



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051-4225  
Phone: 827-7682

FILE  
COPY

May 25, 1994

Andrew N. Davis, Esq.  
Brown, Rudnick, Freed & Gesmer  
CityPlace I  
185 Asylum Street  
Hartford, CT 06103-3402

Re: Litchfield County Cellular, Inc. - Motion for Transfer of an  
Exempt Modification Approval, Torrington facility.

Dear Attorney Davis:

At a meeting of the Connecticut Siting Council (Council), on May 23, 1994, the Council approved a motion by Litchfield County Cellular, Inc. (LCCI), to transfer an Approval of an Exempt Modification of an existing facility located at 1210 Highland Avenue, Torrington, Connecticut, from LCCI to Litchfield Acquisition Corporation (LAC).

The Council acknowledges the LCCI statement that this transfer was not contemplated at or prior to the Council's Exempt Modification Approval for the Torrington facility dated July 16, 1991.

The Council also acknowledges LAC's consent to comply with all terms, limitations, and conditions contained in the Exempt Modification Approval upon its transfer to LAC.

Please notify the Council when the transfer is formally executed.

Very truly yours,

Mortimer A. Gelston  
Chairman

MAG:TEF:mmb

7899E

**RECEIVED**

FEB 21 1995

CONNECTICUT  
SITING COUNCIL

CONNECTICUT SITING COUNCIL  
LITCHFIELD ACQUISITION CORP.

NOTICE OF INTENT TO  
CONSTRUCT EXEMPT MODIFICATION

DOCKET NO. \_\_\_\_\_

FEBRUARY 21, 1995

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE:

LITCHFIELD ACQUISITION CORP., : DOCKET NO.  
CONSTRUCTION AND OPERATION :  
OF FACILITIES TO PROVIDE :  
CELLULAR SERVICE IN RSA NO. 357 :  
CONNECTICUT 1 - LITCHFIELD : FEBRUARY 21, 1995

**NOTICE OF INTENT TO  
CONSTRUCT EXEMPT MODIFICATION**

I. INTRODUCTION

This notice of intent to construct an exempt modification ("Notice") and the exhibits accompanying it are submitted by Litchfield Acquisition Corp. ("LAC") to the Connecticut Siting Council ("Council") pursuant to Conn. Agencies Regs. § 16-50j-73. LAC is a Delaware corporation qualified to do business in the State of Connecticut with its principal business office located at 777 East Main Street, Torrington, CT 06790. Litchfield County Cellular, Inc. ("LCCI") had been designated the non-wireline cellular carrier by the Federal Communications Commission ("FCC") in Rural Service Area ("RSA") No. 357, Connecticut 1 - Litchfield (FCC File No. 10940-CL-CP-89, approval issued August 14, 1990; and FCC File No. 07937-CL-MP-91, Modification Authorization, issued April 15, 1991). By Consents to Assignment of Common Carrier Radio Station Construction Permit or License (FCC File Nos. 01674-CL-AL-94 and 01673-CL-AL-94 both issued on March 11, 1994) LAC has been designated the non-wireline cellular carrier For RSA No. 357, Connecticut 1 - Litchfield.

This Notice describes LAC's intent to modify an existing 79 foot lattice tower by attaching cellular antennas and associated equipment. The proposed location is the site of a 79 foot lattice communications tower ("Cornwall Tower Site") American Telephone and Telegraph Company ("AT&T"). In 1952, AT&T was granted an easement to utilize the site, which is owned by the State of Connecticut and managed by the Connecticut Department of Environmental Protection ("DEP"). In January, 1995, the easement was modified by AT&T and DEP to allow LAC to utilize the site. (See **Appendix A**). Applications for Certificates of Environmental Compatibility and Public Need and/or further Notices will subsequently be submitted by LAC to the Council to expand LAC's cellular facilities and to provide Domestic Public Cellular Radio Telecommunication Service throughout the Connecticut 1 - Litchfield RSA.

