minimum Rebar based on Reinforcement Ratio

Minimum Required Mat Width:	8.00 ft - OK
Minimum Required Mat Length:	8.00 ft - OK
Minimum Required Foundation Depth:	4.35 ft - OK
Minimum Required Mat Thickness:	1.83 ft - OK
Minimum Required # of Vertical Rebar in Pier:	7 OK
Minimum Required Tie Spacing:	12 in - OK

Overturning Moment Usage

Design OTM:	2248.8 k-ft
OTM Resistance:	2889.9 k-ft
Design OTM / OTM Resistance:	0.78 Result: OK

Soil Bearing Pressure Usage:

Total Weight (Foundation, Soil, Tower):	356.8 k
Net Bearing Pressure:	3761 psf
Nominal Bearing Pressure:	4500 psf
Net Bearing Pressure/Nominal Bearing Pressure:	0.84 Result: OK
Load Direction Controlling Design Bearing Pressure:	Diagonal to Pad Edge

Sliding Factor of Safety

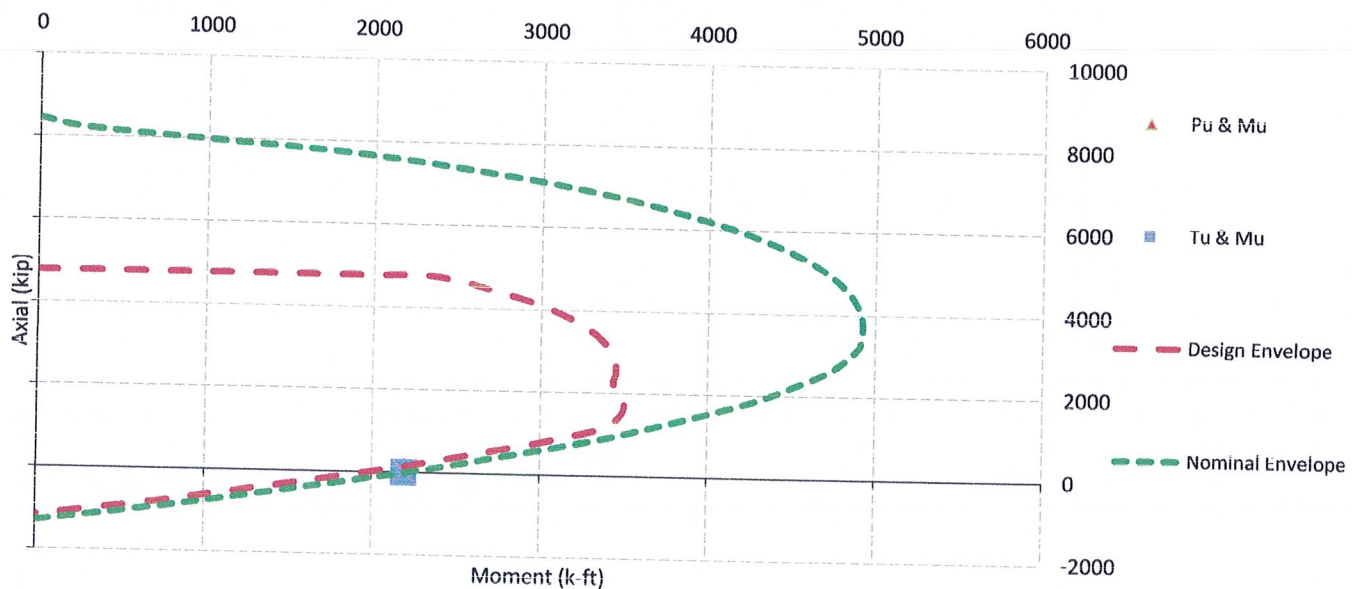
Total Factored Sliding Resistance:	93.7 k
Sliding Design / Sliding Resistance:	0.20 Result: OK

One Way Shear, Flexural Capacity, and Punching Shear

Factored One Way Shear (V_u):	142.8 k
One Way Shear Capacity (ϕV_c):	575.3 k - ACI11.3.1.1
$V_u / \phi V_c$:	0.25 Result: OK
Load Direction Controlling Shear Capacity:	Diagonal to Pad Edge
Lower Steel Pad Factored Moment (M_u):	859.5 k-ft
Lower Steel Pad Moment Capacity (ϕM_n):	4394.4 k-ft - ACI10.3
$M_u / \phi M_n$:	0.20 Result: OK
Load Direction Controlling Flexural Capacity:	Parallel to Pad Edge
Upper Steel Pad Factored Moment (M_u):	629.9 k-ft
Upper Steel Pad Moment Capacity (ϕM_n):	3969.0 k-ft
$M_u / \phi M_n$:	0.16 Result: OK
Lower Pad Flexural Reinforcement Ratio:	0.0046 OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Upper Pad Flexural Reinforcement Ratio:	0.0041 OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Lower Pad Reinforcement Spacing:	5 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Upper Pad Reinforcement Spacing:	6 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Factored Punching Shear (V_u):	0.0 k
Nominal Punching Shear Capacity ($\phi_c V_n$):	1601.5 k - ACI11.12.2.1
$V_u / \phi V_c$:	0.00 Result: OK
Factored Moment in Pier (M_u):	2191.5 k-ft
Pier Moment Capacity (ϕM_n):	2120.7 k-ft
$M_u / \phi M_n$:	1.03 Result: Acceptable
Factored Shear in Pier (V_u):	19.1 k
Pier Shear Capacity (ϕV_n):	202.4 k
$V_u / \phi V_c$:	0.09 Result: OK
Pier Shear Reinforcement Ratio:	0.0009 No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0 k
Pier Tension Capacity (ϕT_n):	1179.4 k
$T_u / \phi T_n$:	0.00 Result: OK
Factored Compression in Pier (P_u):	25.2 k
Pier Compression Capacity (ϕP_n):	4391.8 k - ACI10.3.6.2
$P_u / \phi P_n$:	0.01 Result: OK
Pier Compression Reinforcement Ratio:	0.010 OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
$M_u / \phi M_n + T_u / \phi T_n$:	1.03 Result: Acceptable

Engineer Notes

Nominal and Design Moment Capacity and Factored Design Loads



Site ID		CT54XC784 - Manchester Spectrasite																
Site Address		2 Prestige Park Drive, East Hartford, CT, 06108																
Site Type		Monopole																
Sector 1																		
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage	
1a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	5	100	15.9	138	132	1/2 "	0.5	0	3467.3685	71.54151	7.15415%	
1a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	138	132	1/2 "	0.5	0	389.96892	8.04615	1.41907%	
Sector total Power Density Value:															8.573%			
Sector 2																		
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage	
2a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	5	100	15.9	138	132	1/2 "	0.5	0	3467.3685	71.54151	7.15415%	
2a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	138	132	1/2 "	0.5	0	389.96892	8.04615	1.41907%	
Sector total Power Density Value:															8.573%			
Sector 3																		
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage	
3a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	5	100	15.9	138	132	1/2 "	0.5	0	3467.3685	71.54151	7.15415%	
3a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	138	132	1/2 "	0.5	0	389.96892	8.04615	1.41907%	
Sector total Power Density Value:															8.573%			

Site Composite MPE %	
Carrier	MPE %
Sprint	25.720%
Total Site MPE %	25.720%

BILL OF MATERIALS

QUANTITY REQUIRED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTION	LENGTH	DRAWING NUMBER	WEIGHT (lbs)	COMMENTS
12		--	DYWIDAG REINFORCEMENT				
4		--	#20 ALL THREAD BAR	30'-0"	A-1	6012	GALVANIZED
12		--	#20 ALL THREAD BAR	8'-6 3/4"	A-1	572	GALVANIZED
24		--	#20/#20 COUPLER	--	A-1	228	GALVANIZED
4		TB-20C-12	#20 HEAVY HEX NUT	--	A-1	135	GALVANIZED
140		BR-20C	L 6" X 3 1/2" A36 TERMINATION BRACKET (CONCENTRIC)	3'-6 3/4"	F-1	167	GALVANIZED
			L 6" X 3 1/2" X 3/8" A36 BAR BRACKET (CONCENTRIC)	12"	F-1	1638	GALVANIZED
328		RUH4	HARDWARE				
308		HB16 *SIZE 1-HDG	5/8" X 2 1/2" X 4 3/8" A36 U-BOLT	--	F-1,F-2	282	(2) HHN-FTW GALVANIZED
			LINDAPTER M16 (5/8") HOLLO BOLTS	--	--	--	GALVANIZED
65 (SEE COMMENT)		MPSB20-1	STEP-BOLTS BRACKET ASSEMBLY				
			STEP-BOLT BRACKET WELDMENT	--	F-2	150	GALVANIZED (VERIFY QUANTITY REQUIRED IN FIELD PRIOR TO SUBMITTING BID)
65 (SEE COMMENT)		RUH4	5/8" X 2 1/2" X 4 3/8" A36 U-BOLT	--	F-1,F-2	56	(2) HHN-FTW-LKW GALVANIZED (VERIFY QUANTITY REQUIRED IN FIELD PRIOR TO SUBMITTING BID)
					TOTAL WEIGHT: (NOT INCLUDING GALVANIZING)		9240

PAGE 1 OF 1



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REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	CH	1/17/13

ATC SITE NUMBER:
302473

ATC SITE NAME:
E H F R - PRESTIGE
PARK, CT

SITE ADDRESS:
310 PRESTIGE PARK RD.
EAST HARTFORD, CT 06108-1206

DRAWN BY:	CH
APPROVED BY:	RK
DATE DRAWN:	1/17/13
JOB NO:	51574133
SHEET TITLE:	

BILL OF MATERIALS

SHEET NUMBER:	REV. #
BOM	0

GENERAL

1.

ALL METHODS, MATERIALS AND WORKMANSHIP SHALL FOLLOW THE DICTATES OF GOOD CONSTRUCTION PRACTICE.
2.

ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.
3.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.
4.

ANY SUBSTITUTIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
5.

ANY MANUFACTURED DESIGN ELEMENTS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
6.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.
7.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY, PER TIA-1019-A-2011, TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.
8.

CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO, ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.

STRUCTURAL STEEL

1.

ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.
2.

ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
3.

ALL U-BOLTS SHALL BE ASTM A307 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.
4.

FIELD CUT EDGES, EXCEPT DRILLED HOLES, SHALL BE GROUND SMOOTH.
5.

ALL FIELD CUT SURFACES AND FIELD DRILLED HOLES SHALL BE REPAIRED WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
6.

ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.

WELDING

1.

ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
2.

ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE (100% IF REJECTABLE DEFECTS ARE FOUND) TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
3.

INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
4.

ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
5.

MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
6.

PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.

BOLT TIGHTENING PROCEDURE

1.

STRUCTURAL CONNECTIONS TO BE ASSEMBLED AND INSPECTED IN ACCORDANCE WITH RCSC-2004 (SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS.)

2.

TIGHTEN FLANGE BOLTS BY AISC "TURN-OF-THE-NUT" METHOD, USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIAMETERS

1/2"	BOLTS UP TO AND INCLUDING 2.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
5/8"	BOLTS UP TO AND INCLUDING 2.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
3/4"	BOLTS UP TO AND INCLUDING 3.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
7/8"	BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS UP TO AND INCLUDING 4.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS UP TO AND INCLUDING 5.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS UP TO AND INCLUDING 5.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS UP TO AND INCLUDING 6.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT

BOLT LENGTHS OVER FOUR DIAMETERS BUT NOT EXCEEDING EIGHT DIAMETERS

1/2"	BOLTS 2.25 TO 4.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
5/8"	BOLTS 2.75 TO 5.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
3/4"	BOLTS 3.25 TO 6.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
7/8"	BOLTS 3.75 TO 7.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS 4.75 TO 9.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS 5.25 TO 10.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS 5.75 TO 11.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS 6.25 TO 12.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT

3.

SPLICE BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8.2.1 OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS", LOCATED IN THE AISC MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8.2.1 THROUGH 8.2.4.

8.2.1 TURN-OF-NUT PRETENSIONING
BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1, UNTIL ALL THE BOLTS ARE SIMULTANEOUSLY SNUG TIGHT AND THE CONNECTION IS FULLY COMPACTED. FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.

4.

ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1 OF THE SPECIFICATION.

ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT INSERTION OF THE BOLTS WITHOUT UNDUE DAMAGE TO THE THREADS. BOLTS SHALL BE PLACED IN ALL HOLES WITH WASHERS POSITIONED AS REQUIRED AND NUTS THREADED TO COMPLETE THE ASSEMBLY. COMPACTING THE JOINT TO THE SNUG-TIGHT CONDITION SHALL PROGRESS SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT. THE SNUG-TIGHTENED CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.

PAINT

1.

AS REQUIRED, CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1K.

APPLICABLE CODES AND STANDARDS

1.

ANSI/TIA: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, 222-G EDITION.
2.

2003 INTERNATIONAL BUILDING CODE WITH 2005 CONNECTICUT SUPPLEMENTS AND 2009 CONNECTICUT AMENDMENTS.
3.

ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 318-02.
4.

CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.
5.

AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
6.

AWS: AMERICAN WELDING SOCIETY D1.1, STRUCTURAL WELDING CODE, LATEST EDITION.

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REV.

DESCRIPTION

BY

DATE

0

FIRST ISSUE

CH

1/17/13

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ATC SITE NUMBER:

302473

ATC SITE NAME:

E H F R – PRESTIGE PARK, CT

SITE ADDRESS:

310 PRESTIGE PARK RD.

EAST HARTFORD, CT 06108-1206

DRAWN BY:

CH

APPROVED BY:

RK

DATE DRAWN:

1/17/13

JOB NO:

51574133

SHEET TITLE:

IBC GENERAL NOTES

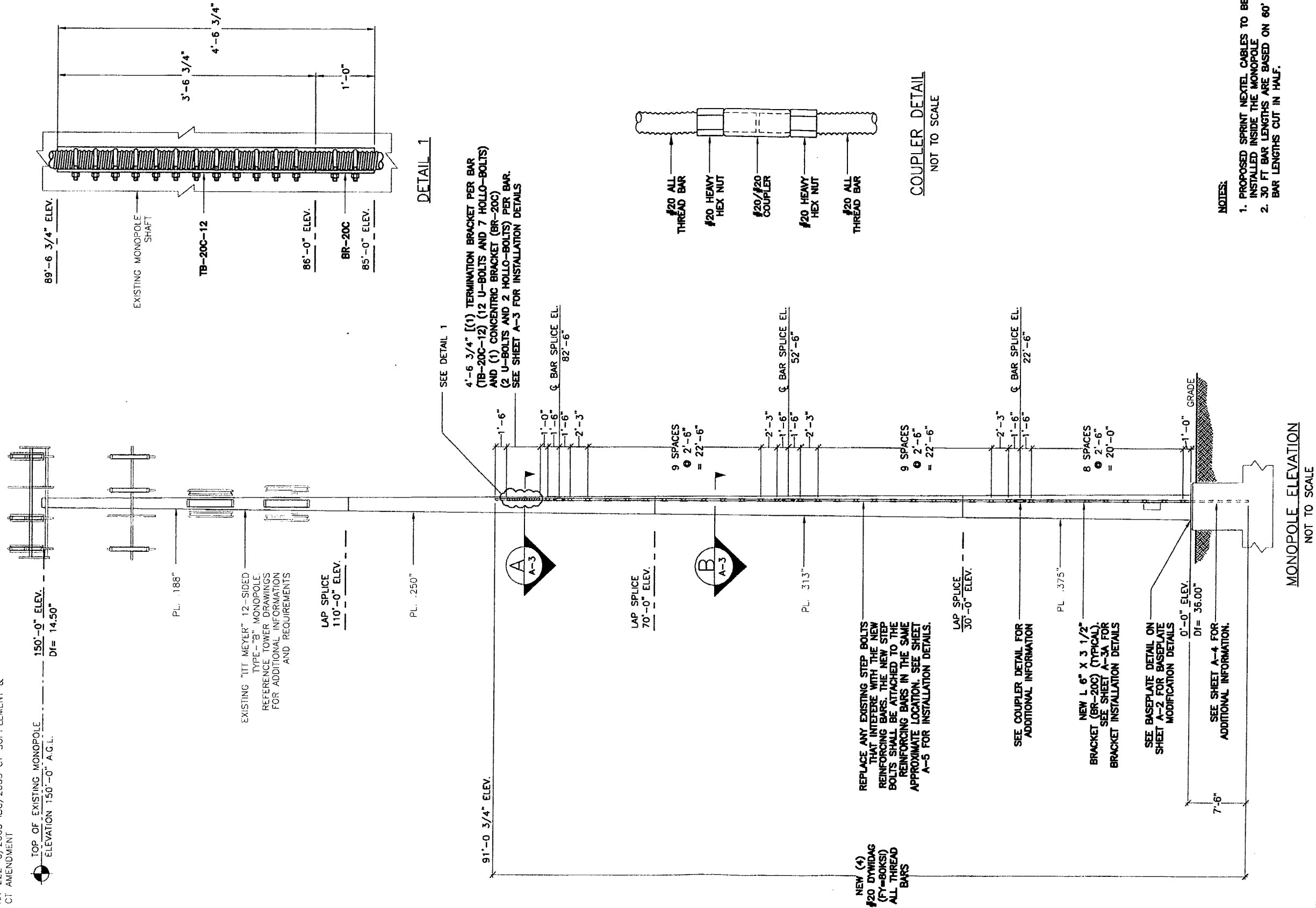
SHEET NUMBER:

IGN

REV. #

0

BASIC WIND SPEED: 95. MPH (3-SECOND GUST)
RADIAL ICE: 50 MPH (3-SECOND GUST) W/ 1" RADIAL ICE CONCURRENT
CODE: ANSI/TIA-222-G/2003 IBC/2005 CT SUPPLEMENT &
2009 CT AMENDMENT



NOTES:

1. PROPOSED SPRINT NEXTEL CABLES TO BE INSTALLED INSIDE THE MONOPOLE
2. 30 FT BAR LENGTHS ARE BASED ON 60' BAR LENGTHS CUT IN HALF.



