



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@po.state.ct.us

www.ct.gov/csc

November 18, 2005

Andrew J. Nunn
First Selectman
Monroe Town Hall
7 Fan Hill Road
Monroe, CT 06468-1800

RE: **EM-MONROE-085-051107** - Town of Monroe notice of intent to modify an existing telecommunications facility located at 1428 Monroe Turnpike, Monroe, Connecticut.

Dear Mr. Nunn:

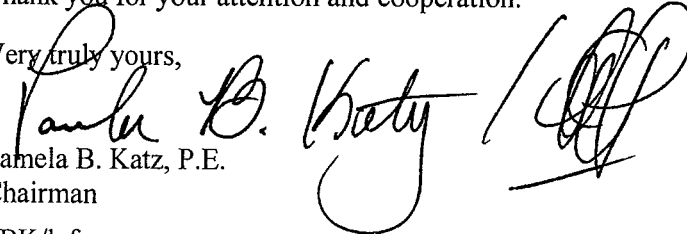
At a public meeting held on November 17, 2005, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated November 1, 2005, including the placement of all necessary equipment and shelters within the tower compound. 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. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

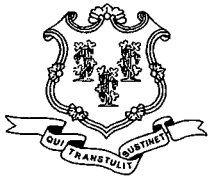
Thank you for your attention and cooperation.

Very truly yours,


Pamela B. Katz, P.E.
Chairman

PBK/laf

- c: Keith Coppins, Vice President, Optasite, Inc.
- Christopher B. Fisher, Esq., Cuddy & Feder LLP
- Kenneth C. Baldwin, Esq., Robinson & Cole LLP
- Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
- Christine Farrell, T-Mobile



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November 8, 2005

The Honorable Andrew J. Nunn
First Selectman
Town of Monroe
Town Hall
7 Fan Hill Road
Monroe, CT 06468-1800

RE: **EM-MONROE-085-051107** – Town of Monroe notice of intent to modify an existing telecommunications facility located at 1428 Monroe Turnpike, Monroe, Connecticut.

Dear Mr. Nunn:

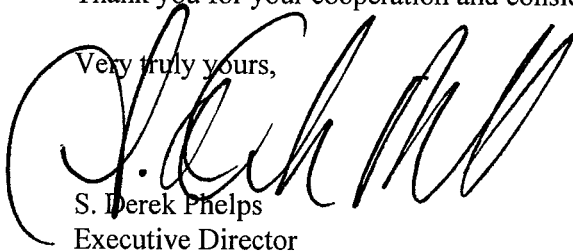
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for November 17, 2005 at 1.30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the council by November 16, 2005.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/ap

Enclosure: Notice of Intent

c: Daniel A. Tuba, Planning Administrator, Town of Monroe

Perrone, Michael

From: Captain Flick [captflick@monroepolicedept.com]
Sent: Tuesday, November 01, 2005 3:36 PM
To: Perrone, Michael
Subject: Re: ATTENTION: Michael Perrone

I will make those changes. Thanks again. You truly don't know how much you have helped me!!

Capt. Flick

----- Original Message -----

From: Perrone, Michael
To: captflick@monroepolicedept.com
Cc: Fontaine, Lisa
Sent: Tuesday, November 01, 2005 3:24 PM
Subject: RE: ATTENTION: Michael Perrone

Captain Flick:

That Notice of Exempt Modification looks good. I would only suggest a few minor changes. I would delete the sentence that says, "In the Siting Council Opinion dated October 23, 2002, it was recognized that the Town of Monroe was requesting party status" and replace it with the following:

"On August 1, 2002, the Siting Council granted party status to the Town of Monroe in that proceeding."

Lastly, in your sentence beginning with "This Police radio system site is a transmit and receive...", please add in there somewhere that it is one channel (assuming that is the case).

We also like to have the coordinates of the tower in the application. Under the address in the "Tower Location" section, please state "Latitude 41-22-35 and Longitude 73-11-11." (I got those numbers from our database and trust they are accurate.)

Please prepare an original and 25 copies of the entire application (packet). Also, please address the application to:

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

That should do it. If you have any other questions, please don't hesitate to call or email me.

Thanks.

Mike Perrone
Siting Analyst
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051
Email: Michael.perrone@ct.gov
Phone: 860-827-2943

11/7/2005

-----Original Message-----

From: Fontaine, Lisa

Sent: Tuesday, November 01, 2005 2:58 PM

To: Perrone, Michael

Subject: FW: ATTENTION: Michael Perrone

-----Original Message-----

From: Captain Flick [mailto:captflick@monroepolicedept.com]

Sent: Tuesday, November 01, 2005 1:59 PM

To: siting.council@po.state.ct.us

Subject: ATTENTION: Michael Perrone

Mr. Perrone,

I have attached a draft copy of the Notification of Exempt Modification. Please contact me with your comments.

Again, thank you for your help.

Captain Michael Flick
Monroe Police Department
203-452-5451

Town of Monroe

ORIGINAL

ANDREW J. NUNN
First Selectman



OFFICE OF THE FIRST SELECTMAN
Town Hall
7 Fan Hill Road
Monroe, Connecticut 06468-1800
Phone: (203) 452-5421
Fax: (203) 452-5475
email: anunn@monroect.org

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

EM-MONROE-085-051107

RECEIVED
NOV 07 2005

Notice of Exempt Modification

CONNECTICUT
SITING COUNCIL

Requesting Party:

First Selectman Andrew J. Nunn, Town of Monroe
7 Fan Hill Road, Monroe, CT 06468
Tel: (203) 452-5421; FAX (203) 452-5475

November 1, 2005

Tower Owner:

Optasite, Inc.
One Research Drive, Suite 200C
Westborough, MA 01581
Tower Manager: Christian Carmody

Tower Location:

Latitude 41-22-35 Longitude 71-11-11
Marian Heights Novitiate
1428 Monroe Turnpike, Monroe, CT. 06468

The Town of Monroe is aware that the Siting Council, in their Decision and Order of October 23, 2002, Docket #210, had authorized Connecticut Architectural Towers, LLC (previously know as James E. Dwyer Co., Inc) to construct a 160 foot tower at the Marian Heights Novitiate, 1428 Monroe Turnpike, Monroe, for the purpose of providing communications facility space to wireless carriers. On August 1, 2002, the Siting Council granted party status to the Town of Monroe. The Siting Council determined that a monopole structure would the best solution for emergency radio communications.

The Town of Monroe entered into a contract with Motorola to improve the Police radio system in the fall of 2004, and the new system was installed shortly thereafter and uses multiple tower sites within the Town to provide adequate portable radio coverage for its Police Officers.

At the time of construction of this tower, the Town of Monroe purchased and installed a platform at the top of this tower (157') for the purpose of installing antenna for emergency radio communications and in November of 2004 a six foot antenna and lightening protection was attached to this platform for the new Police Radio system. This modification did not change the height of the tower.

The Town also installed an equipment cabinet and associated concrete pad within the fenced compound at the base of the tower.

This Police radio system site is a one channel transmit and receive site with Transmit frequency at 453.6125 MHz and Receive frequency at 458.6125 MHz at 104 Watts ERP.

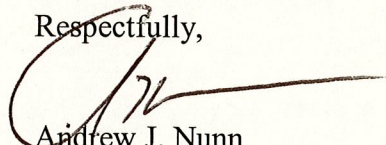
This modification did not increase noise by six decibels at the boundary of the site nor did it require an extension of the site boundaries.

Attachments:

- 1) Structural Analysis
- 2) Drawing of tower indicating antenna and lightening protection heights
- 3) Description of ground equipment (also indicated on above drawing)

Pursuant to CSC Regulations, Section 15-50j-72, the Town requests that the Siting Council takes whatever action is necessary and required in order to allow the Town of Monroe to continue operating police communications equipment at this site.

Respectfully,



Andrew J. Nunn
First Selectman, Town of Monroe

August 3, 2004

Mr. Fred Jacoby
Motorola
26 Sims Way
Shelton, CT 06484

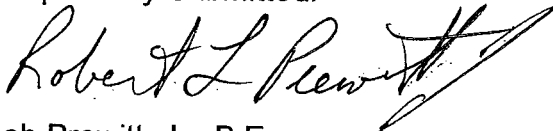
Subject: **Structural Analysis Report**
 Motorola Co-Locate
 Motorola Site Name "Marion Sisters, CT"
 160' Sabre Monopole Tower
 VSI Job Number 2004-117-002

Dear Mr. Jacoby:

Vertical Structures is pleased to provide you with the results of the structural analysis performed on the 160' tall monopole tower at Motorola's Marion Sisters site near Stevenson, Connecticut. The purpose of the analysis was to determine the suitability of the tower upon adding one (1) proposed Decibel DB404B omni antenna at 157' for Motorola when combined with the existing and reserved equipment on the structure. We have concluded that the tower and foundation are structurally adequate to support the proposed and existing loading as considered in this study.

Please, feel free to call if there are any questions. We appreciate the opportunity to provide this report and would ask that you consider Vertical Structures again on any future projects requiring material, engineering, and construction services.

Respectfully Submitted:



Bob Prewitt, Jr., P.E.
Project Engineer

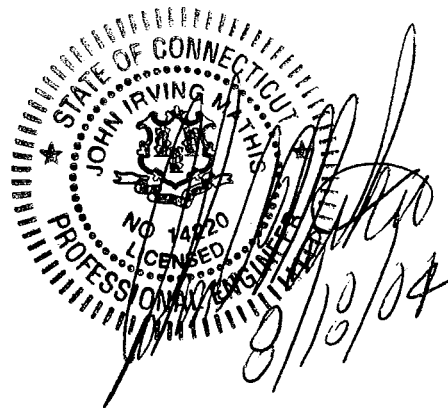


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INTRODUCTION

The subject tower is located near Stevenson, Connecticut. The 160' tall monopole tower was designed by Sabre Communications Corporation in 2003 for Site Acquisition Consulting. The tower consists of four (4) 18-sided polygon sections with slip joint connections and is founded on a 25'-6" square by 2' thick mat buried 5'6" deep.

ANALYSIS CRITERIA

The Marion Sisters monopole tower was analyzed in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." The existing and proposed antennas, lines and mounts considered in this analysis are listed in Table 1. Applied forces in this study were derived from an 85 MPH basic "fastest mile" wind speed with no ice and a reduced 74 MPH basic "fastest mile" wind speed with a 1/2" of radial ice accumulation. The tower was originally designed for an 85 MPH basic "fastest mile" wind speed with no ice and a reduced 74 MPH basic "fastest mile" wind speed with a 1/2" of radial ice accumulation. The original design loads are listed in Table 2. The EIA minimum basic wind speed for Fairfield County, Connecticut is 85 MPH. All coax are assumed to be run on the interior of the pole.

