Appalachian WIRELESS www.appwireless.com

P. O. BOX 520 • 15795 S. US 23
HAROLD, KENTUCKY 41635

(606) 478-2355
(800) 452-2355
FAX (606) 478-2356

January 26, 2000

Helen C. Helton, Executive Director
KY Public Service Commission
730 Schenkel Lane
P O Box 615
Frankfort KY 40602

RE: Case No. 2000-002
Application of Appalachian Cellular, LLC
D/b/a Appalachian Wireless
For a Certificate of Public Convenience and Necessity
To construct and operate a Cellular Cell Site at
Price, KY in Floyd County at a point on top of the ridge
Between Left Beaver Creek and Spewing Camp, Floyd County, KY

We enclose herewith the original and five (5) copies of the above referenced document.

This is our request for the above referenced Certificate of Public Convenience and Necessity to construct and operate the above referenced facility. Floyd County has no local planning (zoning) commission that relate to this. A proposed construction notice has been posted in a visible location on the proposed site and shall remain so posted for at least two (2) weeks following the date of application.

Please provide us with a list of additional items (if any) needed in order to obtain the certificate.

If you have any questions, I may be reached at **606 478 9401 ext. 207**, or email at jcamp@gearheart.com.

Sincerely,

James Campbell
Controller

Cc: Paul R. Gearheart

C:\My Documents\FILES\ACGP\Cell Site-4B4B Helton Case No 2000-002)JC.doc

APPALACHIAN CELLULAR, LLC
D/B/A APPALACHIAN WIRELESS
CASE NO. 2000-002 PRICE

LIST OF EXHIBITS

EXHIBIT	ITEM
1.	Notification/Response from County
2.	Copies of Cell Site Notices
3.	Core Drilling analysis
4.	Kentucky Airport zoning Commission Application
5.	Tower Design
6.	FAA Notice of Proposed Construction
7.	1998 Audited Financial Statements
8.	Unaudited Financial Statements thru 11/30/99
9.	Maps to Suitable Scale
10.	Deed of Conveyance or Lease Agreement for the Proposed Tower Site Property
11.	Survey of Site signed and sealed by a professional engineer registered in Kentucky

CASE NO. 2000-002

1. Additional items pursuant to 807 KAR 5:063 Section 1(1):

(e) Clear directions to the proposed site.

At Price, KY in Floyd County at a point on top of the ridge between Left Beaver Creek and Spewing Camp Branch.

(k) A map, drawn to a scale no less than 1 inch equals 200 feet, that identifies every structure and every owner of real estate within 500 feet of the proposed tower.

A map to suitable scale is included as Exhibit 9. There are no structures within 500 feet of the proposed tower. All property owners within 500 feet of the proposed tower are identified in the survey included as Exhibit 11.

(l) A statement that every person who owns property within 500 feet of the proposed tower has been notified by certified mail, return receipt requested, of the proposed construction.

On January 5, 2000, every person who owns property within 500 feet of the proposed tower were notified by certified mail, return receipt requested.

Copies of those certified notices are included as Exhibit 2.

(m) A list of the property owners who received the notice, together with copies of the certified letters sent to listed property owners.

Copies of those certified notices are included as Exhibit 2. The property owners are as follows:

Hal Yungmeyer
Electric Fuels Corporation
First American Center
415 Broad Street, Suite 640-D
Kingsport, TN 37660

(n) A statement that the local planning unit or, if none, the county judge executive, has been (1) notified by certified mail, return receipt requested, of the proposed construction; (2) given the Commission docket number under which the application will be processed; and (3) informed of its, or his, right to request intervention.

We wrote the Floyd county Judge Executive and his response is included as Exhibit 1.

(o) A copy of the notice sent to the local planning unit or, if none, to the county judge executive.

See copy of letter sent to the judge executive via certified mail included as Exhibit 1.

(p) A statement that two written notices, at least 2' X 4', one in a visible location on the proposed site and one on the nearest public road have been, and shall remain, posted for at least two weeks after the application has been filed.

Two written notices, at least 2' X 4', one in a visible location on the nearest public road have been, and shall remain, posted for at least two weeks after the application is final.

(q) A statement that notice of the location of the proposed construction has been published in a newspaper of general circulation in the county in which the construction is proposed.

Notice of the location of the proposed construction has been published in the newspaper of general circulation of Floyd County – The Floyd County Times.

(r) A brief description of the character of the general area in which the tower is proposed to be constructed, which includes the zoning classification and existing land use for the specific property involved.

The general area in which the tower is proposed to be constructed is a hilltop in rural Floyd County, in which there are no zoning restrictions. The land has no apparent alternative uses.

(s) A statement that the utility has considered the likely effects of the installation on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate service to the area can be provided, and
That there is no reasonably available opportunity to co-locate, including a statement indicating that the utility attempted to co-locate on towers designed to host multiple wireless service providers' facilities or existing structures, such as a telecommunications tower, or another suitable structure capable of supporting the utility's facilities.

Appalachian Wireless seeks every opportunity to co-locate whenever possible. At present, we are co-located on three (3) towers of a CATV company and also are co-located on two (2) additional towers owned by BellSouth.

Appalachian Wireless has considered the likely effects of the installation on nearby land users and values and have concluded that there is no more suitable location reasonably available from which adequate service to the area can be provided.

In this particular case, in order to provide adequate service, there is no reasonable available opportunity to co-locate.

2. Additional items pursuant to 807 KAR 5:063 Section 1(2):

(a) The notice on the site must state: "(Name of utility) proposes to construct a telecommunications ('tower' or 'monopole') on this site. If you have questions, please contact (name and address of utility) or the Executive Director, Public Service Commission, 730 Schenkel Lane, P O box 615, Frankfort, Kentucky 40602. Please refer to (assigned docket number) in your correspondence."

(b) The notice posted on the nearest public road must state:

"(Name of utility) proposes to construct a telecommunications ('tower' or 'monopole') near this site. If you have questions, please contact (name and address of utility) or the Executive Director, Public Service Commission, 730 Schenkel Lane, P O box 615, Frankfort, Kentucky 40602. Please refer to (assigned docket number) in your correspondence."

(b) In both posted notices, the work "tower" or "monopole" shall be printed in letters at least four (4) inches high.

The above notices were posted as required.

APPALACHIAN CELLULAR, LLC
D/B/A APPALACHIAN WIRELESS
P O BOX 520
HAROLD KY 41635
606 478 9401
606 478 3650 (FAX)

VIA FAX: 1 606 886 3603

3 PAGES (INCLUDING THIS COVER PAGE)

TO: Floyd County Times

FROM: James Campbell

SUBJECT: Public Notice Ad

DATE: January 5, 2000

Please run the attached Public Notice Ad in your Wednesday, January 12, 2000 issue.

