



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

June 10, 2004

Wendell G. Davis, Esq.
Blackwell, Davis, Spadaccini, LLC
158 East Center Street
Manchester, CT 06040

RE: **EM-SPRINT-043-040601** – Sprint Spectrum LP notice of intent to modify an existing telecommunications facility located at 148 Roberts Road, East Hartford, Connecticut.

Dear Attorney Davis:

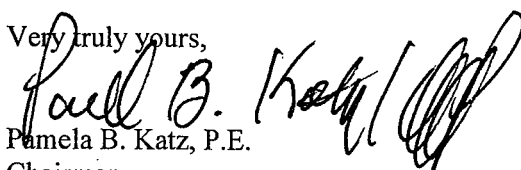
At a public meeting held on June 9, 2004, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated May 28, 2004. 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. 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/cm

- c: Honorable Timothy D. Larson, Mayor, Town of East Hartford
- Michael J. Dayton, Town Planner, Town of East Hartford
- Stephen Marcus, The Marcus Group
- Thomas F. Flynn III, Nextel Communications, Inc.
- Christopher B. Fisher, Esq., Cuddy & Feder, LLP
- Kenneth C. Baldwin, Esq., Robinson & Cole, LLP

Blackwell ♦ Davis ♦ Spadaccini LLC

Attorneys at Law

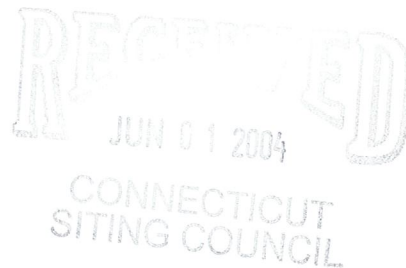
Manchester

Hartford

David H. Blackwell, Esq.
Wendell G. Davis, Jr., Esq.
Louis A. Spadaccini, Esq.

May 28, 2004

Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051



Re: SBA Network Services, Inc – Sprint Spectrum LP
Notice of Exempt Modification
- Roberts Road, East Hartford
- Willard Avenue, Newington

To Whom It May Concern:

Enclosed please find one (1) original and twenty (20) copies of Sprint Spectrum LP's (by and through its agent, SBA Network Services, Inc.) Notice Of Intent To Modify An Existing Telecommunications Facility for the following locations:

1. 148 Roberts Road, East Hartford, CT
2. 605 Willard Avenue, Newington, CT

Also enclosed please find two (2) firm checks to cover the filing fee for these applications. If you should have any questions, please do not hesitate to contact me.

Respectfully,

A handwritten signature in blue ink, appearing to read "WGD".

Wendell G. Davis

Blackwell ♦ Davis ♦ Spadaccini
Attorneys at

Manchester

EM-SPRINT-043-040601

David H. Blackwell, Esq.
Wendell G. Davis, Jr., Esq.
Louis A. Spadaccini, Esq.

May 28, 2004

Hon. Pamela B. Katz,
Chairperson
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

RE: ***NOTICE OF INTENT TO MODIFY AN EXISTING
TELECOMMUNICATIONS FACILITY AT
148 Roberts Road, East Hartford, CT***

The Honorable Pamela B. Katz:

Sprint Spectrum LP (“Sprint”) by and through its agent SBA Network Services, Inc. hereby respectfully requests acknowledgment that the proposed co-location of Sprint on an existing telecommunications facility owned by The Marcus Group, LLC and located at 148 Roberts Road, East Hartford, Connecticut (the “Roberts Road Facility”) constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72. In accordance with R.C.S.A. Section 16-50j-73, a copy of this letter has been sent to the Honorable Timothy D. Larson, Mayor of the Town of East Hartford.

The Roberts Road Facility

The Roberts Road Facility consists of a 120 foot monopole located within a site compound surrounded by a chain link fence. The facility was approved by the Connecticut Siting Council on November 7, 2002 (Docket 228) and the facility currently supports the antenna arrays and related equipment of several carriers, already approved by the Connecticut Siting Council, including Verizon, AT&T and Nextel. Sprint and The Marcus Group, LLC have agreed to the shared use of the Roberts Road Facility as is more fully detailed below.

Sprint’s Facility

Sprint’s Facility will include the installation of 6 panel antennas at an antenna center line height of approximately 110 feet and 1 array antenna at an antenna center line of approximately 70 feet. A Structural Analysis Report, attached as Exhibit A, was generated by Tectonic/Keyes Associates and confirms that the tower is structurally

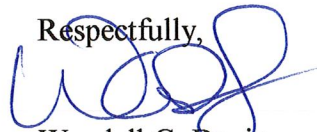
capable of supporting Sprint's proposed antennas.¹ Sprint will also install its equipment in a 15' x 25' area at the base of the tower all within the existing fenced compound.