Table 1 – Proposed and Existing Loads

Elev.	Carrier	Status	Antennas	Feedlines	Mounts
157'	Motorola	Proposed	(1) Decibel DB404B Omni	(1) 7/8" Coax	(1) 12.5' L.P. Platform
	AT&T	Existing	(3) Allgon 7250.03 Panels	(6) 1 5/8" Coax	
149'	Sprint	Existing	(6) Decibel DB948F85E-M Panels	(6) 1 5/8" Coax	(1) 12.5' L.P. Platform
140'	T-Mobile	Existing	(6) EMS FR65-17-04DP Panels	(12) 1 1/4" Coax	(1) 14' L.P. Platform
46.5'	Sprint	Existing	(1) GPS	(1) 1/2" Coax	(1) 3.5' Sidearm

Table 2 – Original Design Loads

Elev.	Carrier Name	Status	Antennas	Feedlines	Mounts
157'		Design	(9) 4' x 1' Panels		(1) 10' L.P. Platform
149'		Design	(12) 4' x 1' Panels		(1) 12' L.P. Platform
139'		Design	(12) 4' x 1' Panels		(1) 12' L.P. Platform
129'		Design	(12) 4' x 1' Panels		(1) 12' L.P. Platform
119'		Design	(12) 4' x 1' Panels		(1) 12' L.P. Platform
109'		Design	(12) 4' x 1' Panels		(1) 12' L.P. Platform

ANALYSIS PROCEDURES

A July, 2004 tower audit was performed by Vertical Structures to gather structural information and existing loadings. All material specifications and foundation design information were obtained from the original Sabre design drawings. No geotechnical information regarding this site was provided. Proposed loading information was provided by Motorola.

ERI Tower (Version 3.0), a commercially available software program, was used to create a three-dimensional model of the tower and calculate member stresses for various dead, live, wind, and ice load cases. All loads were computed in accordance with the ANSI/EIA/TIA 222-F or the local building code requirements. Selected output from the analysis is included in Appendix A.

Assumptions

1. Tower and structures were built in accordance with the manufacturer's specifications.
2. The tower and structures have been maintained in accordance with manufacturer's specifications.
3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and any referenced drawings.
4. When applicable, transmission cables are considered to be structural components for calculating wind loads, as allowed by TIA/EIA-222-F.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and Vertical Structures should be allowed to review any new information to determine its effect on the structural integrity of the tower.

ANALYSIS CONCLUSIONS

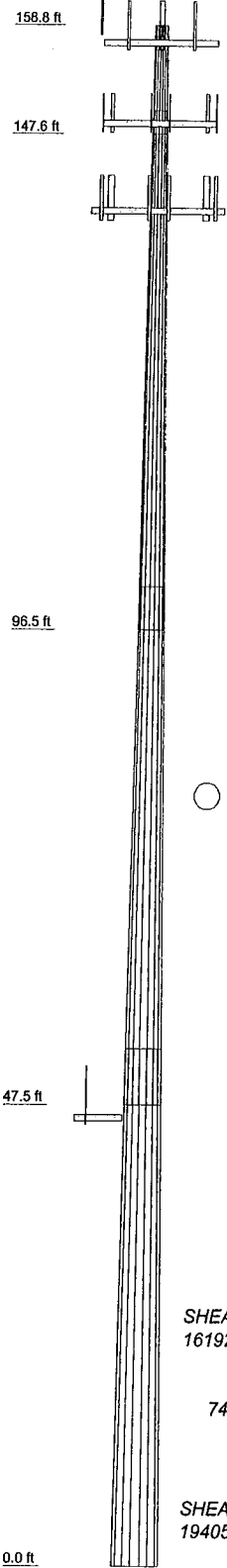
The Marion Sisters monopole is found to be adequate for the intended loading at the wind and ice conditions considered. Foundation reactions are within the original tower manufacturer's design limits. Analysis results are listed in Table 3.

Table 3 – Tower Component Stresses vs. Capacity

Section Number	Elevation	Combined Stress Ratio	Allowable Stress Ratio	Percent Used
1	158.8 – 147.6	0.151	1.333	11.3
2	147.6 – 96.5	0.645	1.333	48.4
3	96.5 – 47.5	0.619	1.333	46.4
4	47.5 - 0	0.651	1.333	48.8
Base Plate – Bending				25.2
Anchor Bolts – Tension				59.5
Foundation – Moment (comparing actual loads vs. design loads)				53.9

APPENDIX A

Section	1	2	3	4
Length (ft)	11.25	53.51	53.50	53.25
Number of Sides	18	18	18	18
Thickness (in)	0.1875	0.3125	0.3750	0.3750
Lap Splice (ft)	2.43		5.75	
Top Dia (in)	15.0000	17.0091	30.2517	43.1290
Bot Dia (in)	18.0400	32.1500	45.5200	58.2000
Grade			A572-65	
Weight (lb)	372.1	4382.7	8128.0	10846.0



APPURTENANCES

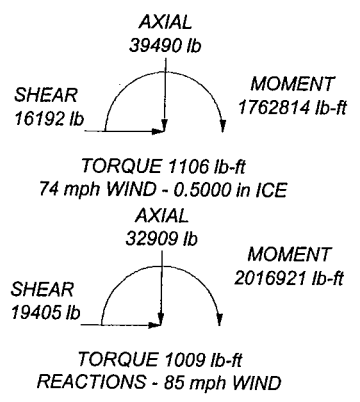
TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 4' on 6' Extension (VSI)	158.833	6' x 2" Antenna Mount Pipe (VSI)	149
Sabre 12'-6" Rotatable Platform	157.333	6' x 2" Antenna Mount Pipe (VSI)	149
3'x2" Antenna Mount Pipe (Motorola)	157.333	6' x 2" Antenna Mount Pipe (VSI)	149
DB404 (Motorola)	157.333	Sabre 14' Rotatable Platform	140
7250.03 w/Mount Pipe	157.333	(2) FR65-17-04DP w/Mount Pipe	140
7250.03 w/Mount Pipe	157.333	(2) FR65-17-04DP w/Mount Pipe	140
7250.03 w/Mount Pipe	157.333	(2) 7'x2" Antenna Mount Pipe	140
7250.03 w/Mount Pipe	157.333	(2) 7'x2" Antenna Mount Pipe	140
Sabre 12'-6" Rotatable Platform	149	(2) 7'x2" Antenna Mount Pipe	140
(2) DB948F85E-M w/Mount Pipe	149	(2) 7'x2" Antenna Mount Pipe	140
(2) DB948F85E-M w/Mount Pipe	149	Generic GPS (VSI)	46.5
(2) DB948F85E-M w/Mount Pipe	149	3' Sidearm (1 1/4" pipe) (VSI)	46.5


MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 48.8%



	Vertical Structures, Inc.		Marion Sisters, CT		
	309 Spangler Drive Richmond, KY 40475		Project: Vertical Structures Job #2004-117-002		
	Phone: (859) 624-8360		Client: Motorola	Drawn by: Bob Prewitt	App'd:
	FAX: (859) 624-8369		Code: TIA/EIA-222-F	Date: 08/03/04	Scale: NTS
		Path:	Dwg No. E-1		

ERITower Vertical Structures, Inc. 309 Spangler Drive Richmond, KY 40475 Phone: (859) 624-8360 FAX: (859) 624-8369	Job Marion Sisters, CT	Page 1 of 7
	Project Vertical Structures Job #2004-117-002	Date 12:20:51 08/03/04
	Client Motorola	Designed by Bob Prewitt

Tower Input Data

There is a pole section.

This tower is designed using the TIA/EIA-222-F standard.

The following design criteria apply:

Tower is located in Fairfield County, Connecticut.

Basic wind speed of 85 mph.

Nominal ice thickness of 0.5000 in.

Ice density of 56 pcf.

A wind speed of 74 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 50 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.333.

Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Treat Feedline Bundles As Cylinder
Consider Moments - Horizontals	Assume Legs Pinned	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Diagonals	✓ Assume Rigid Index Plate	✓ Calculate Redundant Bracing Forces
Use Moment Magnification	✓ Use Clear Spans For Wind Area	Ignore Redundant Members in FEA
✓ Use Code Stress Ratios	✓ Use Clear Spans For KL/r	✓ SR Leg Bolts Resist Compression
✓ Use Code Safety Factors - Guys	Retention Guys To Initial Tension	✓ All Leg Panels Have Same Allowable
Escalate Ice	✓ Bypass Mast Stability Checks	Offset Girt At Foundation
Always Use Max Kz	✓ Use Azimuth Dish Coefficients	✓ Consider Feedline Torque
Use Special Wind Profile	✓ Project Wind Area of Appurt.	✓ Include Angle Block Shear Check
✓ Include Bolts In Member Capacity	✓ Autocalc Torque Arm Areas	Poles
Leg Bolts Are At Top Of Section	✓ SR Members Have Cut Ends	Include Shear-Torsion Interaction
✓ Secondary Horizontal Braces Leg	Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	✓ Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
Add IBC .6D+W Combination		

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	158.83-147.58	11.25	2.43	18	15.0000	18.0400	0.1875	0.7500	A572-65 (65 ksi)
L2	147.58-96.50	53.51	4.50	18	17.0091	32.1500	0.3125	1.2500	A572-65 (65 ksi)
L3	96.50-47.50	53.50	5.75	18	30.2517	45.5200	0.3750	1.5000	A572-65 (65 ksi)
L4	47.50-0.00	53.25		18	43.1290	58.2000	0.3750	1.5000	A572-65 (65 ksi)

ERITower Vertical Structures, Inc. 309 Spangler Drive Richmond, KY 40475 Phone: (859) 624-8360 FAX: (859) 624-8369	Job Marion Sisters, CT	Page 2 of 7
	Project Vertical Structures Job #2004-117-002	Date 12:20:51 08/03/04
	Client Motorola	Designed by Bob Prewitt

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ²	J in ⁴	I/Q in ²	w in	w/t
L1	15.2314	8.8153	244.3603	5.2584	7.6200	32.0683	489.0422	4.4085	2.3100	12.32
	18.3183	10.6245	427.8020	6.3376	9.1643	46.6813	856.1668	5.3132	2.8450	15.174
L2	17.9689	16.5610	583.2860	5.9273	8.6406	67.5049	1167.3396	8.2821	2.4436	7.82
	32.6460	31.5788	4044.0011	11.3023	16.3322	247.6091	8093.3235	15.7924	5.1084	16.347
L3	32.0225	35.5608	4010.2765	10.6062	15.3679	260.9520	8025.8298	17.7838	4.6643	12.438
	46.2222	53.7338	13835.8107	16.0265	23.1242	598.3271	27689.8270	26.8720	7.3515	19.604
L4	45.4468	50.8880	11751.8544	15.1777	21.9095	536.3807	23519.1721	25.4488	6.9307	18.482
	59.0978	68.8262	29075.1902	20.5279	29.5656	983.4128	58188.6383	34.4196	9.5832	25.555

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals
ft	ft ²	in					in	in
L1 158.83-147.58				1	1	1		
L2 147.58-96.50				1	1	1		
L3 96.50-47.50				1	1	1		
L4 47.50-0.00				1	1	1		

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement	Total Number	C _A A _A	Weight
				ft		ft ² /ft	plf
LDF5-50A (7/8 FOAM) (Motorola)	C	No	Inside Pole	157.33 - 0.00	1	No Ice 1/2" Ice	0.33 0.33
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	157.33 - 0.00	6	No Ice 1/2" Ice	0.82 0.82
LDF7-50A (1-5/8 FOAM)	C	No	Inside Pole	149.00 - 0.00	6	No Ice 1/2" Ice	0.82 0.82
LDF6-50A (1-1/4 FOAM)	C	No	Inside Pole	141.00 - 0.00	12	No Ice 1/2" Ice	0.66 0.66
LDF4-50A (1/2 FOAM)	C	No	CaAa (Out Of Face)	46.50 - 0.00	1	No Ice 1/2" Ice	0.15 0.15