Please send invoice along with affidavit to the address above to my attention.

Please use the standard size type for Public Notices.

PRINT DATE = JAN. 05 '00
PRINT TIME = 15:14

TX RESULT REPORT

FUNCTION	No.	DESTINATION STATION	DATE	TIME	PAGE	COMM. TIME	MODE	RESULT
TX	1	16068863603	JAN. 05	15:12	3	0H02' 00"	STD	ECM OK

FLOYD COUNTY FLOODPLAIN MANAGEMENT

LON MAY
ADMINISTRATOR

361 N. LAKE DR. Suite 1
PRESTONSBURG, KENTUCKY 41653
TELEPHONE: (606) 886-0498

FAX: (606) 886-2003
E-MAIL: fcdes@eastky.net
HOMEPAGE: Members.tripod.com/fcdes/

L.O.I.S. LETTER (LOCATION OF INSURABLE STRUCTURES)

DATE: 12-6-1999

NAME: LON MAY
TITLE: FLOODPLAIN ADMINISTRATOR
AFFILIATION: FLOYD COUNTY FLOODPLAIN ADMINISTRATOR
ADDRESS: 361 NORTH LAKE DRIVE SUITE 1
CITY: PRESTONSBURG STATE: KENTUCKY ZIP: 41653
TELEPHONE: (606) 886-0498

SUBJECT:
NAME: Gerold Robinette
ADDRESS: 5 Laynesville Road
CITY:Harold STATE: KY ZIP: 41635
TELEPHONE: (606) 478-3650

FIRM FLOOD MAP
COMMUNITY NAME: Price
COMMUNITY NUMBER: 210069
PANEL NUMBER: 0100
MAP PANEL SUFFIX: B
MAP PANEL DATE: September 5, 1984
ELEVATION: 1755
COORDINATES: 37°41'15"N 82°44'20"W

Using all available resources, I have determined that the above-cited property is not in a Special Flood Hazard Area on the Food Insurance Rate Maps. No permits will be Requaired at this site.
Please see attached maps.

Sincerely,

Lon May, Floyd County Floodplain Administrator

Appalachian WIRELESS www.appwireless.com

P. O. BOX 520 • 15795 S. US 23
HAROLD, KENTUCKY 41635

(606) 478-2355
(800) 452-2355
FAX (606) 478-2356

Exhibit 1

KY RSA #9
PRICE, FLOYD COUNTY, KY
CELL SITE
PUBLIC NOTICE

January 10, 2000

Hal Yungmeyer
Electric Fuels Corporation
First American Center
415 Broad Street, Suite 640-D
Kingsport, TN 37660

RE: Public Notice – Public Service Commission of Kentucky (Case No. 2000-002)

Appalachian Cellular, LLC d/b/a Appalachian Wireless has applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide cellular radio telecommunication service. The facility will include a 300 foot guyed ___ self supported X tower, with attached antennas extending upwards, and an equipment shelter to be located at Price, Kentucky, in Floyd County, at a point on top of the ridge between Left Beaver Creek and Spewing Camp Branch. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you own property or reside within a 500' radius of the proposed tower.

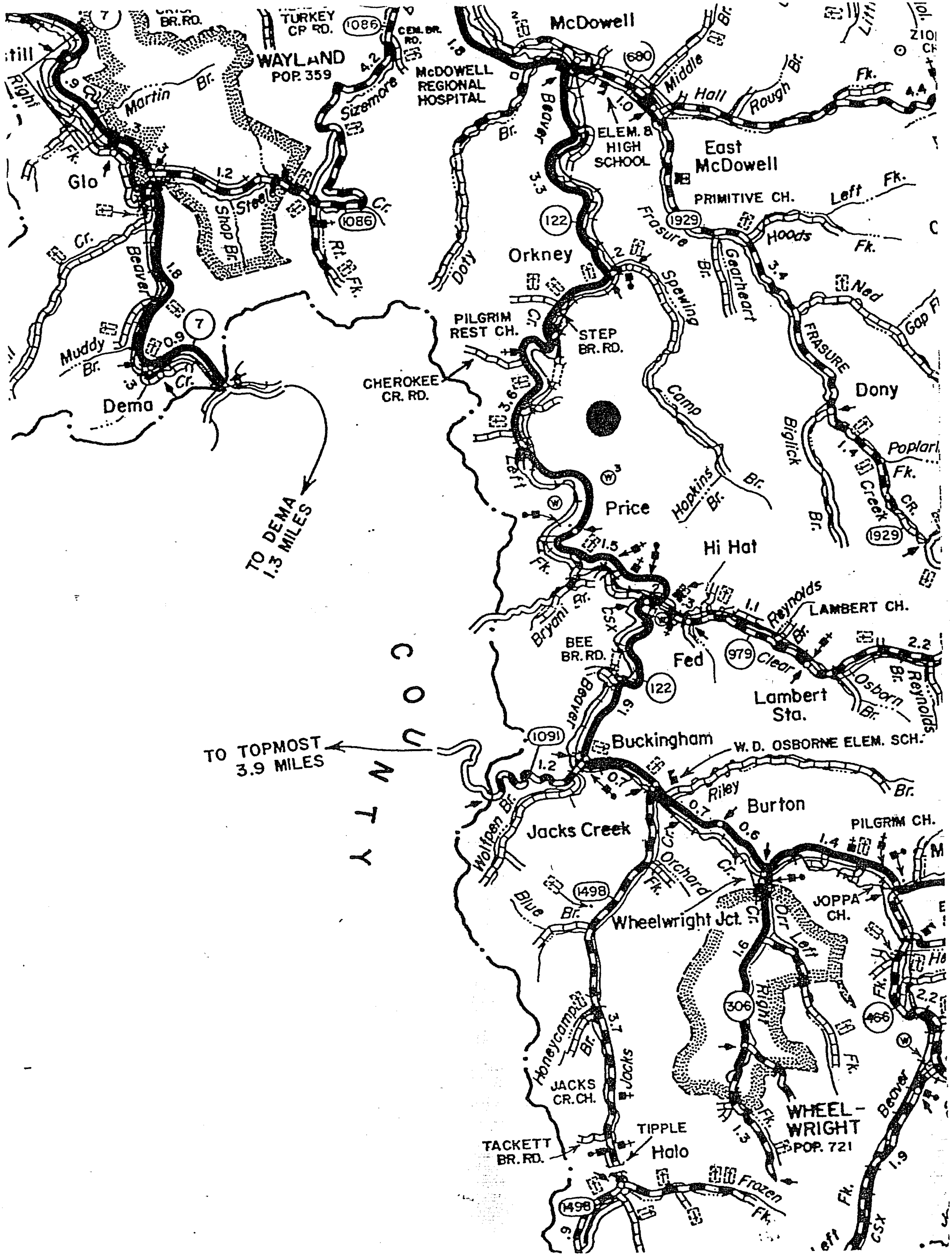
The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within 20 days of the date of this letter as shown above.

Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, P. O. Box 615, Frankfort, KY 40602. Please refer to Case No. 2000-002 in your correspondence.

Sincerely,

James Campbell
Controller

C:\My Documents\FILES\ACGP\Cell Site-4B (Price Floyd Co PUBLIC Notice).doc


WAYLAND
POP. 359
TURKEY CP RD.
McDOWELL REGIONAL HOSPITAL
McDowell
Glo
Martin Br.
Sizemore
Steel
Shop Br.
Beaver
Muddy Br.
Dema
Cr.
TO DEMA 1.3 MILES
ELEM. & HIGH SCHOOL
East McDowell
PRIMITIVE CH.
Middle
Hall
Rough
Left Fk.
Hoods Fk.
Orkney
Doty Br.
Frasure Br.
Gearheart
Spewing Camp
Ned
Gap Fk.
FRASURE
Dony
Biglick Br.
Poplar Fk.
Creek
PILGRIM REST CH.
STEP BR. RD.
CHEROKEE CR. RD.
Price
Hopkins Br.
Hi Hat
Bryant Br.
BEE BR. RD.
CSX
Fed
Reynolds Br.
LAMBERT CH.
Clear
Osborn Br.
Lambert Sta.
COUNTY
TO TOPMOST 3.9 MILES
Buckingham
W. D. OSBORNE ELEM. SCH.
Riley Br.
Burton
Wolfpen Br.
Jacks Creek
PILGRIM CH.
Orchard Cr.
Blue Br.
Wheelwright Jct.
JOPPA CH.
Orr Cr.
Left Fk.
Right Fk.
Honeycamp Br.
Jacks
JACKS CR. CH.
TIPPLE
TACKETT BR. RD.
Halo
WHEEL-WRIGHT
POP. 721
Frozen Fk.
Beaver
1086
680
122
1929
979
1091
1498
306
466
7

Nell

Z 190 215 946

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to HAL YUNGMEYER	
Street & Number ELECTRIC FUELS CORPORATION	
Post Office, State, & ZIP Code FIRST AMERICAN CENTER 415 BROAD STREET, SUITE 640-D KINGSPORT TN 37660	
Postage	$ .33
Certified Fee	1.40
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.25
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$ 2.98
Postmark or Date	JAN 05 2000

HEBRON KY 41048
USPS

PS Form 3800, April 1995

Geotram Environmental Services

50 Best Street
Prestonsburg, KY 41653

Telephone 606.886.0955
Fax 606.886.8265

December 28, 1999

PRICE TOWER SITE

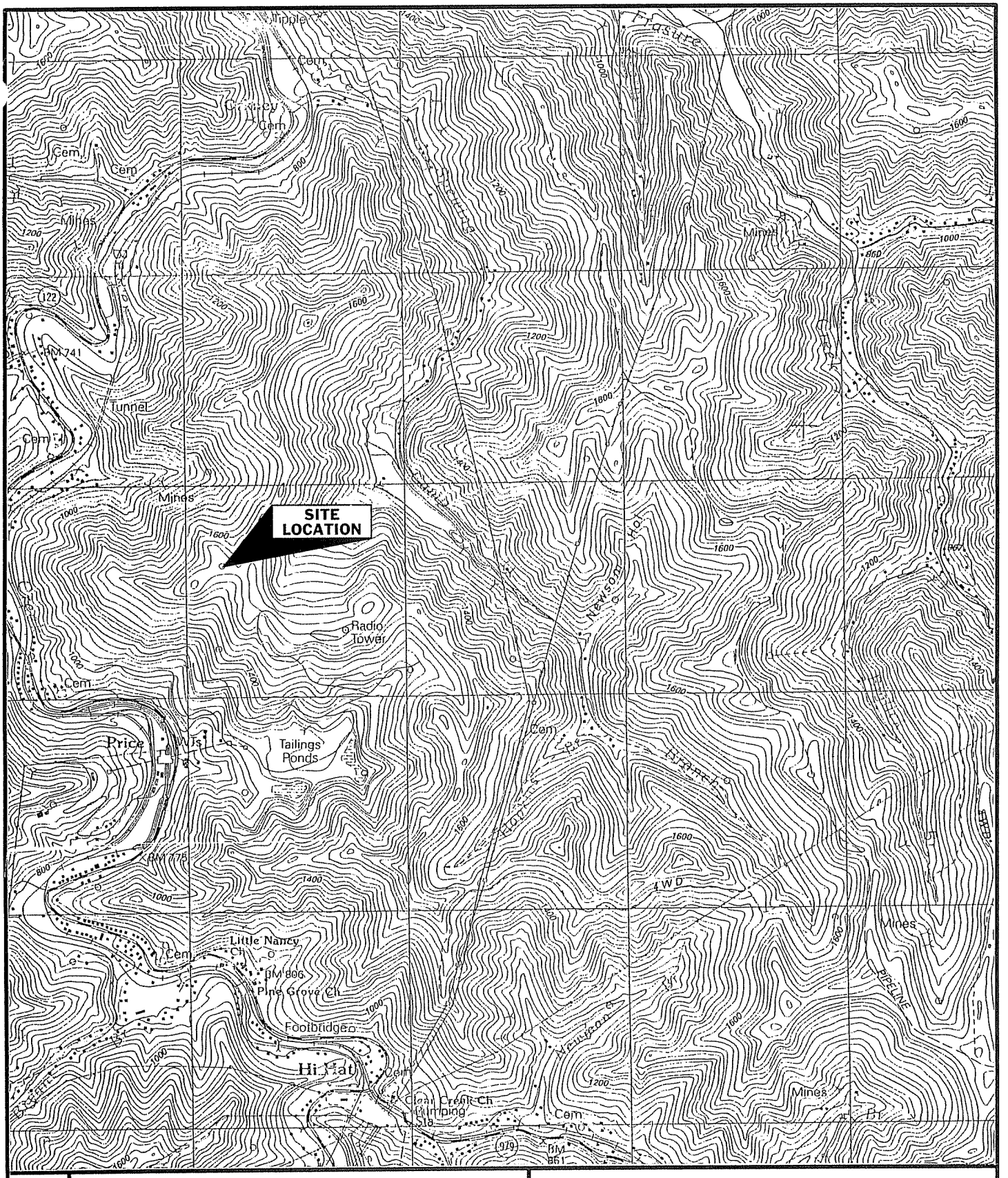
The following information and conclusions are based on data obtained during a site visit conducted on December 22, 1999, in conjunction with data obtained from the McDowell Geologic Quadrangle. The Price Tower Site is located on a knob approximately eight thousand two hundred (8,200) feet northwest of the intersection of Route 979 and Route 122, and approximately seven thousand (7,000) feet southeast of intersection of Spewing Camp Branch and Route 122 at an elevation of 1755 msl (lat. 37° 24' 35" Long. 82° 44' 13.6").