LAC has determined that the tower to which it will be attaching its cellular antennas and associated equipment is within the purview of the Council's definition of "facility" per Conn. Gen. Stat. § 16-50(i)(a). Reviewing this information in the context of the Council's regulations, LAC has determined that some of this equipment is cellular equipment which would bring this tower within the Council's definition of "facility". In addition, we have examined LAC's proposed activities and the Council's regulations and have concluded that these activities are within the Council's jurisdiction and are covered by the filing of a Notice to modify a facility tower in compliance with the provisions set forth at Conn. Agencies Regs. § 16-50-72(b)(2).

Correspondence regarding this Notice should be addressed to:

Litchfield Acquisition Corp.  
c/o John Farrell  
CellularOne  
15 East Midland Avenue  
Paramus, New Jersey 07652

with a copy to:

Douglas A. Cohen, Esq.  
John J. Russotto, Esq.  
Brown, Rudnick, Freed & Gesmer  
CityPlace I  
185 Asylum Street  
Hartford, CT 06103-3402

## II. SITE DESCRIPTION

### A. Location and Zoning

The Cornwall Tower site is owned by The State of Connecticut, and managed by the Department of Environmental Protection. AT&T leases the site from the State. The property is identified on the Cornwall Tax Assessor's Map as Map F4, Block 1. The site is located in Mohawk Mountain State Park, at the terminus of Mattatuck Road. The 90 foot by 71 foot leased tower site is accessed via a 900± foot gravel road off Mattatuck Road.

The site currently supports a 79 foot lattice, single platform communications tower and an associated equipment building. The tower site and existing equipment building is surrounded by a chain link fence (See Site Plan at **Appendix B**).

This area of Cornwall is currently zoned as State Forests and Parks. The tower site at the end of the access road is

bounded on all sides by land owned by the State of Connecticut (see **Appendix C** for names of nearest adjoining property owners).

## B. Natural Features

### 1. Topography and Hydrology

Topographically, the site lies at an elevation of approximately 1679 feet above mean sea level. On site slope conditions in the vicinity of the tower are 0-3 percent. These gentle slope conditions are found at the apex of the mountain. Slope increases dramatically with descent from the mountain's top, especially in the southerly and easterly directions.

The site lies within the Shepaug River sub-regional drainage basin (CT DEP drainage basin number 6700). This basin lies within the Shepaug regional basin, which is part of the Housatonic major drainage basin. The site lies within the Waterbury Water department public water supply watershed.

### 2. Bedrock and Surficial Geology

The Cornwall Tower Site is situated within the Lapetos (Oceanic) Geologic Terrane. According to the Bedrock Geological Map of Connecticut compiled by John Rogers in 1985, the Cornwall site is underlain by Manhattan Schist. This formation is characterized by gray, rusty-weathering, coarse-grained schistose gneiss.

Soils at the Cornwall site are identified by the Soil Survey of Litchfield County, Connecticut (U.S. Department of Agriculture, Soil Conservation Service) as Hollis extremely rocky fine sandy loam (HxC), 3 to 15 percent slopes. This soil generally has a shallow depth to bedrock, between 1 and 2 feet. Typically, Hollis soils have a surface layer of very dark, grayish brown to yellowish brown gravelly fine sandy loam that extends to bedrock. No wetland soils have been identified on site.

### 3. Vegetation and Wildlife

The very top of the mountain (where the existing structures are located) is mostly void of vegetation except for patches of grass and brush. However, the perimeter of the site is densely forested. Dominant tree species include Oak (*Quercus* sp.), Cotton Wood (*Populus* sp.), Grey Birch (*Betula populifolia*), and Beech (*Fagus grandifolia*). The shrub layer includes Birch (*Betula* sp.), Oak (*Quercus* sp.), Witchazel (*Hamamelis virginiana*), and Red Maple saplings (*Acer rubrum*), as well as moderately dense Mountain Laurel (*Kalmia latifolia*).