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation	Face	A _R	A _F	C _A A _A In Face	C _A A _A Out Face	Weight
	ft		ft ²	ft ²	ft ²	ft ²	lb
L1	158.83-147.58	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	58.14
L2	147.58-96.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	871.96
L3	96.50-47.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00

ERITower Vertical Structures, Inc. 309 Spangler Drive Richmond, KY 40475 Phone: (859) 624-8360 FAX: (859) 624-8369	Job Marion Sisters, CT	Page 3 of 7
	Project Vertical Structures Job #2004-117-002	Date 12:20:51 08/03/04
	Client Motorola	Designed by Bob Prewitt

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight lb
L4	47.50-0.00	C	0.000	0.000	0.000	0.000	886.41
		A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	866.25

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight lb
L1	158.83-147.58	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	58.14
L2	147.58-96.50	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	871.96
L3	96.50-47.50	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	886.41
L4	47.50-0.00	A	0.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	866.25

Feed Line Center of Pressure

Section	Elevation ft	CP _x in	CP _z in	CP _x Ice in	CP _z Ice in
L1	158.83-147.58	0.0000	0.0000	0.0000	0.0000
L2	147.58-96.50	0.0000	0.0000	0.0000	0.0000
L3	96.50-47.50	0.0000	0.0000	0.0000	0.0000
L4	47.50-0.00	0.0000	0.0000	0.0000	0.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft ²	C _{AA} Side ft ²	Weight lb
Sabre 12'-6" Rotatable Platform	C	None		0.0000	157.33	No Ice 1/2" Ice	30.00 36.00	30.00 2500.00
Lightning Rod 4' on 6' Extension (VSI)	A	From Centroid-Face	7.21 0.00 4.00	0.0000	158.83	No Ice	1.68	1.68
						1/2" Ice	2.59	2.59
3'x2" Antenna Mount Pipe (Motorola)	C	From Centroid-	7.21 0.00	0.0000	157.33	No Ice	0.58	0.58
						1/2" Ice	0.77	0.77

ERITower Vertical Structures, Inc. 309 Spangler Drive Richmond, KY 40475 Phone: (859) 624-8360 FAX: (859) 624-8369	Job Marion Sisters, CT	Page 4 of 7
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	Client Motorola	Designed by Bob Prewitt

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	lb
DB404 (Motorola)	C	Face	0.00						
		From	7.21		0.0000	157.33	No Ice 1.14	1.14	14.00
		Centroid-	0.00				1/2" Ice 2.05	2.05	18.20
7250.03 w/Mount Pipe	A	Face	2.50						
		From	4.00		0.0000	157.33	No Ice 4.45	3.54	40.95
		Centroid-	0.00				1/2" Ice 5.03	4.72	76.25
7250.03 w/Mount Pipe	B	Leg	1.50						
		From	4.00		0.0000	157.33	No Ice 4.45	3.54	40.95
		Centroid-	0.00				1/2" Ice 5.03	4.72	76.25
7250.03 w/Mount Pipe	C	Leg	1.50						
		From	4.00		0.0000	157.33	No Ice 4.45	3.54	40.95
		Centroid-	0.00				1/2" Ice 5.03	4.72	76.25
Sabre 12'-6" Rotatable Platform	C	None			0.0000	149.00	No Ice 30.00	30.00	1785.00
							1/2" Ice 36.00	36.00	2500.00
(2) DB948F85E-M w/Mount Pipe	A	From	4.00		0.0000	149.00	No Ice 2.62	4.92	34.05
		Centroid-	0.00				1/2" Ice 3.23	6.01	68.79
		Leg	0.75						
(2) DB948F85E-M w/Mount Pipe	B	From	4.00		0.0000	149.00	No Ice 2.62	4.92	34.05
		Centroid-	0.00				1/2" Ice 3.23	6.01	68.79
		Leg	0.75						
(2) DB948F85E-M w/Mount Pipe	C	From	4.00		0.0000	149.00	No Ice 2.62	4.92	34.05
		Centroid-	0.00				1/2" Ice 3.23	6.01	68.79
		Leg	0.75						
6' x 2" Antenna Mount Pipe (VSI)	A	From	4.00		0.0000	149.00	No Ice 1.43	1.43	23.00
		Centroid-	0.00				1/2" Ice 1.92	1.92	33.83
		Leg	0.00						
6' x 2" Antenna Mount Pipe (VSI)	B	From	4.00		0.0000	149.00	No Ice 1.43	1.43	23.00
		Centroid-	0.00				1/2" Ice 1.92	1.92	33.83
		Leg	0.00						
6' x 2" Antenna Mount Pipe (VSI)	C	From	4.00		0.0000	149.00	No Ice 1.43	1.43	23.00
		Centroid-	0.00				1/2" Ice 1.92	1.92	33.83
		Leg	0.00						
Sabre 14' Rotatable Platform	C	None			0.0000	140.00	No Ice 20.00	20.00	2000.00
							1/2" Ice 25.00	25.00	2830.00
(2) FR65-17-04DP w/Mount Pipe	A	From	4.00		0.0000	140.00	No Ice 4.91	3.64	43.55
		Centroid-	0.00				1/2" Ice 5.57	4.70	81.64
		Leg	1.00						
(2) FR65-17-04DP w/Mount Pipe	B	From	4.00		0.0000	140.00	No Ice 4.91	3.64	43.55
		Centroid-	0.00				1/2" Ice 5.57	4.70	81.64
		Leg	1.00						
(2) FR65-17-04DP w/Mount Pipe	C	From	4.00		0.0000	140.00	No Ice 4.91	3.64	43.55
		Centroid-	0.00				1/2" Ice 5.57	4.70	81.64
		Leg	1.00						
(2) 7'x2" Antenna Mount Pipe	A	From	4.00		0.0000	140.00	No Ice 1.66	1.66	26.00
		Centroid-	0.00				1/2" Ice 2.39	2.39	38.58
		Leg	0.00						
(2) 7'x2" Antenna Mount Pipe	B	From	4.00		0.0000	140.00	No Ice 1.66	1.66	26.00
		Centroid-	0.00				1/2" Ice 2.39	2.39	38.58
		Leg	0.00						
(2) 7'x2" Antenna Mount Pipe	C	From	4.00		0.0000	140.00	No Ice 1.66	1.66	26.00
		Centroid-	0.00				1/2" Ice 2.39	2.39	38.58
		Leg	0.00						
Generic GPS (VSI)	C	From	6.75		0.0000	46.50	No Ice 1.40	1.40	25.00
		Centroid-	0.00				1/2" Ice 1.70	1.70	30.00
		Leg	2.00						
3' Sidearm (1 1/4" pipe) (VSI)	C	From	5.25		0.0000	46.50	No Ice 0.42	1.26	28.00

ERITower Vertical Structures, Inc. 309 Spangler Drive Richmond, KY 40475 Phone: (859) 624-8360 FAX: (859) 624-8369	Job Marion Sisters, CT	Page 5 of 7
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	Client Motorola	Designed by Bob Prewitt

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz Lateral	Vert					
			ft	ft	°	ft	ft ²	ft ²	lb
		Centroid- Leg	0.00	0.00		1/2" Ice	0.66	1.98	44.00

Load Combinations

Comb. No.	Description
1	Dead Only
2	Dead+Wind 0 deg - No Ice
3	Dead+Wind 90 deg - No Ice
4	Dead+Wind 180 deg - No Ice
5	Dead+Ice+Temp
6	Dead+Wind 0 deg+Ice+Temp
7	Dead+Wind 90 deg+Ice+Temp
8	Dead+Wind 180 deg+Ice+Temp
9	Dead+Wind 0 deg - Service
10	Dead+Wind 90 deg - Service
11	Dead+Wind 180 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
L1	158.833 - 147.583	Pole	Max Tension	7	0.03	1.40	0.68
			Max. Compression	5	-3275.55	131.44	-20.47
			Max. Mx	3	-2112.19	-20179.16	-20.96
			Max. My	4	-2112.00	198.11	-20450.09
			Max. Vy	3	2748.46	-20179.16	-20.96
			Max. Vx	4	2748.61	198.11	-20450.09
			Max. Torque	8			-618.08
L2	147.583 - 96.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-15346.21	332.61	-51.80
			Max. Mx	3	-11090.82	-471069.20	-39.63
			Max. My	4	-11090.56	234.04	-471354.01
			Max. Vy	3	11345.34	-471069.20	-39.63
			Max. Vx	4	11345.58	234.04	-471354.01
			Max. Torque	8			-618.06
L3	96.5 - 47.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-24883.78	332.24	-51.74
			Max. Mx	3	-19703.92	-	-50.63
			Max. My	4	-19703.73	1099122.94 250.32	-
			Max. Vy	3	15038.61	-	1099419.67 -50.63
			Max. Vx	4	15038.86	1099122.94 250.32	-

ERITower Vertical Structures, Inc. 309 Spangler Drive Richmond, KY 40475 Phone: (859) 624-8360 FAX: (859) 624-8369	Job Marion Sisters, CT	Page 6 of 7
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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Force lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
L4	47.5 - 0	Pole	Max. Torque	8			1099419.67
			Max Tension	1	0.00	0.00	-616.86
			Max. Compression	5	-39490.44	720.21	-275.92
			Max. Mx	3	-32900.41	-	-798.84
			Max. My	4	-32900.40	2015489.95	-
			Max. Vy	3	19404.60	-	2016920.50
			Max. Vx	4	19419.08	2015489.95	-798.84
			Max. Torque	8		-52.85	-

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	F _a ksi	A in ²	Actual P lb	Allow. P _a lb	Ratio P/P _a
L1	158.833 - 147.583 (1)	TP18.04x15x0.1875	11.25	0.00	0.0	39.000	10.2341	-2112.00	399132.00	0.005
L2	147.583 - 96.5 (2)	TP32.15x17.0091x0.3125	53.51	0.00	0.0	39.000	30.3159	-11090.60	1182320.00	0.009
L3	96.5 - 47.5 (3)	TP45.52x30.2517x0.375	53.50	0.00	0.0	39.000	51.7807	-19703.70	2019450.00	0.010
L4	47.5 - 0 (4)	TP58.2x43.129x0.375	53.25	0.00	0.0	38.538	68.8262	-32900.40	2652430.00	0.012

Pole Bending Design Data

Section No.	Elevation ft	Size	Actual M _x lb-ft	Actual f _{bx} ksi	Allow. F _{bx} ksi	Ratio f _{bx} /F _{bx}	Actual M _y lb-ft	Actual f _{by} ksi	Allow. F _{by} ksi	Ratio f _{by} /F _{by}
L1	158.833 - 147.583 (1)	TP18.04x15x0.1875	20451.0	-5.668	39.000	0.145	0.00	0.000	39.000	0.000
L2	147.583 - 96.5 (2)	TP32.15x17.0091x0.3125	471354.	-24.796	39.000	0.636	0.00	0.000	39.000	0.000
L3	96.5 - 47.5 (3)	TP45.52x30.2517x0.375	1099416	-23.752	39.000	0.609	0.00	0.000	39.000	0.000
L4	47.5 - 0 (4)	TP58.2x43.129x0.375	2016916	-24.611	38.538	0.639	0.00	0.000	38.538	0.000

Pole Interaction Design Data

ERITower Vertical Structures, Inc. 309 Spangler Drive Richmond, KY 40475 Phone: (859) 624-8360 FAX: (859) 624-8369	Job Marion Sisters, CT	Page 7 of 7
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	Client Motorola	Designed by Bob Prewitt