The access road and the tower site were being constructed during the site visit, which allowed for additional subsurface information to be obtained. The proposed tower site will be constructed upon a massive sandstone formation greater than thirty (30) feet in thickness. The underlying formation consists of a shale-fireclay-coal-fireclay-shale sequence approximately eight (8) feet in thickness. Underlying the shale-fireclay sequence is another massive sandstone formation greater than twenty-five (25) feet in thickness. The proposed tower support base will be constructed upon the sandstone caprock with minimal amounts of the remaining soil debris as a result of site development and construction.

Tests were not conducted to determine the Load Bearing Strength of the bedrock. The field work for this project and the associated report was performed by Stephen R. Gearheart, P.G., using generally accepted methods in the practice of geological science.

The collection of field data and the associated report was performed by Stephen R. Gearheart, P.G., using generally accepted methods in the practice of geological science.

Stephen R. Gearheart, P.G.



Drawn By: LJG
091228

Appalachian Cellular
Price Tower Site

Geotram Environmental Services

Underground Storage Tank Management, Site Investigations, Drilling Services, Consulting

50 Best Street
Prestonsburg, KY 41653

(606) 886-0955
(606) 886-8265 (FX)

Stephen R. Gearheart, P.G., C.E.I.

December 13, 1999

(202) 828-9489
TELECOPIER
(202) 828-8405

Via Federal Express

Kentucky Airport Zoning Commission
125 Holmes Street
Frankfort, KY 40622

Attention: Mr. Ronald J. Bland, Administrator

Dear Mr. Bland:

Forwarded herewith in accordance with KRS 183.990 and Chapter 50 of Title 602 of the Kentucky Administrative Regulations, is an "Application for Permit to Construct or Alter a Structure" (Form TC 56-50) for a communications tower proposed at a site approximately .56 miles southwest of Price (Floyd Co.), KY.

A copy of the FAA flight safety determination for the proposed tower structure has been included with this application.

If you have any questions, please do not hesitate to call the undersigned.

Thank you for your consideration in this matter.

Sincerely,

LeRoy A. (Art) Adam
Consulting Engineer

LAA:la
Enclosures
cc: Appalachian Cellular

TC 56-50
Rev. 5/89

KENTUCKY TRANSPORTATION CABINET
OFFICE OF AERONAUTICS
421 ANN STREET
FRANKFORT, KENTUCKY 40622

Application for Permit to Construct or Alter a Structure

—Instructions on Reverse Side of Form—

-DO NOT FILL IN-

AERONAUTICAL STUDY NO.

APPLICANT - NAME & ADDRESS

Appalachian Cellular, LLC
c/o Lukas, Nace, Gutierrez & Sachs
1111 19th Street NW, Suite 1200
Washington D.C. 20036

TELEPHONE NO.

(202) 857-3500

TYPE OF STRUCTURE

1. CHECK ONE

☒ New Construction ☐ Alteration

2. CHECK ONE

☒ Permanent ☐ Temporary
Length of time _____ months.

3. NATURE AND COMPLETE DESCRIPTION OF STRUCTURE

Structure: New 300' Self-supported Communications Tower with a 25' antenna top-mounted.

Frequency: Cellular Band B (880-890 MHz)

ERP: 200 Watta (Max.)

4. County in which construction will take place Floyd County.

LOCATION OF STRUCTURE -submit a map-

5. COORDINATES (To nearest second)						6. NEAREST CITY OR TOWN, & STATE	
LATITUDE			LONGITUDE			Price, KY	
37°	24	35.0	82°	44	13.6	(a) DISTANCE TO 6. .56 Miles	(b) DIRECTION TO 6. N204°E

7. NAME OF NEAREST PUBLIC AIRPORT WITHIN KY. BOUNDARIES	8. DISTANCE & DIRECTION TO NEAREST POINT OF NEAREST RUNWAY
Pikeville Co. - Hatcher Field (7KO)	14.2 miles at N41.70°E

9. HEIGHT & ELEVATION (Complete A,B & C to nearest foot)		10. WORK SCHEDULE DATES
A. ELEVATION OF SITE ABOVE MEAN SEA LEVEL	1755'	A. WILL START 1/25/00
B. HEIGHT OF STRUCTURE INCLUDING APPURTENANCES & LIGHTING(if any) ABOVE GROUND, OR WATER IF SO SITUATED	325'	B. WILL COMPLETE 2/8/00
C. OVERALL HEIGHT ABOVE MEAN SEA LEVEL (A + B)	2080'	

D. IF APPLICATION IS FOR CONSTRUCTION/ALTERATION OF AN OVERHEAD TRANSMISSION LINE OR STATIC WIRE WITH SPAN LENGTH 1000 FEET OR MORE. See Appendix E

11. CHECK IF COMPLETED STRUCTURE WILL BE	YES	NO
A. MARKED FOR THE PROTECTION OF AIR NAVIGATION	X	
B. PAINTED AS SPECIFIED IN THE REGULATIONS OF THE COMMISSION RELATED TO OBSTRUCTION MARKING	X	
C. LIGHTED AS SPECIFIED IN THE REGULATIONS OF THE COMMISSION RELATED TO OBSTRUCTION MARKING	X	

12. HAS "NOTICE OF CONSTRUCTION OR ALTERATION" (Form 7460-1) BEEN FILED WITH FEDERAL AVIATION ADMINISTRATION FOR AIRSPACE CLEARANCE? IF SO, WHEN FILED? Yes; 8/12/99