Sprints' Facility Constitutes An Exempt Modification

For the following reasons, the proposed modifications to the Roberts Road Facility meet the exempt modification criteria set forth in R.C.S.A. Section 16-50j-72(b)(2):

1. As evidenced by the attached Tower Elevation Drawing (Exhibit B), the proposed modification will not increase the height of the tower as Sprint's antennas will be installed at a center line height of approximately 110' feet on an existing 120' monopole.
2. As evidenced by the attached Site Plan Drawing (Exhibit B), the installation of Sprint's equipment will not require an extension of the existing site boundaries.
3. The proposed modifications will not increase the noise levels at the existing facility by six decibels or more.
4. As set forth in the Power Density Report prepared by Sprint PCS attached as Exhibit C, the operation of the additional antennas will not increase the total radio frequency (RF) electromagnetic radiation power density to a level at or above the standards adopted by the Connecticut Department of Environmental Protection and the Federal Communications Commission.

For the foregoing reasons, Sprint respectfully submits that the proposed addition of Sprints' antenna and equipment at the Roberts Road Facility constitutes an exempt modification under R.C.S.A. Section 16-50j-72.

Respectfully,

Wendell G. Davis

cc: The Honorable Timothy D. Larson, Mayor Town of East Hartford
Aaron Cowher, SBA, Agent for Sprint

¹ As the existing structure is expandable to 140', the Structural Analysis Report takes a conservative approach and assumes Sprint's proposed antennas are being added to a 140' structure with antennas located at the 140', 130', 120', 100' and 90' levels.

EXHIBIT A

**SBA NETWORK SERVICES
MARCUS GROUP
EXISTING 140' MONOPOLE
EAST HARTFORD, CONNECTICUT
STRUCTURAL ANALYSIS REPORT
MAY 25, 2004**

1.0 INTRODUCTION

The existing 140 foot monopole is located at 148 Roberts Road, East Hartford, CT. Sprint PCS has proposed installing additional antennas and a platform on the monopole at approximately elevation 110 feet.

Tectonic Engineering and Surveying Consultants, P.C. has performed a structural analysis of the monopole to verify its adequacy for supporting antennas, in accordance with current code requirements.

1.1 Information Provided

Tectonic was furnished with the following information:

- "Monopole Details", Job No. MP1400800-0001 by Glen Martin Engineering, Inc., dated August 26, 2003
- "Foundation Design", Job No. GME-03309 by Glenn Martin Engineering, Inc., dated August 8, 2003

2.0 STRUCTURE DESCRIPTION

2.1 General

The existing 140 foot monopole is a 16 sided taper monopole, with four sections. Splices between the first three sections are slip joint type. The splice on the top section is a flange type connection. The monopole was designed by Glen Martin Engineering, Inc in 2003.

The monopole is 49.19" across the flats at the base, and 18.00" across the flats at the top. The wall thickness of the first (bottom) section is 3/8", the wall thickness of the second section is 5/16" and the wall thickness of the third section is 1/4". The wall thickness of the top section is 3/16". The monopole was designed with several feed line entrance ports and exit ports.

A diagram of the structure is presented in Figure 1, attached.

2.3. Monopole Foundation

The existing foundation was designed by Glen Martin Engineering and the foundation design reactions were listed on their drawing that was furnished.

According to the Glen Martin Engineering drawing, the foundation consists of a 23 foot square reinforced concrete pad. The foundation design was based upon a geotechnical report prepared by Dr Clarence Welti, P.E., P.C. of Glastonbury, CT. dated April 25, 2003.

Anchorage of the monopole to the foundation is provided by twenty (20) 2-1/2" diameter x 6'-0" long ASTM A572, Grade 55 anchor bolts.

3.0 EXISTING CONDITION

3.1 Field Visit

The monopole was visual inspected from the ground on November 20, 2003. Photographs were taken to document the existing configuration and conditions.

Based on our limited inspection, the monopole is in good condition. The galvanizing on the monopole is intact. No damage or significant deformation of the monopole was observed. The exposed portion of the concrete foundation, the grout and anchor bolts are in good condition.

Based on these findings, we expect that the monopole is capable of supporting its original design loads.

4.0 PROPOSED INSTALLATION

It is our understanding that all existing antennas and equipment will remain on the structure, and the following items are proposed to be added to the monopole by Sprint PCS and future telecommunication carriers:

Sprint PCS:

- 6 - Decibel DB950F40T2E-M panel antennas at elevation 110'
- 1 - 14' Summit low profile platform at elevation 110'
- 1 - CSA Two Foot Planar Array antenna at elevation 70'
- 7 - 1-5/8" diameter coaxial cables routed up the interior of the monopole to the 110' level

Future Telecommunication Carriers:

- Panel Antennas, with total CaAa = 34.40 ft², at elevation 140'.
1 - 14' Summit low profile platform at elevation 140'.
- Panel Antennas, with total CaAa = 34.40 ft², at elevation 130'.
1 - 14' Summit low profile platform at elevation 130'.
- Panel Antennas, with total CaAa = 34.40 ft², at elevation 120'.

