



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

June 23, 1999

J. Brendan Sharkey
Omnipoint Communications, Inc.
100 Filley Street
Bloomfield, CT 06002

RE: TS-OCI-003-990520 – Omnipoint Communications request for an order to approve tower sharing at an existing telecommunications facility located on Janowski Road in Ashford, Connecticut.

Dear Mr. Sharkey:

At a public meeting held June 16, 1999, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures.

This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. 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 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated May 18, 1999. Please notify the Council when all work is complete.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'Mortimer A. Gelston'.

Mortimer A. Gelston
Chairman

MAG/RKE/tsg

c: John M. Zulick, First Selectman, Town of Ashford



100 Filley Street, Bloomfield, CT 06002
(860) 692-7154 phone
(860) 692-7159 fax

18 May, 1999

RECEIVED

MAY 20 1999

CONNECTICUT
SITING COUNCIL

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

**Re: Request by Omnipoint Communications, Inc. for an
Order to Approve the Shared Use of a Tower Facility
Janowski Road, Ashford, Connecticut**

Dear Chairman Gelston and Members of the Council:

Pursuant to Connecticut General Statutes §16-50aa, Omnipoint Communications, Inc. ("Omnipoint") hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed shared use by the Applicant of an existing tower located on Janowski Road in Ashford, Connecticut. The tower is owned and operated by Sprint Spectrum, L.P. ("Sprint"). Omnipoint proposes to install antennas on the existing tower located within Sprint's leased compound area, and the equipment associated with this facility would be located near the base of the tower within that same compound (see "Exhibit A"). The Applicant requests that the Council find that the proposed shared use of the tower satisfies the criteria stated in §16-50aa and issue an order approving the proposed use.

Background

Omnipoint Communications, Inc. is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telephone service in the State of Connecticut, which includes the area to be served by Omnipoint's proposed installation.

The Sprint tower on Janowski Road in Ashford is an approximately 190-foot lattice tower located on an approximately 43'x 33', or 1,419 sq. ft. compound. Omnipoint and Sprint have agreed to the proposed shared use of this tower pursuant to mutually acceptable terms and conditions. Sprint has also authorized Omnipoint to act on its behalf to apply for all necessary local, state and federal permits, approvals, and authorizations which may be required for the proposed shared use of this facility.

Omnipoint proposes to install two (2) EMS RR33-20-00DP antennas at Sector 124° and one (1) EMS RR65-18-02DP dual pol antenna at Sector 160° on the Sprint tower. The directional antennas would be mounted with their top at 153 feet Above Grade Level ("AGL"), and their center of radiation at approximately 151.8 feet AGL. The radio transmission equipment associated with these antennas, a Nortel S2000H cabinet, would be located at the base of the tower on a 10'x 5.5' concrete pad. Exhibit B contains specifications for the proposed antennas and equipment cabinet.

C.G.S. §16-50aa (c) (1) provides that, upon written request for approval of a proposed shared use, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns, the council shall issue an order approving such shared use." The shared use of the tower satisfies those criteria as follows:

A. Technical Feasibility The existing tower is structurally sound and capable of supporting the proposed Omnipoint antennas. The proposed shared use of this tower therefore is technically feasible.

B. Legal Feasibility Under Public Acts 93-268 and 94-242, the Council has been authorized to issue orders approving the proposed shared use of an existing tower facility such as the facility at Janowski Road in Ashford. (Public Acts 93-268, Section 2; and 94-242, Section 6 (c). This authority complements the Council's prior-existing authority under C.G.S. Section 16-50p to issue orders approving the construction of new towers that are subject to the Council's jurisdiction. Public Act 94-242, Section 7 (a) directs the Council to "give such consideration to other state laws and municipal regulations as it shall deem appropriate" in ruling on requests for the shared use of existing towers facilities. Under the authority vested in the Council by Public Act 94-242, an order by the Council approving the shared use would permit the applicant to obtain a building permit for the proposed installations.

C. Environmental Feasibility The proposed shared use would have a minimal environmental effect, for the following reasons:

1. The proposed installations would have an insignificant incremental visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing site. In particular, the proposed installations would not increase the height of the existing tower, and would not extend the boundaries of the tower site outside the limits of the Sprint leased compound area.
2. The proposed installations would not increase the noise levels at the existing facility by six decibels or more.

3. Operation of antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the American National Standards Institute ("ANSI"). The "worst-case" exposure calculated for operation of this facility (i.e., calculated at the base of the tower, which represents the closest publicly accessible point within the broadcast field of the antennas), with both the Sprint and Omnipoint antennas, would be 0.02617 mW/cm² (2.61% of the ANSI standard). These calculations are attached as Exhibit C.
4. The proposed installations, would not require any water or sanitary facilities, or generate air emissions or discharges to water or sanitary facilities, or generate air emissions or discharges to water bodies. After construction is complete (approximately two weeks), the proposed installations would not generate any traffic other than periodic maintenance visits.

The proposed use of this facility would therefore have a minimal environmental effect, and is environmentally feasible.

E. Economic Feasibility As previously mentioned, Sprint and Omnipoint have entered into a mutual agreement to share the use of the existing tower on terms agreeable to the parties. The proposed tower sharing is therefore economically feasible.

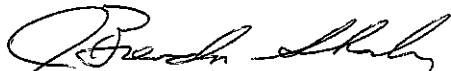
F. Public Safety Concerns As stated above, the existing tower is structurally capable of supporting the proposed Omnipoint antennas. The tower stands on a which is accessible from a gravel drive. Omnipoint is not aware of any other public safety concerns relative to the proposed sharing of the existing tower. In fact, the provision of new or improved phone service through shared use of the existing tower is expected to enhance the safety and welfare of area residents.

Conclusion

For the reasons discussed above, the proposed shared use of the existing tower facility at Janowski Road in Ashford, Connecticut satisfies the criteria stated in C.G.S. §16-50aa, and advances the General Assembly's and the Siting Council's goal of preventing the proliferation of towers in Connecticut. The Applicant therefore requests that the Siting Council issue an order approving the proposed shared use.

Thank you for your consideration of this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Brendan Sharkey".