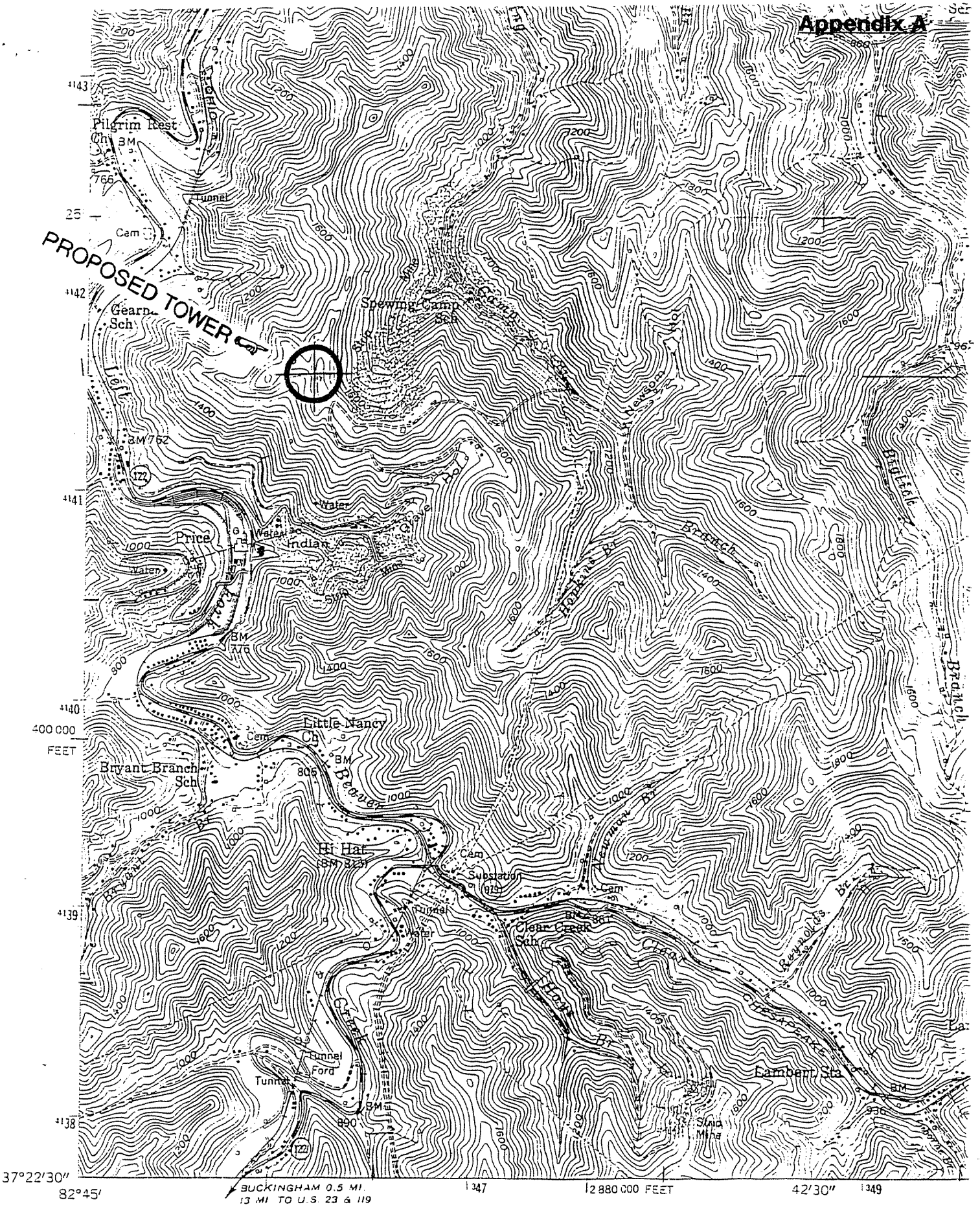
13. CERTIFICATION — *I Hereby Certify that all the above statements made by me are true, complete, and correct to the best of my knowledge and brief.*

By LeRoy A. Adam, Consulting Engineer Date 12/13/99
-Signature & Title of Individual Authorized to Make this Certification-

PENALTY — See Reverse Side of this Form

COMMISSION ACTION	
APPROVED ☐	☐ CHAIRMAN, KAZC (OR) ☐ ADMINISTRATOR, KAZC
DISAPPROVED ☐	_____ Date _____

Appendix A



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by stereophotogrammetric methods and from coal company maps stereo-compiled in 1947, revised from aerial photographs taken 1952. Entire map field checked 1954

Polyconic projection. 1927 North American datum

MC DOWELL, KY.

NW/4 PIKEVILLE 15' QUADRANGLE

N3722.5—W8237.5/7.5

1954

PHOTOREVISED 1979

AMS 4458 NW—SERIES V853

LUKAS, NACE, GUTIERREZ & SACHS
CHARTERED
1111 NINETEENTH STREET, N.W.
SUITE 1200
WASHINGTON, D.C. 20036
(202) 857-3500

RUSSELL D. LUKAS
DAVID L. NACE
THOMAS GUTIERREZ
ELIZABETH R. SACHS
GEORGE L. LYON, JR.
JOEL R. KASWELL
PAMELA L. GIST
DAVID A. LaFURIA
J. JUSTIN McCLURE
MARILYN SUCHECKI MENSE
PAMELA GAARY HOLRAN
B. LYNN F. RATNAVALE
ELIZABETH H. CRONISE*
* NOT ADMITTED IN D.C.
*ADMITTED ONLY IN VIRGINIA

CONSULTING ENGINEERS
THOMAS G. ADCOCK, P.E.
MEHRAN NAZARI
ALI KUZEHKANANI
LEROY A. ADAM
LEILA REZANAVAZ

OF COUNSEL
JOHN J. MCAVOY
J.K. HAGE III*

TELECOPIER
(202) 842-4485

Email: lngs@fcclaw.com
http://www.fcclaw.com

WRITER'S DIRECT DIAL
(202) 828-9489
TELECOPIER
(202) 828-8405

August 12, 1999

Via Federal Express

Ms. Sandy Brodnax
Federal Aviation Administration
Southern Regional Office
Air Traffic Division, Airspace Branch ASO-520
1701 Columbia Avenue
College Park, Georgia 30337

Dear Sandy:

Enclosed please find one FAA Form 7460-1 (Notice of Proposed Construction) for a 325' self-supported communications tower structure (300' tower plus 25' antenna/lightning rod) proposed near Price (Floyd County), Kentucky. The proposed site is approximately .56 miles NNE of Price.

The proponent, Appalachian Cellular, LLC, is the licensee for Cellular Block B service in Kentucky RSA-9 (Elliott), Market No. 451. Transmit frequencies to be used at this station are Cellular Band B (880-890 MHz); the maximum ERP will be 200 Watts. A 6 GHz point-to-point microwave system will also be operated with maximum ERP of 1.0 Watt.

The transmitting system proposed for this site will be installed and maintained such that transmitter spurious radiation in the frequency range of 118 MHz to 137 MHz shall be attenuated at least 71 dB below the unmodulated carrier level.

Geographic coordinates are based on 1927 North American Datum.

The ground elevation at the site was read from a 7.5 minute USGS topographic map.