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1			
2			
3			

ATC SITE NUMBER:
302473

ATC SITE NAME:
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PARK, CT

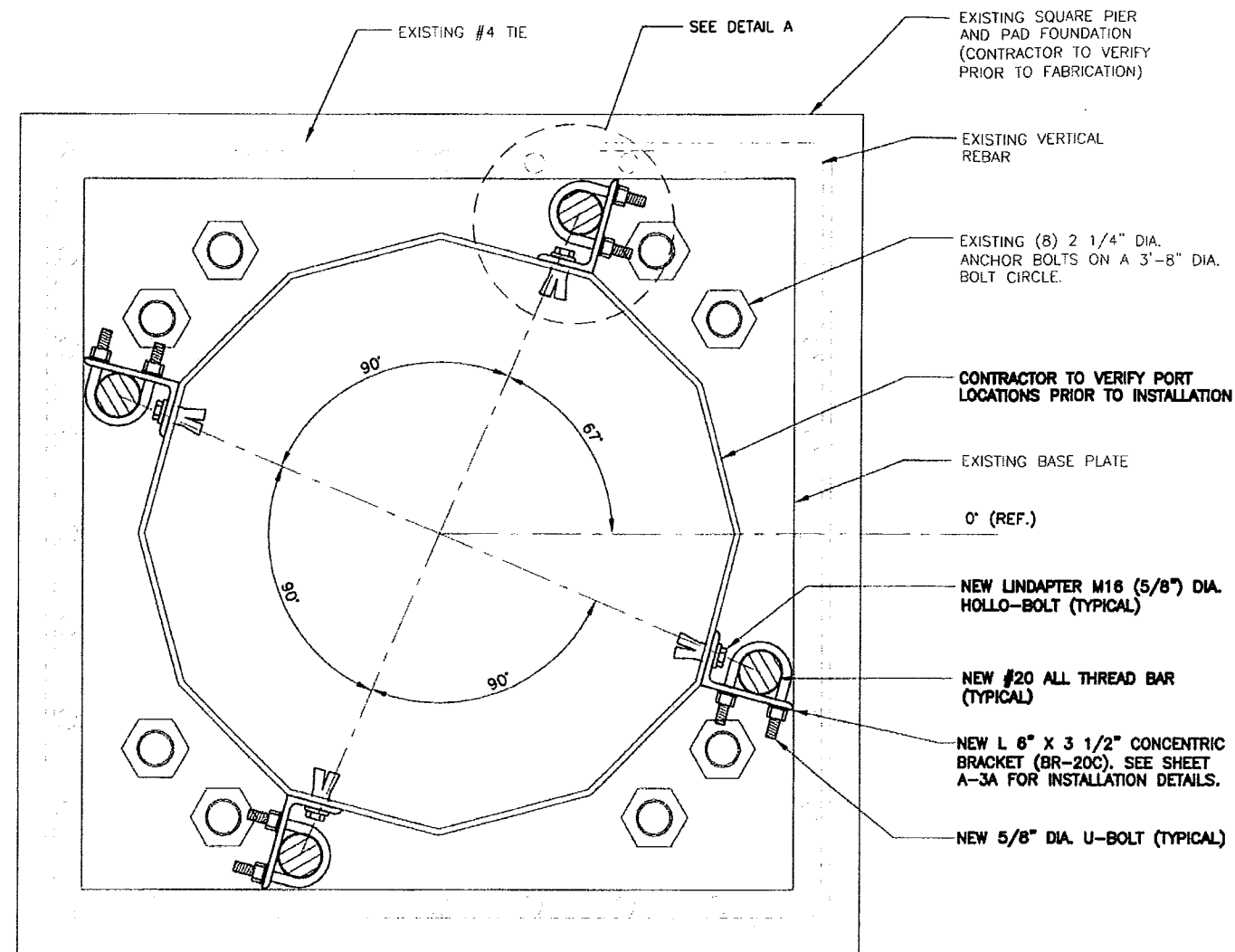
SITE ADDRESS:
310 PRESTIGE PARK RD.
EAST HARTFORD, CT 06108-1206

DRAWN BY:	CH
APPROVED BY:	RK
DATE DRAWN:	1/17/13
JOB NO:	51574133

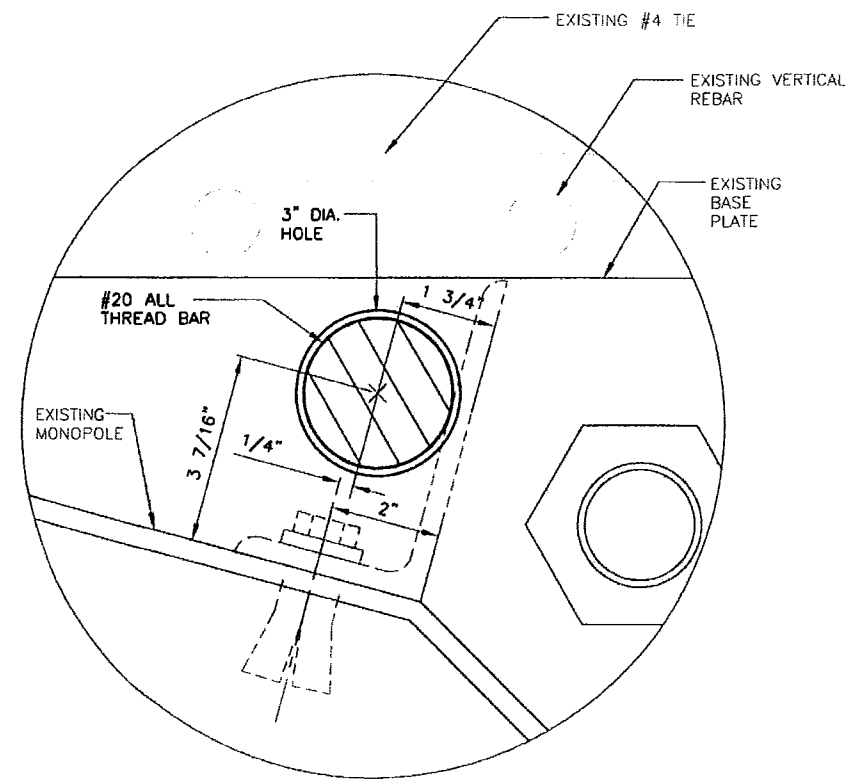
SHEET TITLE:

MONOPOLE
ELEVATION
VIEW

SHEET NUMBER:	REV. #
A-1	0



BASE PLATE DETAIL



DETAIL A



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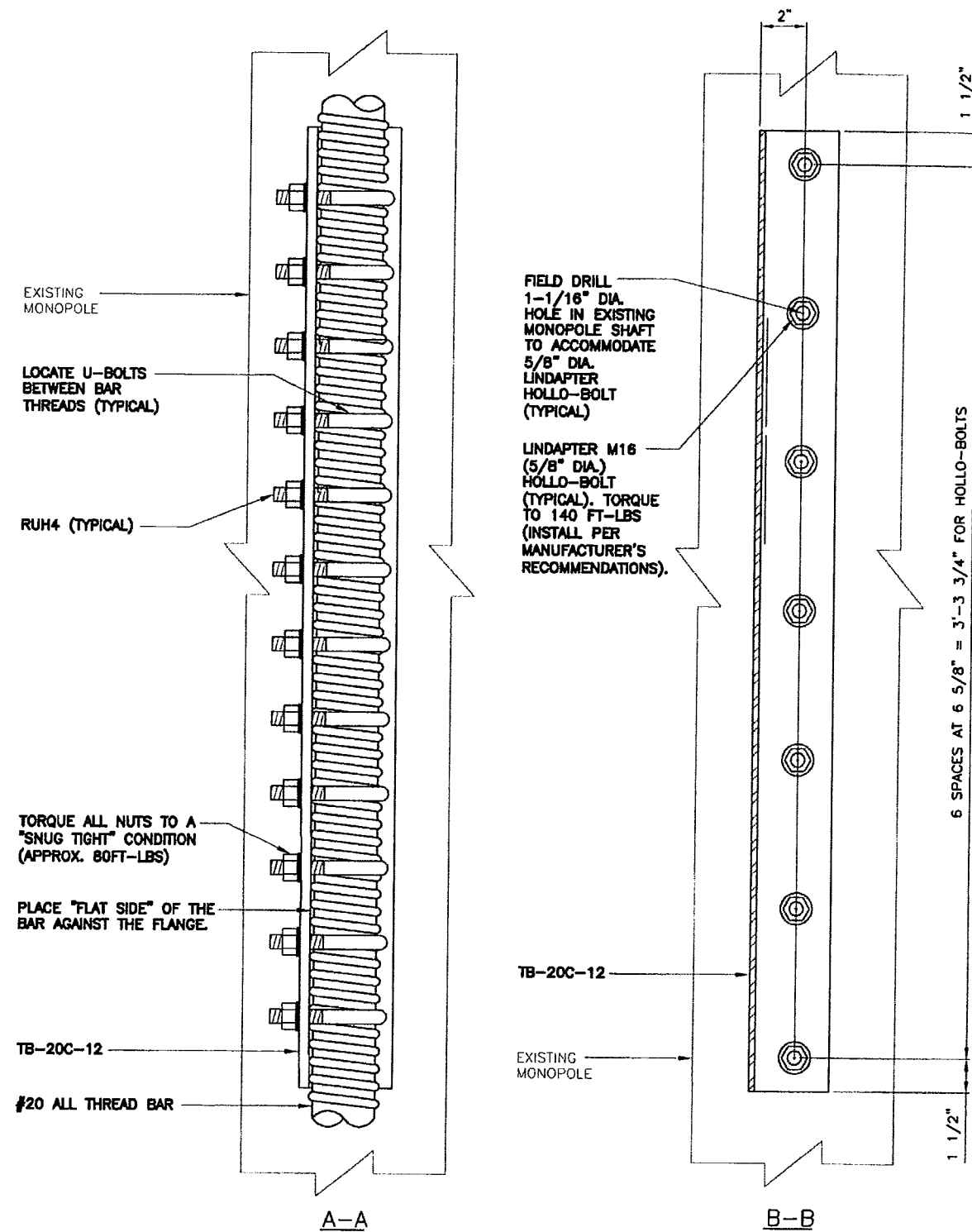
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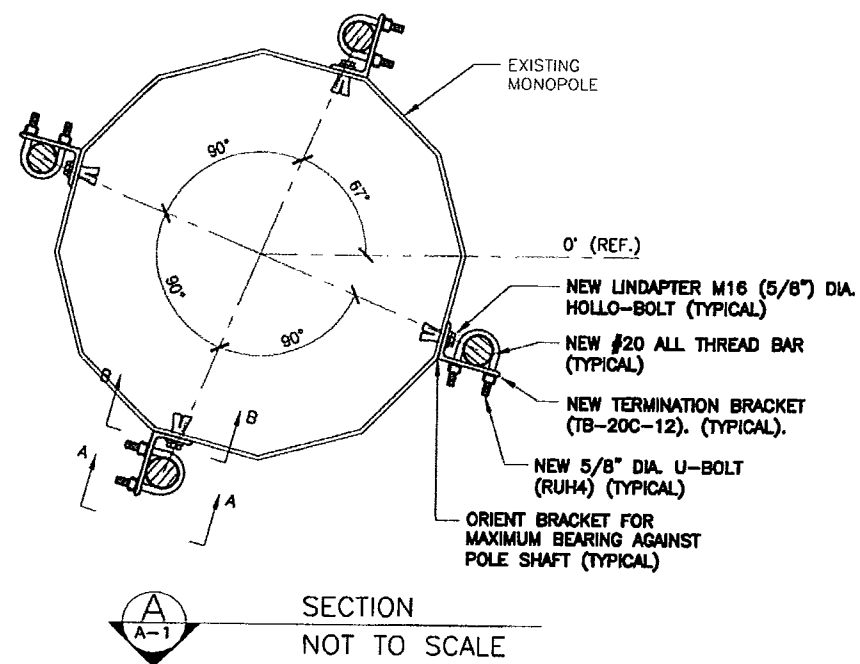
DRAWN BY:	CH
APPROVED BY:	RK
DATE DRAWN:	1/17/13
JOB NO:	51574133
SHEET TITLE:	

BASE PLATE
 DETAILS

SHEET NUMBER:	REV. #
A-2	0



- NOTES:**
1. APPLY (2) COATS ZINC RICH GALVANIZING COMPOUND PER THE MANUFACTURER'S SPECIFICATIONS TO ALL FIELD DRILLED HOLES.
 2. SEE SHEET F-1 FOR FABRICATION DETAILS



BRACKET INSTALLATION DETAILS

N.T.S.

1



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 302473

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 E H F R - PRESTIGE
 PARK, CT

SITE ADDRESS:
 310 PRESTIGE PARK RD.
 EAST HARTFORD, CT 06108-1206

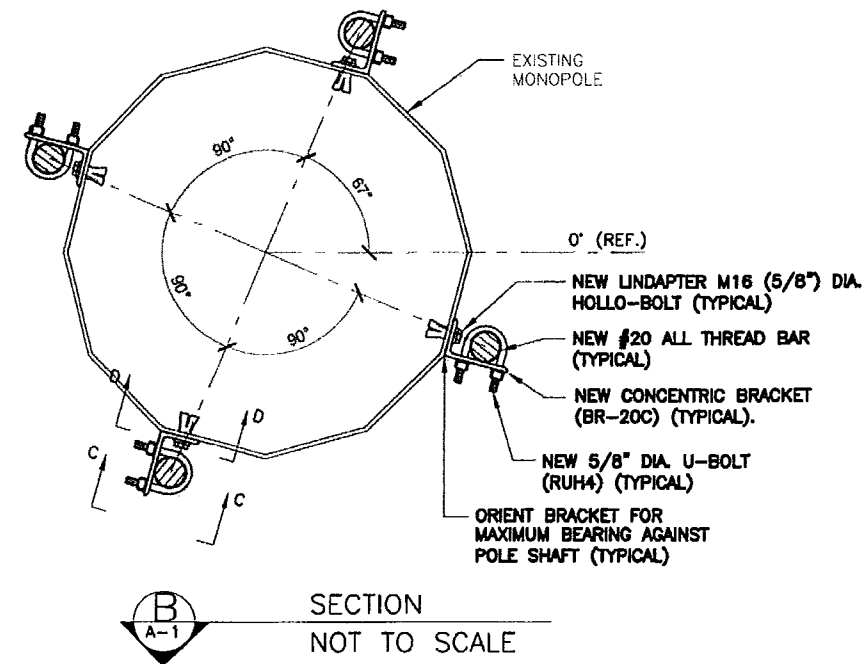
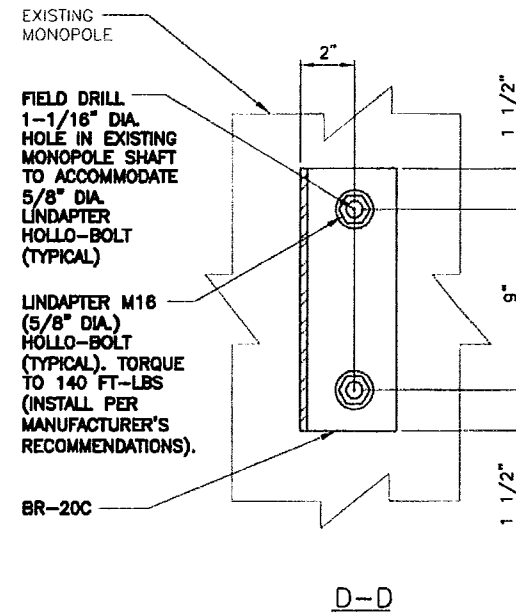
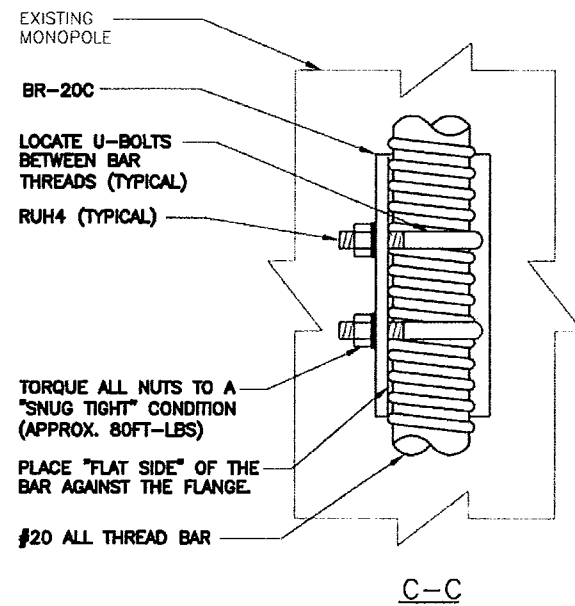
DRAWN BY: CH
 APPROVED BY: RK
 DATE DRAWN: 1/17/13
 JOB NO: 51574133

SHEET TITLE:
 BRACKET
 INSTALLATION
 DETAILS
 (CONCENTRIC)

SHEET NUMBER: A-3
 REV. # 0

NOTES:

1. APPLY (2) COATS ZINC RICH GALVANIZING COMPOUND PER THE MANUFACTURER'S SPECIFICATIONS TO ALL FIELD DRILLED HOLES.
2. SEE SHEET F-1 FOR FABRICATION DETAILS



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REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	CH	1/17/13
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3			

ATC SITE NUMBER:
 302473
 ATC SITE NAME:
 E H F R - PRESTIGE
 PARK, CT

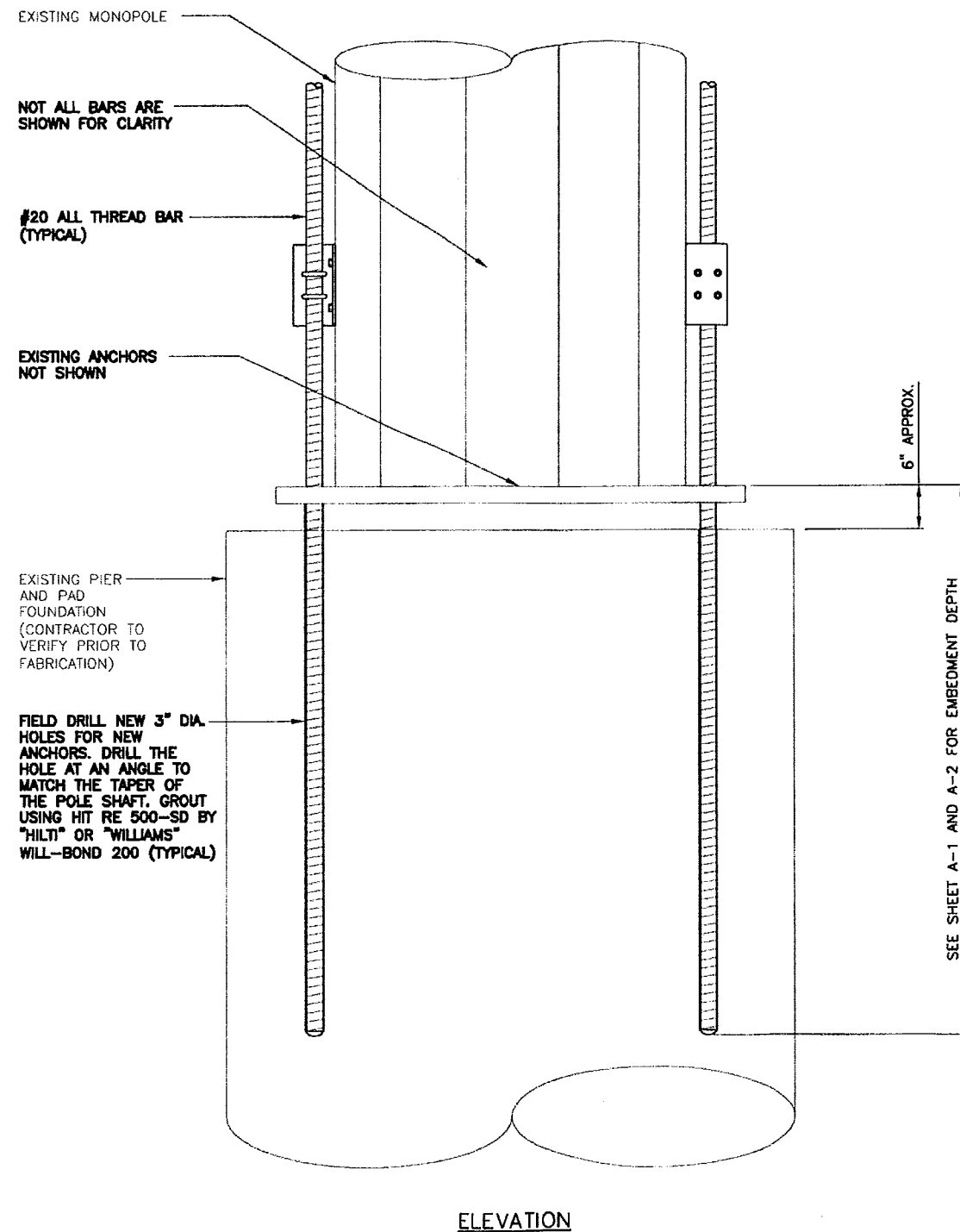
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 EAST HARTFORD, CT 06108-1206