J. Brendan Sharkey
for Omnipoint Communications, Inc.

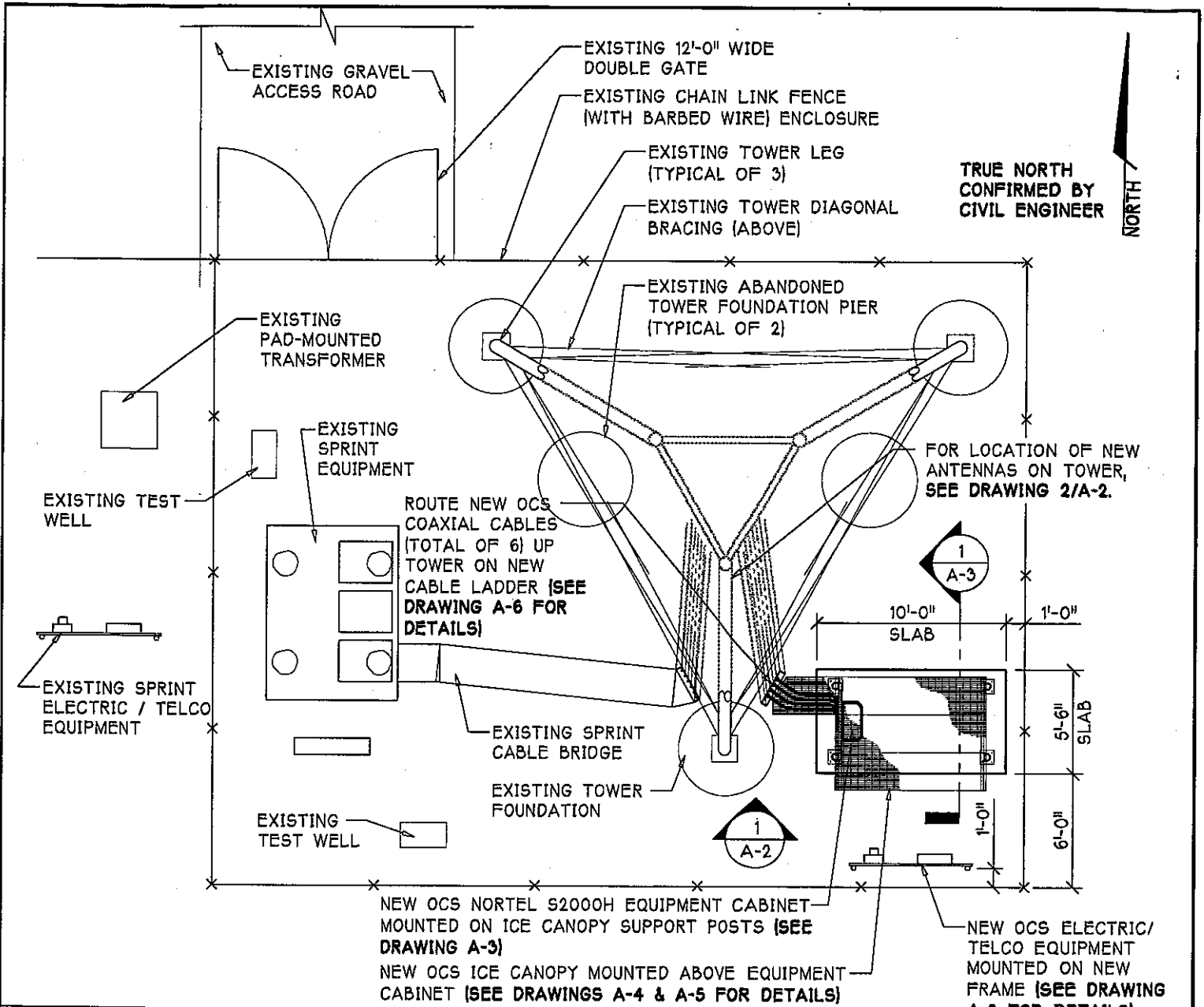
Attachments

Exhibit A

Design Drawings

Janowski Road

Ashford, CT

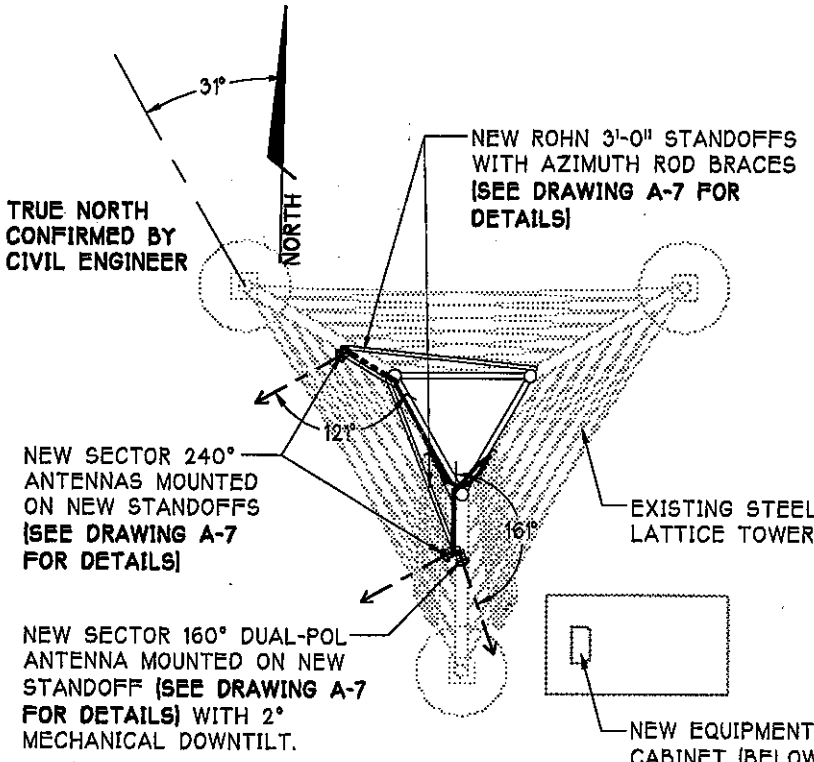


1 SITE LAYOUT
A-1 SCALE: 1/8" = 1'-0"

- NOTES:**
- FOR A LIST OF ITEMS SUPPLIED BY OTHERS, SEE MATERIALS LIST, DRAWING A-13.
 - CONTRACTOR TO LOCATE AND MARK-OUT ALL PUBLIC AND PRIVATE UNDERGROUND UTILITIES AND STRUCTURES THROUGH THE USE OF A LOCATING SERVICE PRIOR TO ANY EXCAVATION WORK. HAND DIG IN AREAS OF EXISTING UTILITIES AND/OR STRUCTURES.
 - TOWER HAS PASSED STRUCTURAL ANALYSIS FOR THE PROPOSED INSTALLATION.