The proponent respectfully requests FAA permission to install dual obstruction lighting (red and medium intensity white) in lieu of other marking and lighting for the proposed Price tower.

Should you have any questions or require additional information, please do not hesitate to call the undersigned at the above identified telephone number.

Sincerely,

LeRoy A. (Art) Adam
Consulting Engineer

Enclosure
cc: Appalachian Cellular, LLC
Attention: Gerald Robinette

638S25\Brodnax.812

U.S. Department of Transportation
Federal Aviation Administration

Notice of Proposed Construction or Alteration

Failure To Provide All Requested Information May Delay Processing Of Your Notice

Aeronautical Study Number
Appendix B
Page 3 of 4

1. Nature of Proposal

A. Type	B. Class	C. Work Schedule Dates
[X] New Construction	[X] Permanent	Beginning 10/11/99
[ ] Alteration *	[ ] Temporary (Duration _____ months)	End 10/29/99

* If Alteration, provide previous FAA Aeronautical Study Number, if available :

3A. Name, address, and telephone number of individual, company corporation, etc. proposing the construction or alteration. (Number, Street, City, State, and Zip Code)

Appalachian Cellular, LLC
c/o Lukas, Nace, Gutierrez & Sachs
1111 19th St. N.W., Suite 1200
Washington, DC 20036

Area Code 202 Telephone Number 857-3500

3B. Name, address and telephone number of proponent's representative, if different than 3A. above.

LeRoy A. (Art) Adam
Lukas, Nace, Gutierrez & Sachs
1111 19th St. N.W., Suite 1200
Washington, DC 20036

(202) 828-9489
Area Code Telephone Number

2. Complete Description of Structure

Please describe the proposed construction or alteration.

A. For proposals involving transmitting stations, include effective radiated power (ERP) and assigned frequency. If not known, give frequency band and maximum ERP.

B. For proposals involving overhead wire, transmission lines, etc., include the size and the configuration of the wires and their supporting structures.

C. For buildings, include site orientation, dimensions, and construction materials.

D. **Optional**— Describe the type of obstruction marking and lighting system desired. The FAA will consider this in their study.

A: Band B Cellular (880-890 MHz)
ERP = 200 W. (max.)

point-to-point microwave
(6 GHz Band)

D: Dual lighting (Red and Medium intensity white)

4. Location Of Structure

A. Coordinates (to hundredths of seconds, if known)	B. Nearest City or Town and State	C. Nearest public or military airport, heliport, flightpark, or seaplane base
Latitude 0 ' "	Price	Pikeville Co.-Hatcher Field (7k0)
37 | 24 | 35 . 0	(1). Distance to 4B	(1). Distance from structure to nearest point of nearest runway
Longitude 0 ' "	.56 mi.	14.2 mi.
82 | 44 | 13 . 6	(2). Direction to 4B	(2). Direction from structure to airport
	N204°E	N41.72°E

4D. Source for item 4A data.
[X] USGS 7.5' Quad Chart [ ] Survey [ ] Other Specify

...le the reference datum.
[X] NAD 27 [ ] NAD 83 [ ] Other Specify

5. Height and Elevation (to nearest foot)

A. Elevation of ground above mean sea level.	1755'
B. Height of structure including all appurtenances and lighting above ground or water.	325'
C. Overall height above mean sea level	2080'

4E. **Description of site location with respect to highways, street, airports, prominent terrain, features, existing structures, etc.** Please attach a U.S. Geological Survey Map (or equivalent) showing the construction site. If available, attach a copy of a documented site survey with the surveyor's certification.

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 1501). Persons who knowingly and willfully violate the Notice requirements of Part 77 are subject to a civil penalty of $1,000 per day until the notice is received, pursuant to Section 901(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app § 1471(a)) as well as the fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app § 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards as necessary.

Date	Typed or Printed Name and Title of Person Filing Notice	Signature
8/12/99	LeRoy A. Adam, Consulting Engineer	LeRoy A. Adam

