STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401 New Britain, Connecticut 06051 Phone: 827-7682

Gloria Dibble Pond Chairperson August 31, 1989

TO:

COMMISSIONERS

Energy / Telecommunications

Peter G. Boucher Leslie Carothers

Hazardous Waste/Low-level Radioactive Waste

Frederick G. Adams Lester J. Forst

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Harry E. Covey Mortimer A. Gelston Daniel P. Lynch, Jr. Paulann H. Sheets William H. Smith Colin C. Tait

Joel M. Rinebold Executive Director

Stanley J. Modzelesky Executive Assistant

Clarine Nardi Riddle

Acting Attorney General

State of Connecticut

Office of the Attorney General

MacKenzie Hall 110 Sherman Street Hartford, CT 06105

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RE: The Connecticut State Police Notices of Intent

to Erect Exempt Telecommunications Towers and Associated Equipment at the Southbury Training School in Southbury; in Middlebury; at The Associated Exempt 2015

in Sou hours in Bethany; and at West Rock Ridge

in New Haven.

Dear Ms. Riddle:

At a meeting on August 30, 1989, the Siting Council tabled the subject Notices of Intent pending further information regarding the locations of the telecommunications towers and associated equipment in relation to the boundaries of their respective sites and abutting property owners.

The Council also requests a description of services provided by all new users and antennas located on the subject towers.

If there are any questions concerning this matter please contact Joel Rinebold, Executive Director, at 827-7682.

Very truly yours,

Gloria Dibble Pond

Chairperson

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cc: Captain Ronald P. Milkulka

Peter Seaha

Mlana Detile Pardy

Robert F. Vacchelli, Assistant Attorney General

State of Connecticut

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CLARINE NARDI RIDDLE
ACTING ATTORNEY GENERAL

Office of The Attorney General

Tel: 566-7570

MacKENZIE HALL
110 SHERMAN STREET
HARTFORD, CONNECTICUT 06105
TELEPHONE (203) 566-2192
TELECOPIER (203) 523-5536

July 18, 1989

Honorable Gloria Dibble Pond Chairperson Connecticut Siting Council 136 Main Street, Suite 401 New Britain, CT 06051

RE: State Police CTS
Site No. 21 - Southbury Training School

Dear Chairperson Pond:

Enclosed please find an original and 20 copies of a Notice of Intent to Erect an Exempt Telecommunications Tower and Associated Equipment pursuant to Council Reg. Sec. 16-50j-73 for Siting Council review.

Please record my name as counsel for the State Police in this matter and in correspondence from the Siting Council.

Thank you for your consideration.

Guel Flachell.

Very truly yours,

CLARINE NARDI RIDDLE ACTING ATTORNEY GENERAL

BY:

Robert F. Vacchelli Assistant Attorney General

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CONNECTICUT SITING COUNCIL

STATE OF CONNECTICUT



SITING COUNCIL

Notice of Intent to Erect an Exempt Telecommunications Tower and Associated Equipment

Pursuant to Conn. Gen. Stat. § 16-50g et seq. and Sec. 16-50j-73 of the Regulations of the Connecticut Siting Council, the Connecticut Division of State Police hereby gives notice of its intent to erect an exempt telecommunications tower and associated equipment at Southbury Training School in Southbury, CT.

The site is currently occupied by an existing, active telecommunications tower and radio building enclosed by a fence. The State Police Division proposes to replace the existing, 180 foot, lattice-type tower with a new lattice-type tower of equal height, remove the old tower, build a new equipment shelter and remove the existing shelter, replace the existing fencing and place a gravel cover within the enclosed area as generally depicted in the Site Plan Drawing 021-200 attached in Attachment A. Equipment on the existing tower includes 9 antennas: 3 whip type, 2 dish, 2 single dipole, 1 two dipole array and 1 folded monopole. Users are the State Police Division, Southbury Training School and State Department of Transportation. At

present, the State Police Division intends to replace all of these antennas on the new tower, and add 13 more: 7 dish, 4 whip type and 2 four dipole arrays. New users will be the State Police Division, State Department of Education, U.S. Secret Service, and State Department of Health Services. The near-term projected maximum loading specifications are listed in Attachment B. This tower replacement project is part of a State Police Division state-wide effort to upgrade its equipment and implement a modern Connecticut Telecommunications System (CTS) for Trooper and public safety, and to share tower space with other users.