ROBERT P. JUENBERT

 670 North Beers Street, Building 2, Holmdel, NJ 07733 Tel: 732.739.3200 Fax: 732.739.0440	Drawing Title: SITE LAYOUT		Project: SPRINT TOWER Address: JANOWSKI ROAD ASHFORD, CT		
	Client:		Approved By: PROJ. MGR: _____ DATE: _____ R.F. ENGR: _____ DATE: _____ SAC: _____ DATE: _____ OWNER: _____ DATE: _____		REVI(JM) 3/23/99 Revision No. Date: Drawing No. A-1
Search Area: SPRINT ASHFORD/I-84x72 Site ID No.: CT-11-353C	P.C.: JDi	P.G. Chkd.: _____ Chkd. by: _____	ARCNET Project No.: A99.506-797A	Drawn: JMc Date: 3/1/99	



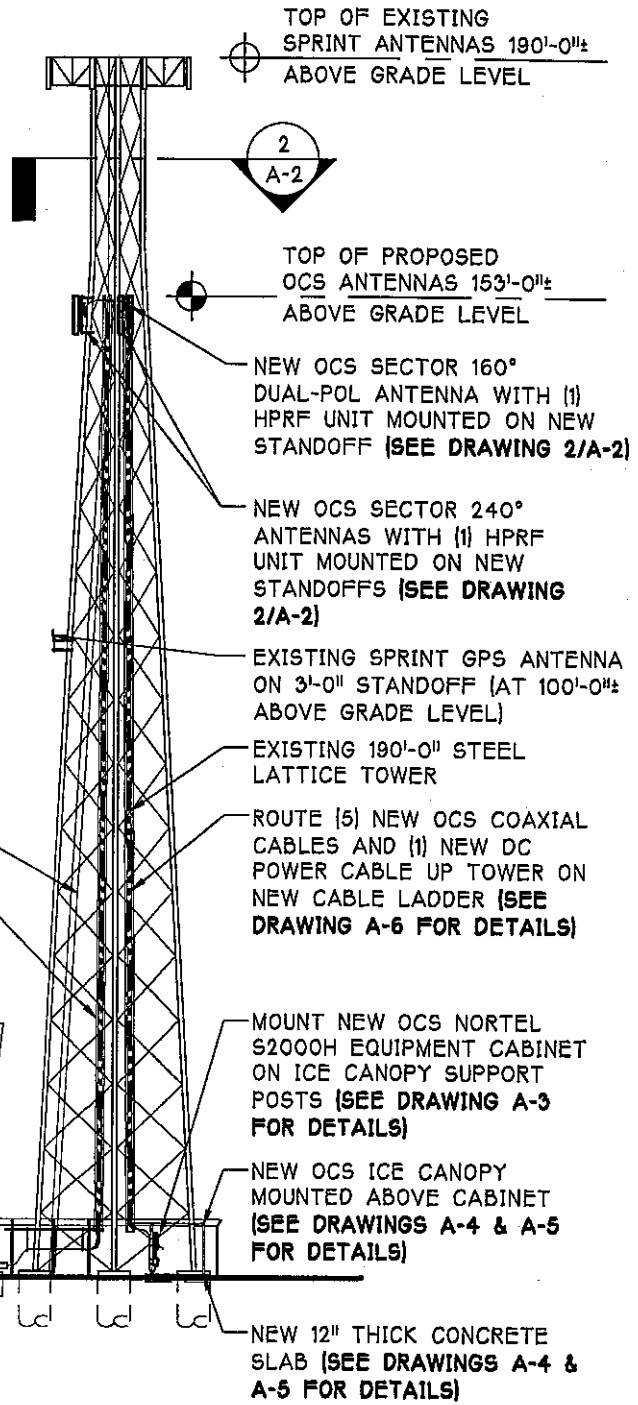
2 ANTENNA ORIENTATION
A-2 SCALE: 3/32" = 1'-0"

EXISTING ACCESS LADDER

EXISTING CABLES MOUNTED ON EXISTING CABLE LADDER

EXISTING SPRINT EQUIPMENT

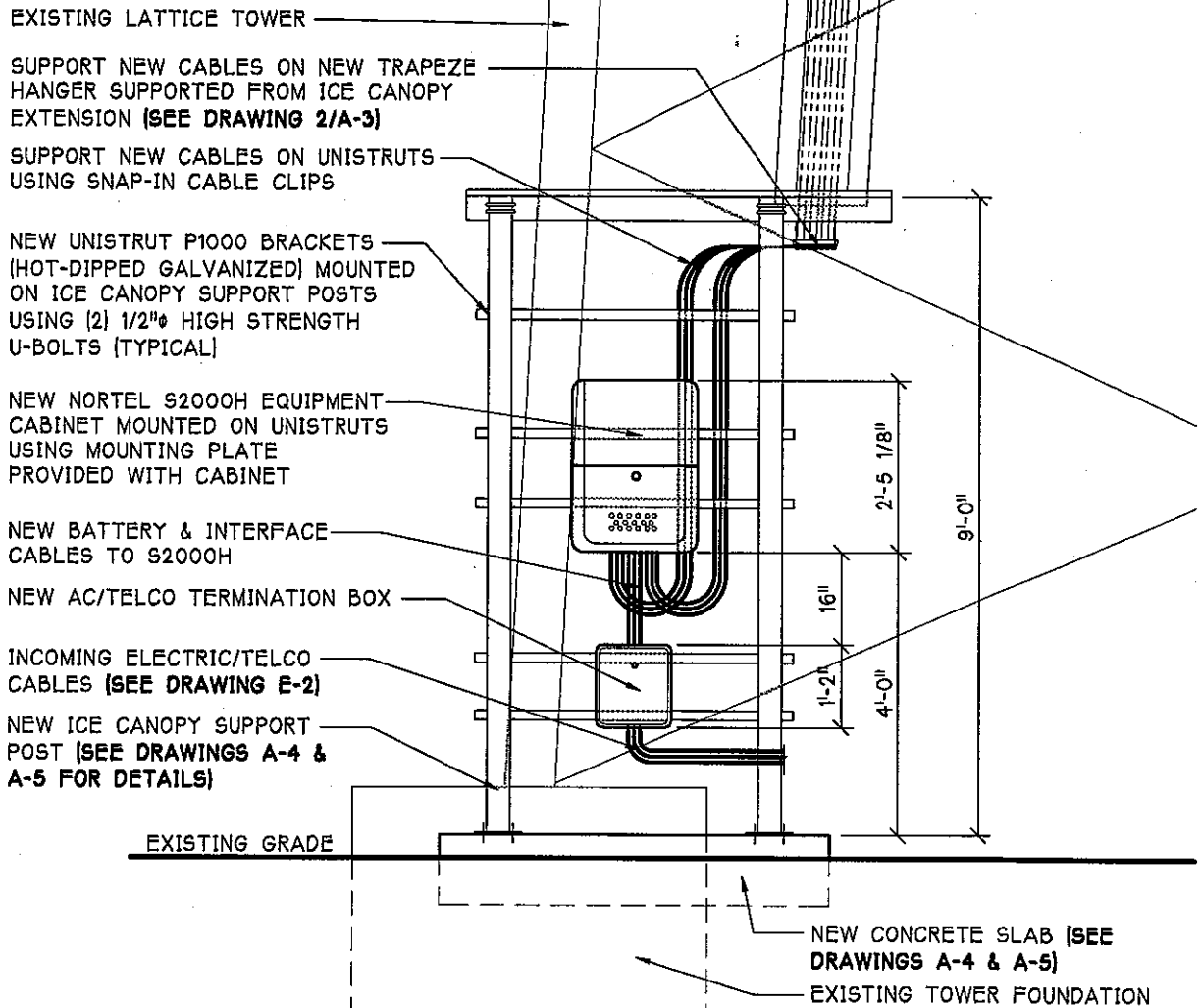
EXISTING 8'-0" CHAIN LINK FENCE WITH BARBED WIRE