FOR FAA USE ONLY

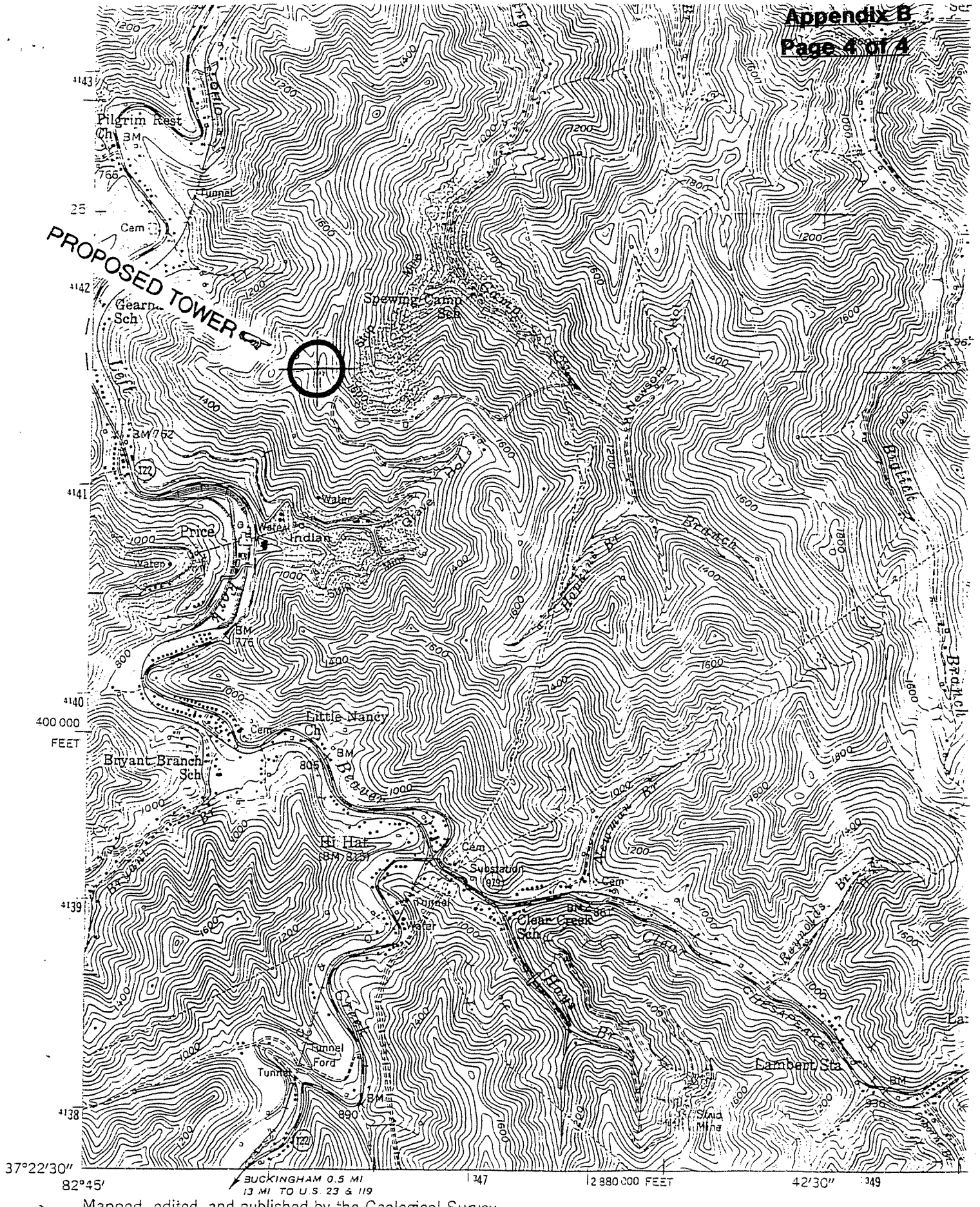
...ile Proposal

...Latitude ... Longitude

Issued in	Signature	Date

FAA Form 7460-1 (5-94) Supersedes Previous Edition

NSN: 0052-00-012-0007



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by stereophotogrammetric methods and from coal company maps stereo-compiled in 1947, revised from aerial photographs taken 1952. Entire map field checked 1954

Polyconic projection. 1927 North American datum

(KITE)
4458 IV SE

MC DOWELL, KY.

NW/4 PIKEVILLE 15' QUADRANGLE
N3722.5—W8237.5/7.5

1954
PHOTOREVISED 1979
AMS 4458 NW—SERIES V855

Appendix D

The proposed structure is to be constructed for the purpose of cellular radio transmission considered to be a "minor modification" of our existing system. Therefore, under Section 22.163(e) of Federal Communications Commission rules, no application for FCC license is required.

A copy of the current station authorization is provided herewith.

638S16\APPEND-D.D30

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

\DIO STATION AUTHORIZATION

OBILE RADIO AUTHORIZATION
CC FORM 463

ELLULAR RADIO TELEPHONE SERVICE

APPALACHIAN CELLULAR GENERAL PARTNERSHIP
P.O. BOX 160
HAROLD, KY 41635

CALL SIGN: KNKN880
SYSTEM IDENTIFICATION NUMBER: 1290

Page 01

OPERATOR: KKC

MARKET: 0451 KENTUCKY 9 - ELLIOTT

ORIGINAL GRANT DATE: OCTOBER 23, 1991
DATE OF ISSUE: APRIL 15, 1996
EXPIRATION DATE: OCTOBER 1, 2001

AUTHORIZATION IS GRANTED FOR CELLULAR FREQUENCY BLOCK: B-1
BASE: 880.02 - 889.98 MHZ, 891.51 - 893.97 MHZ
MOBILE: 835.02 - 844.98 MHZ, 846.51 - 848.97 MHZ

CONTROL POINT NO. 001 U.S. 23
HAROLD KY

LOCATION NO. 001:
LATITUDE: 37 47 42 N
1.4 KM SOUTH OF
CITY: PAINTSVILLE
STATE: KENTUCKY
LONGITUDE: 082 48 03 W
COUNTY: JOHNSON

ANTENNA MARKINGS: *A,H,I

PARAGRAPH A MODIFIED TO REQUIRE USE OF L-865 MEDIUM INTENSITY LIGHTS IN LIEU OF L-856. LIGHTS SHALL EMIT A PEAK INTENSITY OF APPROXIMATELY 2000 CANDELAS AT NIGHT IN LIEU OF 4000.

LOCATION NO. 002:
LATITUDE: 37 35 39 N
2.25 KM SOUTHEAST
OF
CITY: ALLEN
STATE: KENTUCKY
LONGITUDE: 082 42 44 W
COUNTY: FLOYD

ANTENNA MARKINGS: A,H,I

PARAGRAPH A MODIFIED TO REQUIRE USE OF L-865 MEDIUM INTENSITY LIGHTS IN LIEU OF L-856. LIGHTS SHALL EMIT A PEAK INTENSITY OF APPROXIMATELY 2000 CANDELAS AT NIGHT IN LIEU OF 4000.

FEDERAL
COMMUNICATIONS
COMMISSION

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

RADIO STATION AUTHORIZATION

CALL SIGN: KNKN880

LOCATION NO. 003:

LATITUDE: 37 31 59 N
JOE'S KNOB 6.4 KM NORTH OF
CITY: PIKEVILLE
STATE: KENTUCKY

LONGITUDE: 082 29 40 W

COUNTY: PIKE

ANTENNA MARKINGS: A,H,I

PARAGRAPH A MODIFIED TO REQUIRE USE OF L-865 MEDIUM INTENSITY LIGHTS IN LIEU OF L-856. LIGHTS SHALL EMIT A PEAK INTENSITY OF APPROXIMATELY 2000 CANDELAS AT NIGHT IN LIEU OF 4000.

LOCATION NO. 004:

LATITUDE: 37 56 11 N
1.6 KM NORTH OF
CITY: WEST LIBERTY
STATE: KENTUCKY

LONGITUDE: 083 15 22 W

COUNTY: MORGAN

ANTENNA MARKINGS: 1,3,11,21,22

LOCATION NO. 005:

LATITUDE: 37 43 08 N
1.1 KM NORTH OF
CITY: IVYTON
STATE: KENTUCKY

LONGITUDE: 082 58 44 W

COUNTY: MAGOFFIN

ANTENNA MARKINGS: 1,3,4,13,21,22

LOCATION NO. 006:

LATITUDE: 38 02 02 N
3.1 KM ESE OF
CITY: ADAMS
STATE: KENTUCKY

LONGITUDE: 082 39 41 W

COUNTY: LAWRENCE

ANTENNA MARKINGS: 1,3,11,21,22

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UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

DIO STATION AUTHORIZATION

CALL SIGN: KNKN880

OCATION NO. 008:
LATITUDE: 37 27 56 N
KIMPER REPEATER 3.9 KM SSW OF
CITY: KIMPER
STATE: KENTUCKY
LONGITUDE: 082 21 57 W
COUNTY: PIKE

ANTENNA MARKINGS: 1,3,11,21,22

OCATION NO. 009:
LATITUDE: 37 17 15 N
FLATWOOD MOUNTAIN 7.1 KM EAST OF
CITY: DORTON
STATE: KENTUCKY
LONGITUDE: 082 30 03 W
COUNTY: PIKE