DRAWN BY:	CH
APPROVED BY:	RK
DATE DRAWN:	1/17/13
JOB NO:	51574133

SHEET TITLE:
 BRACKET
 INSTALLATION
 DETAILS
 (CONCENTRIC)

SHEET NUMBER:	REV. #
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ANCHOR INSTALLATION DETAIL

N.T.S. 1



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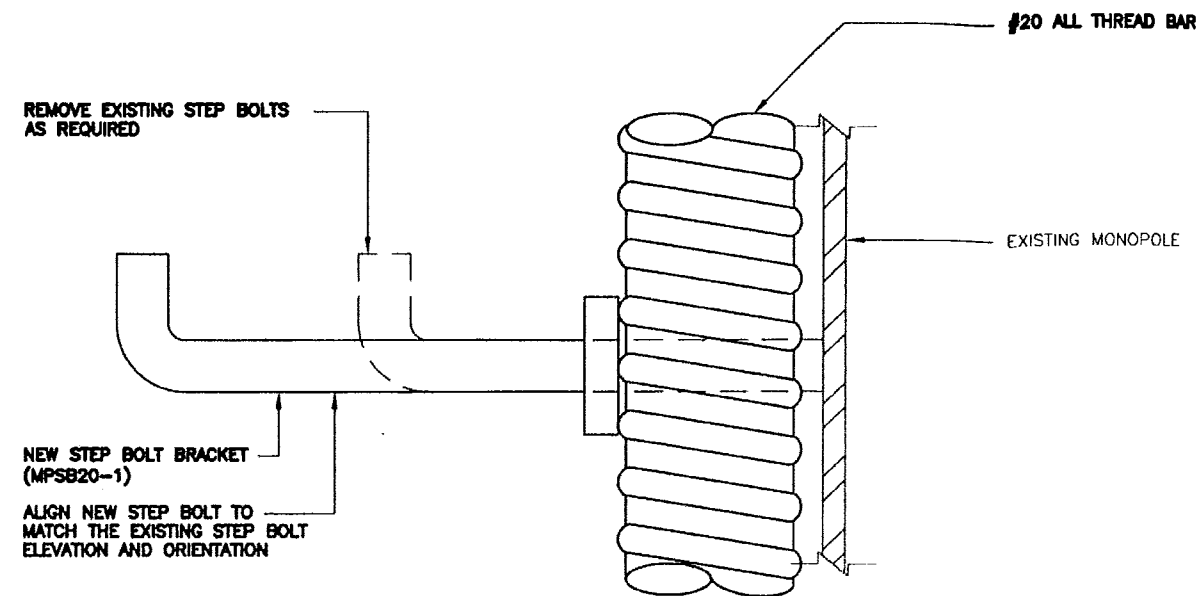
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DATE DRAWN:	1/17/13
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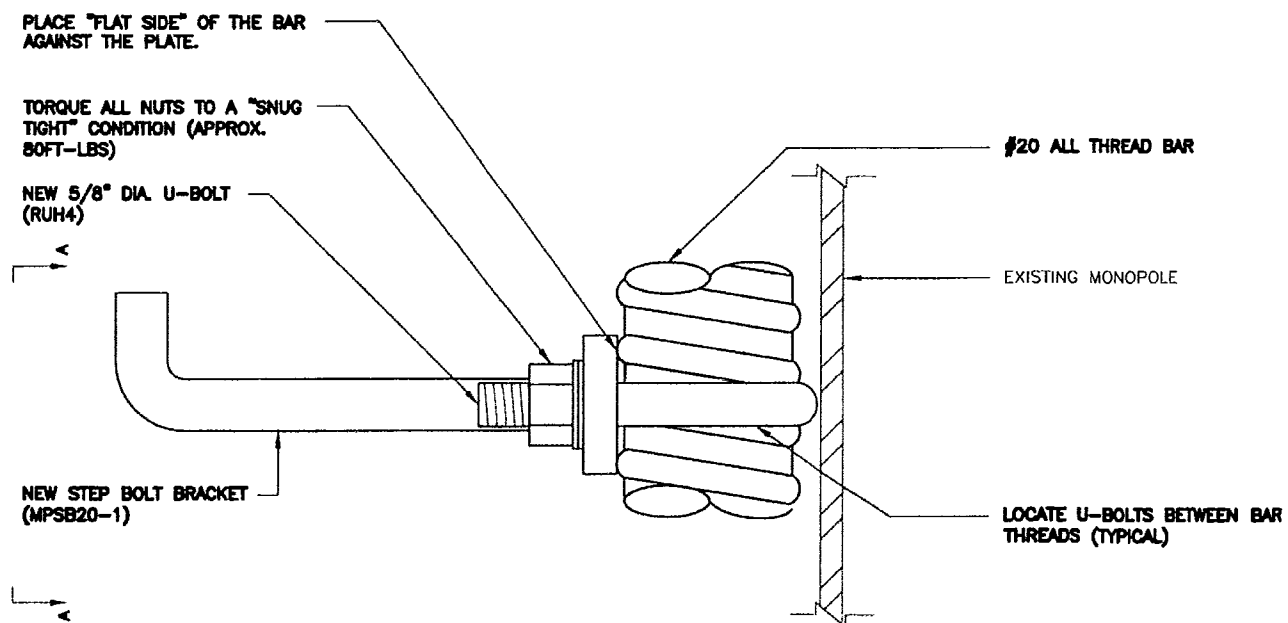
ANCHOR
INSTALLATION
DETAIL

SHEET NUMBER:	REV. #
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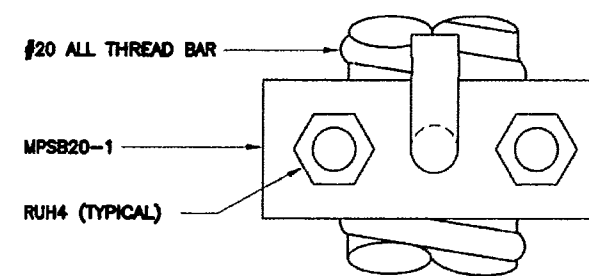
STEP 1



STEP 2

NOTE:

1. SEE SHEETS F-3 AND F-4 FOR FABRICATION DETAILS



A-A



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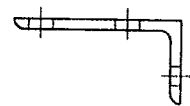
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EAST HARTFORD, CT 06108-1206

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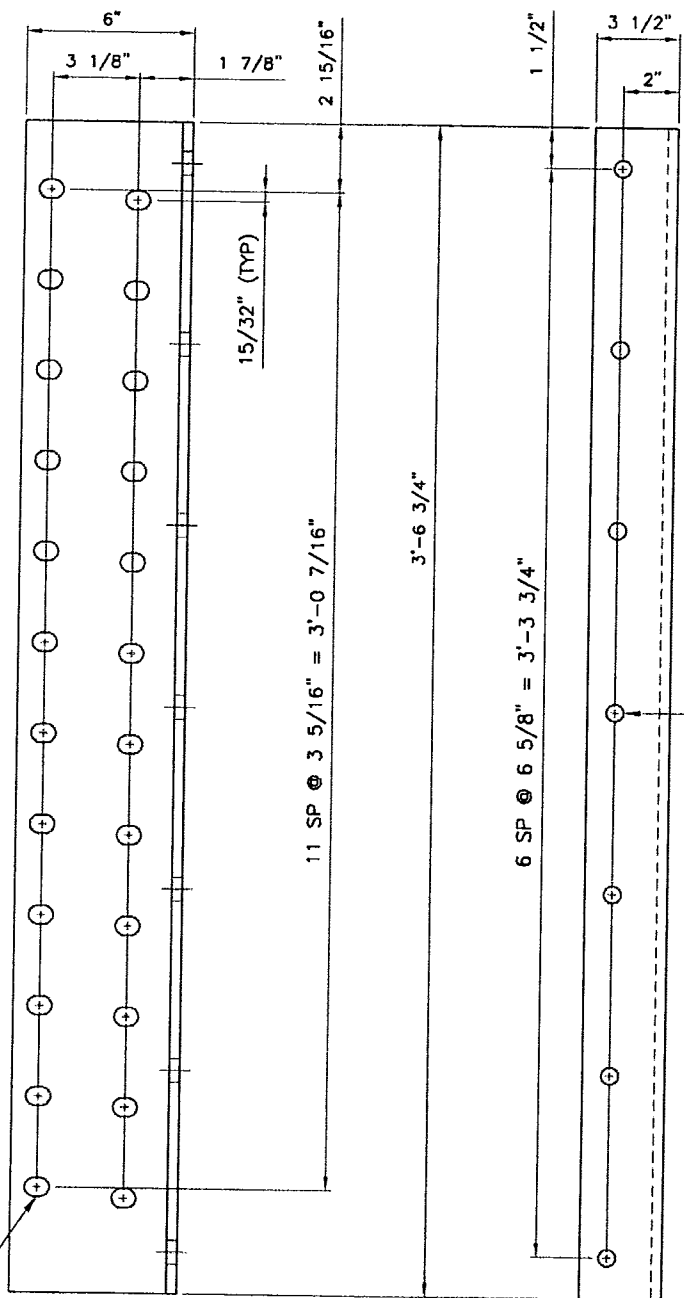
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STEP BOLT
BRACKET
INSTALLATION
DETAILS

SHEET NUMBER:	REV. #
A-5	0



TOP VIEW



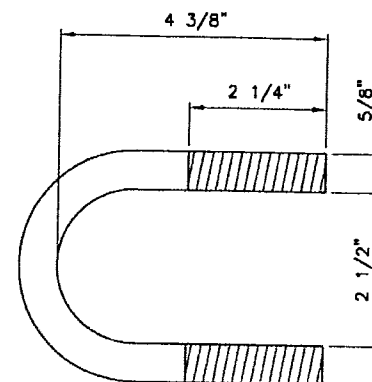
FRONT VIEW

SIDE VIEW

(TB-20C-12)

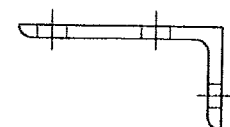
L 6" X 3 1/2" X 3/8" A36 TERMINATION BRACKET

NOTE:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

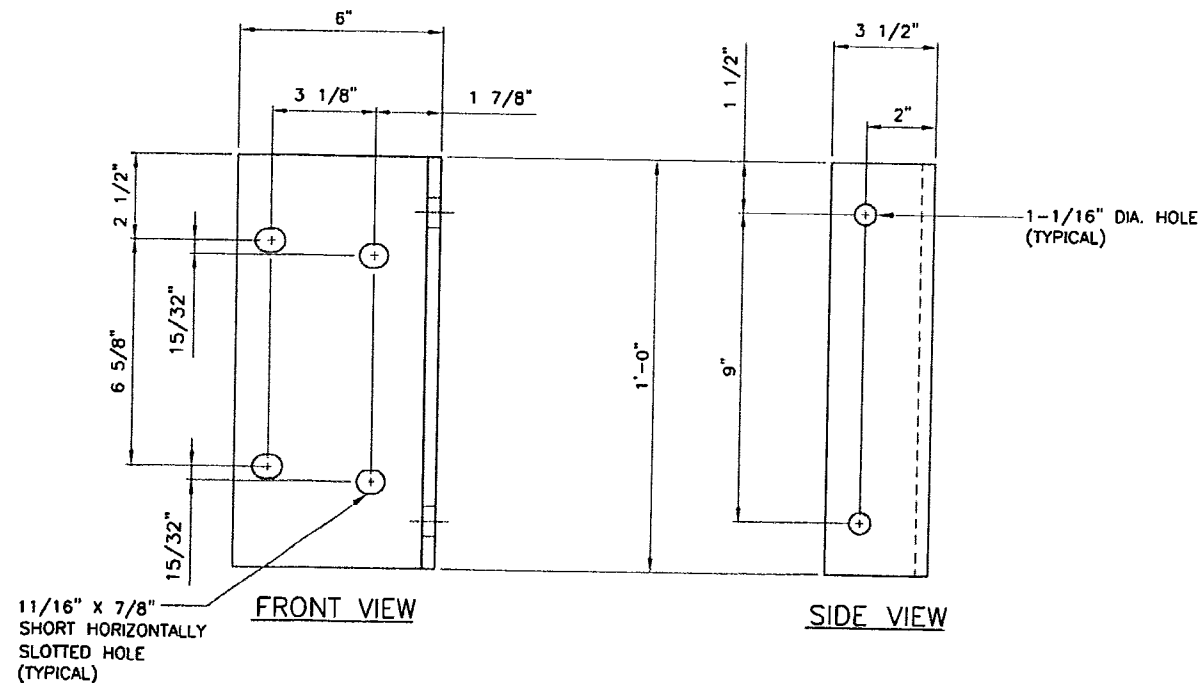


(RUH4)

5/8" X 2 1/2" X 4 3/8" A36 U-BOLT DETAIL



TOP VIEW



FRONT VIEW

SIDE VIEW

(BR-20C)

L 6" X 3 1/2" X 3/8" A36 BRACKET



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EAST HARTFORD, CT 06108-1206

DRAWN BY: CH
APPROVED BY: RK
DATE DRAWN: 1/17/13
JOB NO: 51574133

SHEET TITLE:

TB-20C-12,
BR-20C AND
RUH4 DETAILS

SHEET NUMBER:

F-1

REV. #

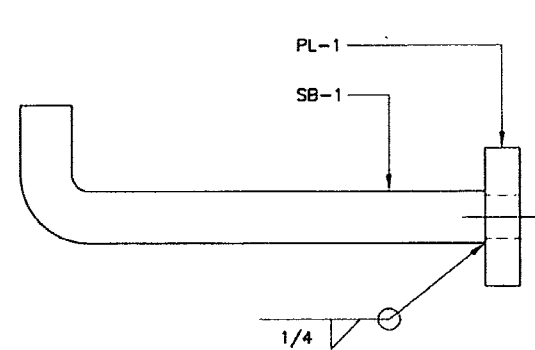
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TB-20C-12 BR-20C AND RUH4 DETAILS

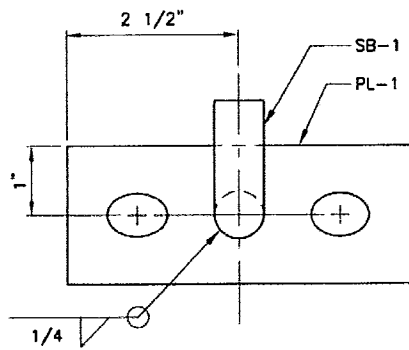
N.T.S.

1

- NOTES:
- 1. HOT-DIPPED GALVANIZED PER ASTM A123.
 - 2. ALL HOLES ARE 11/16" X 7/8" SHORT HORIZONTALLY SLOTTED HOLES UNLESS NOTED OTHERWISE.

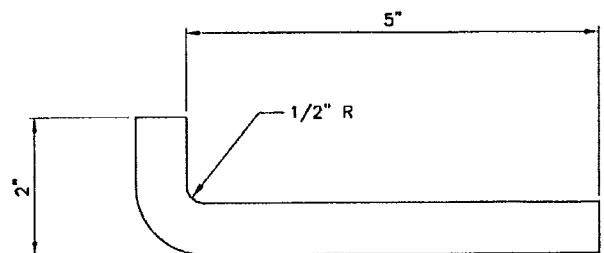


SIDE VIEW



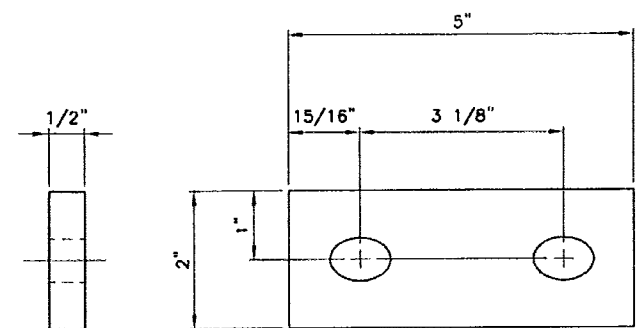
FRONT VIEW

MPSB20-1 WELDMENT DETAILS



(SB-1)

3/4" DIA. X 2" X 5" A36 SOLID ROD STEP BOLT DETAIL



SIDE VIEW

FRONT VIEW

(PL-1)

PL 1/2" X 2" X 5" A36 DETAILS

MPSB20-1 WELDMENT		
PART NO.	DESCRIPTION	QUANTITY REQ'D
SB-1	3/4" DIA. X 2" X 5" A36	1
PL-1	PL 1/2" X 2" X 5" A36 DETAILS	1

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SHEET TITLE:
MPSB20-1
WELDMENT
DETAILS

SHEET NUMBER:	REV. #
F-2	0

1.0 GENERAL REQUIREMENTS (AS REQUIRED)

1) GENERAL SPECIFICATIONS

- a) ALL REFERENCES TO THE OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED CUSTOMER OR ITS DESIGNATED REPRESENTATIVE
- b) WORK SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS. ALL NECESSARY LICENSES, CERTIFICATES, PERMITS, ETC., REQUIRED BY AUTHORITY HAVING JURISDICTION SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR
- c) ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO DO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS AGREEMENT, THE CONTRACTOR ATTESTS THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY TO COMPLETE THE WORK, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PREFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK.
- d) THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING DIMENSIONS AND CONDITIONS AT THE JOB SITE WHICH COULD AFFECT THE WORK UNDER THIS CONTRACT. ALL MANUFACTURES RECOMMENDED SPECIFICATIONS, EXCEPT THOSE SPECIFICATIONS HEREIN, WHERE MOST STRINGENT SHALL BE COMPLIED WITH.
- e) DO NOT SCALE THE DRAWINGS. DIMENSIONS ARE EITHER TO THE FACE OF FINISHED ELEMENTS OR TO THE CENTER LINE OF ELEMENTS, UNLESS NOTED OTHERWISE. CRITICAL DIMENSIONS SHALL BE CONFIRMED WITH SITE MEASUREMENTS. VERIFY WITH ATC AS APPLICABLE.
- f) WHERE ONE DETAIL IS SHOWN FOR ONE CONDITION, UNLESS NOTED OTHERWISE, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS.
- g) DRAWINGS FORMING THIS SET ARE COMPLIMENTARY AND MUST BE READ AS ONE TOTAL DOCUMENT. DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF ATC. THESE DRAWINGS WERE PREPARED TO BE SUBMITTED TO GOVERNMENTAL BUILDING AUTHORITIES FOR REVIEW FOR COMPLIANCE WITH APPLICABLE CODES. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO EXECUTE CONSTRUCTION INDICATED HEREIN ACCORDING TO THE APPLICABLE BUILDING CODES.
- h) THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT DESCRIBED HEREIN.
- i) THE CONTRACTOR SHALL OBTAIN AUTHORIZATION FROM ATC TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.