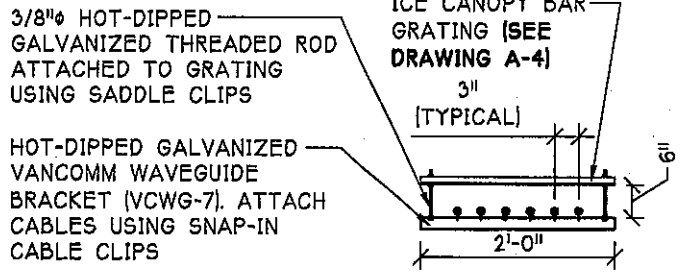
1 SOUTH ELEVATION
A-2 SCALE: 1" = 30'-0"

ROBERT P. JUENGERT

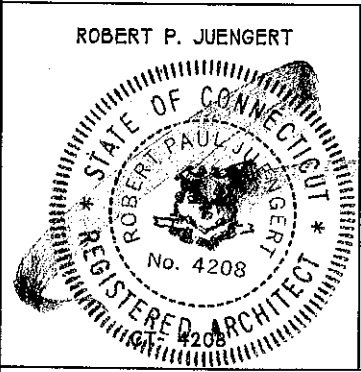
<p>670 North Beers Street, Building 2, Holmdel, NJ 07733 Tel: 732.739.3200 Fax: 732.739.0440</p>	Drawing Title: SOUTH ELEVATION		Project: SPRINT TOWER Address: JANOWSKI ROAD ASHFORD, CT		
	Client:		Approved By: PROJ. MGR: _____ DATE: _____ R.F. ENGR: _____ DATE: _____ SAC: _____ DATE: _____ OWNER: _____ DATE: _____		REVISION No. 1 Date: 3/23/99 No. 2 Date: _____
Search Area: SPRINT ASHFORD/I-84x72 Site ID No: CT-11-353C	P.C.: JDi P.G. Chkd: _____ Chkd: _____	ARCNET Project No. A99.506-797A	Drawn: JMc Date: 3/1/99	Drawing No. A-2	



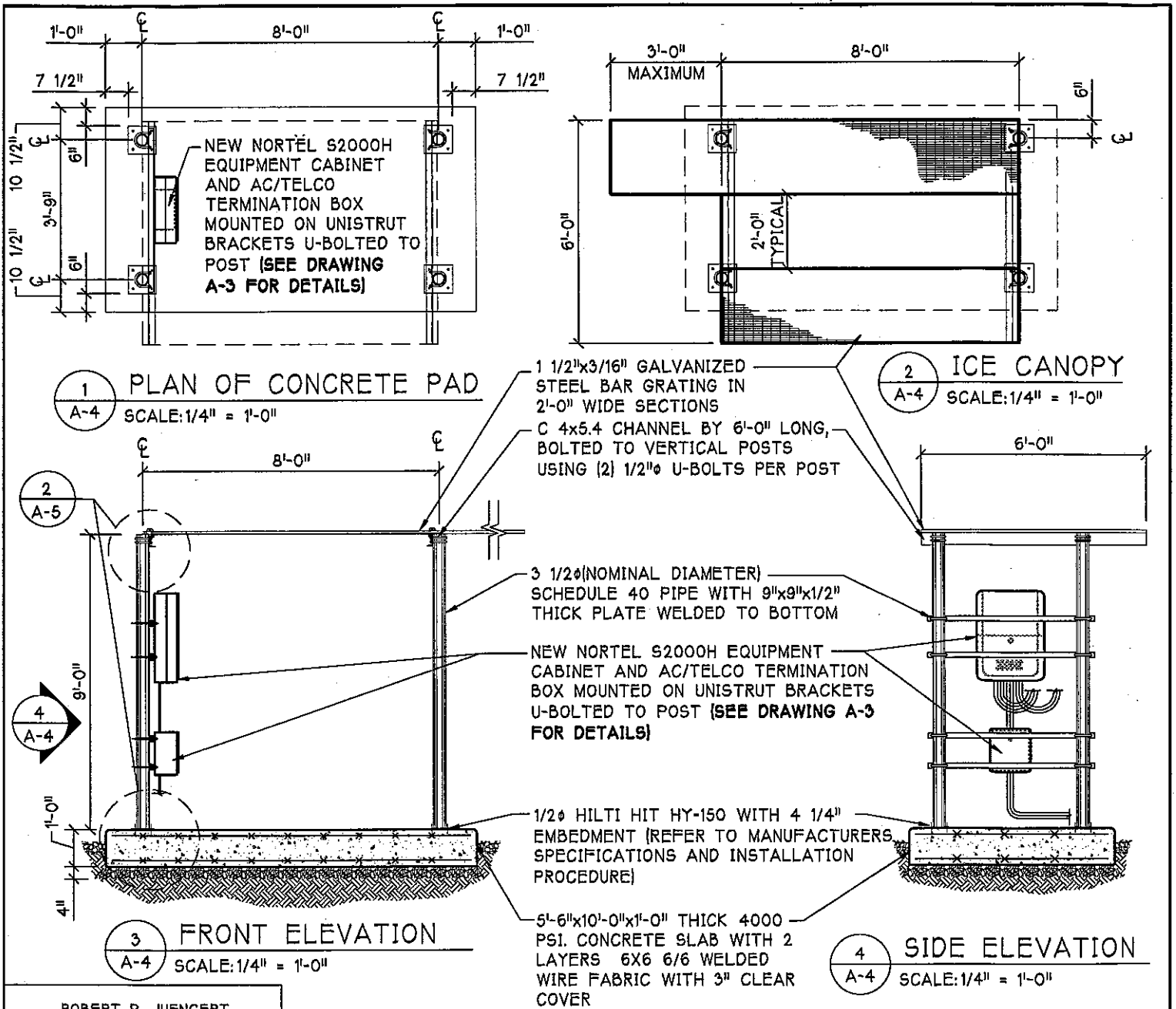
1 EQUIPMENT ELEVATION
A-3 SCALE: 3/8" = 1'-0"