Section No.	Elevation ft	Size	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
			$\frac{P}{P_a}$	$\frac{f_{bx}}{F_{bx}}$	$\frac{f_{by}}{F_{by}}$			
L1	158.833 - 147.583 (1)	TP18.04x15x0.1875	0.005	0.145	0.000	0.151 ✓	1.333	H1-3 ✓
L2	147.583 - 96.5 (2)	TP32.15x17.0091x0.3125	0.009	0.636	0.000	0.645 ✓	1.333	H1-3 ✓
L3	96.5 - 47.5 (3)	TP45.52x30.2517x0.375	0.010	0.609	0.000	0.619 ✓	1.333	H1-3 ✓
L4	47.5 - 0 (4)	TP58.2x43.129x0.375	0.012	0.639	0.000	0.651 ✓	1.333	H1-3 ✓

Section Capacity Table

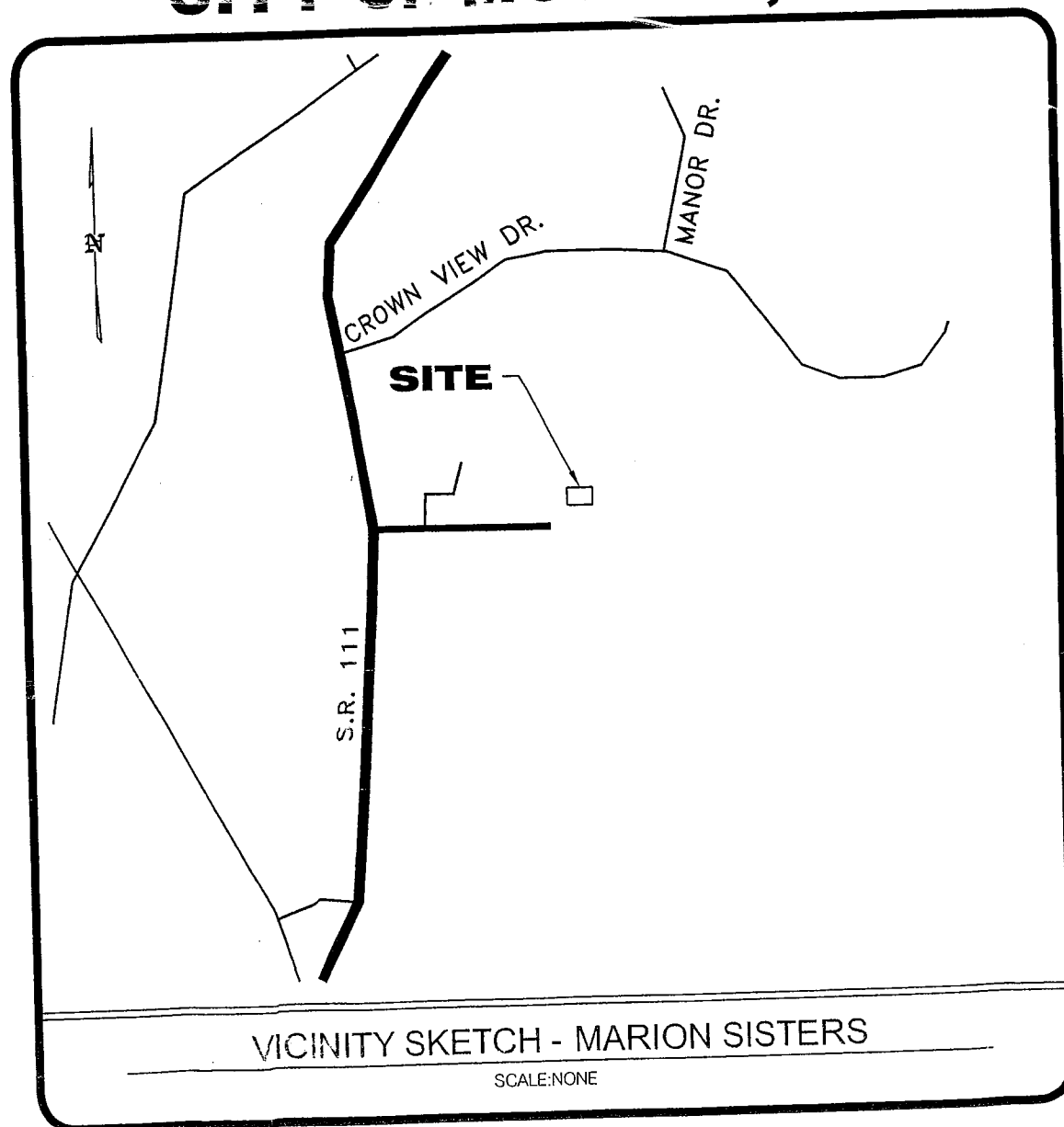
Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	SF*P _{allow} lb	% Capacity	Pass Fail	
L1	158.833 - 147.583	Pole	TP18.04x15x0.1875	1	-2112.00	532042.93	11.3	Pass	
L2	147.583 - 96.5	Pole	TP32.15x17.0091x0.3125	2	-11090.60	1576032.49	48.4	Pass	
L3	96.5 - 47.5	Pole	TP45.52x30.2517x0.375	3	-19703.70	2691926.74	46.4	Pass	
L4	47.5 - 0	Pole	TP58.2x43.129x0.375	4	-32900.40	3535689.04	48.8	Pass	
							Summary		
							Pole (L4)	48.8	Pass
							RATING =	48.8	Pass

August 3, 2004
Motorola – Marion Sisters, CT
VSI Job No. 2004-117-002

APPENDIX B

INSTALL OF NEW 6'-0" X 10'-0" CONCRETE PAD AND ANTENNAS

FOR **MOTOROLA** MARION SISTERS SITE CITY OF MONROE, CT



VICINITY SKETCH - MARION SISTERS

SCALE: NONE

DIRECTIONS TO SITE FROM S.R. 111:
FROM S.R. 111, TURN ONTO LOCAL ROAD. HEAD EAST, THE SITE WILL BE ON YOUR LEFT.

DRAWING TABLE OF CONTENTS

- X-1 GENERAL SITE INFO
- X-2 GENERAL NOTES
- C-1 SITE AND ELECTRICAL PLAN
- C-2 TOWER PROFILE
- C-3 MOUNTING DETAILS
- C-4 FOUNDATION SHEET
- C-5 WAVEGUIDE BRIDGE DETAIL SHEET
- E-1 GROUNDING DETAIL SHEET
- E-2 ELECTRICAL AND TELCO PEDESTAL AND TRENCH DETAIL

SITE NAME: MARION SISTERS
 SITE OWNER: CONNECTICUT ARCHITECTURAL TOWER (CAT)
 LATITUDE: N 41° 22' 34.1"
 LONGITUDE: W 73° 11' 19.7"

APPROVED FOR CONSTRUCTION	
CT. ARCH. TOWER _____	DATE: _____
MOTOROLA: _____	DATE: _____

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	SB
B	REVISED PER CUSTOMER	8-18-04	JC



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FOR
MOTOROLA
 FRED JACOBY
 26 SIMS WAY
 SHELTON, CT 06484
 PH: (203) 924-9672
 FAX: (203) 924-9673

GENERAL SITE INFO
 MARION SISTERS, CT

DRAWN BY: S. BURNETT	DATE: 8-2-04
CHECKED BY: <i>JM 9/</i>	DATE: <i>9/18/04</i>
SCALE: AS NOTED	SHEET 1 OF 9
JOB NUMBER: 2004-117-002	REV A X-1

GENERAL GROUNDING NOTES:

1. VERIFY LOCATION OF ALL BURIED UTILITIES PRIOR TO ANY EXCAVATION. APPLY FOR NEW ELECTRIC AND TELCO SERVICE AS SOON AS POSSIBLE AFTER NOTICE TO PROCEED. VERIFY WITH UTILITY COMPANY REPRESENTATIVE THAT 120/240V, 1Ø POWER WILL BE AVAILABLE TO SERVE SITE.
2. SEAL AROUND CONDUITS AND GROUNDING SLEEVES IN FOUNDATION WITH SILICONE SEALANT TO PREVENT MOISTURE PENETRATION INTO EQUIPMENT ENCLOSURES AND/OR CONCRETE FOUNDATIONS.
3. ALL GROUNDING CABLE IN CONCRETE IS TO BE IN 3/4" PVC CONDUIT. NO METALLIC CONDUIT IS TO BE USED FOR GROUNDING CONDUCTOR SLEEVES.
4. GROUND ALL EXPOSED METALLIC OBJECTS USING A TWO-HOLE NEMA DRILLED CONNECTOR SUCH AS T&B 32207 WITH STAINLESS STEEL SET SCREW OR APPROVED EQUAL.
5. DO NOT INSTALL BURIED GROUND RING OUTSIDE OF PROPERTY LINE. NOTIFY BUILD TO SUIT COMPANY WHEN THE BURIED GROUND RING IS INSTALLED SO THAT A REPRESENTATIVE CAN INSPECT THE GROUND RING BEFORE IT IS BACK FILLED WITH SOIL.
6. ALL EXTERIOR GROUNDING CONDUCTORS INCLUDING GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. ALL BENDS SHALL BE A MINIMUM OF 8" RADIUS AND GREATER THAN 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD BURIED GROUND RING.
7. ALL EXTERNAL GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO BURIED GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND PLATES WHICH ARE THE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZER SUCH AS HOLUB LECTROSOL #15-501.
8. WHERE MECHANICAL CONNECTORS (TWO-HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO OXIDE A" BY DEARBORN CHEMICAL COMPANY ON ALL CONNECTORS. PROVIDE LOCK WASHERS ON ALL MECHANICAL CONNECTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. THOROUGHLY REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS. REPAINT TO MATCH EXISTING AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE TYPES OF METALS BEING ATTACHED TO.
9. ALL SERVICE AND FEEDER CONDUCTORS TO BE STRANDED COPPER UNLESS OTHERWISE NOTED.
10. MAINTAIN ALL EQUIPMENT CLEARANCES AS REQUIRED BY NEC, ARTICLE 110-16.

SITE PLAN GENERAL NOTES:

1. THE SITE SHALL BE GRADED FOR PROPER DRAINAGE AWAY FROM THE EQUIPMENT AND TOWER AREA.
2. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE STATE GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
3. AUTHORIZATION FOR ACCESS TO AND WORK WITHIN PUBLIC ROAD R.O.W. SHALL BE OBTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL ADHERE TO ALL SPECIAL REQUIREMENTS SPECIFIED IN THE AUTHORIZATION.
4. ALL OTHER VEGETATIVE COVER DAMAGED OR REMOVED DURING CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR (UNLESS OTHERWISE NOTED).
5. IF NECESSARY, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND RE-GRADING ROADWAY AND/OR FIELD AFTER THE INSTALLATION OF UTILITIES.
6. WATER AND SEWER SERVICES ARE NOT REQUIRED FOR THIS DEVELOPMENT.
7. LIGHTING: NOT REQUIRED FOR THE DEVELOPEMENT.
8. PARKING SPACES ARE NOT REQUIRED FOR THIS DEVELOPMENT.