2) MATERIALS

- a) WHERE PAVING, CONCRETE SIDEWALKS OR PATHS MEET EXISTING CONSTRUCTION, THE CONTRACTOR SHALL MATCH THE EXISTING PITCH, GRADE, AND ELEVATION SO THE ENTIRE STRUCTURE SHALL HAVE A SMOOTH TRANSITION.
- b) THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT AND MAINTAIN EXISTING CONDITIONS, EASEMENTS, PAVEMENTS, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGES THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY
- c) ALL MATERIALS FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM DEFECTS AND FAULTS AND IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION.
- i) THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUANTITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED AND SHALL ONLY INSTALL SAID SUBSTITUTIONS AFTER APPROVAL BY THE OWNER OR THE OWNER'S ENGINEER.
- ii) ALL MATERIAL FURNISHED UNDER THIS CONTRACT SHALL BE NEW UNLESS NOTED OTHERWISE. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF (1) YEAR FOLLOWING SUBSEQUENT COMPLETION OF PROJECT OR AS SPECIFIED. THE CONTRACTOR SHALL REPAIR OR REPLACE AT HIS EXPENSE ALL WORK THAT MAY DEVELOP DEFECTS IN MATERIAL OR WORKMANSHIP WITHIN THE WARRANTY PERIOD.
- iii) THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR ARE TO BE RESPONSIBLE FOR VERIFYING EXISTING SITE CONDITIONS AND DIMENSIONS AND THE LOCATION OF BURIED UTILITIES AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF WORK.
- iv) CONFLICTS AND OMISSIONS WHICH COULD HAVE BEEN DISCOVERED BY FILED VERIFICATION AND INSPECTION, WHETHER INDICATED ON THE CONTRACT DOCUMENT OR NOT, WILL NOT BE ENTERTAINED OR PAID.
- d) MINIMUM BEND RADIUS OF ANTENNAS CABLES SHALL BE IN ACCORDANCE WITH CABLE MANUFACTURER RECOMMENDATIONS.
- e) CABLE ROUTING SHOWN IS DIAGRAMMATIC. ACTUAL ROUTE OF ANTENNA CABLES SHALL BE DETERMINED IN THE FIELD.

3) VERIFICATION

- a. THE CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST BETWEEN THE LOCATIONS OF ANY AND ALL MECHANICAL, ELECTRICAL, PLUMBING, OR STRUCTURAL ELEMENTS, AND THAT ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE ARE MET. NOTIFY THE ATC OF ANY CONFLICTS, THE ATC HAS THE RIGHT TO MAKE MINOR MODIFICATIONS IN THE DESIGN OF THE CONTRACT WITHOUT THE CONTRACTOR GETTING ADDITIONAL COMPENSATION.
- b. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
- c. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE LOCAL POWER AND TELEPHONE UTILITIES AND THE CONSTRUCTION MANAGER TO CONFIRM THE SOURCE OF SERVICE PRIOR TO CONDUIT INSTALLATION. THE GENERAL CONTRACTOR SHALL OBTAIN WRITTEN CONFIRMATION OF EXPECTED DATE OF COMPLETION OF THE POWER CONNECTION FROM THE POWER COMPANY.

- d. ACCESS TO PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
- e. THE ENGINEER HAS NOT CONDUCTED, NOR DOES IT INTEND TO CONDUCT ANY INVESTIGATION TO DETERMINE THE PRESENCE OF ANY HAZARDOUS MATERIAL INCLUDING BUT NOT LIMITED TO ASBESTOS, LEAD PAINT, AND PCB'S WITHIN THE CONFINES OF THE PROJECT. THE ENGINEER WILL NOT ACCEPT ANY RESPONSIBILITY FOR THE ABATEMENT OR RESULTING CLAIMS FOR DAMAGES OR LOSSES AS RESULT OF THE PRESENCE OF HAZARDOUS MATERIALS. IF EVIDENCE OF HAZARDOUS MATERIAL IS DISCOVERED, SUSPEND WORK AS REQUIRED BY GOVERNING STATUES, AND NOTIFY ATC (AMERICAN TOWER CORPORATION). DO NOT PROCEED WITH WORK UNTIL INSTRUCTED BY ATC.

4) CLEAN-UP

- a) THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY CLEAN UP OF ALL TRADES AND REMOVE ALL DEBRIS FROM THE CONSTRUCTION SITE. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE BUILDING, SITE, AND ANY OTHER SURROUNDING AREAS TO A BETTER THAN NEW CONDITION WHILE MEETING THE APPROVAL OF ATC AND THE LANDLORD

5) SAFETY

- a) THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, ETC. ACCORDING TO APPLICABLE CODES, STANDARDS, AND PRACTICES. THIS INCLUDES, BUT IS NOT LIMITED TO THE ADDITION OF TEMPORARY BRACING, GUYS, OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- b) THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
- c) THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE OSHA, LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- d) THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR DAMAGES TO THE EXISTING FACILITY AND INSTALLATION RESULTING FROM CONSTRUCTION AND GENERAL NEGLIGENCE. REPAIR ALL DAMAGES AND RESTORE FACILITY AND INSTALLATIONS TO THE SATISFACTION OF ATC AND THE LANDLORD AT NO EXTRA CHARGE. NOTIFY ATC OF ANY SUCH DAMAGES PROMPTLY AND REPAIR TO 100% SATISFACTION IMMEDIATELY.
- e) CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA. ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.

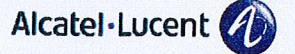
STRUCTURAL STEEL NOTES

6) STRUCTURAL STEEL SPECIFICATIONS

- a) THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST AISC SPECIFICATIONS.
- b) UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF ASTM A36. ALL BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325 HIGH STRENGTH BOLTS.
- c) ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST AWS STRUCTURAL WELDING CODE. ALL WELDERS SHALL PROVIDE PROPER CERTIFICATION OF QUALIFICATION TO THE LANDLORD OR ATC PRIOR TO COMMENCING WORK AT THE SITE.
- d) ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS.
- e) HOLES SHALL NOT BE FLAME CUT THROUGH STEEL UNLESS APPROVED BY THE ENGINEER.
- f) WELDS SHALL BE MADE WITH E-70XX ELECTRODES UNLESS NOTED OTHERWISE.
- g) HOT-DIP GALVANIZE ALL ITEMS AFTER FABRICATION WHERE PRACTICABLE. GALVANIZING SHALL BE DONE IN ACCORDANCE WITH ASTM A123, A153A, A153M, A653A, A653M AND ASTM G90, AS APPLICABLE.
- h) REPAIR DAMAGED SURFACES WITH GALVANIZING REPAIR METHOD AND PAINT CONFORMING TO ASTM A780 OR BY APPLICATION OF STICK OR THICK PASTE MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED AND REMOVE SLAG FROM WELDS. HEAT SURFACES TO A TEMPERATURE SUFFICIENT TO MELT THE METALLIC IN STICK OR PASTE: SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF ANY EXCESS MATERIAL.
- i) A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS.
- j) ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO EXCLUDE THE THREADS FROM THE SHEAR PLANE.
- k) ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. A BOLT THAT ENDS BELOW THE FACE OF THE NUT AFTER TIGHTENING WILL NOT BE PERMITTED.



6391 SPRINT PKWY
OVERLAND PARK, KS 66251



9305 GERWIG LANE
COLUMBIA, MD 21046
OFFICE: (410) 290-5509
FAX: (410) 290-3362

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IRVING, TX 75063
PHONE: (972) 999-8900
FAX: (972) 999-8940
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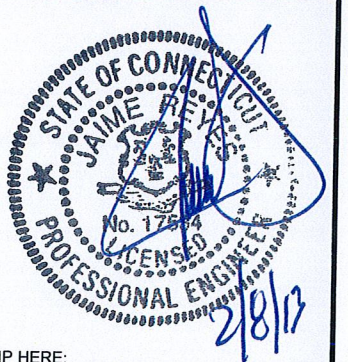
SPRINT SITE NAME:

**MANCHESTER /
SPECTRASITE**

2 PRESTIGE PARK RD.
EAST HARTFORD, CT 06108

ATC SITE NUMBER:

302473



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CHECKED BY:	SAE
DATE DRAWN:	12-03-12
JOB NO:	514512K

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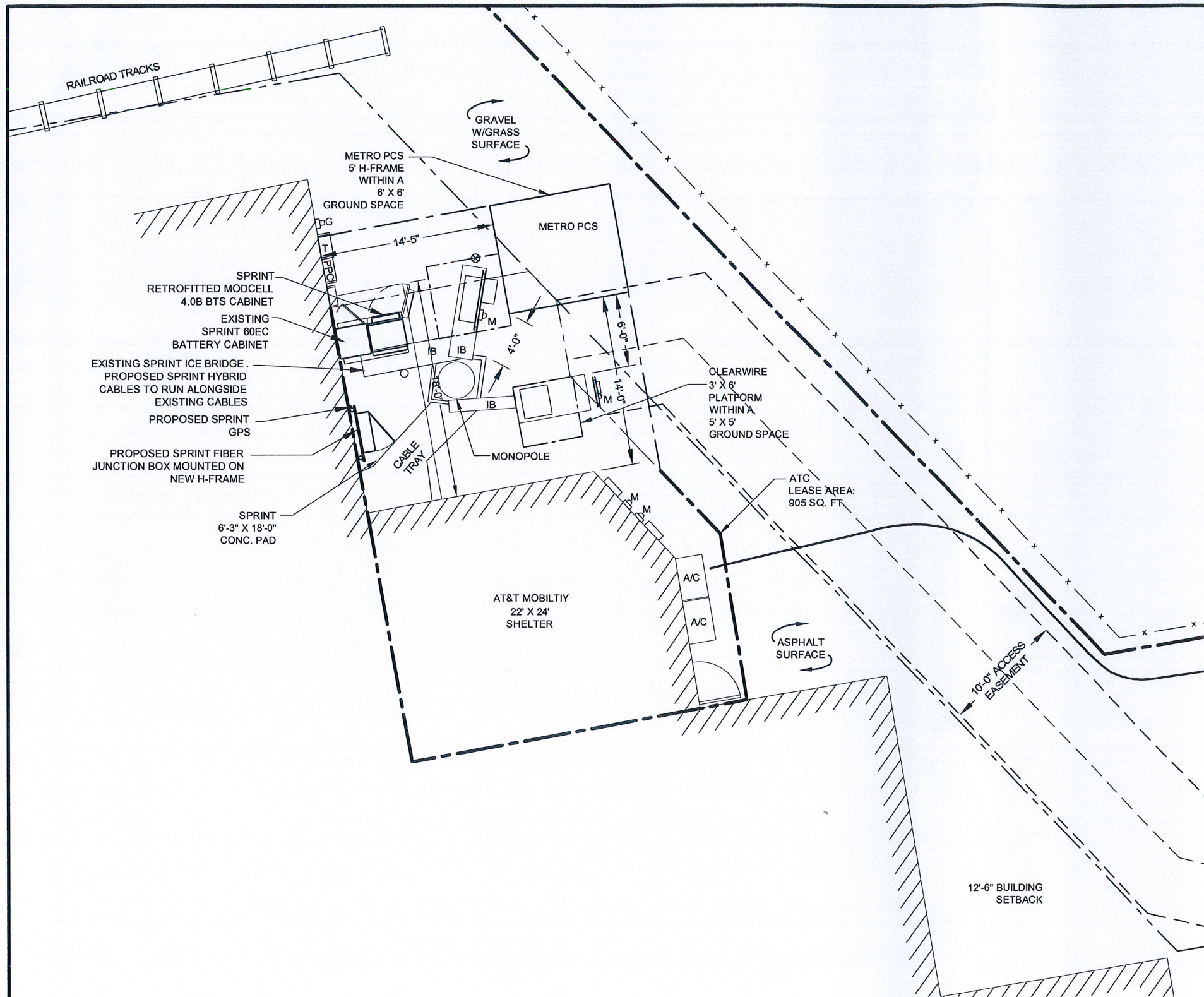
GENERAL NOTES

SHEET NUMBER:

GN-1

REV. #

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LEGEND	
	CHAIN LINK FENCE
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	LEASE AREA
	UTILITY EASEMENT
	GRAVEL
	BUILDING

GENERAL NOTES:

LIGHTING: EXISTING FACILITY WILL MEET OR EXCEED ALL FAA AND FCC REGULATORY REQUIREMENTS.

GRADE: EXISTING GRADE WILL BE MAINTAINED FOR PROPOSED CONSTRUCTION.

PARKING: ONE PARKING SPACE IS REQUIRED, ONE EXISTING.

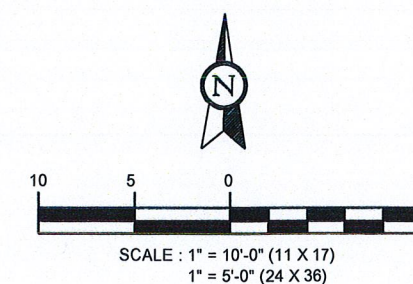
SIGNAGE: EXTERIOR SIGNS ARE NOT PROPOSED EXCEPT AS REQUIRED BY THE FCC.

STORM WATER CONTROL: THE PROPOSED FACILITY WILL RESULT IN AN INSIGNIFICANT INCREASE IN STORM WATER RUNOFF. CONSEQUENTLY, NO WATER QUALITY CONTROL DEVICES ARE PROPOSED.

UTILITIES: SANITARY SEWER SERVICE AND POTABLE WATER ARE NOT APPLICABLE PER THE USE. IF APPLICABLE, SUBCONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATING.

DRIVEWAY: A DRIVEWAY PERMIT IS NOT REQUIRED FOR THIS PROJECT. THE PROJECT WILL NOT REQUIRE RIGHT-OF-WAY OR PROPERTY TO BE DEDICATED FOR PUBLIC USE.

MISC: NO NOISE, SMOKE, DUST, VAPORS OR ODOR WILL RESULT FROM THIS PROJECT.



1 SITE PLAN

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Alcatel-Lucent

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COLUMBIA, MD 21046
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FAX: (410) 290-3362

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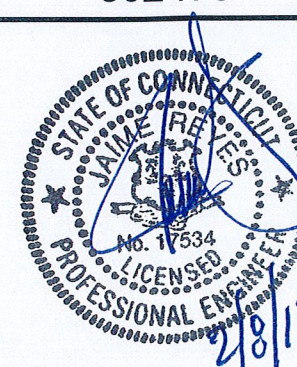
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ATC TOWER SERVICES, INC.
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IRVING, TX 75063
PHONE: (972) 999-8900
FAX: (972) 999-8940
NYSE AMT

SPRINT CASCADE NUMBER:
CT54XC784

SPRINT SITE NAME:
MANCHESTER / SPECTRASITE

2 PRESTIGE PARK RD.
EAST HARTFORD, CT 06108

ATC SITE NUMBER:
302473

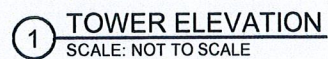


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CHECKED BY:	SAE
DATE DRAWN:	12-03-12
JOB NO:	514512K
SHEET TITLE:	

SITE PLAN

SHEET NUMBER:	REV. #
A-1	0

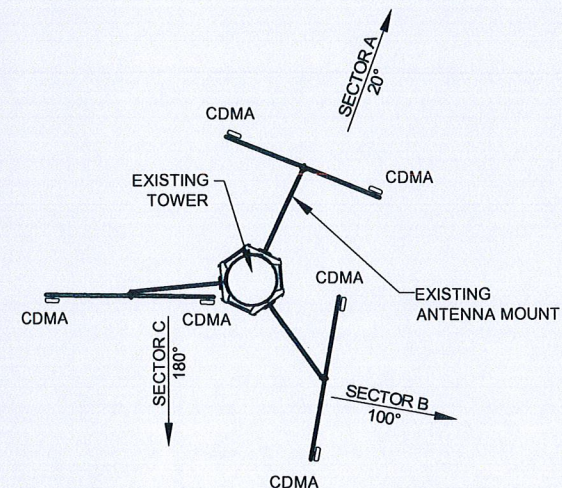


NOTE:
LAYOUT FOR REFERENCE PURPOSES
ONLY, CUSTOMER RESPONSIBLE TO
DETERMINE IF THE PROPOSED ANTENNA
CAN BE SAFELY AND PHYSICALLY
INSTALLED ON EXISTING/PROPOSED
ANTENNA MOUNT.

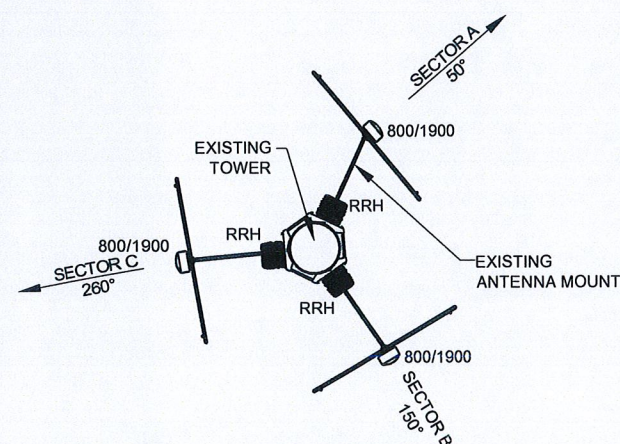
NOTE:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH AMERICAN TOWER PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK .
- ALL COAX, ANTENNAS AND MOUNTS TO BE INSTALLED PER THE LATEST INFORMATION ON FILE WITH THE AMERICAN TOWER ENGINEERING DEPARTMENT .

NOTE: DUE TO FAILING STRUCTURAL, ENG # 51574121.
DATED 1/2/2013. MODIFICATIONS ARE REQUIRED PRIOR TO
INSTALLATION PER MODIFICATION DRAWINGS DATED
01/17/2013. ENG # 51574133.