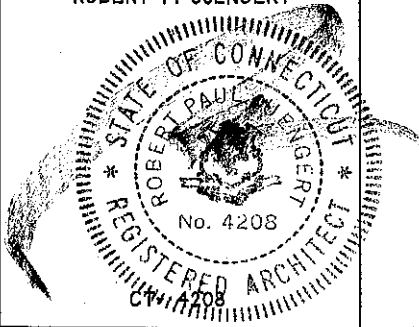
2 TRAPEZE DETAIL
A-3 SCALE: 1/2" = 1'-0"



<p>670 North Beers Street, Building 2, Holmdel, NJ 07733 Tel: 732.739.3200 Fax: 732.739.0440</p>	Drawing Title: EQUIPMENT ELEVATION		Project: SPRINT TOWER		Address: JANOWSKI ROAD ASHFORD, CT
	Client:		Approved By:		
Search Area: SPRINT ASHFORD/I-84x72 Site ID No: CT-11-353C	P.C.: JDi	P.C. Chkd.:	Chk'd. by:	PROJ. MGR: _____ DATE: _____	Revision No. Date:
ARCNET Project No. A99.506-797A	Drawn: JMc	Date: 3/1/99	R.F. ENGR: _____ DATE: _____	SAC: _____ DATE: _____	
© copyright 1999 by ARCNET Architects, Inc.				OWNER: _____ DATE: _____	Drawing No. A-3



ROBERT P. JUENGERT



 670 North Beers Street, Building 2, Holmdel, NJ 07733 Tel: 732.739.3200 Fax: 732.739.0440	Drawing Title: ICE CANOPY DETAILS		Project: SPRINT TOWER Address: JANOWSKI ROAD ASHFORD, CT		REVISIONS 3/23/99 A-4
	Client:		Approved By: _____ DATE: _____ PROJ. MGR: _____ DATE: _____ R.F. ENGR: _____ DATE: _____ SAC: _____ DATE: _____ OWNER: _____ DATE: _____		
Search Area: SPRINT ASHFORD/I-84x72 Site ID No: CT-11-353C	P.C. by: JDI	P.C. Chkd:	ARCNET Project No: A99.506-797A	Drawn: JMc Date: 3/1/99	Drawing No. A-4

Exhibit B

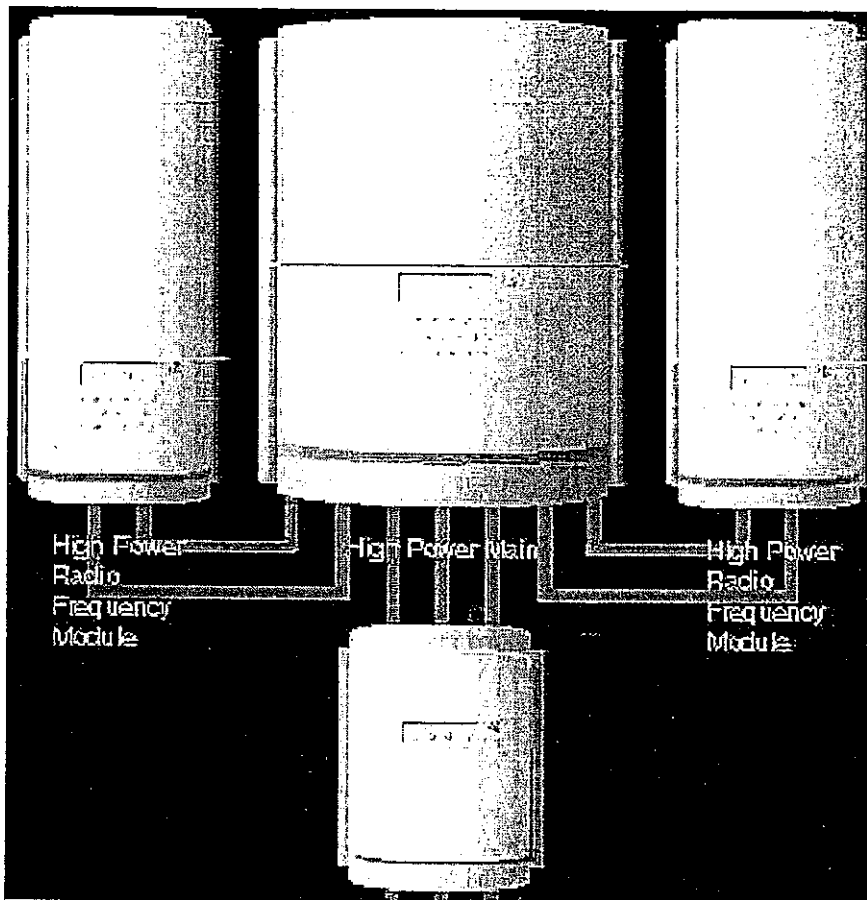
Equipment Specifications

Janowski Road

Ashford, CT



S2000 BTS Site Specifications





NORTEL
NETWORKS™

Mounting Specifications

Physical Sizes & Weights

- **HPMAIN**

- 21.3(W) x 7.6(D) x 29.1(H) inches
- 54.2(W) x 19.7(D) x 74(H) cm
- 141 lbs, 64 kg

- **MEU**

- 10.7(W) x 12.5(D) x 29.1(H) inches
- 27.3(W) x 31.7(D) x 74(H) cm
- 76 lbs, 34.5 kg

- **AC/TELCO**

- 12.6(W) x 9.4(D) x 16.1(H) inches
- 3.2(W) x 2.4(D) x 40.8(H) cm
- 40 lbs, 18.1kg