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	SB



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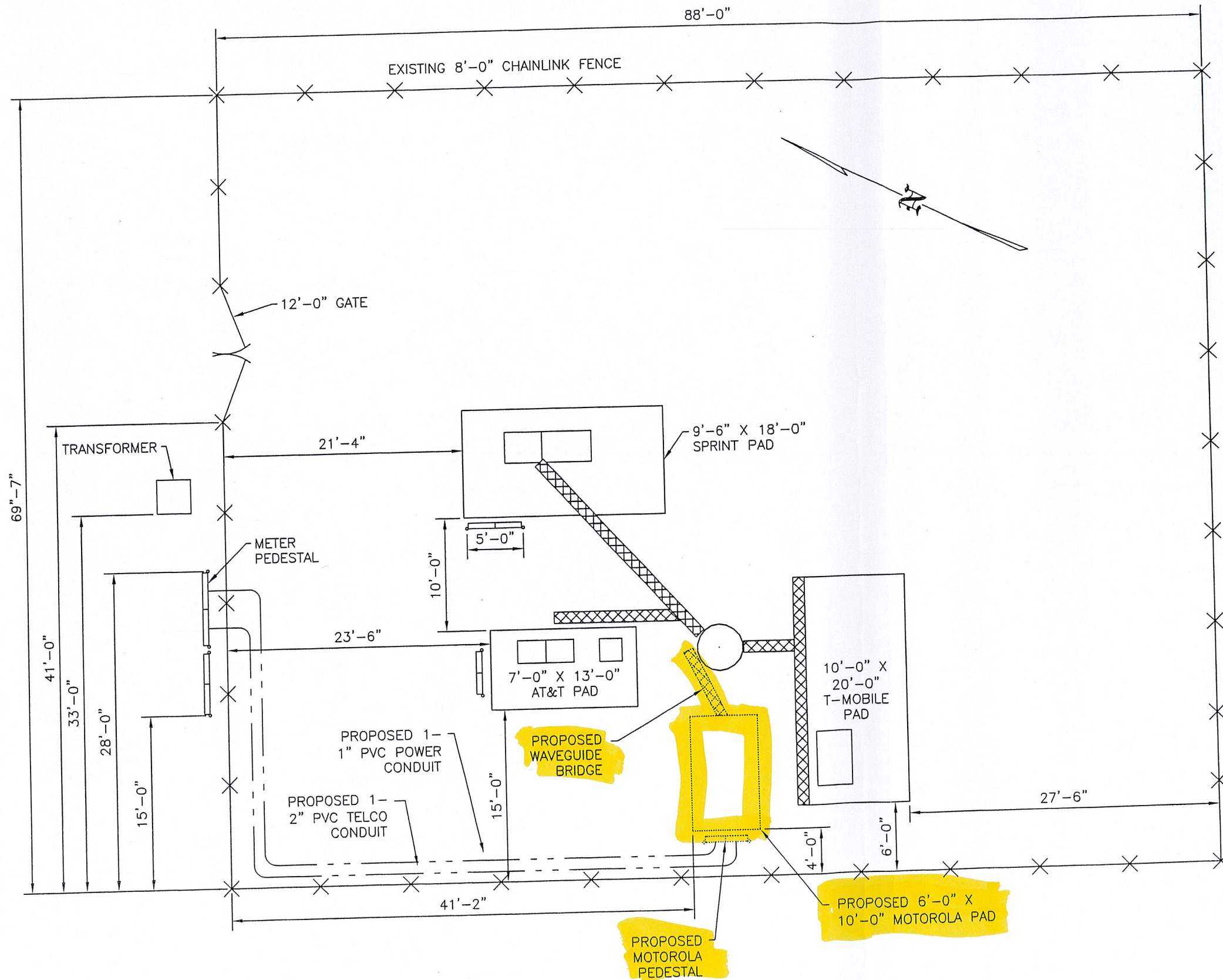
FOR

MOTOROLA

FRED JACOBY
 26 SIMS WAY
 SHELTON, CT 06484
 PH: (203) 924-9672
 FAX: (203) 924-9673

GENERAL NOTES
 MARION SISTERS, CT

DRAWN BY: S. BURNETT	DATE: 8-2-04
CHECKED BY: <i>JB</i>	DATE: <i>8/18/04</i>
SCALE: AS NOTED	SHEET 2 OF 9
JOB NUMBER: 2004-117-002	REV. A X-2



SITE PLAN
SCALE: 1" = 10'-0"

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	JH



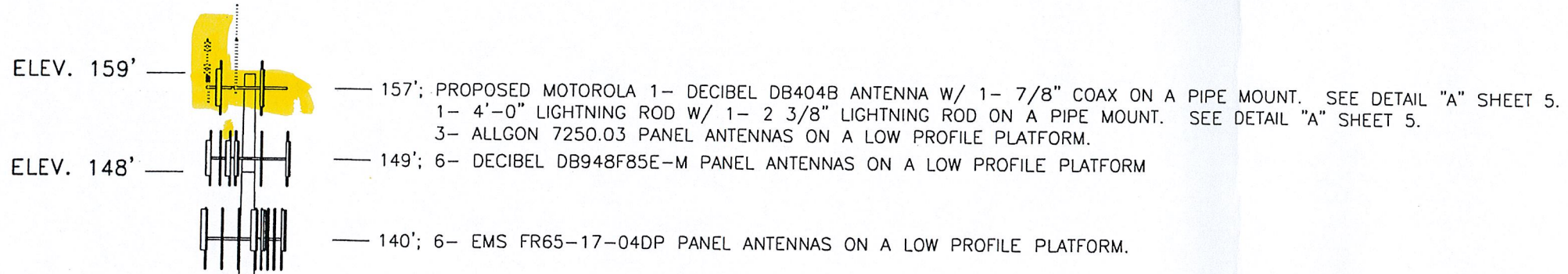
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FOR

MOTOROLA
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SITE AND ELECTRICAL PLAN
MARION SISTERS, CT

DRAWN BY: J. HIGHT II	DATE: 8-2-04
CHECKED BY: <i>jm</i>	DATE: 8/18/04
SCALE: AS NOTED	SHEET 3 OF 9
JOB NUMBER: 2004-117-002	REV. A C-1

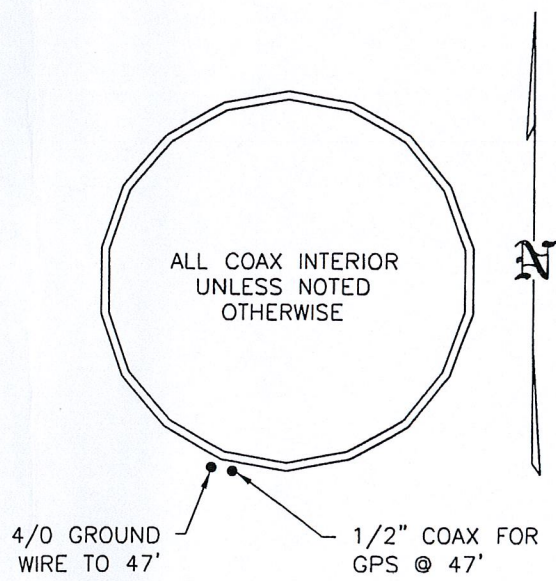


- 157'; PROPOSED MOTOROLA 1- DECIBEL DB404B ANTENNA W/ 1- 7/8" COAX ON A PIPE MOUNT. SEE DETAIL "A" SHEET 5.
1- 4'-0" LIGHTNING ROD W/ 1- 2 3/8" LIGHTNING ROD ON A PIPE MOUNT. SEE DETAIL "A" SHEET 5.
3- ALLGON 7250.03 PANEL ANTENNAS ON A LOW PROFILE PLATFORM.
- 149'; 6- DECIBEL DB948F85E-M PANEL ANTENNAS ON A LOW PROFILE PLATFORM
- 140'; 6- EMS FR65-17-04DP PANEL ANTENNAS ON A LOW PROFILE PLATFORM.

ELEV. 97' —

ELEV. 48' — 47'; GPS ON A 3'-6" SIDARM

ELEV. 0'



COAX PLAN VIEW

NOTE:
1. STRUCTURAL ANALYSIS MUST INCLUDE ALL LOADING SHOWN ON THIS PAGE.

TOWER PROFILE AND MOUNTING DETAILS

REV	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	SB



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FOR
MOTOROLA
FRED JACOBY
26 SIMS WAY
SHELTON, CT 06484
PH: (203) 924-9672
FAX: (203) 924-9673

TOWER PROFILE
MARION SISTERS, CT

DRAWN BY: S. BURNETT	DATE: 8-2-04
CHECKED BY: <i>sm</i>	DATE: <i>8/19/04</i>
SCALE: NONE	SHEET 4 OF 9
JOB NUMBER: 2004-117-002	REV A C-2

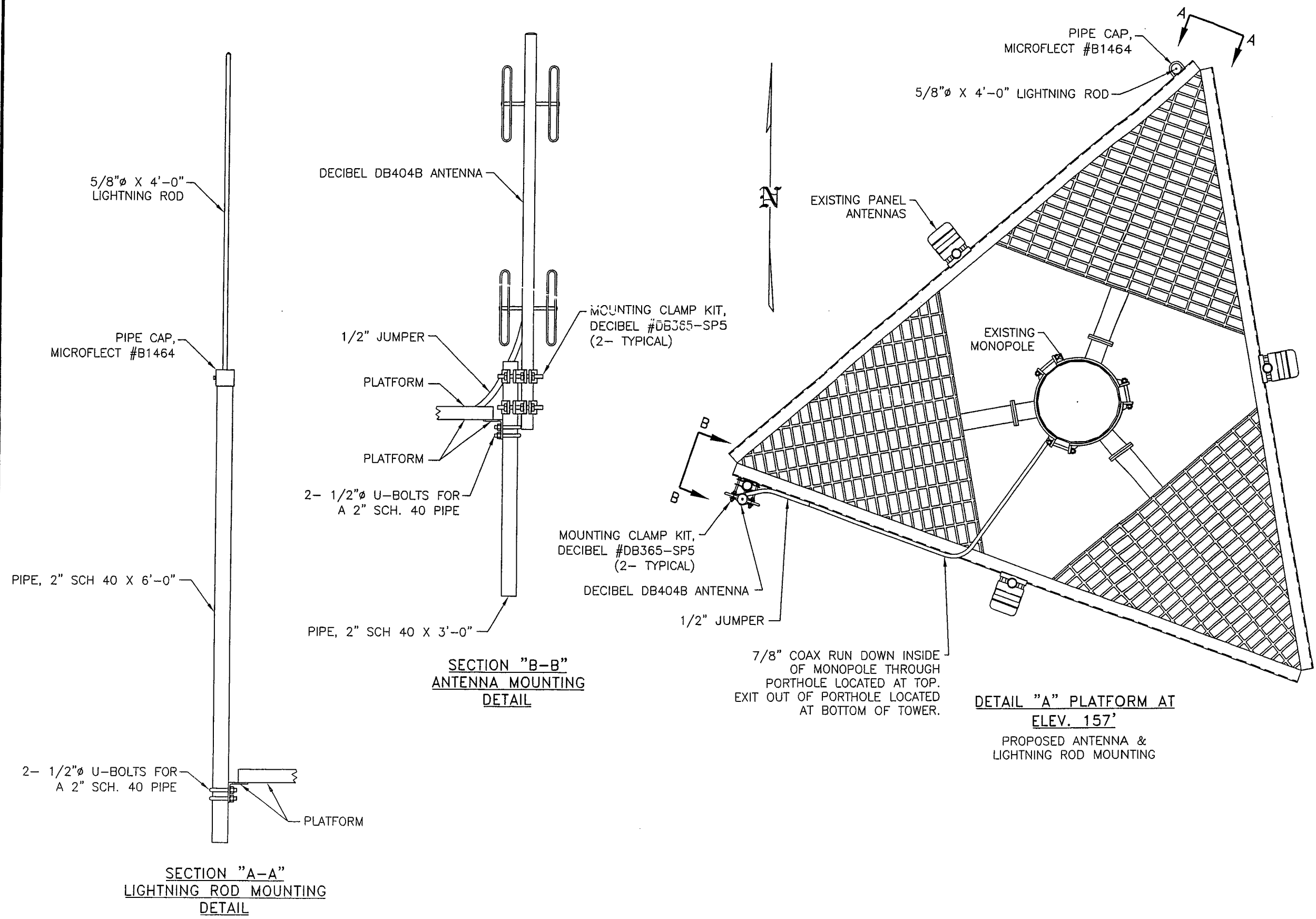
REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	SB