Future Telecommunication Carriers (Continue):

- 1 - 14' Summit low profile platform at elevation 120'.
Panel Antennas, with total CaAa = 34.40 ft², at elevation 100'.
- 1 - 14' Summit low profile platform at elevation 100'.
Panel Antennas, with total CaAa = 34.40 ft², at elevation 90'.
- 1 - 14' Summit low profile platform at elevation 90'

5.0 STRUCTURAL ANALYSIS

5.1 Current Loading Criteria and Procedure

The Connecticut Building Code 2000 Supplement requires this structure to be analyzed in accordance with the provisions of ANSI/TIA/EIA-222-F-1996 "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures". The basic wind speed of 80 mph applies to Hartford County, CT.

Appendix A of the Connecticut Building Code 2000 Supplemental State Building Code requires a design wind speed of 80 mph with an importance factor of 1.04 for East Hartford. This is equivalent to a basic wind speed of 83.2 mph and this value will be used throughout the analysis.

Ice loads have been established based on a 0.5" radial ice thickness in accordance with industry standard practice. A reduced wind speed of 72.1 mph is used in conjunction with ice.

A detailed analysis of the structure was performed using the geometry, material thickness and properties indicated in the Glen Martin Engineering drawings and confirm by our field inspection.

5.2 Results

Under the loading conditions described above, the results of our analysis indicate the calculated stresses in the monopole are within the limits of the allowable values established by applicable codes. In addition, the foundation reactions are within their allowable design values.

5.2.1 Monopole Capacity

The following chart depicts the location and percent of the tower capacity, with 100% representing full capacity;

Monopole Elevation (ft)	Combined Stress (ksi)	Allowable Stress (ksi)	Interaction %
139.00	4.96	52.00	9.5
135.00	7.39	52.00	14.2
131.00	12.30	52.00	23.7
127.00	15.66	52.00	30.1
123.00	18.90	52.00	36.3
119.00	24.17	52.00	46.5
111.20	24.44	52.00	47.0
103.40	30.71	52.00	59.1
95.60	36.14	52.00	69.5
87.80	41.65	52.00	80.1
80.00	46.49	52.00	89.4
72.60	40.35	52.00	77.6
65.20	42.75	52.00	82.2
57.80	44.72	52.00	86.0
50.40	46.31	52.00	89.1
43.00	47.61	52.00	91.6
34.40	40.87	52.00	78.6
25.80	41.66	52.00	80.1
17.20	42.26	52.00	81.3
8.60	42.72	52.00	82.2

5.2.1 Anchor Bolt Capacity

The following chart depicts the location and percent of the anchor bolt capacity, with 100% representing full capacity;

Anchor Bolts	Actual Stress (ksi)	Allowable Stress (ksi)	Interaction %
	20.8	39.3	52.9%
	Required Embedment		69.8%

5.2.1 Foundation Capacity

The following chart depicts the location and percent of the foundation capacity, with 100% representing full capacity;

Foundation Footing	Actual Bearing Pressure (psf)	Allowable Bearing Pressure (psf)	Interaction %
	2303	3500	65.8%

6.0 CONCLUSIONS AND RECOMMENDATIONS

As a result of our analysis, we find that the existing monopole has sufficient capacity to permit the installation of 6 Sprint PCS antennas, 1 Sprint PCS Two Foot Planar Array antenna, low profile platform and related cables. The movement of the monopole will not exceed 3 degrees at the 50 mph operational wind speed. No structural problems for the monopole are anticipated, and no modifications are necessary.

The axial compression and overturning moment from the proposed installation will not exceed the original foundation design. The anchor bolts in the foundation will have sufficient capacity to permit the proposed installation.

Any further changes to the antenna configuration at any of the levels or other appurtenances should be reviewed with respect to their effect on structural loads prior to implementation.

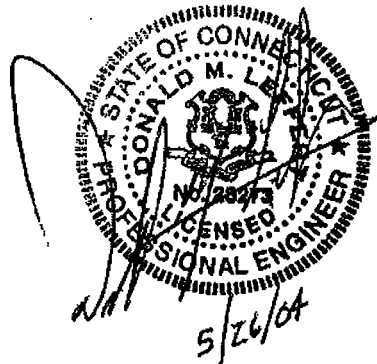
Prepared by:



Donald M Leffert, P.E.
Senior Structural Engineer

Date:

MAY 26, 2004



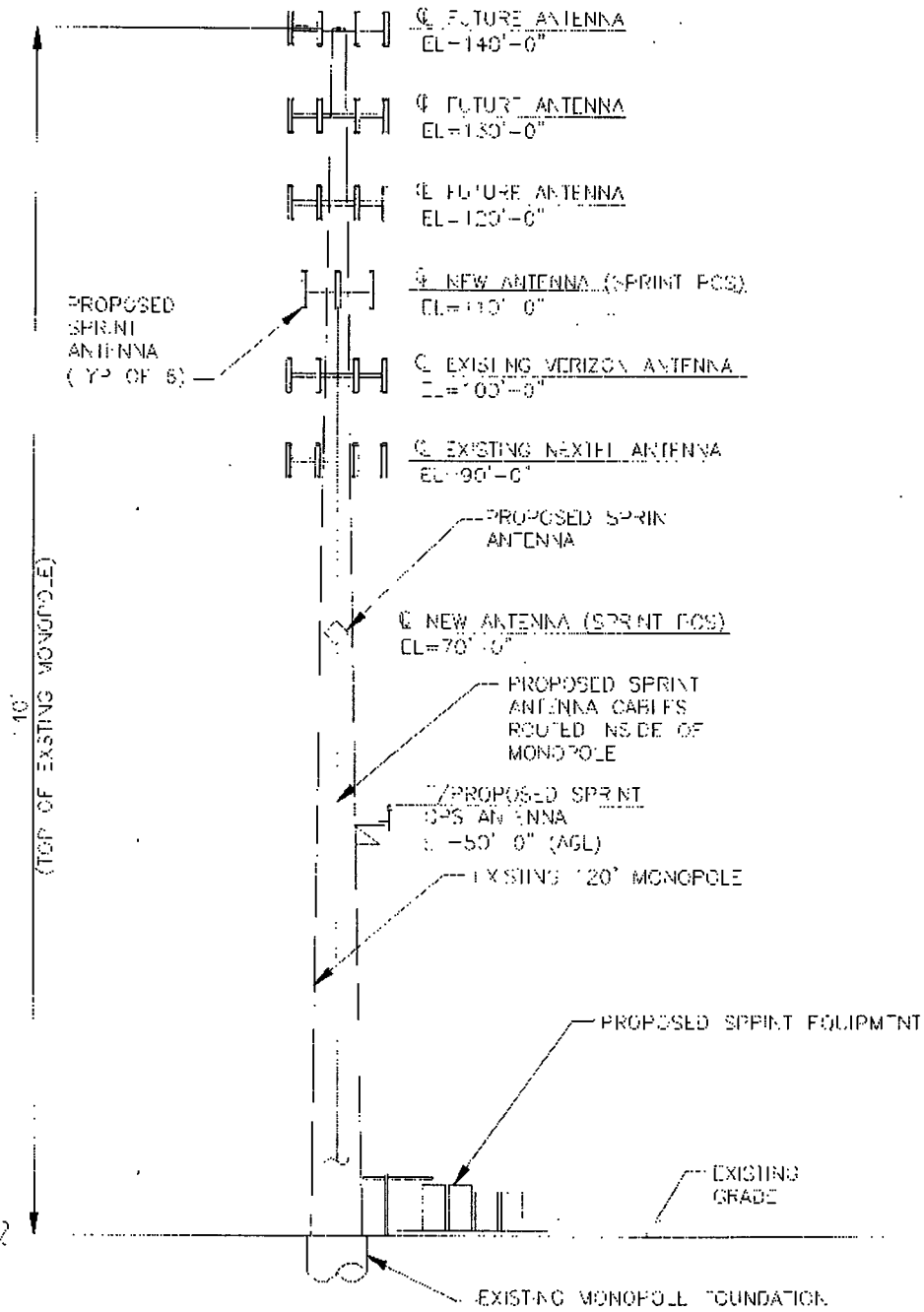


FIGURE 1

TOWER ANALYSIS
FOR

EXISTING MONOPOLE
MARCUS GROUP
148 ROBERTS ROAD
EAST HARTFORD, CONNECTICUT

SPRINT SPECTRUM LP
CASCADE NUMBER CT23XC640

PREPARED FOR
SBA NETWORK SERVICES
900 CUMMINGS CENTER SUITE 316U
BEVERLY, MASSACHUSETTS 01915

PREPARED BY
TECTONIC ENGINEERING AND SURVEYING CONSULTANTS, PC
ROCKY HILL, CONNECTICUT
May 25, 2004

Monopole Properties:

Pole Height	139 ft.		
Top Width	18.00 in.		
Bottom Width	49.19 in.		
Increments Between Splices	5 (max=5)	Avg. Pole Taper	0.22439 in./ft.
Unit Weight of Material	65 ksi	Total Number of Segments	20
Modulus of Elasticity	480 lbs/ft		
Elevation of 5th Splice	29000 ksi		
Elevation of 4th Splice	119,000 ft.	Length of 6th Section	20.00 ft.
Elevation of 3rd Splice	80,000 ft.	Length of 5th Section	39.00 ft.
Elevation of 2nd Splice	43,000 ft.	Length of 4th Section	37.00 ft.
Elevation of 1st (Bottom) Splice	ft.	Length of 3rd Section	43.00 ft.
		Length of 2nd Section	0.00 ft.
		Length of 1st (Bottom) Section	0.00 ft.
Thickness of 6th Section	0.188 in.	Increment in 6th Section	4.00 ft.
Thickness of 5th Section	0.250 in.	Increment in 5th Section	7.80 ft.
Thickness of 4th Section	0.313 in.	Increment in 4th Section	7.40 ft.
Thickness of 3rd Section	0.375 in.	Increment in 3rd Section	8.60 ft.
Thickness of 2nd Section	in.	Increment in 2nd Section	0.00 ft.
Thickness of 1st (Bottom) Section	in.	Increment in 1st (Bottom) Section	0.00 ft.

Loading Information:

Basic Wind Speed with Importance Factor V_{bl} = 83.2 mph
 EIA Version To Use 1 (=EIA-222-F) Gh= 1.690
 (2=prior to version EIA-222-F)

Antennas & Appurtenances:

Item Number	Type	Z (ft.)	Total Weight (lbs.)	Quantity	Ca	Total CaAa (sf)	Total Weight (lbs.)	Kz	Total F (lbs.)	Elev. (ft.)	ITEM	Total Item Weight (lbs.)	
1	Future 140	140	1955	1	1	60.8	1954.6	1.511	26,760	140	1(top)	1955	
2	Future 130	130	1955	1	1	60.8	1954.6	1.480	26,219	130	2	1955	
3	Future 120	120	1955	1	1	60.8	1954.6	1.446	25,626	120	3	1955	
4	Sprint	110	1721	1	1	63.2	1720.6	1.411	24,997	110	4	1721	
5	Verizon	100	1751	1	1	60.8	1750.6	1.373	24,325	100	5	1751	
6	Nextel	90	1751	1	1	60.8	1750.6	1.332	23,604	90	6	1751	
7	Sprint Donor	70	15	1	1	6.6	15.0	1.240	21,968	70	7	15	
8							0.0	0.000	0	0	8	0	
9							0.0	0.000	0	0	9	0	
10							0.0	0.000	0	0	10	0	
Total=												11100	15920

*Must list top to bottom

SUPPORTING CALCULATIONS: combined bending and axial stresses: REVISED FOR 18 SIDED		ELEV-MIDPOINT ELEV		18 SIDED		ELEV-MIDPOINT ELEV		18 SIDED		18 SIDED		18 SIDED	
elevation (ft.)	check (FY ^{0.5} /wt)	is section compact?	elevation of section midpoints (ft.)	Alternate moment arm segment (ft.)	F wind force (lbs.)	wind moment (k-in)	moment due to appur. (k-in)	secondary moment (k-in)	Dia Across Flats (in.)	w (min.=4t) (in.)	Dia Across Flats (in.)	ψ (inip.=4t) (in.)	ψ (in.)
130.00	143	compact	137.00	0	198	0	33	194	18.00	4.82	17.06	3.33	3.33
135.00	150	compact	133.00	2.00	206	5	165	208	16.90	5.06	16.71	3.50	3.50
131.00	157	compact	129.00	2.00	214	19	297	381	19.80	5.31	19.61	3.66	3.66
127.00	165	compact	125.00	2.00	221	44	526	394	20.69	5.55	20.51	3.83	3.83
123.00	172	compact	121.00	2.00	228	79	788	407	21.59	5.79	21.40	3.99	3.99
119.00	179	compact	115.10	2.00	485	124	1081	560	22.49	6.03	22.30	4.16	4.16
111.20	145	compact	107.30	2.00	490	246	1837	680	24.24	6.50	23.99	4.48	4.48
103.40	155	compact	99.50	2.00	513	412	2805	785	25.99	6.96	25.74	4.81	4.81
95.60	165	compact	91.70	2.00	534	626	3943	808	27.74	7.43	27.49	5.13	5.13
87.80	176	compact	83.90	2.00	553	888	5248	881	29.49	7.90	29.24	5.46	5.46
80.00	186	compact	76.30	2.00	539	1201	6715	901	31.24	8.37	30.99	5.78	5.78
72.60	157	compact	68.90	3.90	550	1547	8107	916	32.90	8.82	32.59	6.09	6.09
65.20	165	compact	61.50	3.90	559	1941	9513	932	34.56	9.26	34.25	6.39	6.39
57.80	173	compact	54.10	3.90	564	2384	10927	943	36.22	9.71	35.91	6.70	6.70
50.40	181	compact	46.70	3.90	565	2877	12341	951	37.88	10.15	37.57	7.01	7.01
43.00	189	compact	38.70	3.90	651	3420	13754	958	39.54	10.60	39.23	7.32	7.32
34.40	165	compact	30.10	3.90	635	4114	15397	963	41.17	11.11	41.10	7.67	7.67
25.80	173	compact	21.50	3.90	603	4875	17040	965	43.40	11.63	43.03	8.03	8.03
17.20	180	compact	12.90	3.90	544	5899	18663	965	45.33	12.15	44.96	8.39	8.39
8.60	188	compact	4.30	3.90	414	6563	20328	965	47.26	12.67	46.89	8.74	8.74
0.00	0	compact	0.00	3.90	0	7516	21969	0	49.19	13.16	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	3.70	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	4.30	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	4.30	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	4.30	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	4.30	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	0.00	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	0.00	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	0.00	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10
0.00	0	compact	0.00	0.00	0	7516	21969	0	49.19	13.18	49.19	9.10	9.10