2 EXISTING CONFIGURATION
SCALE: NOT TO SCALE



③ **FINAL CONFIGURATION**
SCALE: NOT TO SCALE



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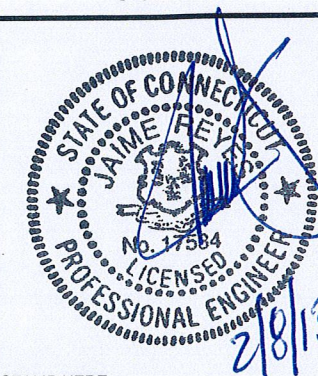
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**MANCHESTER /
SPECTRASITE**

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EAST HARTFORD, CT 06108

ATC SITE NUMBER:
302473



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CHECKED BY:	SAE
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DATE DRAWN:	12-03-12
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JOB NO:	514512K
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SHEET TITLE:

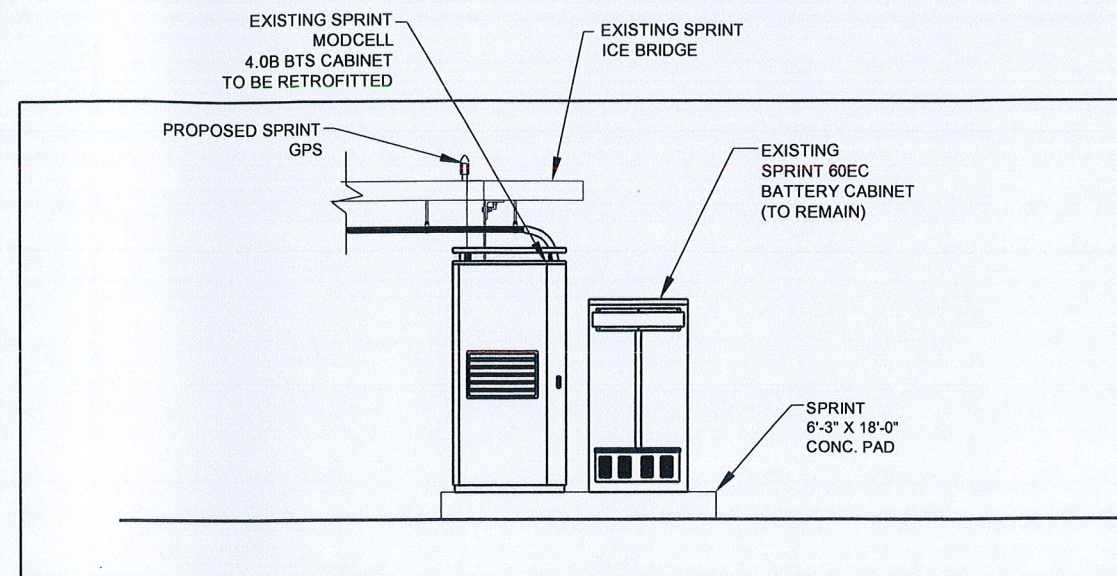
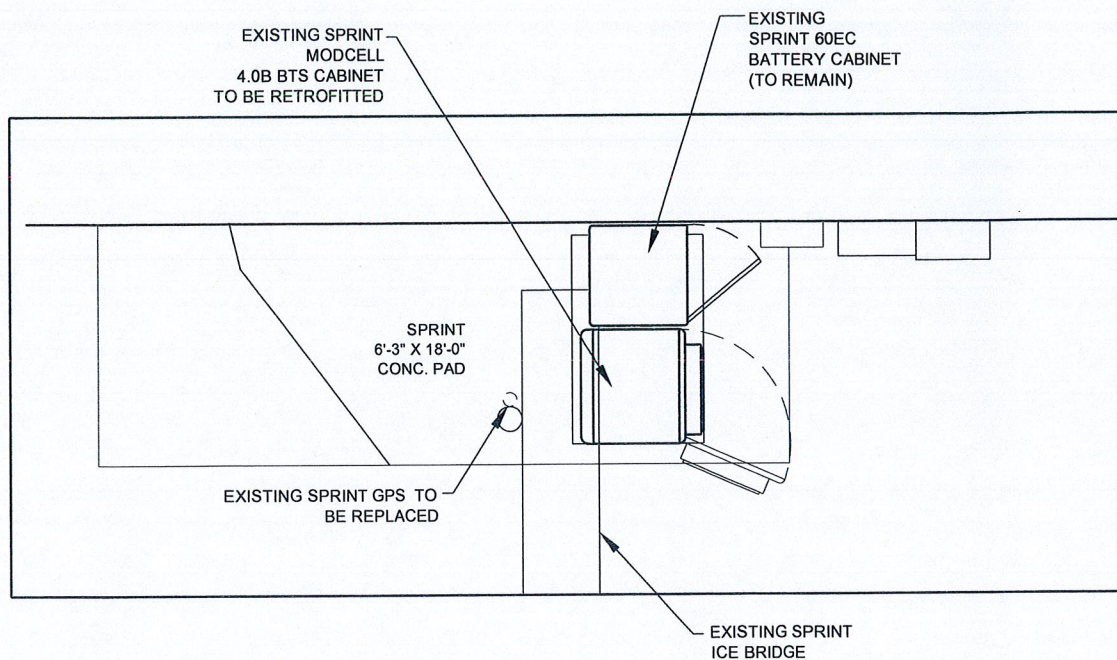
TOWER ELEVATION AND ANTENNA ORIENTATION

SHEET NUMBER:

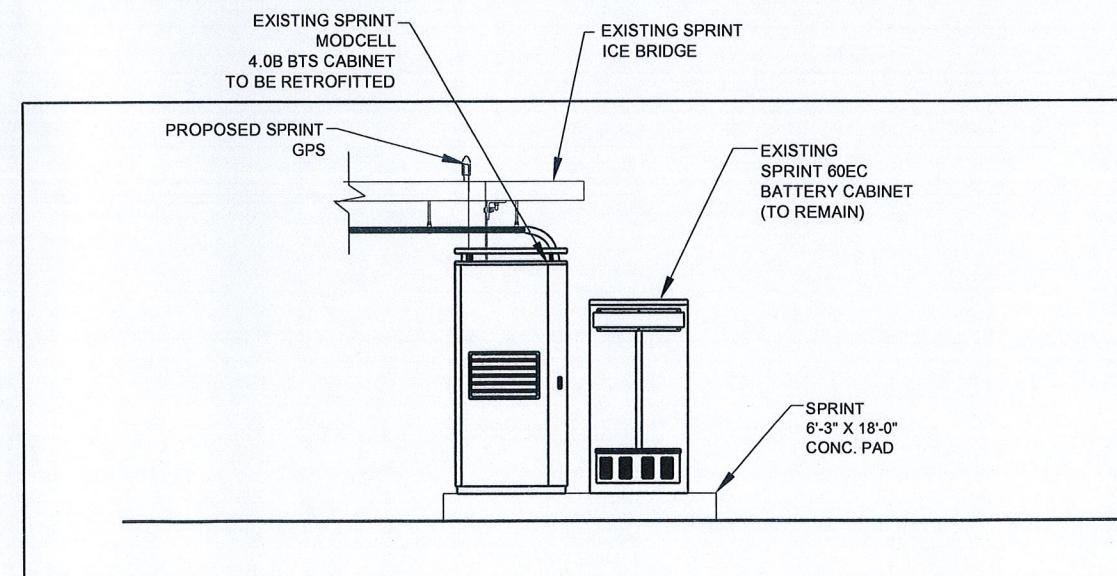
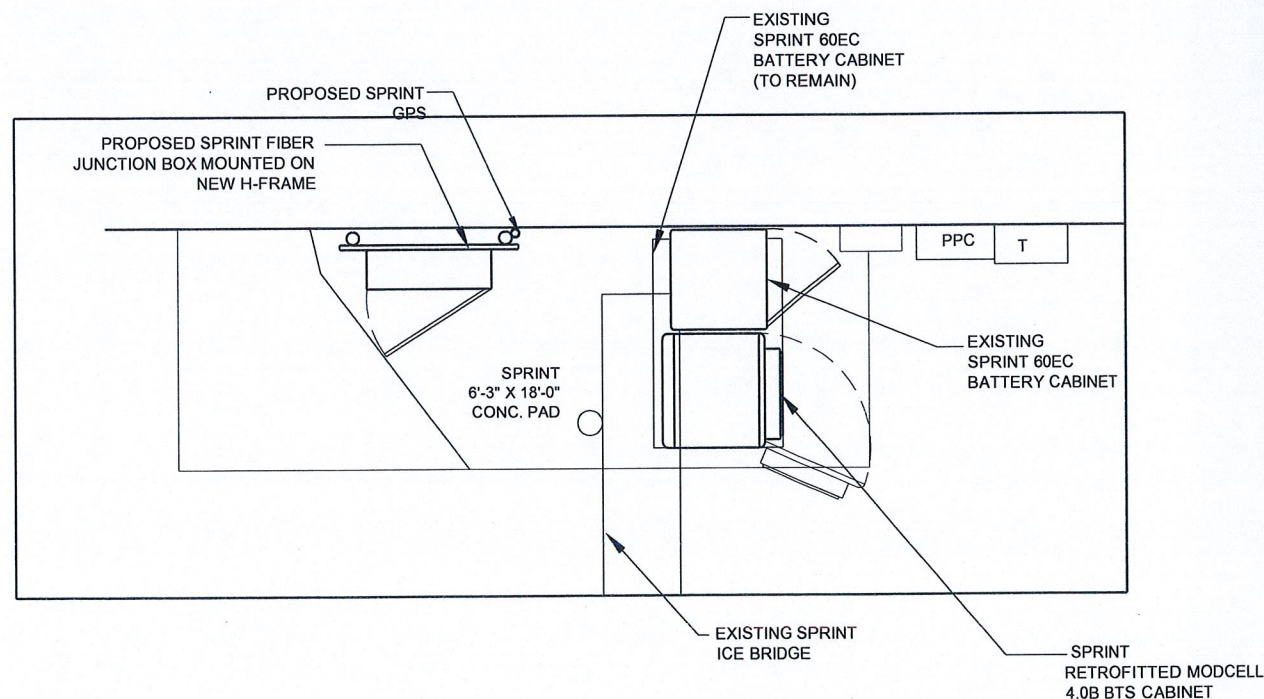
A-2

REV. #

1



1 EXISTING CABINETS PLAN
SCALE : 1" = 5'-0" (11 X 17)
1" = 2'-6" (24 X 36)



2 FINAL CABINETS PLAN
SCALE : 1" = 5'-0" (11 X 17)
1" = 2'-6" (24 X 36)

NOTE:
EXISTING GPS ANTENNA TO BE REPLACED WITH NEW GPS ANTENNA.
COORDINATE IN FIELD WITH SPRINT CONSTRUCTION MANAGER

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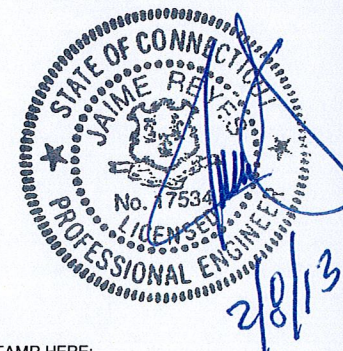
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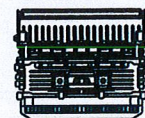


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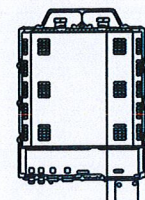
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DATE DRAWN:	12-03-12
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SHEET TITLE:	

EQUIPMENT LAYOUT

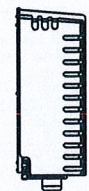
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A-3	0



TOP VIEW

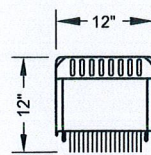


FRONT VIEW

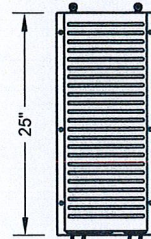


SIDE VIEW

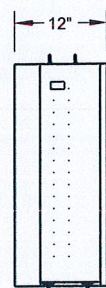
① 800 mhz REMOTE RADIO HEAD
SCALE: NOT TO SCALE



TOP VIEW

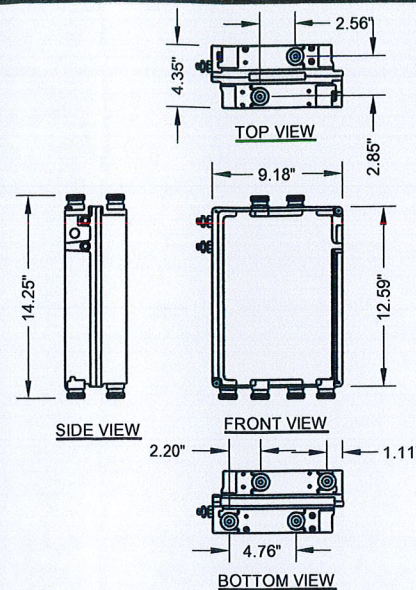


FRONT VIEW

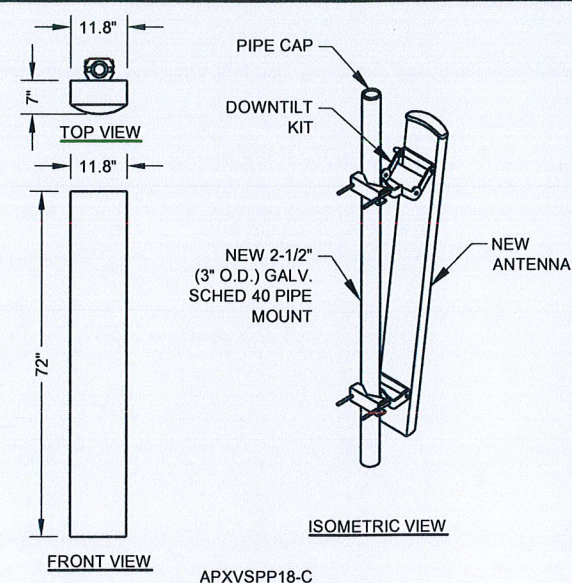


SIDE VIEW

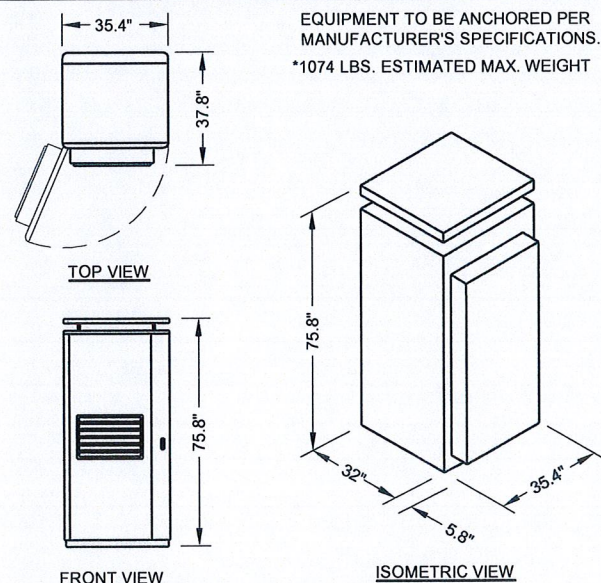
② 1900 mhz REMOTE RADIO HEAD
SCALE: NOT TO SCALE



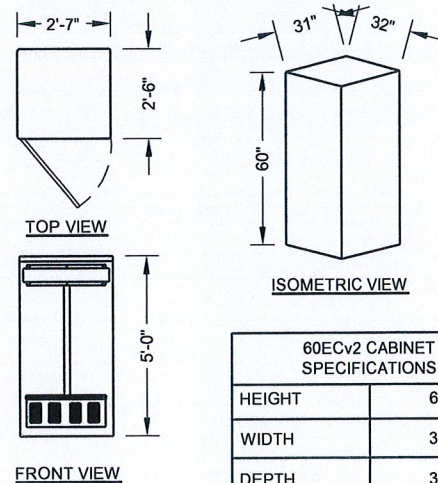
③ IBC1900HG-2A/IBC1900BB-1 DETAILS
SCALE: NOT TO SCALE



④ 800/1900 ANTENNA DETAILS
SCALE: NOT TO SCALE



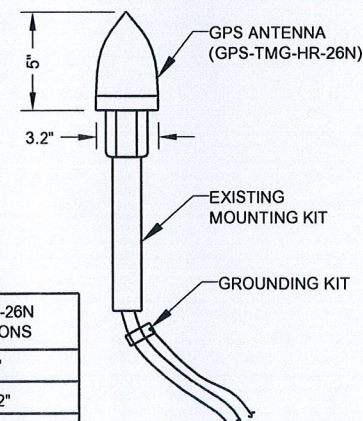
⑤ ALCATEL-LUCENT 9928 DETAILS
SCALE: NOT TO SCALE



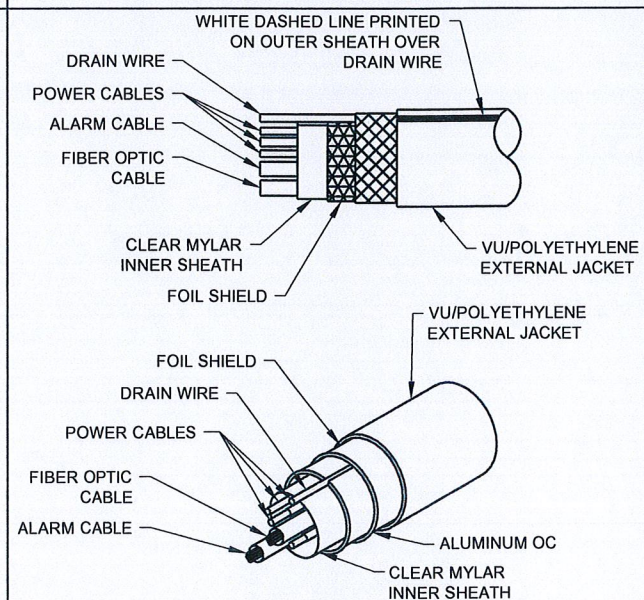
⑥ BATTERY CABINET DETAILS
SCALE: NOT TO SCALE