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 Richmond, KY 40476
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FOR
MOTOROLA
 FRED JACOBY
 26 SIMS WAY
 SHELTON, CT 06484
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ANTENNA
 MOUNTING DETAILS
 MARION SISTERS, CT



DRAWN BY: S. BURNETT	DATE: 8-2-04
CHECKED BY: <i>jm</i>	DATE: <i>8/2/04</i>
SCALE: NONE	SHEET 5 OF 9
JOB NUMBER: 2004-117-002	REV. A C-3

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	SB

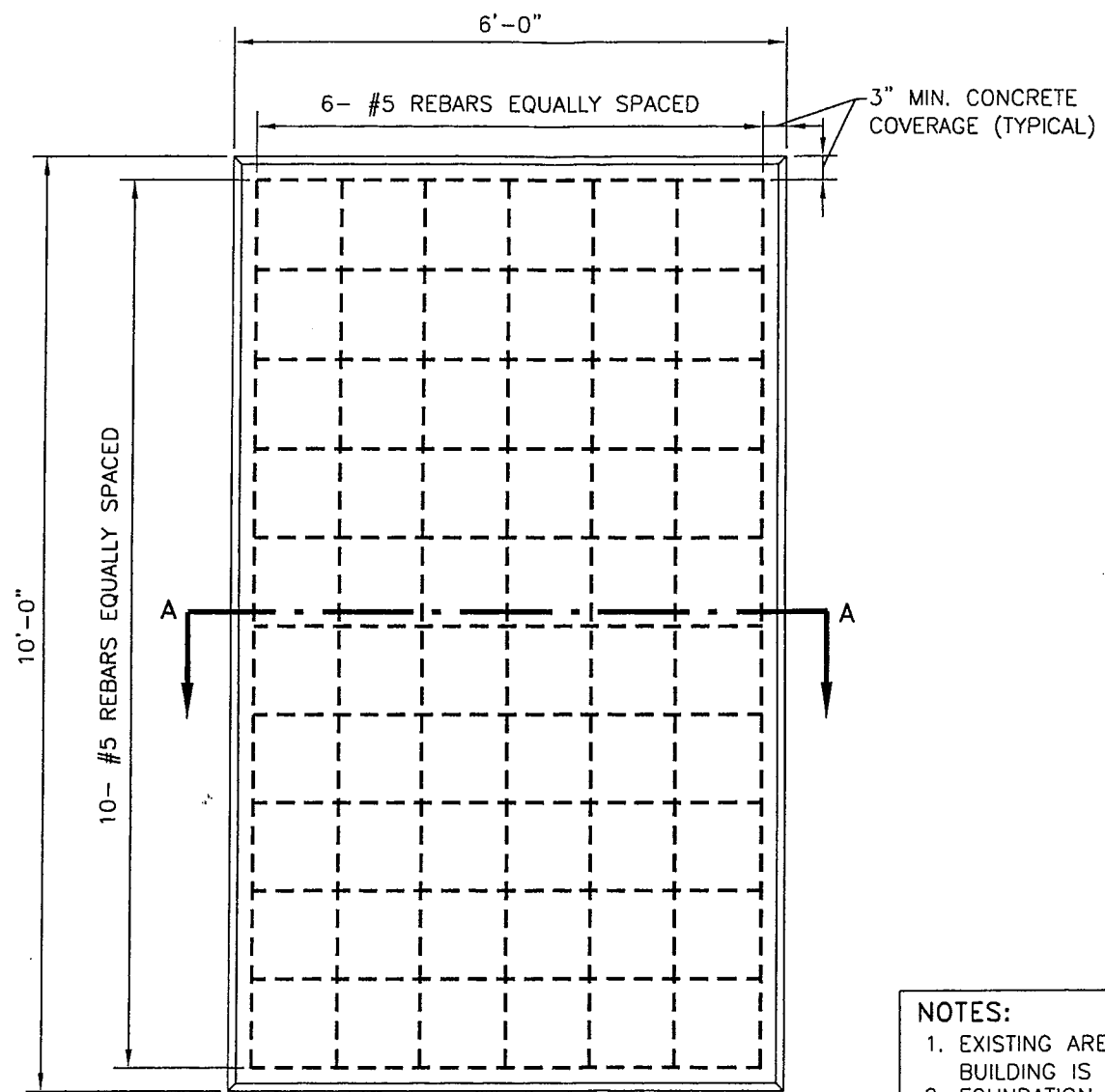


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FOR

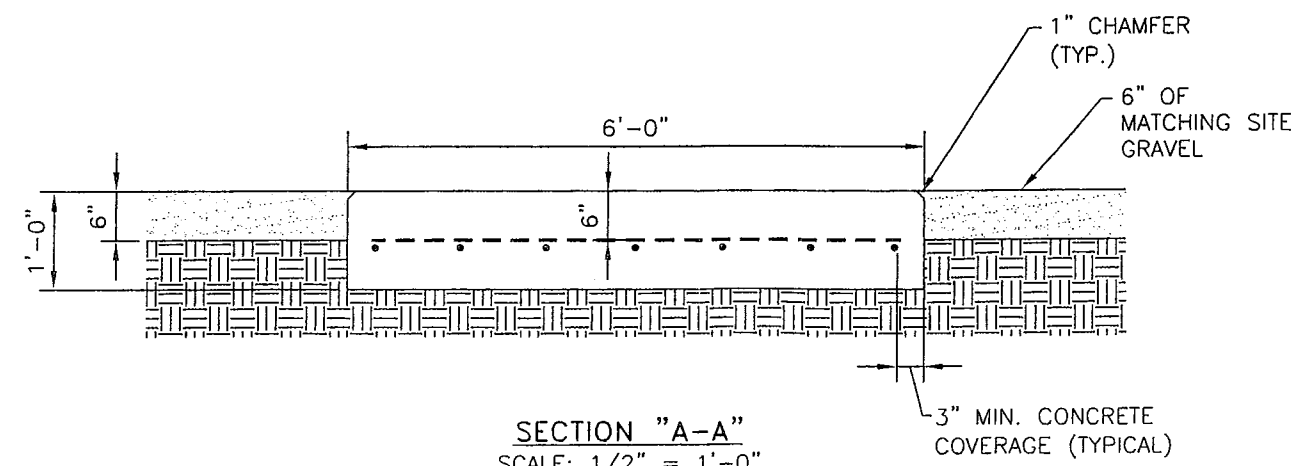
MOTOROLA
 FRED JACOBY
 26 SIMS WAY
 SHELTON, CT 06484
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FOUNDATION SHEET
 MARION SISTERS, CT



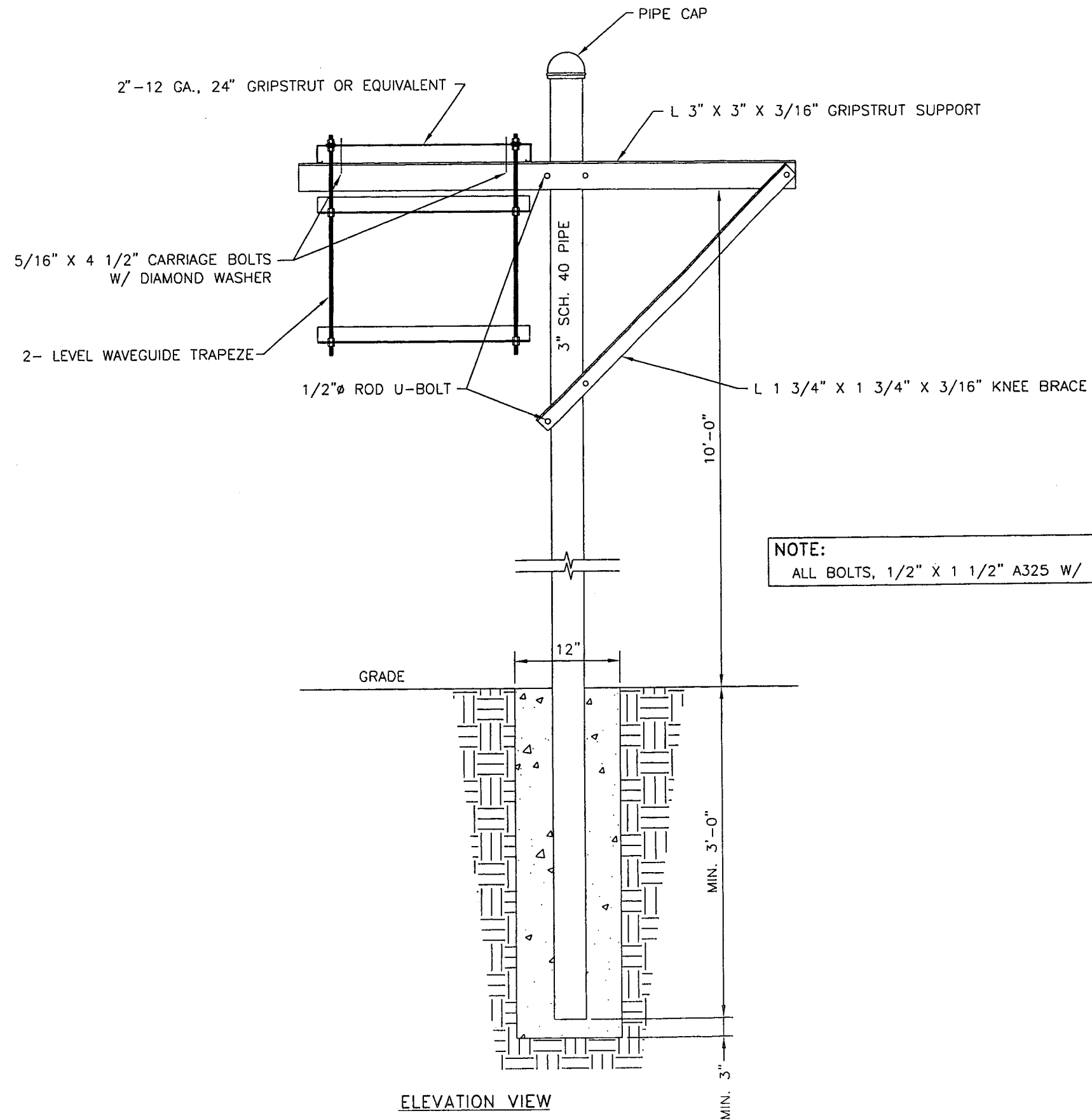
CONCRETE PAD DETAIL
 SCALE: 1/2" = 1'-0"

- NOTES:**
- EXISTING AREA AROUND NEW MOTOROLA BUILDING IS LEVEL TO WITHIN ±6"
 - FOUNDATION MUST BE PLACED ON UNDISTRIED EARTH OR 80% COMPACTED FILL.