The DEP Natural Resources Center was contacted by letter and requested to review the Connecticut Natural Diversity Data Base for pertinent information regarding the presence of any significant flora and fauna within the Mohawk Mountain tower site area. According to the DEP's review, there are no known extant populations of Federal or state Endangered, Threatened or Special Concern Species that occur at the site (see **Appendix D**). However, the mature forested areas are likely to provide food, nesting, and denning sites for many birds and a variety of mammals such as white-tailed deer, gray squirrel, eastern chipmunk, flying squirrel, porcupines, opossum, red fox, weasel, striped skunk, and raccoon.

No long term impacts on wildlife are anticipated from the proposed activities. Since the building site will be unattended, no disturbance of wildlife during operation of the facility is expected. Wildlife use of the area will remain intact following construction activities on site.

### III. PROPOSED SITE DEVELOPMENT

#### A. Modifications to Existing Cellular Tower

Four antennas and associated cables will be attached to the existing cellular tower at approximately elevation 48 feet (at the centerline) above existing grade or 1727± feet above mean sea level (See Site Plan for Tower Profile). A copy of the antenna specifications is found in **Appendix E**.

#### B. Construction Inside of Existing Support Building

CellularOne will utilize twenty-eight (28) square feet within the existing AT&T equipment building. The location of the existing structure is indicated on the attached Site Plan. The structure will house electrical components for the telecommunications system. In addition, the support building will house a back-up battery supply in case of a power outage. The back-up batteries will be recharged when needed by a portable recharger brought to the site by a technician.

### IV. POTENTIAL ENVIRONMENTAL IMPACTS

In satisfaction of Connecticut Agencies Regulations § 16-50j-72(b)(2), the following demonstrates that the activities proposed by CellularOne will not cause a significant change or alteration in the physical and environmental characteristics of the site.

#### A. Air and Water Discharges

The use of the emergency electric battery recharger is expected to be infrequent. Thus the emission of exhaust fumes

will not adversely impact air quality on, or adjacent to, the site. Automobile exhaust emissions associated with vehicular access to the tower site will be minimal. The only vehicular access to the site will be for regularly scheduled equipment maintenance and emergency repair. Not more than one trip per two weeks to the facility is expected. Thus, impacts on air quality from automobile exhaust emissions are expected to be minimal.

#### B. Scenic Considerations

Existing vistas will not be adversely impacted by the proposed development. The proposed tower addition will not significantly change the overall visibility of the existing tower structure. Moreover, the overall tower height will not change. With the exception of distant views of the site, residences and park users are effectively screened by the moderately increasing topography towards the site and the extensive forest cover.

#### C. Soil and Vegetation

No soil disturbance is anticipated during the modifications of the existing tower structure and support building. The existing gravel drive and parking area will be utilized.

Due to the site's gentle topographic condition, established gravel access road, and existing structures, significant environmental impacts on soil erosion and vegetative cover resulting from construction activities are not expected.

### V. ENGINEERING ISSUES

#### A. Model of Radiofrequency Radiation Power Densities

In satisfaction of Conn. Agencies Regs. § 16-50j-72(b)(2), the purpose of this subsection and **Appendix F** is to show that the electromagnetic radiation introduced by the proposed LAC activities will not increase the power density levels at the property boundaries beyond the standards accepted by the DEP. The standards adopted by the DEP are those compiled by the American National Standards Institute ("ANSI").

The steps taken to calculate power density levels generated by the existing and proposed facilities were outlined in OST Bulletin No. 65. This bulletin, entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation," was prepared in October of 1985 by Robert F. Cleveland, Technical Analysis Division, Office of

Science and Technology, Federal Communications Commission,  
Washington, D.C.

The results of a worst-case analysis show that the modifications proposed by LAC will not increase the total radiofrequency electromagnetic radiation power density level at any property boundary beyond the level accepted by the DEP. This fact is supported by the calculations in **Appendix F**. The LAC analysis took into account all services which are presently operating on the premises.