The State Police Division believes that this tower replacement project is exempt from the need to obtain a Certificate of Environmental Compatibility and Public Need pursuant to Siting Council Reg. Sec. 16-50j-72(b) for the following reasons:

1. Existing Tower Site

The proposed location of the new tower is currently occupied by a one hundred eighty (180) foot lattice-type tower and radio building actively utilized by the State Police Division as a telecommunications facility. Existing fencing will be replaced or modified.

Site Boundaries

As depicted on the attached site plan, the boundaries of the tower site will not be extended. No tree cutting or extensive grading will be conducted at the site for the project.

3. Tower Height

The replacement tower will be no higher than the existing tower. Upon erection of the new tower, the old tower will be removed.

4. Noise Levels

The proposed replacement will not increase noise levels at the existing facility by six decibels or more. Except during construction, the only noise associated with the State Police Division equipment will be from air conditioning and stand-by power generation, when in use.

5. Radiation Power Density

The radio frequency sending or receiving capability of the facility will not increase the total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard considered by the State Department of Environmental Protection (DEP).

Although the State DEP is in the process of promulgating standards, it is authorized to adopt the standards recommended by the American National Standards Institute (ANSI). The current ANSI standard applicable to the proposed State Police Division facility and the total radio frequency electromagnetic radiation power density calculated for the proposed tower site boundary are set forth in Attachment C.

CONCLUSION

For all the above stated reasons, the State Police Division requests the Siting Council to rule that this Notice is in compliance with the exception criteria for changes to an existing facility pursuant to Reg. Sec. 16-50j-72(b).

Dated at Meriden, CT this 18th day of July, 1989.

CONNECTICUT STATE POLICE

Captain Ronald P. Mikulka
Deputy Commanding Officer

Police Support Services

294 Colony Street Meriden, CT 06450

Tel. (203) 238-6570

CERTIFICATION

The undersigned hereby certifies that a copy of the foregoing Notice of Intent to Erect Exempt Telecommunications Associated Equipment was mailed this 8^{16} day of July, 1989 to the below named chief elected official in Southbury, CT pursuant to Reg. Sec. 16-50j-73:

Honorable Carol A. Herskowitz First Selectman Town of Southbury 501 Main Street South Southbury, CT 06488

Robert F. Vacchelli

Assistant Attorney General

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ATTACHMENT B

RADIO SYSTEMS CHARACTERISTICS

FILE NAME: SITE NAME:

21-P SOUTHBURY 180 FEET

PREPARED BY: E WEIBLEN

TOWER HEIGHT:

ON DATE: 06-15-1989

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			<u> </u>	ANTENNA	wal ago gan am and ten will ten the ten
No 	OPERATING FREQUENCY (MHz)		HEIGHT (FEET)	ТҮРЕ	VERTICAL SIZE(FT)
1	2142.000	3	177	SOLID DISH	6
2	2147.600	3	168	SOLID DISH	6
3	6700.000	1	171	SOLID DISH W/RADOME	6
4	18700.000	1 1 1	178		4
5	6700.000	1	166	SOLID DISH W/RADOME	8
6	6700.000		174	SOLID DISH W/RADOME	8
7	42.480	100	180	WHIP ON PIPE MOUNT	11
8 9	39.460	250	150		13
	45.860	250	128	SINGLE DIPOLE	13
10	154.665	100	147	TWO DIPOLE ARRAY	11
11	42.040	100	143	WHIP ON PIPE MOUNT	11
12		100	115	WHIP ON PIPE MOUNT	16
13		60	83	WHIP WITH RADIALS	6
14	867.500	350	180	WHIP	13
15	867.500	350	180	WHIP	13
16	822.500	0	180	WHIP	13
17	2536.000	0	166	GRID DISH	4
18	2674.000	2	174	GRID DISH	4
19	2674.000	2	179	SOLID DISH	2
20	165.688	100	93		22
21	462.950	70	155	FOUR DIPOLE ARRAY	10
22	153.815	100	147	WHIP	23