60ECv2 CABINET SPECIFICATIONS	
HEIGHT	60"
WIDTH	31"
DEPTH	30"
WEIGHT W/ BATTERIES	2830 LBS

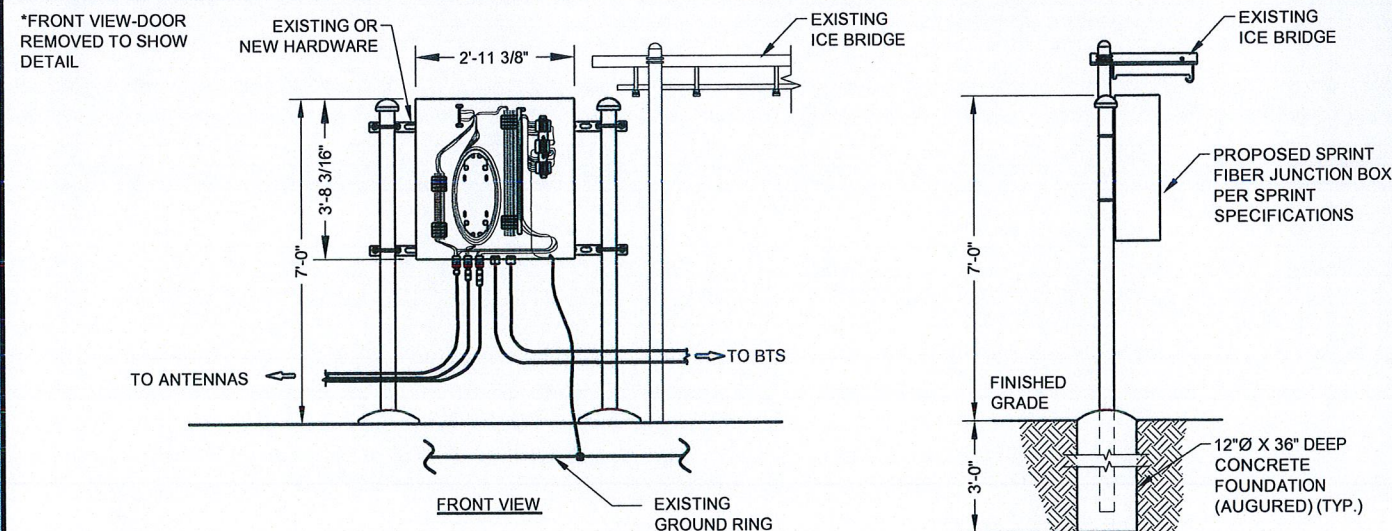
GPS-TMG-HR-26N SPECIFICATIONS	
HEIGHT	5"
WIDTH	32"
WEIGHT	0.6 LBS



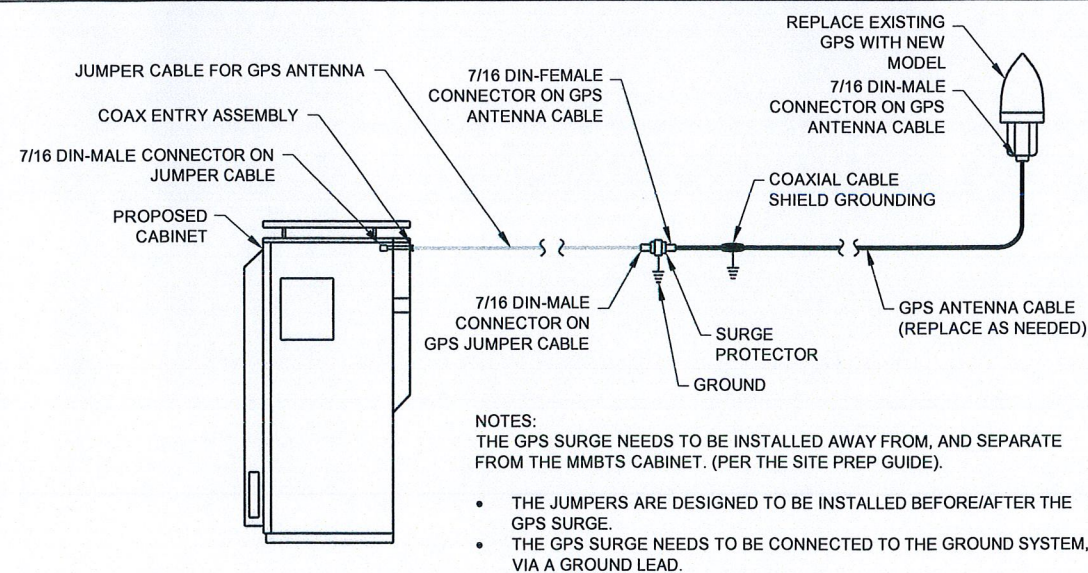
⑦ GPS DETAIL
SCALE: NOT TO SCALE



⑧ HYBRID CABLE DETAIL
SCALE: NOT TO SCALE



⑨ FIBER JUNCTION BOX DETAILS
SCALE: NOT TO SCALE



⑩ SURGE SUPPRESSOR DETAIL
SCALE: NOT TO SCALE

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SPRINT CASCADE NUMBER:
CT54XC784

SPRINT SITE NAME:
MANCHESTER / SPECTRASITE

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EAST HARTFORD, CT 06108

ATC SITE NUMBER:
302473



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CHECKED BY:	SAE
DATE DRAWN:	12-03-12
JOB NO:	514512K

SHEET TITLE:

**EQUIPMENT
DETAILS**

SHEET NUMBER: REV. #

A-4

0

NOTE TO GC:
REFER TO FST FOR MOST RECENT RFDS
PRIOR TO TOWER TOP CONSTRUCTION
START.

	Market	Northern Connecticut		
	Cascade ID	CT54XC784		
		SECTOR 1	SECTOR 2	SECTOR 3
	Split sector present	No	No	No
1900	1900MHz_Azimuth	50	150	260
	1900MHz_No_of_Antennas	1	1	1
	1900MHz_RADCenter(ft)	138	138	138
	1900MHz_Antenna Make	RFS	RFS	RFS
	1900MHz_Antenna Model	APXV9ERR18-C-A20	APXV9ERR18-C-A20	APXVSP18-C-A20
	1900MHz_Horizontal_Beamwidth	80	80	65
	1900MHz_Vertical_Beamwidth	5.5	5.5	5.5
	1900MHz_AntennaHeight (ft)	6	6	6
	1900MHz_AntennaGain(dBd)	14.9	14.9	15.9
	1900MHz_E_Tilt	0	0	-2
	1900MHz_M_Tilt	0	-2	0
	1900MHz_Carrier_Forecast_Year_2013	5	5	5
	1900MHz_RRH Manufacturer	ALU	ALU	ALU
	1900MHz_RRH Model	RRH 1900 4X45 65MHz	RRH 1900 4X45 65MHz	RRH 1900 4X45 65MHz
	1900MHz_RRH Count	2	2	2
	1900MHz_RRH Location	Top of the Pole/Tower	Top of the Pole/Tower	Top of the Pole/Tower
		IBC1900BB-1 and IBC1900HG-2A	IBC1900BB-1 and IBC1900HG-2A	IBC1900BB-1 and IBC1900HG-2A
	1900MHz Combiner Model			
	1900MHz_Top_Jumper #1_Length (RRH or Combiner-to-Antenna for TT or Main Coax to	10	10	10
	1900MHz_Top_Jumper #1_Cable_Model (RRH or Combiner-to-Antenna for TT or Main Coax	LCF12-50J	LCF12-50J	LCF12-50J
	1900MHz_Top_Jumper #2_Length (RRH to Combiner for TT if applicable, ft)	6	6	6
	1900MHz_Top_Jumper #2_Cable_Model (RRH to Combiner for TT if applicable)	LCF12-50J	LCF12-50J	LCF12-50J
	1900MHz_Main_Coax_Cable_Length (ft)	N/A	N/A	N/A
	1900MHz_Main_Coax_Cable_Model	N/A	N/A	N/A
	1900MHz_Bottom_Jumper #1_Length (Ground based RRH to Combiner-OR-Main Coax, ft)	N/A	N/A	N/A
	1900MHz_Bottom_Jumper #1_Cable_Model (Ground based RRH to Combiner-OR-Main Coax)	N/A	N/A	N/A
	1900MHz_Bottom_Jumper #2_Length (Ground based-Combiner to Main Coax, ft)	N/A	N/A	N/A
	1900MHz_Bottom_Jumper #2_Cable_Model (Ground based-Combiner to Main Coax)	N/A	N/A	N/A
	800	800MHz_Azimuth	50	150
800MHz_No_of_Antennas		0	0	0
800MHz_RADCenter(ft)		138	138	138
800MHz_AntennaMake		RFS	RFS	RFS
		APXV9ERR18-C-A20 (Shared w/1900)	APXV9ERR18-C-A20 (Shared w/1900)	APXVSP18-C-A20 (Shared w/1900)
800MHz_AntennaModel				
800MHz_Horizontal_Beamwidth		80	80	65
800MHz_Vertical_Beamwidth		10.5	10.5	11.5
800MHz_AntennaHeight (ft)		6	6	6
800MHz_AntennaGain (dBd)		11.9	11.9	13.4
800MHz_E_Tilt		-8	0	-4
800MHz_M_Tilt		0	-2	0
800MHz_RRH Manufacturer		ALU	ALU	ALU
800MHz_RRH Model		800 MHz RRH 2x50W	800 MHz RRH 2x50W	800 MHz RRH 2x50W
800MHz_RRH Count		1	1	1
800MHz_RRH Location		Top of the Pole/Tower	Top of the Pole/Tower	Top of the Pole/Tower
800_Top_Jumper #1_Length (RRH to Antenna for TT or Main Coax to Antenna for GM)		10	10	10
800_Top_Jumper_Cable_Model (RRH to Antenna for TT or Main Coax to Antenna for GM)		LCF12-50J	LCF12-50J	LCF12-50J
800MHz_Main_Coax_Cable_Length (ft)		N/A	N/A	N/A
800MHz_Main_Coax_Cable_Model		N/A	N/A	N/A
800_Bottom_Jumper #1_Length (Ground based RRH to Main Coax)	N/A	N/A	N/A	
800_Bottom_Jumper #1_Cable_Model (Ground based RRH to Main Coax)	N/A	N/A	N/A	
	Plumbing Scenario *	128	128	128
Comments	* If plumbing scenario does not match the material received, please contact your Construction Manager			
	11/9/2012			

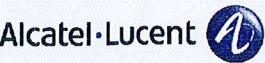
NOTE:
THE INFORMATION ON THIS SHEET WAS
PROVIDED BY SPRINT FOR REFERENCE
PURPOSE ONLY.

1 FINAL RADIO FREQUENCY DATA SHEET CONFIGURATION
SCALE: NOT TO SCALE

NOTE:
COORDINATE RF ANTENNA
INSTALLATION WITH FINAL
SPRINT RFDS.



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DRAWN BY:	MP
CHECKED BY:	SAE
DATE DRAWN:	12-03-12
JOB NO:	614512K

SHEET TITLE:

SPRINT RADIO
FREQUENCY DATA
SHEET

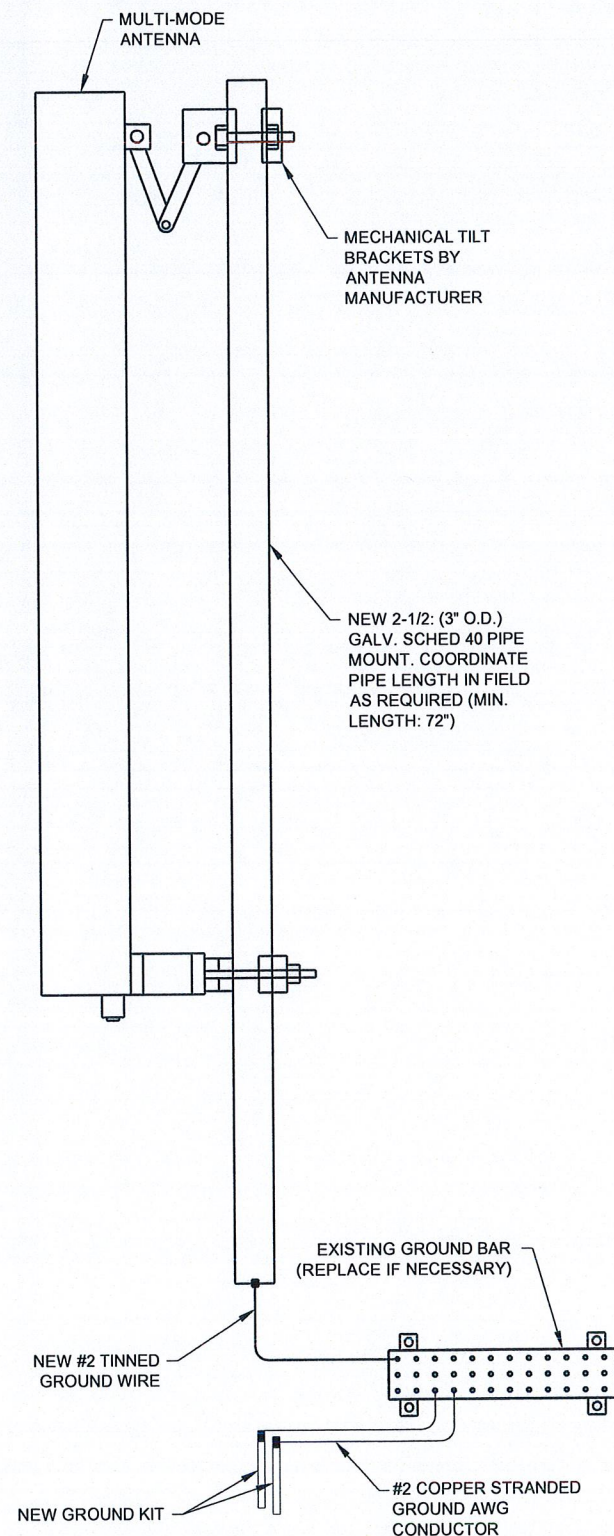
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A-5

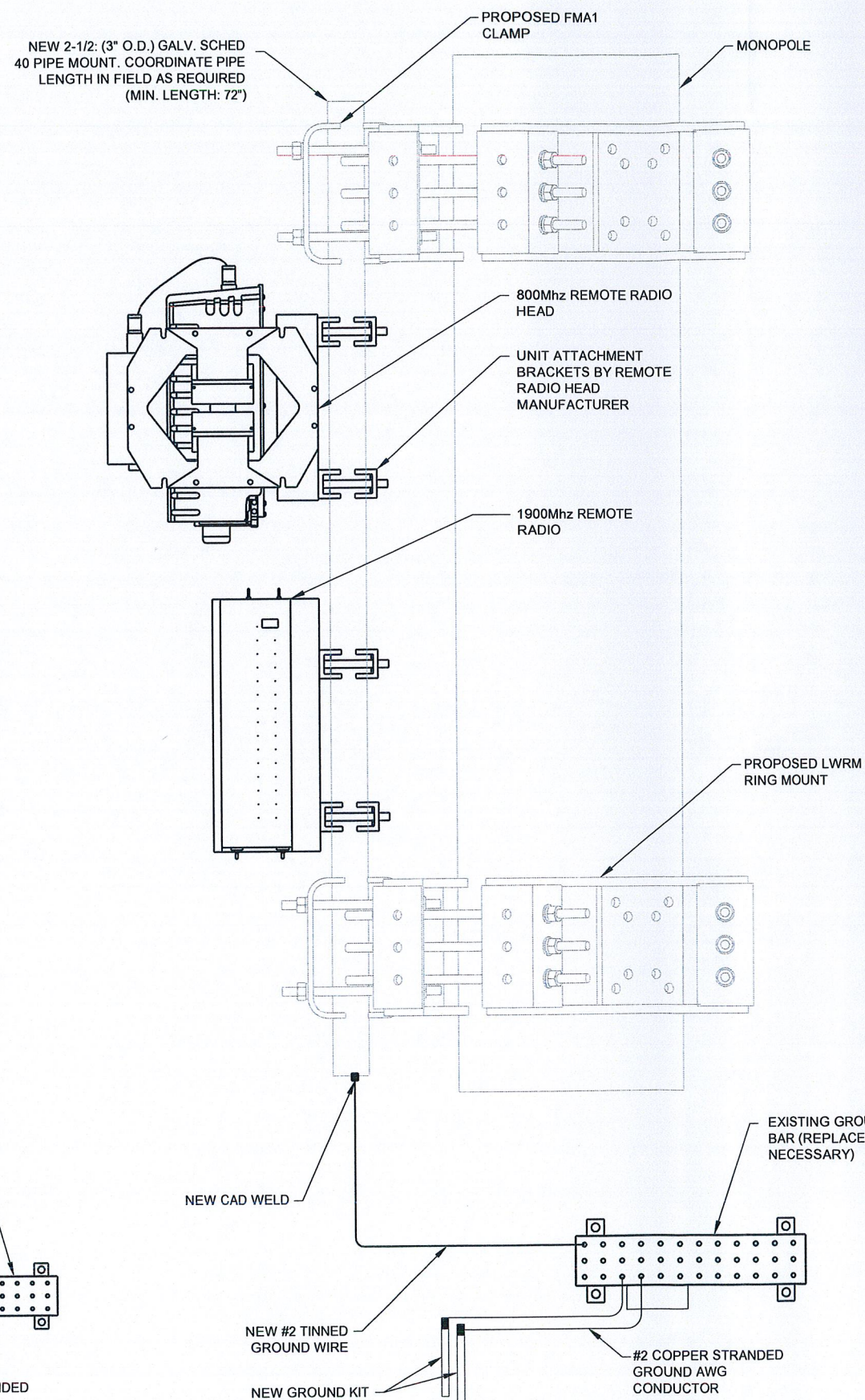
REV. #

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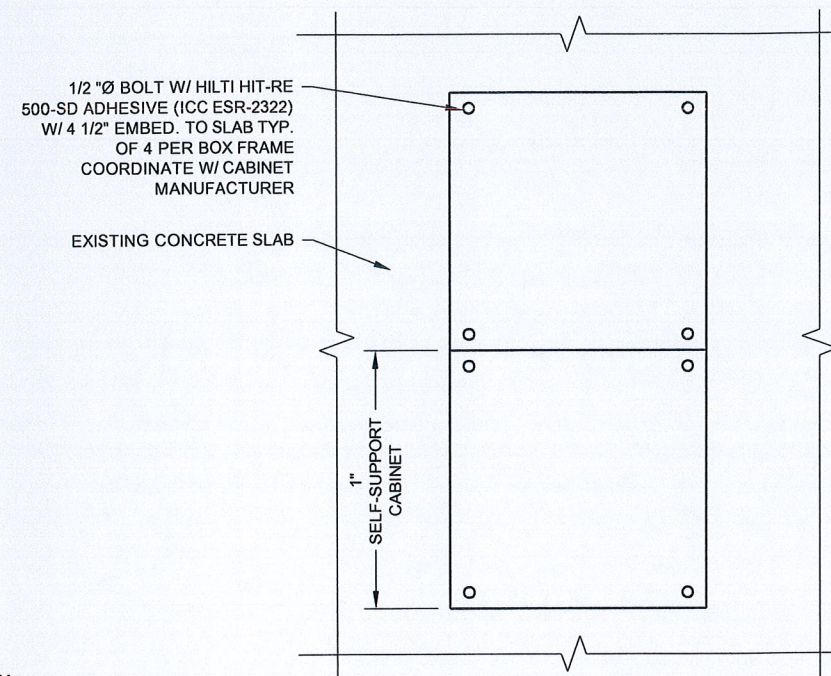
NOTE:
THIS PAGE FOR REFERENCE
ONLY. REFER TO RF SYSTEM
SCHEDULE FOR RRH SPECS
AND QUANTITIES.