As a final justification for LAC's proposed installation, the FCC, in the Report and Order GEN. Docket No. 79-144 adopted on February 12, 1987 (attached for reference in **Appendix F**), declared cellular, microwave point-to-point radio, and other land-mobile and fixed communications services to be categorically excluded from radiofrequency radiation evaluation. Nonetheless, the present study was conducted to demonstrate that the proposed facility will not increase the cumulative radiofrequency electromagnetic radiation to a level that would exceed the DEP standards.

B. Model of Noise Levels in Satisfaction of Conn.  
Agencies Regs. § 16-50j-72(b)(2)

The facility proposed by LAC will not generate noise levels in excess of six decibels (6dB) above ambient as measured at the property boundaries. This standard has been established by the DEP.

The proposed structure is located approximately 1000± from the nearest neighboring property line. The only noise associated with on-site activities will be during construction of the structure and during periods when the portable generator is brought to the site to recharge the batteries. Modifications to the existing structure are anticipated to require two to four weeks. Noise associated with the infrequent use of the portable battery recharger will be infrequent and diminished by the building location and surrounding vegetation.

Please note that, during the actual construction period, noise levels may be temporarily increased due to the presence of other machinery and personnel on site necessary for the proper installation of the proposed facility. However, LAC will ensure that operations are conducted in a responsible and sensible manner in order to minimize disturbance.

VI. CONCLUSION

For the foregoing reasons, LAC has determined that the proposed alterations to the existing tower will not cause a significant change or alteration in the physical and



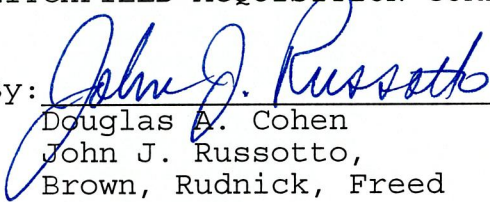
environmental characteristics of the site and satisfy all requirements of Conn. Agencies Regs. § 16-50j-72(b)(2). Therefore, LAC's placement of cellular antennas and associated equipment on the existing tower constitutes a modification that is exempt within the meaning of the regulations. LCC respectfully urges the Council to make such a finding.

WHEREFORE, LAC respectfully requests that the Council affirm its Notice of Intent to Construct an Exempt Modification Facility.

Respectfully submitted,


LITCHFIELD ACQUISITION CORP.

By:

  
Douglas A. Cohen  
John J. Russotto,  
Brown, Rudnick, Freed  
& Gesmer  
CityPlace I  
185 Asylum Street  
Hartford, CT 06103-3402  
Its Counsel

DELPHI::WP0:[RUSSOTTOJ]CELLMOH.AA4;10

An original and 20 copies of the foregoing have been hand delivered to Mortimer A. Gelston, Chairman, Connecticut Siting Council, 136 Main Street, Suite 401, New Britain, Connecticut 06051 on February 21, 1995, and sent by certified first class mail/return receipt requested to the Town Manager, Town of Cornwall on February 21, 1995.

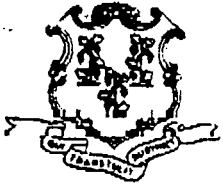
  
\_\_\_\_\_  
John J. Russotto  
Commissioner of the Superior Court

DELPHI::WP0:[RUSSOTTOJ]CELLMOH.AA4;10

INDEX TO APPENDICES

- APPENDIX A. Letter from Sidney J. Holbrook, Commissioner, Department of Environmental Protection, dated January 17, 1995.
- APPENDIX B. Proposed Site Development Plan for Cornwall Tower Site, Cornwall, Connecticut, dated February 16, 1995; prepared by Land-Tech Consultants, Inc., 205 Playhouse Corner, Southbury, CT 06488.
- APPENDIX C. List of names of nearest adjoining property owner; compiled by Land-Tech Consultants, Inc., 205 Playhouse Corner, Southbury, Connecticut 06488.
- APPENDIX D. Letter from Nancy A. Murray, Biologist/ Environmental Analyst III, Natural Resources Center, dated February 8, 1995, No known extant populations of Federal or State Endangered, Threatened or Special Concern Species.
- APPENDIX E. Proposed antenna specifications; prepared by Swedcom Corporation, ALP9212-N, Log-Periodic Reflector Antenna.
- APPENDIX F. Analysis and model radiofrequency radiation power densities; prepared on February 9, 1995 by AT&T Bell Laboratories, Murray Hill, N.J. 07974-0636; Also attached is FCC Gen. Docket No. 79-144.