ATTACHMENT C

POWER DENSITY ANALYSIS

RADIO SYSTEMS DATA

FILE NAME: 21-P PREPARED BY: E WEIBLEN ON DATE: 06-15-1989

TOWER HEIGHT: 180 FEET

	OPERATING	TRANSMIT	ANTENNA	LIMIT OF SAFE	AT THE BASE OF	THE TOWER
					DOMED DENGTON	DEDORMO OF
N T	FREQUENCY	POWER	HEIGHT	EXPOSURE	POWER DENSITY	PERCENT OF
No	(MHz)	(WATTS)	(FEET)	(mW/cm²)	(mW/cm²)	LIMIT
	0140 000	~	4 (7) (7)			
1	2142.000	3	177	5.000	0.0000082	0.0001640
2	2147.600	3	168	5.000	0.0000091	0.0001821
3	6700.000	1	171	5.000	0.0000029	0.0000586
4	18700.000	1	178	5.000	0.0000027	0.0000541
5	6700.000	1	166	5.000	0.0000031	0.0000622
6	6700.000	1	174	5.000	0.0000028	0.0000566
7	42.480	100	180	1.000	0.0002644	0.0264361
8	39.460	250	150	1.000	0.0009517	0.0951701
9	45.860	250	128	1.000	0.0013070	0.1306963
10	154.665	100	147	1.000	0.0003964	0.0396377
11	42.040	100	143	1.000	0.0004189	0.0418862
12	33.840	100	115	1.000	0.0006477	0.0647661
13	157.560	60	83	1.000	0.0007460	0.0745999
14	867.500	350	180	2.892	0.0009253	0.0319940
15	867.500	350	180	2.892	0.0009253	0.0319940
16	822.500	0	180	2.742	0.0000000	0.0000000
17	2536.000	0	166	5.000	0.0000000	0.0000000
18	2674.000	2	174	5.000	0.0000057	0.0001132
19	2674.000	2	179	5.000	0.0000053	0.0001069
20	165.688	100	93	1.000	0.0009903	0.0990324
21	462.950	70	155	1.543	0.0002496	0.0161738
22	153.815	100	147	1.000	0.0003964	0.0396377
					•	

TOTAL PERCENT OF SAFE LIMIT FOR ALL 22 RADIO SYSTEMS = 0.6928217

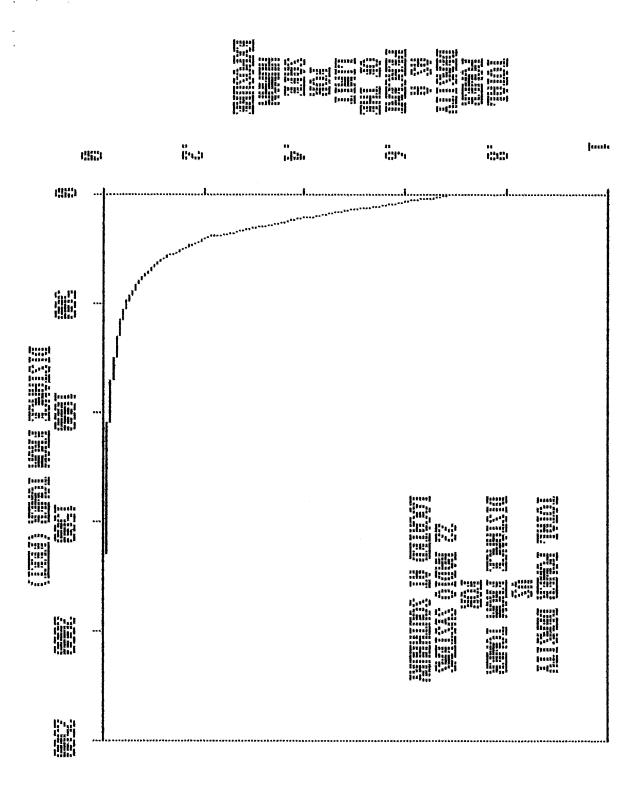
- NOTES: 1. THE 'LIMITS OF SAFE EXPOSURE' HAVE BEEN DETERMINED IN ACCORDANCE WITH THE SAFETY LEVELS DEFINED IN ANSI STANDARD C95.1-1982, ISSUED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE AND ADOPTED BY THE CONNECTICUT LEGISLATURE INTO THE CONNECTICUT GENERAL STATUTES, SECTION 22a-162, IN 1984.
 - 2. THIS ANALYSIS ASSUMES THE FOLLOWING WORST CASE CONDITIONS.
 - A. ALL ANTENNAS HAVE ISOTROPIC (UNIFORM) RADIATION PATTERNS, WHICH PROVIDE HIGH ILLUMINATION OF THE GROUND.
 - B. ALL TRANSMITTERS ARE ON SIMULTANEOUSLY.