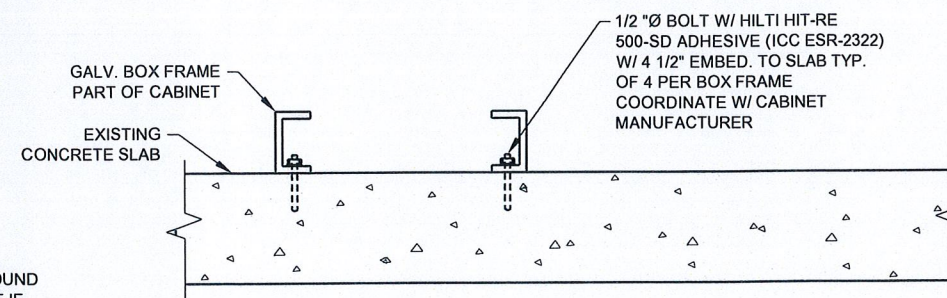
1 ANTENNA MOUNTING DETAILS
SCALE: NOT TO SCALE



2 REMOTE RADIO HEAD MOUNTING DETAILS
SCALE: NOT TO SCALE



PLAN VIEW



SECTION VIEW

3 EXISTING CONCRETE SLAB
SCALE: NOT TO SCALE

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SPRINT CASCADE NUMBER:
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SPRINT SITE NAME:
MANCHESTER / SPECTRASITE

2 PRESTIGE PARK RD.
EAST HARTFORD, CT 06108

ATC SITE NUMBER:
302473



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DATE DRAWN:	12-03-12
JOB NO:	514512K

SHEET TITLE:

**MOUNTING
DETAILS**

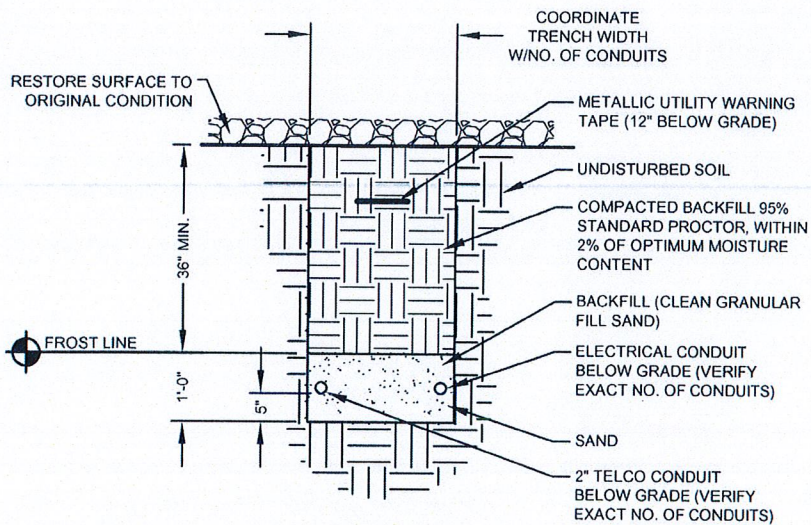
SHEET NUMBER:	REV. #
A-6	0

GENERAL NOTES:

1. ALL WIRING SHALL BE STRANDED COPPER WITH THHN OR EQUIVALENT INSULATION. #12 AWG MINIMUM INSTALLED IN 1/2" MINIMUM CONDUIT. SIGNAL WIRING SHALL BE INSULATED #22 AWG. NO BX OR ROMEX CABLE IS PERMITTED. CONDUITS SHALL BE SURFACE MOUNTED.
2. WIRING DEVICES AND EQUIPMENT SHALL BE UL LISTED SPECIFICATIONS GRADE.
3. MATERIALS SHALL BE NEW AND CONFORM TO THE APPLICABLE STANDARDS ESTABLISHED FOR EACH ITEM BY THE ORGANIZATIONS LISTED BELOW.
 - AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)
 - UNDERWRITER'S LABORATORY (UL)
 - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 - AMERICAN STANDARDS ASSOCIATION (ASA)
 - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
4. INSTALLATION SHALL COMPLY WITH APPLICABLE VERSIONS OF:
 - THE NATIONAL ELECTRIC CODE (NFPA 70)
 - THE NATIONAL ELECTRICAL SAFETY CODE (ANSI C-2)
 - LOCAL BUILDING CODES.
5. THE ENTIRE SYSTEM SHALL BE SOLIDLY GROUNDED USING LOCKNUTS AND BONDING NUTS ON CONDUITS AND PROPERLY BONDED GROUND CONDUCTOR. ALL FEEDER AND BRANCH CIRCUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC 250 RUN WITH THE CIRCUIT WIRING.
6. DEVICE AND JUNCTION BOXES SHALL BE ZINC-COATED OR CADMIUM PLATED STEEL NOT LESS THAN 4" SQUARE AND SUITABLE FOR THE APPLICATION AND SERVICE AND DEVICE. DEVICE AND JUNCTION BOXES SHALL BE SURFACE MOUNTED AND LABELED WITH BRANCH CIRCUIT PANEL DESIGNATION AND CIRCUIT NUMBER.
7. LABEL ALL EQUIPMENT SERVED WITH PHENOLIC LABELS SIZED IN RELATION TO USAGE TO INDICATE PANEL AND CIRCUIT SUPPLY.
8. INDOOR CONDUCTORS SHALL BE INSTALLED IN EMT UNLESS NOTED OTHERWISE. OUTDOOR CONDUCTORS SHALL BE INSTALLED IN RIGID GALVANIZED STEEL UNLESS NOTED OTHERWISE. WHERE EMT IS USED, IT SHALL BE WITH ONLY LISTED STEEL COMPRESSION FITTINGS. NO SET SCREW FITTINGS SHALL BE ALLOWED.
9. CONTRACTOR TO PROVIDE AND INSTALL ENGRAVED LABEL WITH CARRIER NAME ON THE METER SOCKET ENCLOSURE.

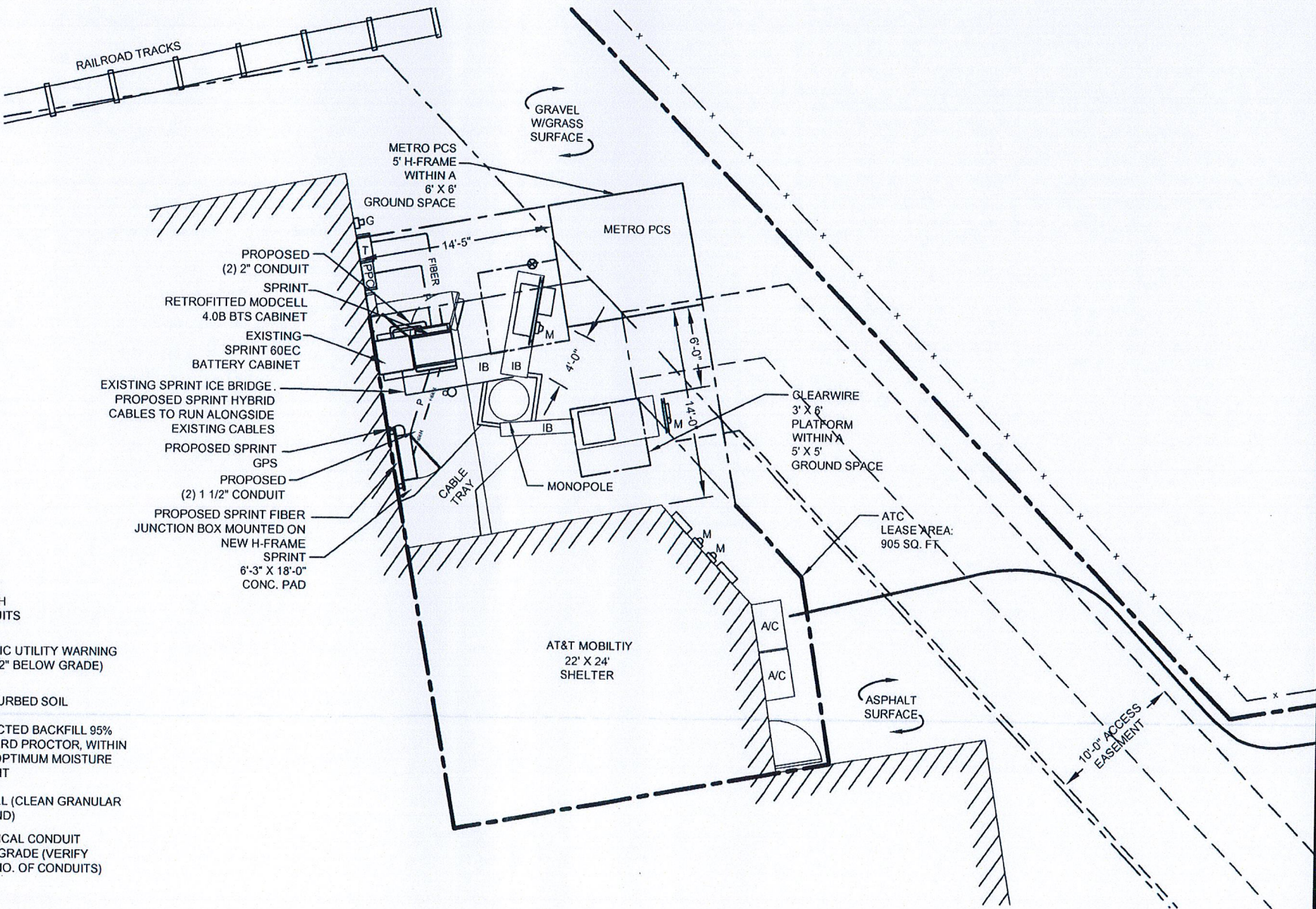
NOTES:

1. SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS WHERE APPLICABLE.
2. COORDINATE UTILITY, LOCATE BEFORE DIGGING



NOTE:
CONDUIT TRENCHING (36\"/>

2 TRENCH DETAIL
SCALE: NOT TO SCALE



1 ELECTRICAL SITE PLAN
SCALE: NOT TO SCALE

LEGEND	
	CHAIN LINK FENCE
	PROPERTY LINE
	LEASE AREA
	UNDERGROUND UTILITY LINES
	UTILITY EASEMENT
	GRAVEL
	BUILDING



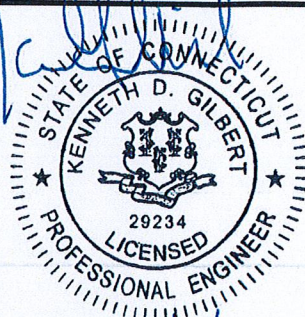
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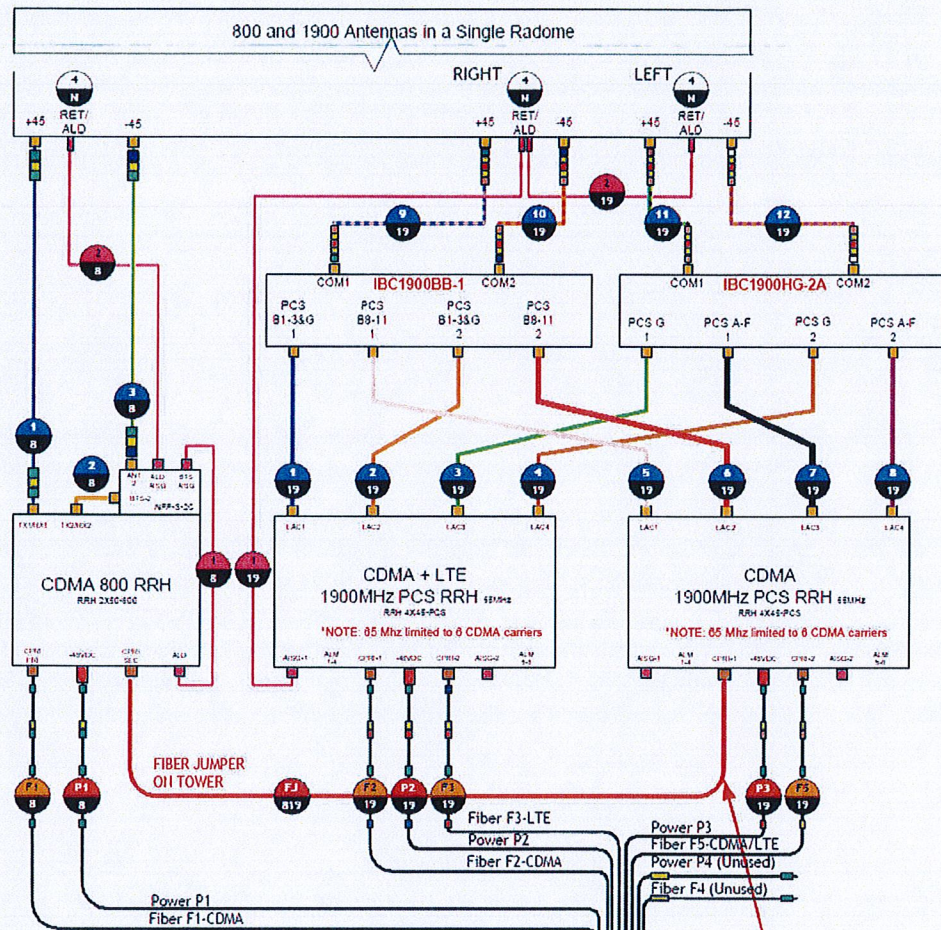
**ELECTRICAL
PLAN**

SHEET NUMBER:	REV. #
E-1	0

PANEL DESIGNATION: <u>PP-1</u>			TYPE: <u>LIGHTING & APPLIANCE</u>			SYSTEM: <u>120/240V, 1Ø, 3W, 32 CKT</u>			LOCATION: <u>EXISTING H-FRAME</u>		
			MOUNTING: <u>SURFACE</u>			MAIN BREAKER (MB): <u>200A</u>					
			ENCLOSURE: <u>NEMA 3R</u>			MAIN BUS RATING: <u>200A</u>			PANEL NOTES: <u>EXISTING</u>		
						SCCR RATING: <u>VERIFY RATING MEETS OR EXCEEDS AVAILABLE UTILITY FAULT CURRENT</u>					

CONNECTED LOAD (KVA)			BRIEF DESCRIPTION	FEEDER OR BRANCH CIRCUIT							BRIEF DESCRIPTION	CONNECTED LOAD (KVA)								
A	B			BREAKER		CIRCUIT			POLE NO.	CIRC. NOTES		POLE NO.	CIRCUIT		BREAKER		A	B		
				AMPS	POLES	WIRE	GND	COND.					COND.	GND	WIRE	POLES				AMPS
0.00			SPARE	100	2					1			2			60	EXISTING SURGE SUP. (TVSS)	0.00		
	0.00									3			4					0.00		
0.18			EXISTING GFI RECEPTACLE	20	1	2-#12	#12	3/4"		5			6			1	20	SPARE		
	0.40		EXISTING LIGHT	20	1	2-#12	#12	3/4"		7			8			1	20	SPARE		
0.18			EXISTIN GFI RECEPTACLE	20	1	2-#12	#12	3/4"		9			10			1	20	SPARE		
	6.00		PROPOSED LUCENT CABINET	100	2	3-#1	#8	2"		11			12			1	20	SPARE		
6.00										13			14							
										15			16							
										17			18							
										19			20							
										29			30							
										31			32							
										33			34							
										35			36							
										37			38							
										39			40							
6.4	6.4									A	B		TOTAL					0.0	0.0	
										6.4	6.4		12.8	CONNECTED LOAD (KVA)						
										6.4	6.4		12.8	DEMAND LOAD (KVA)						

DERATING FACTOR (100%)
DEMANDLOAD SIZING: 53.2 AMPS



1 TOWER TOP BLOCK DIAGRAM
BD1 SCALE: N.T.S.

1 ANTENNA PLUMBING DIAGRAM
SCALE: NOT TO SCALE

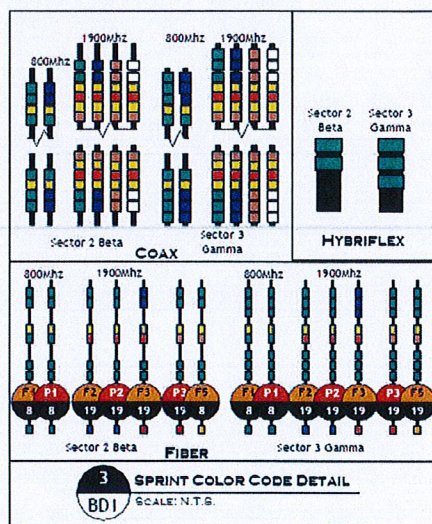
Power Feed Polarity Definition:
IF WIRES ARE BLACK AND BLACK/WHITE STRIPE:
Black = -48VDC Feed (Battery)
Black/White Stripe = Return

IF WIRES ARE RED AND BLACK:
Red = -48VDC Feed (Battery)
Black = Return

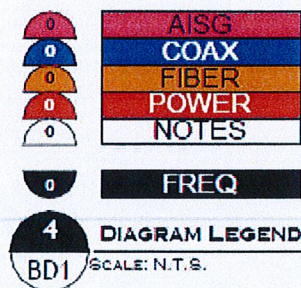
NOTE: For power feed use the same Hybriflex OEM color designator as the fiber.

MM Pair 1 = F1 = Green = P1 (Green)
MM Pair 2 = F2 = Blue = P2 (Blue)
MM Pair 3 = F3 = Red = P3 (Red)
MM Pair 4 = F4 = Yellow = P4 (Yellow)
MM Pair 5 = F5 = Orange = (No P5 power feed)

2 HYBRIFLEX OEM COLOR CODE
BD1 SCALE: N.T.S.



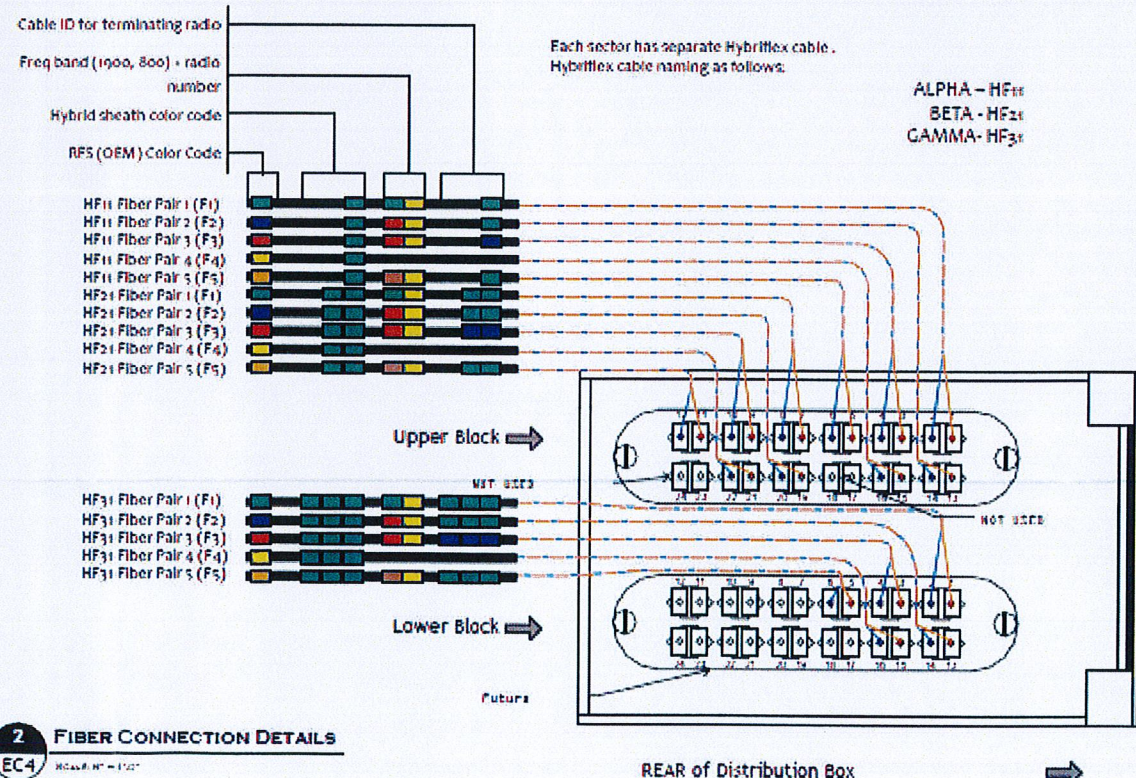
3 SPRINT COLOR CODE DETAIL
BD1 SCALE: N.T.S.