DELPHI : : WPO : [RUSSOTTOJ] CELLMOH.AA4;12



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



January 17, 1995

Todd Thames, National Leasing Manager  
American Telephone & Telegraph Company  
Promenade Annex  
1200 Peachtree Street, N.E.  
Atlanta, Georgia 30309

Dear Mr. Thames:

The State of Connecticut Department of Environmental Protection approves the third party agreement between your firm and the Litchfield Acquisition Company. Approval is based upon the understanding that the "TOWER ATTACHMENT AND BUILDING OCCUPANCY LICENSE AGREEMENT" is subordinate to all of the mutual promises, agreements and conditions of the EASEMENT AND AGREEMENT AND RELEASE between the State of Connecticut Department of Environmental Protection and American Telephone and Telegraph Company as recorded in the Land Records of the Town of Cornwall, Connecticut on March 21, 1994 at 11:15 a.m. in volume 79 at page 530. Approval is also subject to such conditions as may be required by the Connecticut Siting Council.

Sincerely,

A handwritten signature in black ink, appearing to read "Sidney J. Holbrook".

Sidney J. Holbrook  
Commissioner

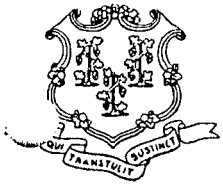
SJH:RHH:mat

cc: file (2)

ORIGINAL COPIES OF SITE PLAN ARE ON FILE  
WITH THE SITING COUNCIL.

**Adjoining Property Owners  
Mohawk Mountain Site  
Cornwall, Connecticut**

MAP	BLOCK	LOT	OWNER	MAILING ADDRESS
F4	1	6	Fabbri, Remo, Jr.	32 Trumbull Street New Haven, CT 06511
F4	1	3	Clark, Harriet L. & Albert M.	69 Clark Road Litchfield, CT 06759
F4			State of CT	Dept. of Env. Protection Cornwall, CT 06753
F4	1	4	Camp Mohawk, Inc.	Cornwall, CT 06753



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



NATURAL RESOURCES CENTER  
79 Elm Street, Store Level  
Hartford, Connecticut 06106-5127  
Natural Diversity Data Base

February 8, 1995

Jenny A. Bittinger  
Land-Tech Consultants, Inc.  
205 Playhouse Corner  
Southbury, CT 06488

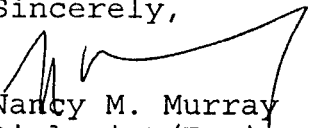
Dear Ms. Bittinger:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided: Mohawk Mountain, Cornwall, Connecticut. According to our information, there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur at the site in question.

Natural Diversity Data Base information includes all information regarding critical biologic resources available to us at the time of the request. This information is a compilation of data collected over the years by the Natural Resources Center's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions (424-3589). Thank you for consulting the Natural Diversity Data Base. Also be advised that this a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,