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Site Requirements

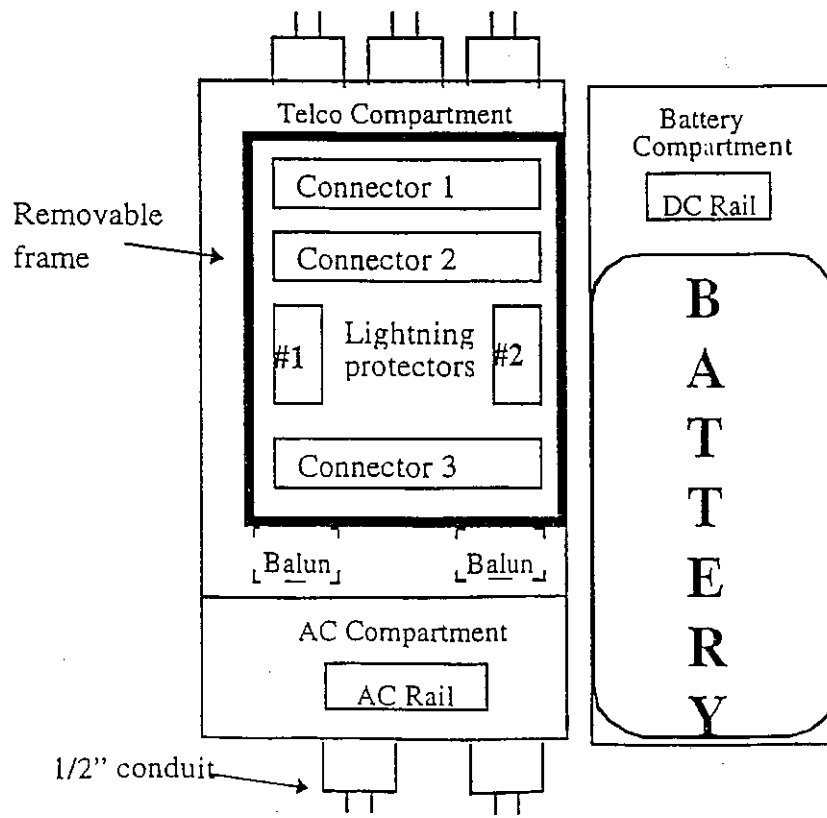
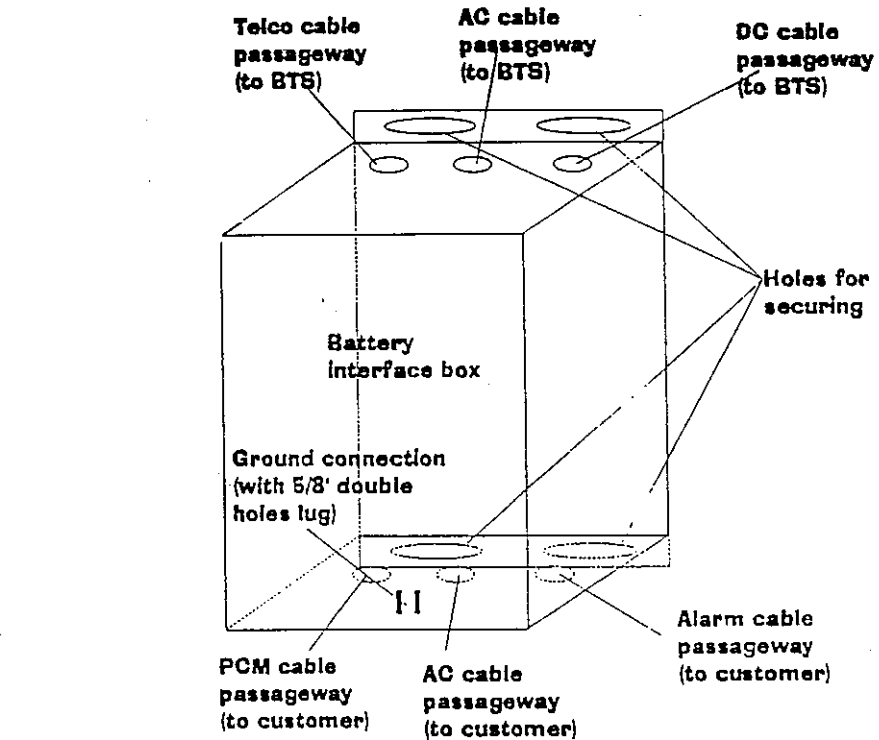
Electrical Specifications

- AC supply requirements for HPMAIN
 - 220 - 240 VAC 2 phase (198-254 tolerance)
- AC/TELCO box accepts three 14 AWG wires for AC connections
- Maximum current draw is 7.6 Amps AC
- Maximum power consumption is 1400 VA
- 10 meter AC cable (AC/TELCO to HPMAIN) supplied with unit
- 10 meter DC cable (AC/TELCO to HPMAIN) supplied with unit
- When no AC/TELCO unit is used 15A circuit breaker with AC surge protection must be used in the AC supply box
- MEU is powered by -48v DC generated by HPMAIN, and is delivered through DC/Data cable (-48v DC not available for other uses)



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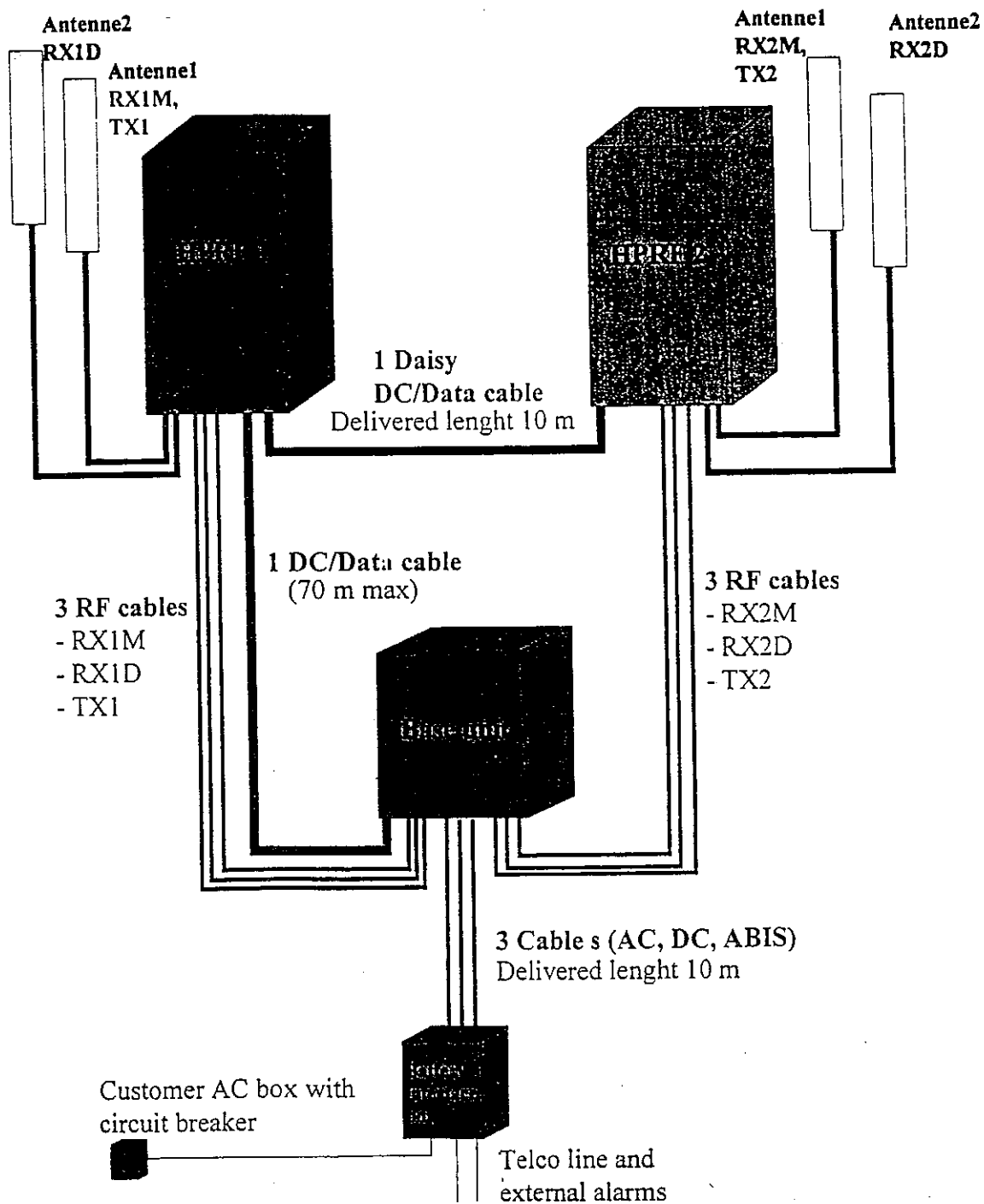
Site Requirements