SECTION "A-A"
 SCALE: 1/2" = 1'-0"

DRAWN BY: S. BURNETT	DATE: 8-2-04
CHECKED BY: <i>Jm</i>	DATE: <i>8/2/04</i>
SCALE: AS NOTED	SHEET 6 OF 9
JOB NUMBER: 2004-117-002	REV. A C-4



REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	SB



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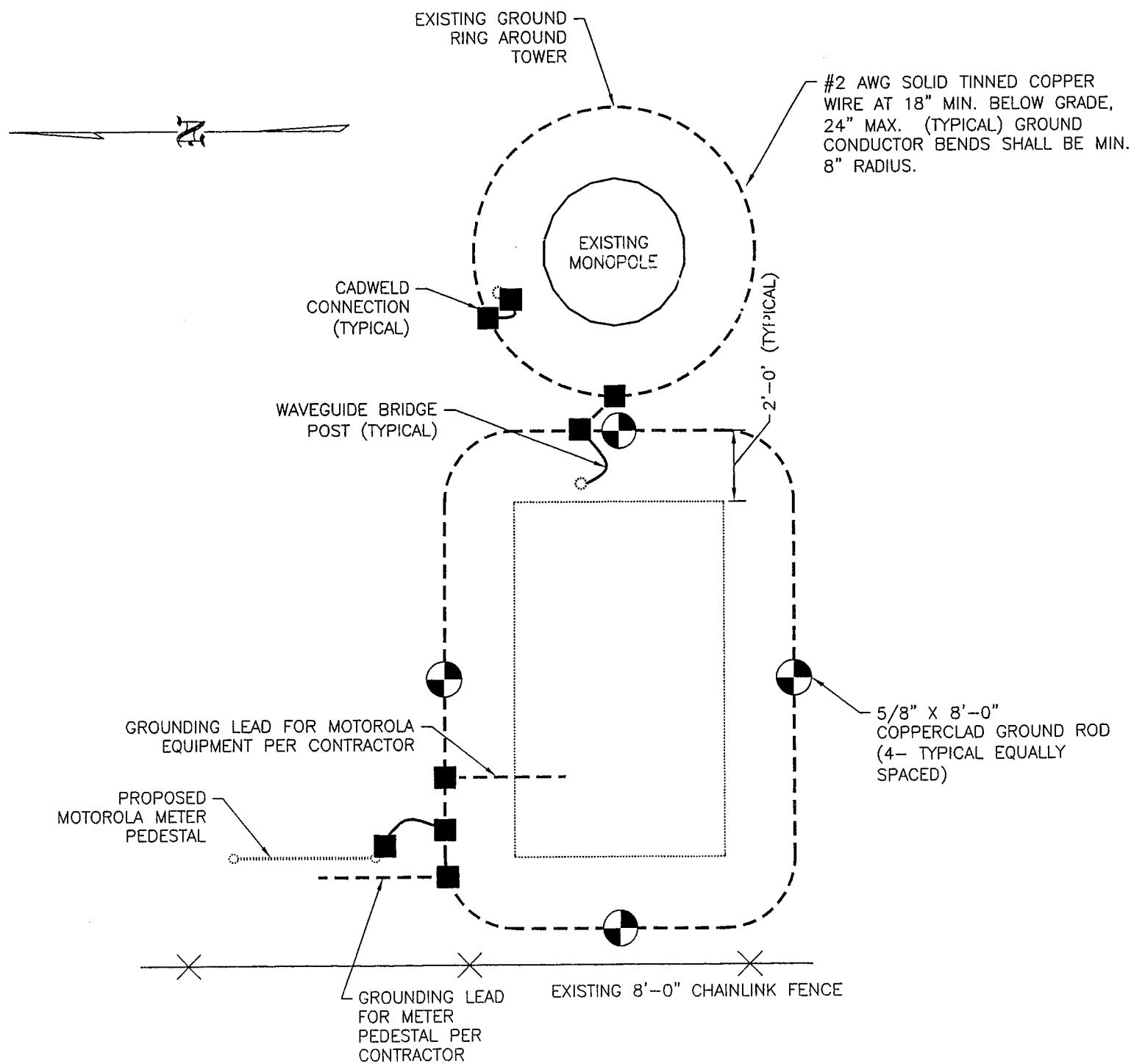
FOR

MOTOROLA

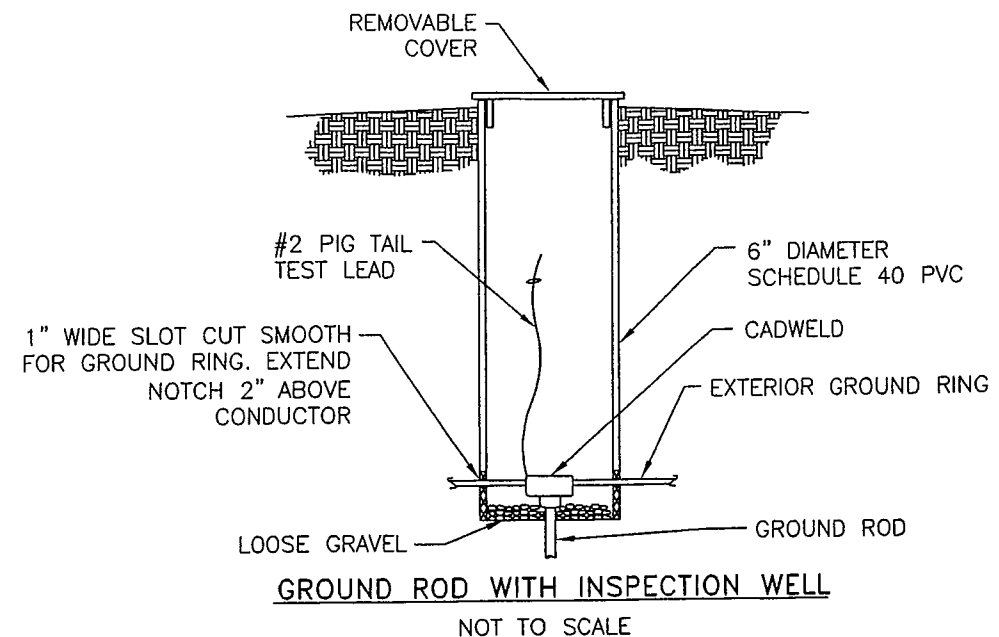
FRED JACOBY
26 SIMS WAY
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WAVEGUIDE BRIDGE
DETAIL SHEET
MARION SISTERS, CT

DRAWN BY: S. BURNETT	DATE: 8-2-04
CHECKED BY: <i>jm</i>	DATE: 8/12/04
SCALE: NONE	SHEET 7 OF 9
JOB NUMBER: 2004-117-002	REV. A C-5



GROUNDING PLAN
SCALE: 1/4" = 1'-0"



GROUNDING NOTES:

1. PROVIDE A GROUND RING BURIED A MINIMUM OF 18" BELOW GRADE. THE GROUND RING SHALL BE INSTALLED 2'-0" AWAY FROM FOUNDATION (MINIMUM UNLESS SHOWN OTHERWISE ON DRAWING).
2. BOND FENCE POST TO GROUND RING AS SHOWN USING AN EXOTHERMIC WELD. BOND FENCE GATE TO POST WITH A FLEXIBLE COPPER JUMPER STRAP, ERICO #FJ2G24 OR BRAIDED CABLE IPC #184, OR APPROVED EQUAL. PROVIDE EXOTHERMIC WELDS AND ANY NECESSARY ACCESSORIES TO BOND STRAP TO GATE AND FENCE POST. PROVIDE LENGTH AS REQUIRED TO MAKE CONNECTION.
3. BOND SERVICE EQUIPMENT SUPPORT STAND AND EQUIPMENT ENCLOSURES TO BURIED GROUNDING CONDUCTOR. BOND EACH INDIVIDUAL EQUIPMENT ENCLOSURE TO GROUNDING CONDUCTOR. BOND SERVICE CONDUITS INDIVIDUALLY TO BURIED GROUNDING CONDUCTOR. USE A NEMA DRILLED TWO-HOLE CONNECTOR FOR BONDS TO EQUIPMENT ENCLOSURES; USE AN APPROVED CONDUIT CLAMP FOR CONNECTIONS TO SERVICE CONDUITS. EXOTHERMICALLY WELD CONNECTIONS TO GROUNDING CONDUCTOR.
4. EXOTHERMICALLY WELD GROUNDING CONDUCTOR TO COMMUNICATION STRUCTURE 1'-0" ABOVE FOUNDATION AND BOND TO BURIED GROUND RING. PROVIDE A 3/4" PVC SLEEVE WITH A GRADUAL BEND, IN THE CONCRETE FOUNDATION.
5. BOND ALL EXTERIOR CONDUITS, PIPES AND CYLINDRICAL METALLIC OBJECTS WITH A PENN-UNION GT SERIES CLAMP, BLACKBURN GUV SERIES CLAMP OR A BURNDY GAR 3900BU SERIES CLAMP ONLY, NO SUBSTITUTES ACCEPTED.
6. AFTER INSTALLATION IS COMPLETED IN CONFORMANCE WITH THESE DRAWINGS AND THE STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL CONFIRM THE IMPEDANCE (GROUND RESISTANCE) TO EARTH AND BETWEEN GROUNDING CIRCUITS. THE GROUNDING SYSTEM IS EXPECTED TO PROVIDE FOR A MAXIMUM EARTH RESISTANCE OF 5 OHMS. THE CONTRACTOR SHALL NOTIFY BUILD TO SUIT COMPANY PRIOR TO ALL TESTING AND SHALL FURTHER NOTIFY THE BUILD TO SUIT COMPANY IN THE EVENT THE EARTH RESISTANCE IS GREATER THAN 5 OHMS.