4 DIAGRAM LEGEND
BD1 SCALE: N.T.S.

Unused DC pairs as follows:

1 DC POWER CONNECTION DETAILS
BD1 SCALE: N.T.S.



2 FIBER CONNECTION DETAILS
BD1 SCALE: N.T.S.

2 DISTRIBUTION BOX CONNECTION DETAILS
SCALE: NOT TO SCALE

NOTE:
GC TO REFER TO MOST RECENT
DIAGRAM SCENARIO PRIOR TO
STARTING CONSTRUCTION.

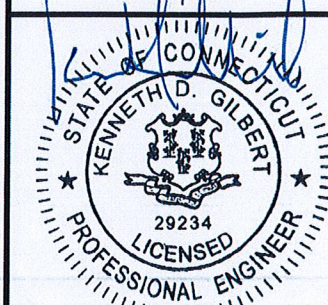
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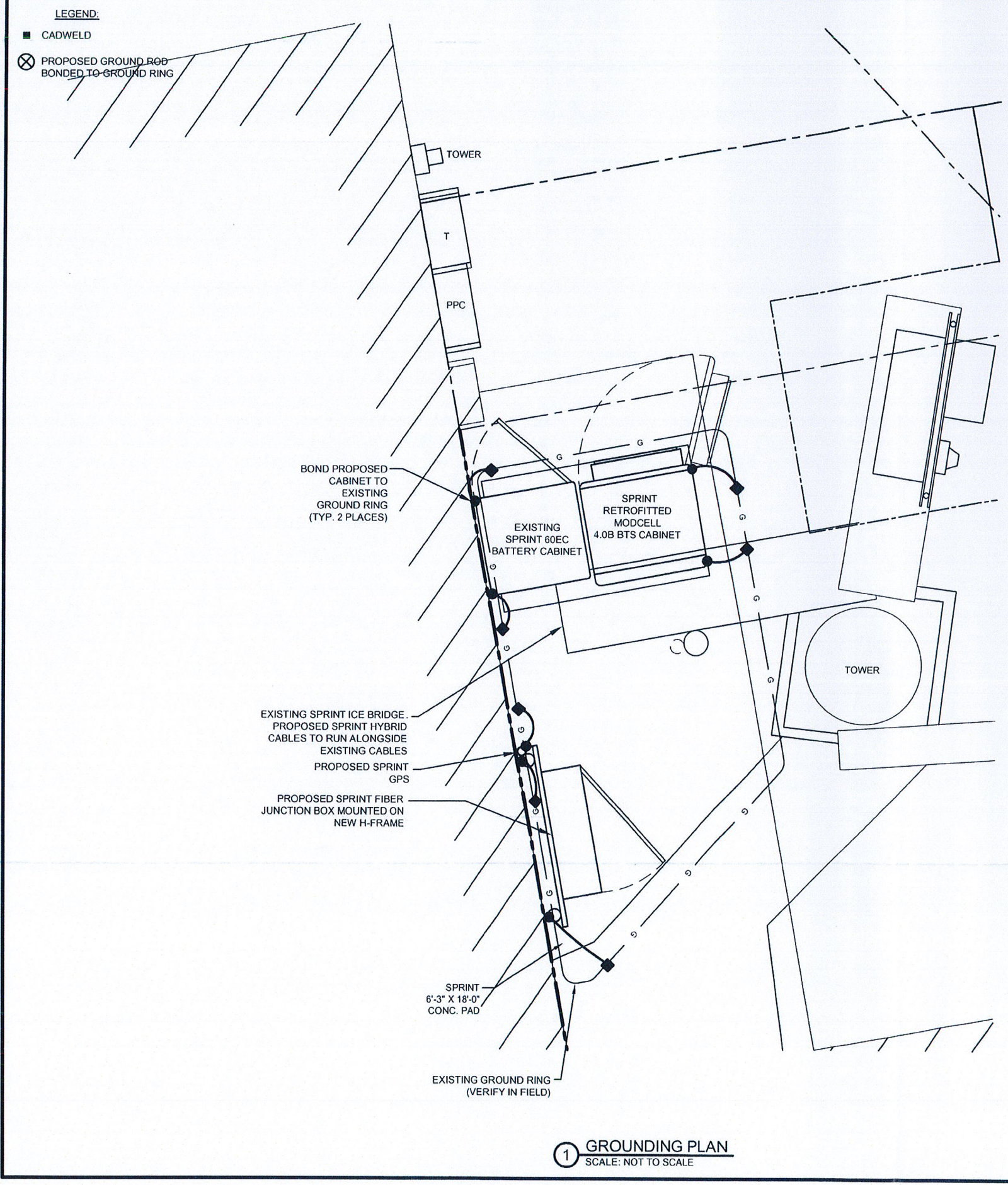
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SHEET TITLE:

ANTENNA PLUMBING DIAGRAM

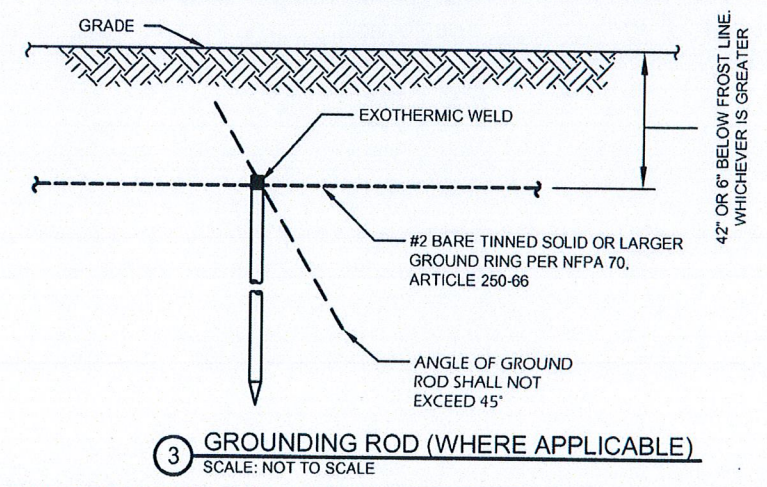
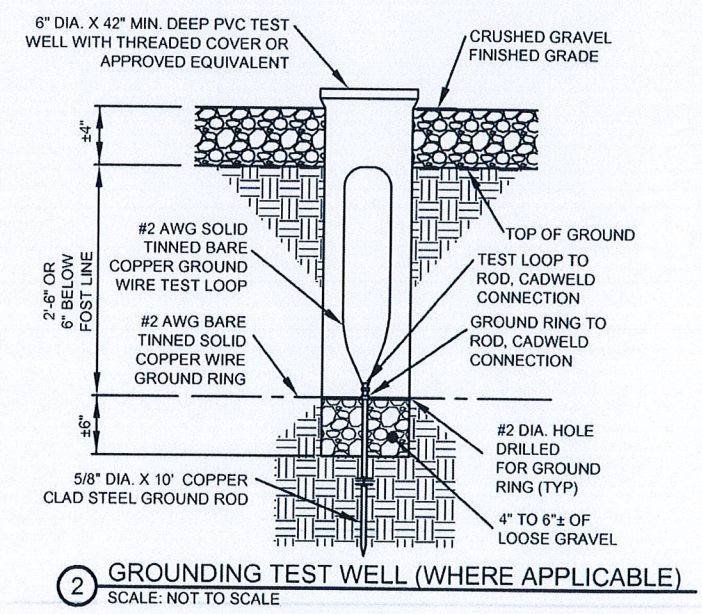
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OPTION 128
TOWER



GROUNDING NOTES:

1. GROUNDING SHALL COMPLY WITH NEC ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
2. ALL GROUNDING DEVICES SHALL BE U.L. APPROVED AND LISTED FOR THEIR INTENDED USE.
3. GROUND WIRES SHALL BE TINNED #2 AWG BARE SOLID CU UNLESS NOTED OTHERWISE.
4. GROUNDING CONNECTIONS SHALL BE EXOTHERMIC (CADWELD) UNLESS NOTED OTHERWISE. CLEAN SURFACES TO BARE METAL. WHERE GROUND WIRES ARE CADWELD TO GALVANIZED SURFACE. SPRAY COMPLETED CADWELD WITH GALVANIZING PAINT.
5. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 8" RADIUS.
6. PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETSS KOPR-SHIELD (TM OF JET LUB INC.). PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR EQUAL.
7. GROUNDING WIRE CONNECTIONS SHALL BE 3-CRIMP C-TAP COMPRESSION TYPE. SPLIT BOLTS ARE NOT ACCEPTABLE. CONNECTORS SHALL BE CRIMPED USING HYDRAULIC CRIMPING TOOLS.
8. GROUND RODS SHALL BE COPPER CLAD STEEL 5/8" X 10' SPACE NOT LESS THAN 10' O.C.
9. SURFACE CONNECTIONS SHALL BE MADE TO BARE METAL. PAINTED SURFACES SHALL BE FILED TO ENSURE PROPER CONTACT. APPLY NON-OXIDIZING AGENT TO CONNECTIONS.
10. COPPER BUSES SHALL BE CLEANED, POLISHED AND A NON-OXIDIZING AGENT APPLIED. NO FINGERPRINTS OR DISCOLORED COPPER WILL BE PERMITTED.
11. HARDWARE (I.E. NUTS, BOLTS, WASHER, ETC.) SHALL BE STAINLESS STEEL.
12. EXOTHERMIC WELDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS.



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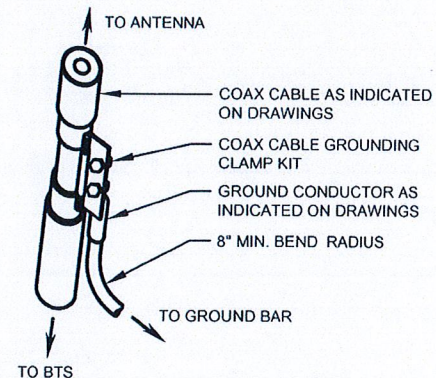
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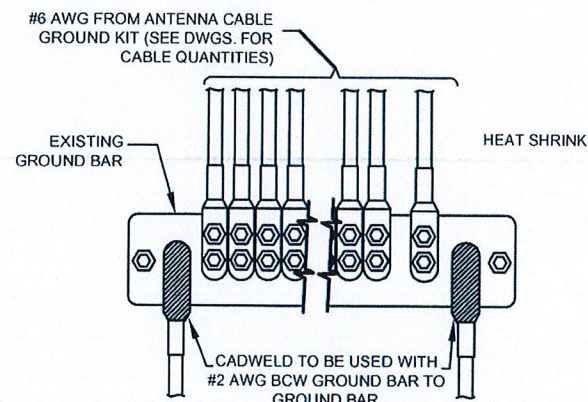
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SHEET TITLE:
GROUNDING PLAN

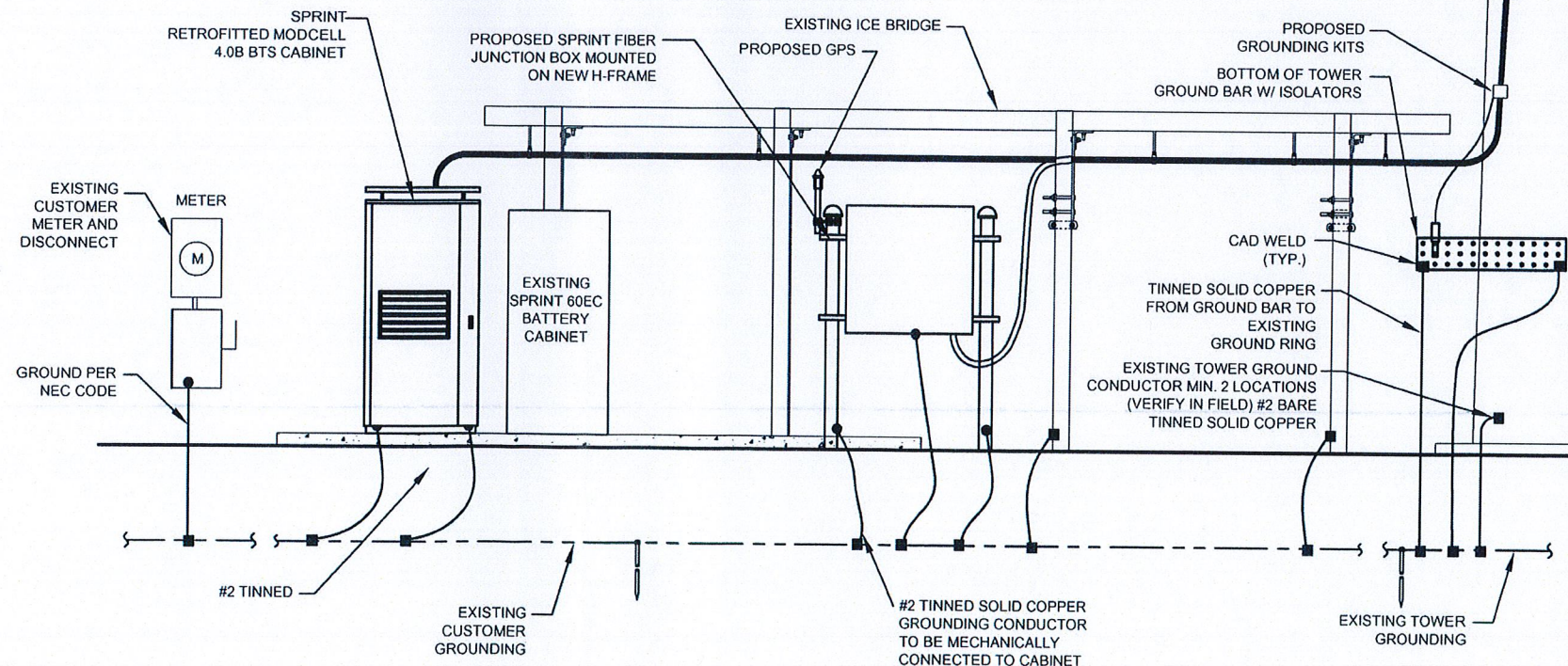
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3 HYBRIFLEX GROUNDING DETAIL
SCALE: NOT TO SCALE

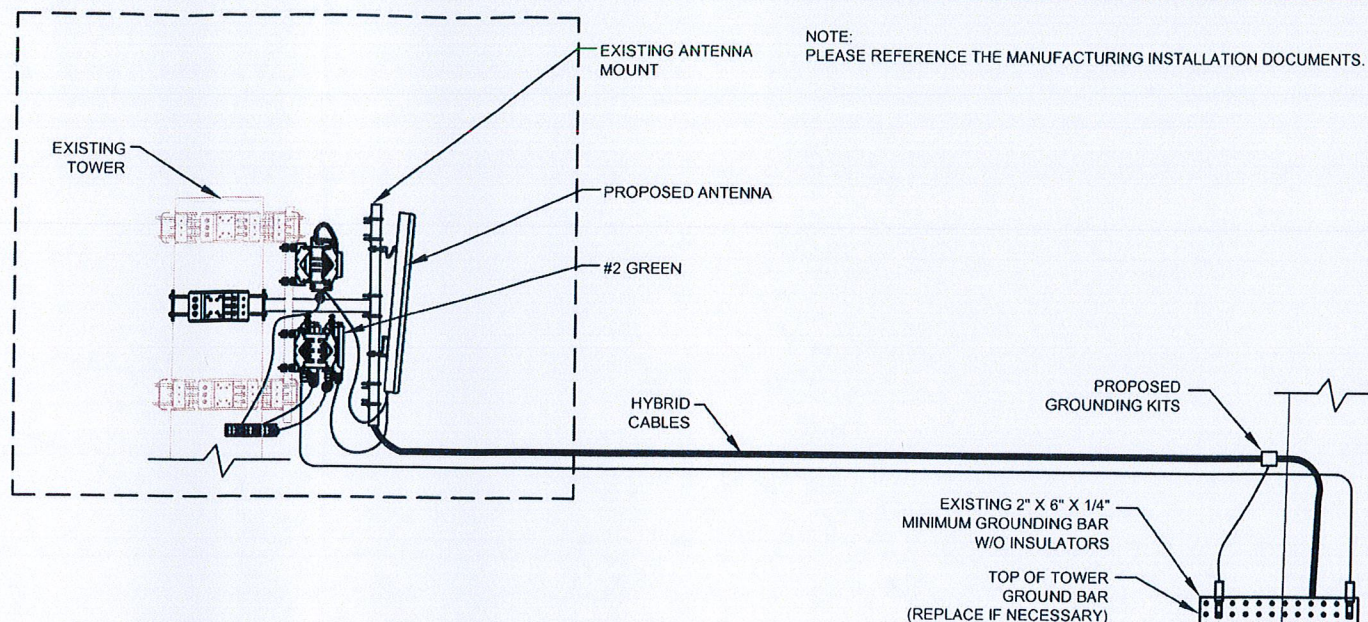


2 GROUNDING BAR DETAIL
SCALE: NOT TO SCALE



1 GROUNDING SCHEMATIC DIAGRAM
SCALE: NOT TO SCALE

- LEGEND
- = EXOTHERMIC WELD CONNECTION
 - = MECHANICAL CONNECTION



NOTE:
HAND DIG AS REQUIRED TO PROTECT ALL EXISTING UNDERGROUND UTILITIES (VERIFY IN FIELD)

NOTE:
PLEASE REFERENCE THE MANUFACTURING INSTALLATION DOCUMENTS.

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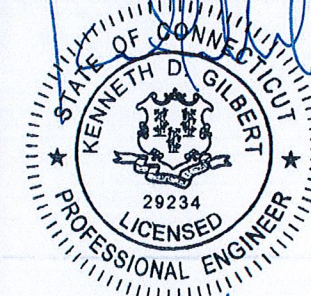
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GROUNDING DETAILS

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G-2

REV. #

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