Monopole Properties:
 Pole Height 139 ft.
 Top Width 18,000 in.
 Bottom Width 49,119 in.
 Increments Between Splices 5 (max=5)
 Yield Strength 65 ksi
 Unit Weight of Material 490 lbs/ft
 Modulus of Elasticity 29,000 ksi
 Elevation of 5th Splice 118,000 ft.
 Elevation of 4th Splice 80,000 ft.
 Elevation of 3rd Splice 43,000 ft.
 Elevation of 2nd Splice ft.
 Elevation of 1st (Bottom) Splice ft.
 (TOP) Center line
 Thickness of 6th Section 0.188 in.
 Thickness of 5th Section 0.250 in.
 Thickness of 4th Section 0.313 in.
 Thickness of 3rd Section 0.375 in.
 Thickness of 2nd Section in.
 Thickness of 1st (Bottom) Section in.

Avg. Pole Taper 0.222439 in./ft.
 Total Number of Segments 20

Length of 6th Section 20.00 ft.
 Length of 5th Section 39.00 ft.
 Length of 4th Section 37.00 ft.
 Length of 3rd Section 43.00 ft.
 Length of 2nd Section 0.00 ft.
 Length of 1st (Bottom) Section 0.00 ft.
 Increment in 6th Section 4.00 ft.
 Increment in 5th Section 7.80 ft.
 Increment in 4th Section 7.40 ft.
 Increment in 3rd Section 8.60 ft.
 Increment in 2nd Section 0.00 ft.
 Increment in 1st (Bottom) Section 0.00 ft.

Loading Information:
 Basic Wind Speed with Importance Factor Vwl = 72.1 mph
 EIA Version To Use 1 (1=EIA-222-F)
 (2=prior to version EIA-222-F)
 Glt= 1.690

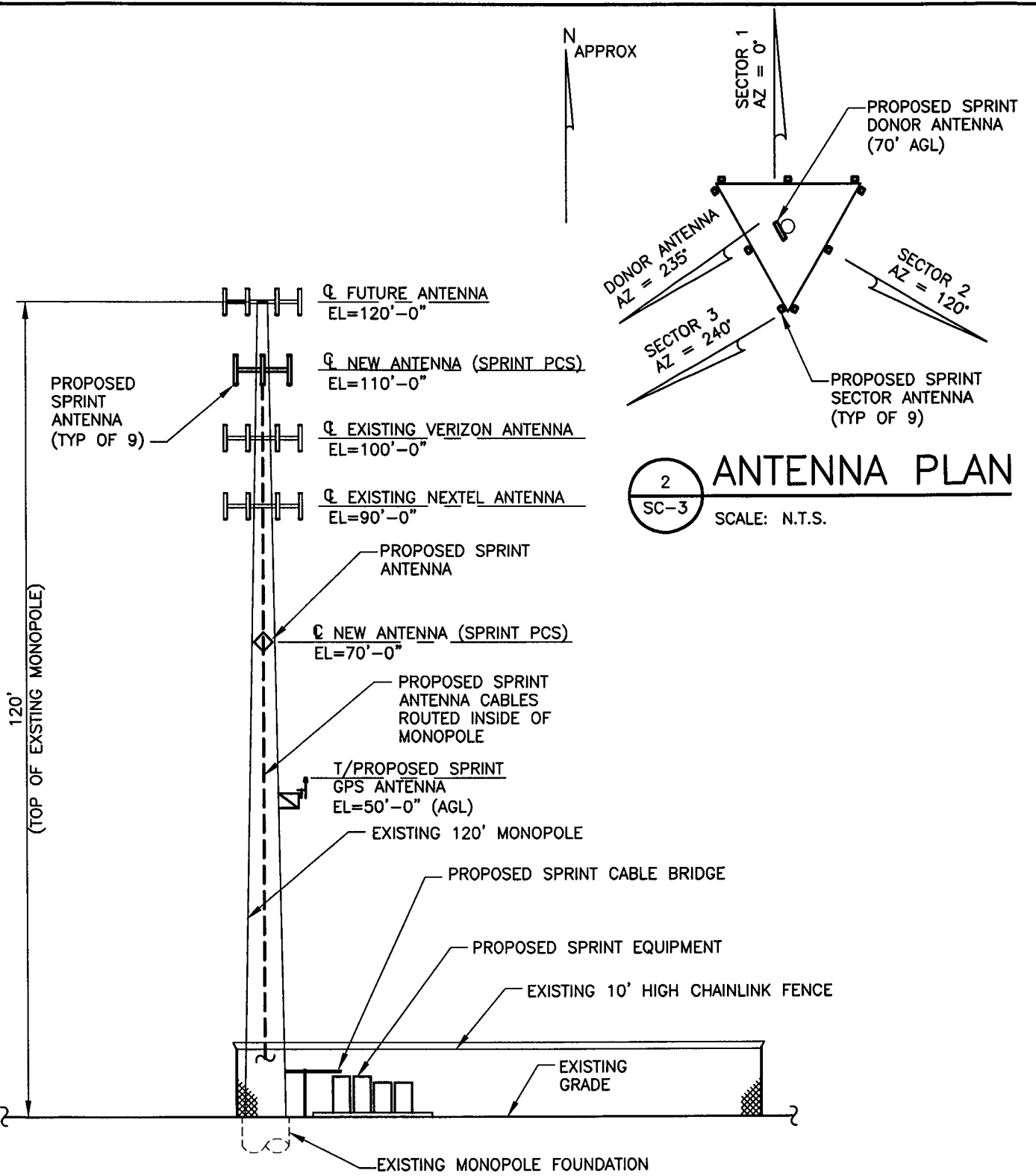
Antennas & Appurtenances:

Item Number	Type	Z (ft.)	Total Weight (lbs.)	Quantity	Total CaAa (sf)	Total Weight (lbs.)	Kz	qz	Total F (lbs.)	Elev. (ft.)	Total Item Weight (lbs.)
1	Future 140	140	2872	1	74.2	2871.6	1.511	20.085	2518	140	2872
2	Future 130	130	2872	1	74.2	2871.6	1.480	19.664	2456	130	2872
3	Future 120	120	2872	1	74.2	2871.6	1.446	19.219	2410	120	2872
4	Sprint	110	2556	1	75.1	2556.1	1.411	18.747	2379	110	2556
5	Verizon	100	2668	1	74.2	2667.6	1.373	18.244	2288	100	2668
6	Nextel	90	2668	1	74.2	2667.6	1.332	17.703	2220	90	2668
7	Sprint Donor	70	42	1	7.1	41.7	1.240	16.476	197	70	42
8						0.0	0.000	0.000	0	0	0
9						0.0	0.000	0.000	0	0	0
10						0.0	0.000	0.000	0	0	0
									Total=		14478

***Must list top to bottom**

ITEM	Elev. (ft.)	Total Item Weight (lbs.)
1(top)	140	2872
2	130	2872
3	120	2872
4	110	2556
5	100	2668
6	90	2668
7	70	42
8	0	0
9	0	0
10	0	0

EXHIBIT B



ANTENNA PLAN
 SCALE: N.T.S.