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	JH



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26 SIMS WAY
SHELTON, CT 06484
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FAX: (203) 924-9673

GROUNDING DETAIL SHEET
MARION SISTERS, CT

DRAWN BY: J. HIGHT II	DATE: 6-2-04
CHECKED BY: <i>Jm</i>	DATE: <i>8/19/04</i>
SCALE: AS NOTED	SHEET 8 OF 9
JOB NUMBER: 2004-117-002	REV. A E-1

REV.	DESCRIPTION	DATE	BY
A	ORIGINAL RELEASE	8-2-04	SB



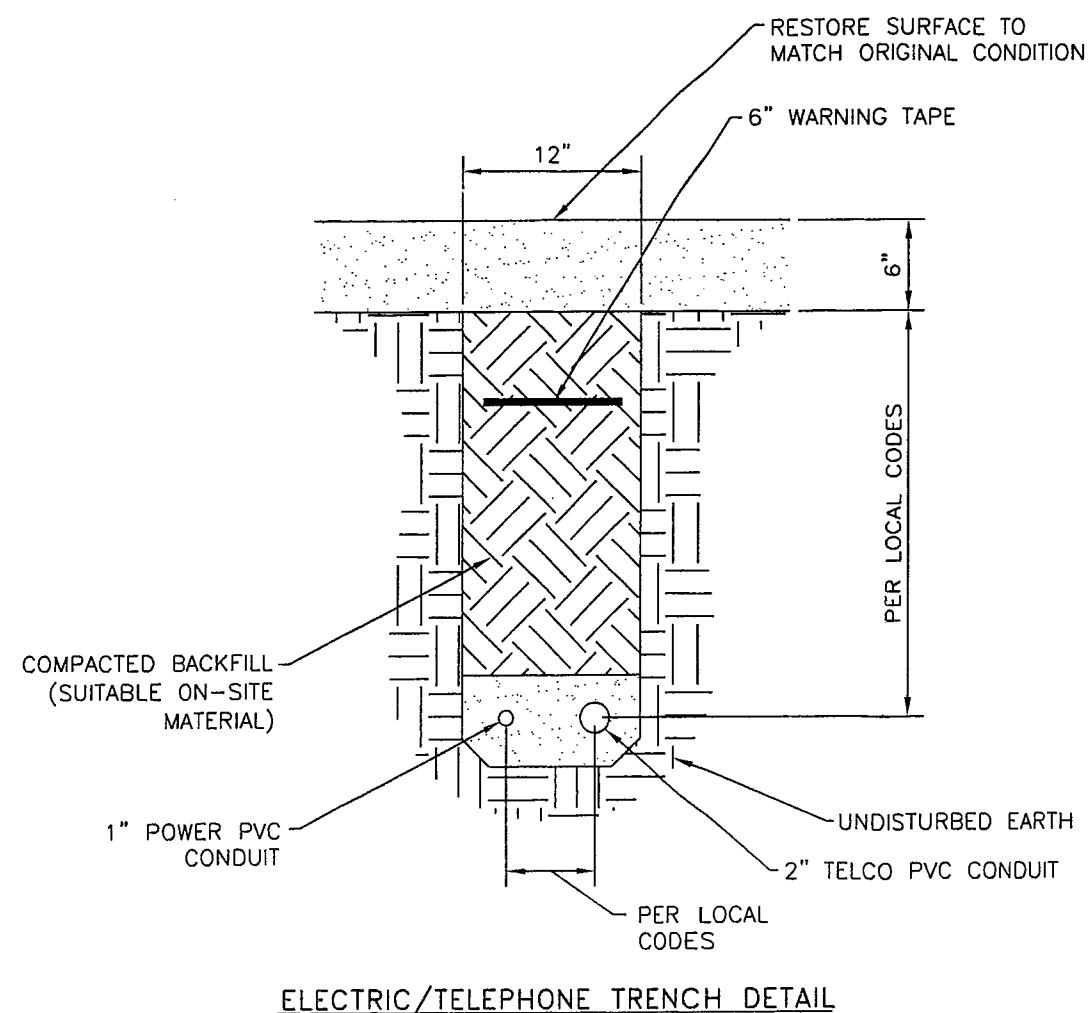
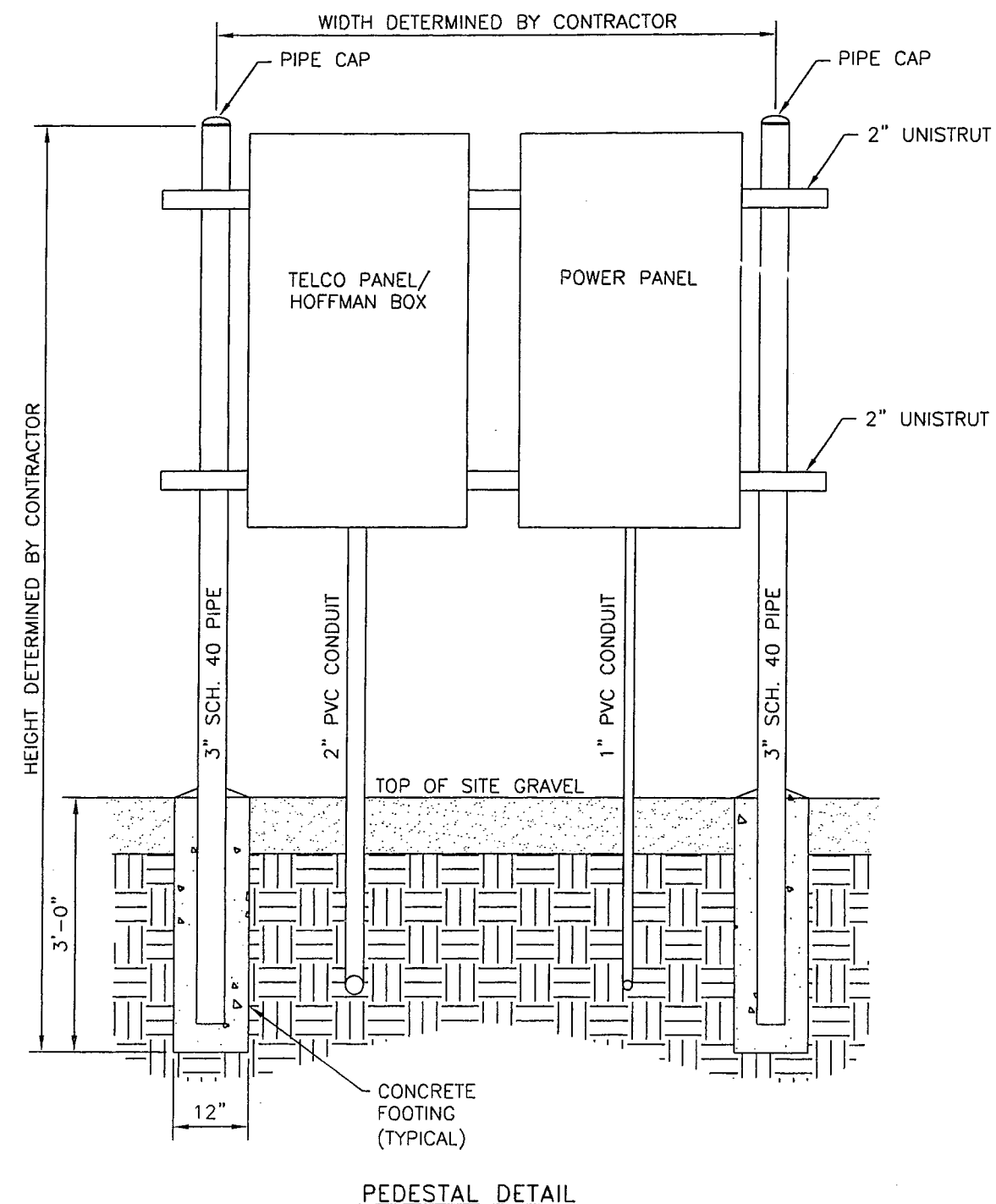
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FOR

MOTOROLA

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ELECTRICAL AND TELCO
 PEDESTAL AND TRENCH
 DETAIL
 MARION SISTERS, CT



DRAWN BY: S. BURNETT	DATE: 8-2-04
CHECKED BY: <i>jm</i>	DATE: <i>9/2/04</i>
SCALE: NONE	SHEET 9 OF 9
JOB NUMBER: 2004-117-002	REV. A E-2



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@po.state.ct.us

www.ct.gov/csc

October 28, 2005

John L. Salvatore
Chief of Police
Monroe Police Department
7 Fan Hill Road
Monroe, CT 06468-1800

RE: Town Antenna Installation at an existing telecommunications facility located 1428 Monroe Turnpike, Monroe.

Dear Chief Salvatore:

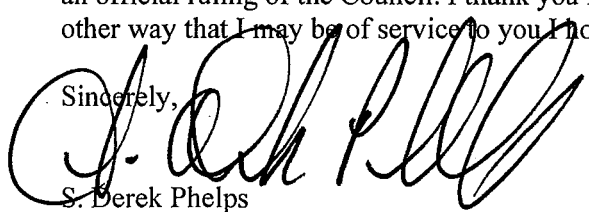
I am in receipt of your letter dated October 20, 2005 regarding the Town of Monroe's (Town) antenna installation at the above referenced facility. You requested a determination as to whether or not a Notice of Exempt Modification would need to be filed for your Town's antenna installation. I am pleased to respond to this inquiry.

Connecticut Siting Council (Council) records reflect that this facility was approved on October 23, 2002. The Development and Management (D&M) Plan, which contains the final construction details, was approved on June 3, 2003. The D&M Plan did not include the Town's antenna installation in its construction drawings. In addition, our records indicate that a Notice of Exempt Modification was not filed for the Town's antenna.

Based on your representations and our records I conclude that the tower in question is a facility as defined in Connecticut General Statutes § 16-50i(a)(6) and as such is under the jurisdiction of the Connecticut Siting Council. Moreover, on the basis of our records, I conclude that this facility remains under Council jurisdiction.

Please note that this determination is not an official ruling of the Council. As such, the Council respectfully requests that a Notice of Exempt Modification is filed to ensure the completeness of our respective records. The Town may bring a Notice of Exempt Modification before the Council, pursuant to Sections 16-50j-73 of the Regulations of Connecticut State Agencies in order to gain an official ruling of the Council. I thank you for your inquiry into this matter and if there is any other way that I may be of service to you I hope you will not hesitate to contact our office.

Sincerely,



S. Derek Phelps
Executive Director

SDP/MP/cm

c: Pamela B. Katz, P.E., Chairman
Robert L. Marconi, Assistant Attorney General

Town of Monroe

JOHN L. SALVATORE
Chief of Police



POLICE DEPARTMENT
7 Fan Hill Road
Monroe, Connecticut 06468-1800
Phone: (203) 261-3622
Fax: (203) 261-4769

October 20, 2005

ORIGINAL

RECEIVED
OCT 24 2005
CONNECTICUT
SITING COUNCIL

Mr. S. Derek Phelps,
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, Connecticut 06051

Dear Mr. Phelps,

The Town of Monroe Police Department operates a simulcast emergency radio system, which utilizes antennae located on three different towers within the Town. One antenna is co-located on a cellular tower at 1428 Monroe Turnpike, Monroe, which is owned by Optasite of One Research Drive, Suite 200C, Westborough, Massachusetts 01581.

On October 18, 2005, the Police Department was contacted by a representative of Optasite, who informed us that during a recent Connecticut Siting Council audit on this tower, they were advised they were not in compliance with Siting Council regulations because equipment labeled "Monroe Radio" was located within the fenced compound. Optasite has requested that the Town of Monroe file with the Siting Council for the co-location of its antenna and equipment.

This particular tower was approved by the Siting Council on October 23, 2002 (Docket #210, James Dwyer Company), with an agreement with the Town of Monroe for free tower space for Town radio systems. At the time of construction, the Town purchased and installed a platform on this tower for future emergency radio system expansion.

During the fall of 2004, the Town mounted an antenna on this platform as part of an upgraded Town emergency radio system. This antenna is lower than the Siting Council's approved height. At that time, the Town was under the impression that a Siting Council review was not necessary, as radio waves for public safety did not fall under the jurisdiction of the Siting Council. The Town has obtained FCC licensing to operate a transmitter and receiver radio at this site.

Mr. S. Derek Phelps
Page 2
October 20, 2005

I am respectfully requesting either direction from the Siting Council as to whether the Town is required to file a Notification of Exempt Modification for this site or a determination that the Town is not in violation of Siting Council regulations.

Sincerely,



John L. Salvatore
Chief of Police

JLS/sas