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Site Requirements





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Site Requirements

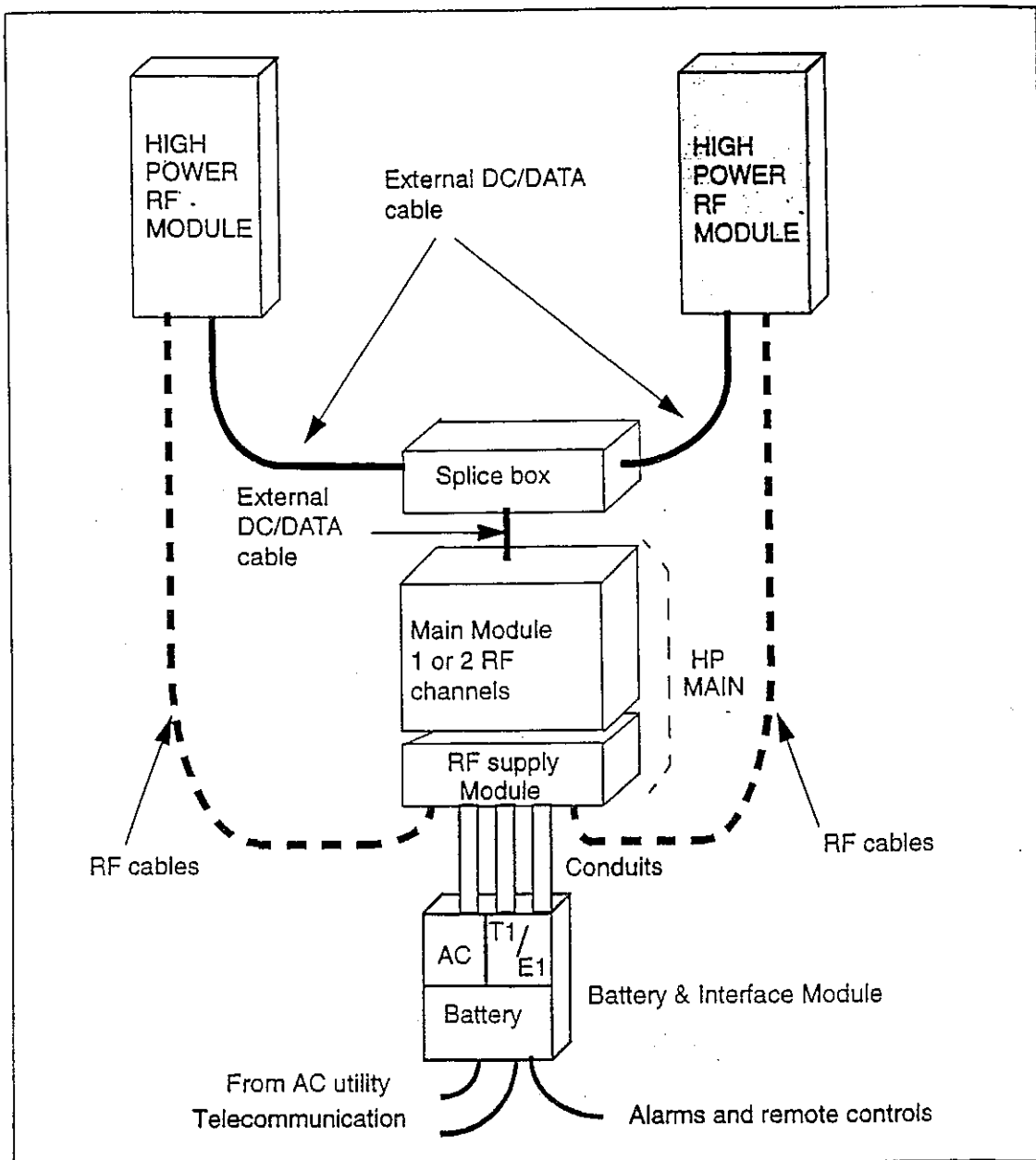


Exhibit C

Power Density Calculations

Janowski Road

Ashford, CT

Technical Memo

To: Brendan Sharkey
From: Haider Syed (Radio Engineering Consultant)
cc: Mike Fulton
Subject: Power Density Report for CT11353C
Date: 5/20/99

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the proposed OMNIPOINT Communications Inc. PCS antenna installation on Sprint Tower at Jankowski Rd., Ashford, CT. This study incorporates the most conservative considerations for determining the practical combined worst case power density levels that would be theoretically encountered from several locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

- 1) The emissions from the OCI transmitters are in the 1930-1950 MHZ frequency band.
- 2) The antenna cluster consists of two sectors, with 1 antenna per sector. The model number of antenna for the primary sector is EMS RR651802DP and model for the secondary sector is RV332000DP.
- 3) The antenna height is 150.5 feet Center Line.
- 4) The maximum transmit power from each sector is 1349.0 Watts Effective Isotropic Radiated Power (EiRP).
- 5) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
- 6) Power levels emitting from the antennas 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.
- 7) The average ground level of the studied area does not significantly change with respect to the transmitting location.

Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

3. Conclusion:

Based on the above worse case assumptions, the power density calculations from the proposed OMNIPOINT Communications Inc., PCS antenna installation combined with numbers provided by Sprint PCS are on the order of 1,000 to 10,000 times less than the FCC/ANSI/IEEE C95.1-1991 standard of 1000 microwatts per square centimeter ($\mu\text{w}/\text{cm}^2$). Details are shown in the attachment. Furthermore, the proposed antenna location for Omnipoint Communications at Sprint Tower at Jankowski Rd., Ashford, CT will not interfere with existing public safety telecommunications, AM band and FM band radio broadcast, TV, Police Communication, HAM Radio communications and other signals in the area.