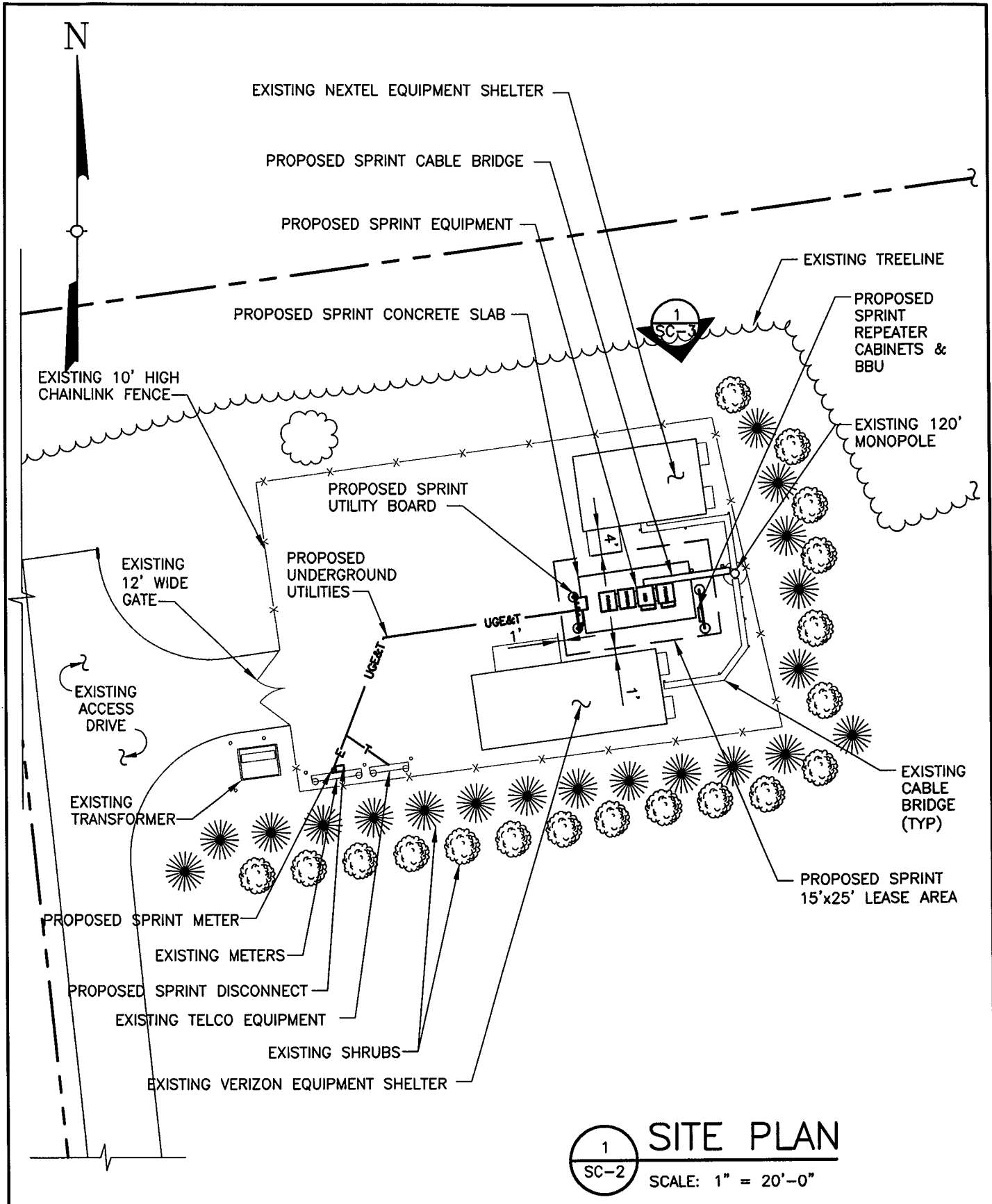
ELEVATION
 SCALE: 1' = 20'

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 Fax: (860) 257-4882
 www.tectonicengineering.com

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 EAST HARTFORD, CT. 06108



1 SITE PLAN
 SC-2 SCALE: 1" = 20'-0"

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EXHIBIT C

CT23XR540 - Marcus Communication Tower, 148 Roberts Road, East Hartford, CT 06108
Cumulative Power Density Analysis of Sprint PCS and Existing Antennas

Operator	Operating Frequency (MHz)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure* (mW/cm ²)	Fraction of MPE (%)
AT&T*	1900	120	0.033200	1.000000	3.32%
Verizon*	880	100	0.066178	0.580000	11.41%
Nextel*	851	90	0.013800	0.568000	2.43%
Sprint PCS	1962.5	110	0.100967	1.000000	10.10%
Total Percentage of Maximum Permissible Exposure					27.26%

* Technical data provided by respective operator

Power Density Analysis - CT23XR540

CT23XR540 - Marcus Communications Tower, 148 Roberts Road, East Hartford, CT 06108

Power Density Analysis of Sprint PCS Antennas to be mounted on Monopole. Assumes Maximum ERP and no antenna pattern adjustment.

Operating Frequency (MHz)	Number of Transmitters	Effective Radiated Power (ERP) Per Transmitter (Watts)	Total ERP (Watts)	Antenna Height (Feet)	Distance From Base of the tower (Feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure	%MPE
1962.5	11	308.51	3393.61	110	0	0.100967	1	10.0967%
1962.5	11	308.51	3393.61	110	50	0.083678	1	8.3678%
1962.5	11	308.51	3393.61	110	100	0.055281	1	5.5281%
1962.5	11	308.51	3393.61	110	150	0.035309	1	3.5309%
1962.5	11	308.51	3393.61	110	200	0.023449	1	2.3449%
1962.5	11	308.51	3393.61	110	250	0.016377	1	1.6377%
1962.5	11	308.51	3393.61	110	300	0.011966	1	1.1966%
1962.5	11	308.51	3393.61	110	400	0.007099	1	0.7099%
1962.5	11	308.51	3393.61	110	500	0.004661	1	0.4661%

*Requirements set forth in OET Bulletin 65. Based on NCRP Report No. 86 and ANSI/IEEE C95.1-1992