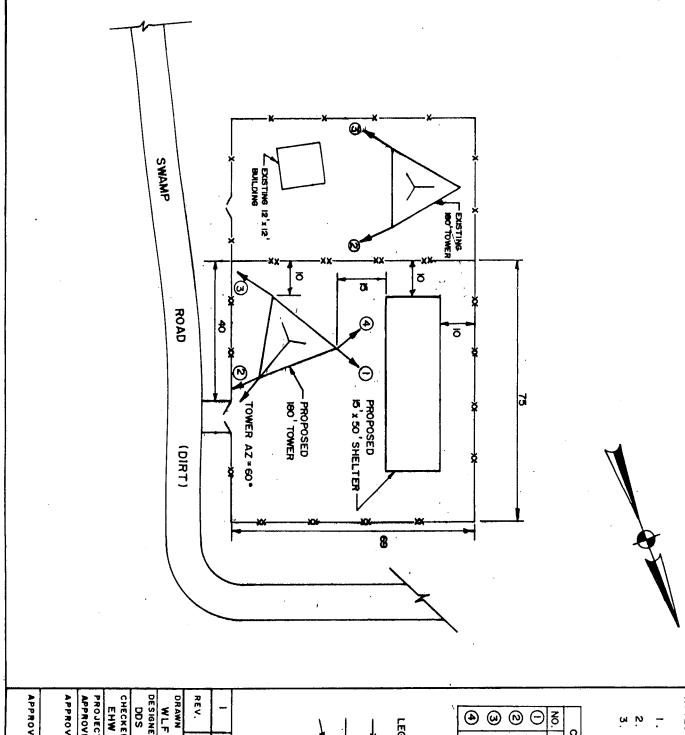
POWER DENSITY ANALYSIS

POWER DENSITY (% OF SAFE LIMIT) VS DISTANCE FROM TOWER

FILE NAME: 21-P
SITE NAME: SOUTHBURY PREPARED BY: E WEIBLEN
TOWER HEIGHT: 180 FEET ON DATE: 06-15-1989

DISTANCE (FEET)	POWER DENSITY (% OF SAFE LIMIT)
	والمراه ويهيه والمراه والم
0	0.6928218
100	0.4237267
200	0.2057502
300	0.1120938
400	0.0686206
500	0.0458149
600	0.0325865
700	0.0242976
800	0.0187849
900	0.0149429
1000	0.0121627
1100	0.0100882
1200	0.0085003
1300	0.0072585
1400	0.0062694
1500	0.0054689
1600	0.0048121
1700	0.0042666
1800	0.0038087
1900	0.0034207
2000	0.0030889
2100	0.0028031
2200	0.0025552
2300	0.0023387
2400	0.0021486
2500	0.0019807





NOTES :

- ALL DIMENSIONS ARE IN FEET.
- ARROW INDICATES TRUE NORTH.
 TOWER AZIMUTH 60°

	CTS MICROWAVE PATHS	동
NO.	SITE	AZIMUTH
Θ	NEW MILFORD	330
0	MIDDLEBURY	86 •
(3)	TROOP A	143
(4)	DANBURY	252

C	Ö
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PROPOSED FENCE

EXISTING FENCE

MICROWAVE PATH

-						
-	RELOCAT	ED PROF	OSED	TOWER, S	RELOCATED PROPOSED TOWER, SHELTER AND FEN	D FEN
REV.			DESCRIPTION	PTION		
DRAWN		DATE			•)
WLF		5/11/89	7	1	-CAS CO	ဂ <u>၀</u>
DESIGNED	8 0	DATE		•		(
pos Q	OF T	5)1184 SITE	SITE	22	VOI ITHEI IDY	
CHECKED	0 /	DATE		0001		
EHW	de	5/15/20	TITLE			
PROJEC	つける	DATE,		SITE	SITE PLAN	
APPROV	APPROVED L MAI	5/5/5				
APPROVED FOR	ED FOR		SIZE	PROJECT	BEWING NUMBE	NUMBE
			w	CTS	02	021-20
APPROVED FOR	ED FOR					
			SCALE	SCALE: " = 20'		