Worst Case Power Density for installation on Sprint Tower @ Jankowski Rd. in Ashford, CT

Region 11 - Connecticut	
Power Density Calculation - Worst Case	
Base Station TX output	15.85 W
Number of channels	42,000.29 dBm
Antenna Model	EMS: RR-33-20/ RV-33-20
Antenna Gain	19.7 dB
Cable Size	1 5/8"
Cable Length	160 ft
Jumper & Connector loss	0 dB
Cable Loss per foot	0.0116
Total Cable Loss	1.856 dB
Total Attenuation	0.4 dB
Total EIRP per sector	61.30 dB
Ground Reflection	1.6
Frequency	1930 MHz
Antenna Height	150.5 ft
msg	19.3
Power Density (S) =	0.013067 mW / cm²
% MPE =	1.3067%

Worst Case Omnipoint Power Density 0.013067 mW / cm²
 Worst Case Power Density Combined with Sprint 0.026172 mW / cm²

Equation Used :

$$S = \frac{(1000(\text{grf})^2 (\text{Power}) * 10^{(\text{msg}/10)})}{4\pi (R)^2}$$

Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

Power Density Calculation for installation on Sprint Tower in Ashford, CT.

Inputed Parameters

Antenna Type: EMS_RV332000DP ▼

Antenna Centerline Height (Feet): 150.5

Mechanical Downtilt (Degrees): 0

Base Station TX Power (dBm): 42

Coax and Connector Loss (dB): 0.4

Number of Channels per Sector (TXs): 1

Power per Sector (EIRP Watts)	Distance from Base to Location (ft)	Height at Location, Relative to Base (ft)	Number of Times Below Federal Safety Limit of 1.0 mW/cm ²
1349.0	1	5	412,900
1349.0	10	5	293,600
1349.0	100	5	391,400
1349.0	1000	5	75,500
1349.0	10000	5	406,800
1349.0	20000	5	1,353,400

Notes: Equations given in "FCC OET Bulletin 65, Edition 97-01", in conjunction with manufactures specific antenna data were used in the field strength calculations. The resultant values represent worst case levels for field strength intensity.



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

May 25, 1999

Honorable John M. Zulick
First Selectman
Town of Ashford
Knowlton Memorial Town Hall
Route 44
25 Pompey Hollow Road
Ashford, Connecticut 06278

RE: TS-OCI-003-990520 – Omnipoint Communications request for an order to approve tower sharing at an existing telecommunications facility located on Janowski Road in Ashford, Connecticut.

Dear Mr. Zulick:

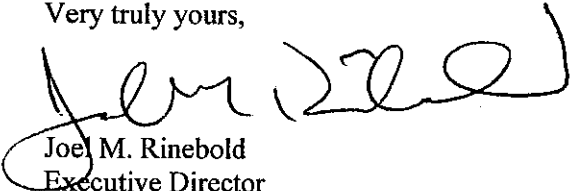
On May 20, 1999, the Connecticut Siting Council (Council) received a request from Omnipoint Communications for an order to approve tower sharing at an existing telecommunications facility located on Janowski Road, Ashford, Connecticut, pursuant to Connecticut General Statutes § 16-50aa.

The Council will consider this item at the next meeting tentatively scheduled for Tuesday, June 8, 1999, at 1:30 p.m. in Hearing Room Three, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this modification of an existing facility.

Thank you for your cooperation and consideration.

Very truly yours,


Joel M. Rinebold
Executive Director

JMR/tsg

Enclosure: Notice of Intent

OMNIPOINT COMMUNICATIONS
100 Filey Street
Bloomfield, CT 06002
Phone (860)692-
Fax (860)692-7159

To:	Department:	Phone #'s:	Fax #'s:
<i>Joel Reinhold</i>			<i>(860)827-2750</i>

Date: *6/4/99*Pages: *3* (including cover sheet)**RECEIVED**

JUN 07 1999

CONNECTICUT
SITING COUNCILCONNECTICUT
SITING COUNCIL

JUN 07 1999

RECEIVEDSender: *Brenda Shockey* Sender's Direct Dial: *(860) 692-7154*

The documents accompanying this transmission may contain confidential, proprietary and/or legal privileged information intended solely for the use of the named addressee(s). If you are not an intended recipient, you are hereby notified that any disclosure, dissemination, copying, distribution or other use of the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please notify the sender immediately by telephone at the number above to arrange for the return of the original.

By Facsimile

4 June, 1999

Joel Rinebold, Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: TS-OCI-154-990520 - Westbrook
TS-OCI-003-990520 - Ashford

Dear Joel:

Attached please find copies of the return receipts from the above-referenced tower sharing applications which Omnipoint sent via certified mail to the first selectmen of Ashford and Westbrook.. I am providing these copies to you because I noticed that our cover letters to these applications did not indicate that copies would be sent to their respective chief executives.

Please contact me if I may provide any additional information, and I look forward to the Council's action on these items on June 8th.

Sincerely,



J. Brendan Sharkey, Esq.
for Omnipoint Communications, Inc.

enclosures

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

3. Article Addressed to:

Franklin D. Lark, 1st Selectman
Town of Westbrook
1163 Boston Post Road
Westbrook, CT 06498

4a. Article Number

4906400076

4b. Service Type

- Registered
- Express Mail
- Return Receipt for Merchandise
- Certified
- Insured
- COD

7. Date of Delivery

5-24-99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Addressee or Agent)

Bill Brown

PS Form 3811, December 1994

102595-01-8-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER: <input type="checkbox"/> Complete items 1 and/or 2 for additional services. <input type="checkbox"/> Complete items 3, 4a, and 4b. <input type="checkbox"/> Print your name and address on the reverse of this form so that we can return this card to you. <input type="checkbox"/> Attach this form to the front of the mailpiece, or on the back if space does not permit. <input type="checkbox"/> Write "Return Receipt Requested" on the mailpiece below the article number. <input type="checkbox"/> The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery
3. Article Addressed to: John M. Zolick 1st Selectman Town of Ashford Knowlton Memorial Town Hall Route 44 35 Pender Hollow Rd Ashford CT 06208	4a. Article Number 2400400817	
	4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	<input checked="" type="checkbox"/> Certified <input type="checkbox"/> Insured <input type="checkbox"/> COD
	5. Received By: (Print Name) Beverly Fretwell	7. Date of Delivery 5/21/99 BW 12:05 PM
6. Signature (Addressee or Agent) Beverly Fretwell	8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

102585-99-5-0223 Domestic Return Receipt