  
Nancy M. Murray  
Biologist/Environmental  
Analyst III

NMM/dmt

# Swedcom Corporation

## ALP 9212-N

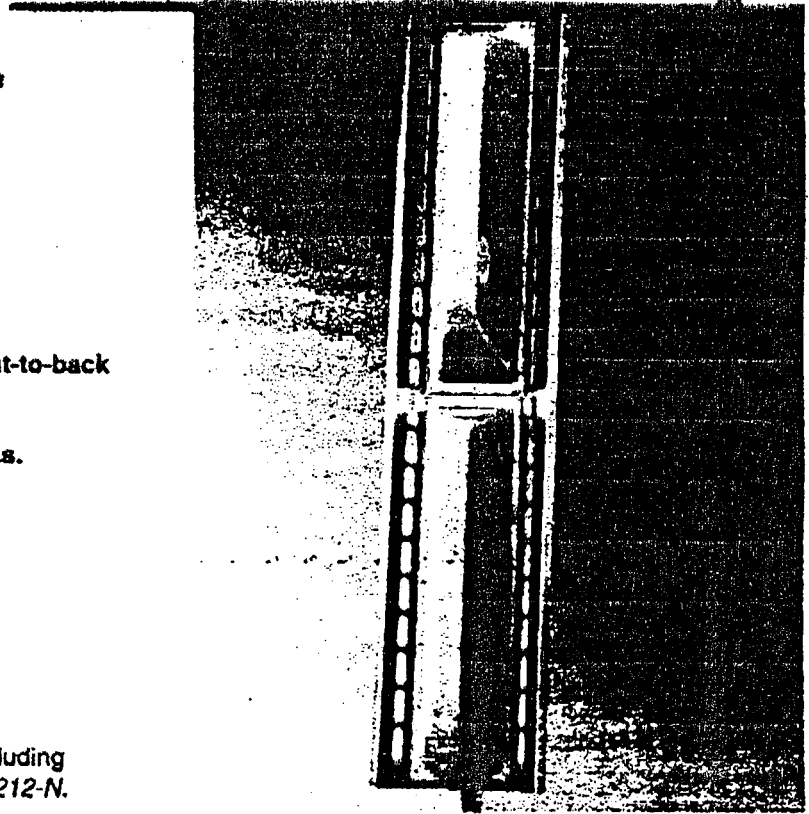
Log-Periodic Reflector Antenna

92 Degrees 12 dBd

### Features:

- Broadbanded. (800-900 MHz)
- Low backlobe radiation. Front-to-back ratio better than 28 dB
- Low Intermodulation Products.
- Low Wind-load.
- Low weight.
- Small size.
- Rugged design.

Please see the following pages including radiation patterns/tables for ALP 9212-N.



### Electrical Specifications:

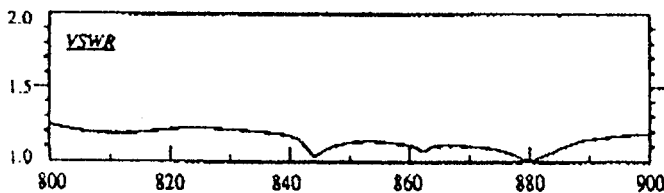
Frequency range:	808-896 MHz
Impedance:	50 ohm
Connector:	N-female or 7/8" EIA
VSWR:	Typ. 1.3:1 max 1.5:1
Polarization:	Vertical
Gain:	12 dBd
Front to back ratio:	>28 dB
Side-lobe suppression:	>18 dB
Intermodulation: (2x25W):	IM3 >146 dB IM5 >153 dB IM7 & IM9 >163 dB
Power Rating:	500 W
H-Plane:	-3 dB 95°
E-Plane:	-3 dB 15°
Lightning Protection:	DC Grounded

### Mechanical Specifications:

Overall Height:	52 in	(1320 mm)
Width:	11.4 in	(290 mm)
Depth:	11.4 in	(290 mm)
Weight including brackets:	26.7 lbs	(12 Kg)
Rated wind velocity:	113 mph	(180 Km/h)
Wind Area (CxA/Front):	3.9 sq.ft	(0.36 sq.m)
Lateral thrust at rated wind		
Worst case:	570 N	

### Materials:

Radiating elements:	Aluminum
Element housing:	Grey PVC
Back-plate:	Aluminum



Mounting hardware	
clamps:	Hot dip galvanized steel
bolts:	Stainless steel

Manufactured by: Allgon System AB