ANTENNA MARKINGS: NONE

LOCATION NO. 010:
LATITUDE: 37 33 26 N
PHELPS REPEATER 4.8 KM NORTH OF
CITY: PHELPS
STATE: KENTUCKY
LONGITUDE: 082 10 13 W
COUNTY: PIKE

ANTENNA MARKINGS: 1,3,11,21,22

LOCATION NO. 011:
LATITUDE: 37 50 58 N
3.2 KM SOUTHEAST OF
CITY: INEZ
STATE: KENTUCKY
LONGITUDE: 082 30 35 W
COUNTY: MARTIN

ANTENNA MARKINGS: NONE

LOCATION NO. 012:
LATITUDE: 37 37 20 N
1.9 KM NNE OF
CITY: CANADA
STATE: KENTUCKY
LONGITUDE: 082 18 58 W
COUNTY: PIKE

ANTENNA MARKINGS: 1,3,11,21,22

LOCATION NO. 014:
LATITUDE: 38 04 10 N
ON THE NORTH SIDE OF SR32 AND 4.6 KM SE OF
CITY: SANDY HOOK
STATE: KENTUCKY
LONGITUDE: 083 04 35 W
COUNTY: ELLIOTT

ANTENNA MARKINGS: NONE

FEDERAL
COMMUNICATIONS
COMMISSION

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

DIO STATION AUTHORIZATION

CALL SIGN: KNKN880

WAIVERS AND CONDITIONS

THIS AUTHORIZATION DOES NOT CONVEY TO THE LICENSEE THE RIGHT TO RECEIVE PROTECTION FROM THE CAPTURE OF SUBSCRIBER TRAFFIC, CO-CHANNEL INTERFERENCE OR FIRST-ADJACENT-CHANNEL INTERFERENCE IN ANY AREA OUTSIDE OF THE AUTHORIZED CELLULAR GEOGRAPHIC SERVICE AREA (CGSA) OF THE SYSTEM. MOREOVER, ANY FACILITY AUTHORIZED HEREIN WITH A SERVICE AREA BOUNDARY (SAB) EXTENDING INTO THE CGSA OF ANY OTHER OPERATING CELLULAR SYSTEM ON THE SAME CHANNEL BLOCK, REGARDLESS OF WHEN SUCH OTHER CELLULAR SYSTEM WAS/IS AUTHORIZED, IS SUBJECT TO THE FOLLOWING CONDITION: IN THE EVENT THAT THE LICENSEE OF THE OTHER CELLULAR SYSTEM REQUESTS THAT THE SAB OF THE FACILITIES AUTHORIZED HEREIN BE REMOVED FROM ITS CGSA, THE LICENSEE HEREIN MUST REDUCE TRANSMITTING POWER OR ANTENNA HEIGHT (OR BOTH) AS NECESSARY TO REMOVE THE SAB FROM THE CGSA, UNLESS WRITTEN CONSENT FROM THE LICENSEE OF THE OTHER CELLULAR SYSTEM, ALLOWING THE SAB EXTENSION, IS OBTAINED.

FEDERAL
COMMUNICATIONS
COMMISSION

AUTHORIZATION CONDITIONS AND REQUIREMENTS

tion of this station is governed by Commission's Rules.

uthorization permits only the use of rs as appear in the Commission's ment Acceptable for Licensing" ervices other than Broadcast. The or mobile transmitters shall not ts. The Effective Radiated Power nsmitters under Sub-Part K shall vatts.

completion of station construction, with the terms of this authoriza- tee shall, on the forms and in the ribed from time to time by the Com- e known to the satisfaction of the that all the terms, conditions, and t forth in the application and in this have been fully met. After such notification, and upon a finding by ion that since the granting of this no cause or circumstance has arisen judgement of the Commission, makes of the station against the public Commission will without notification authorization for operation of the reafter this authorization contains the ecified in Section 309 of the Com- Act of 1934, as amended, and such and conditions as the Commission e.

4. During construction this authorization shall not vest in the grantee any right to operate the station, nor any right to any authorization permitting the use of the particular frequency or the amount of power, or any herein specified time of operation. The Commission, in issuing this authorization, reserves the right to assign whatever frequency, power, or time of operation it deems best calculated to serve public interest, convenience, or necessity. The terms of said authorization as to frequencies, power, emission, time of operation, and scope of communications expressly made subject to the exercise of said reserved right.

5. Nothing contained herein shall be construed as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require otherwise. The permittee expressly agrees to install such marking or lighting as the Commission may hereafter require under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

6. This authorization shall become automatically forfeited if the said station is not ready for operation within the time specified, unless prior to the date of required completion of construction the Commission shall have granted an extension of time. Upon proper showing, made to it by the grantee and received at the Commission prior to the expiration of such period, the Commission may grant an extension if it finds that the grantee was prevented from completing the construction of said station by causes beyond the grantee's control.

7. This authorization is issued on the grantee's representation that the statements contained in his applications and notifications are true and that the undertakings therein contained, so far as they are consistent herewith, will be carried out in good faith. The permittee shall, during the term of this authorization, render such service as will serve public interest, convenience, or necessity to the full extent of the privileges herein conferred.

8. Neither this authorization nor the right granted herein shall be assigned or otherwise transferred to any person, firm, company, or corporation in violation of the Communications Act of 1934, as amended, and without the written consent of the Commission. This authorization shall not vest the permittee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. This authorization is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934, as amended.

Federal Aviation Administration
Southern Region, ASO-520
P.O. Box 20636
Atlanta, GA 30320

AERONAUTICAL STUDY
No: 99-ASO-4152-OE

ISSUED DATE: 09/14/99

C/O LUKAS,NACE,GUTIERREZ & SACHS
APPALACHIAN CELLULAR, LLC
1111 19TH ST N.W., STE 1200
WASHINGTON, DC 20036

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Description: NEW ANTENNA TOWER
880-890 MHZ/200 WATTS;MW 6 GHZ/1 WATT
Location: PRICE KY
Latitude: 37-24-35.36 NAD 83
Longitude: 082-44-13.16
Heights: 325 feet above ground level (AGL)
2080 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

-As a condition to this determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting, Chapters 4, 8(M-Dual), & 13.

-It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

N/A At least 10 days prior to start of construction (7460-2, Part I)

X Within 5 days after construction reaches its greatest height (7460-2, Part II)

While the structure does not consitute a hazard to air navigation, it would be located within or near a military training area and/or route.

This determination expires on 03/14/01 unless:

(a) extended, revised or terminated by the issuing office or
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case the determination expires on the date prescribed by the FCC for completion of construction or on the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

-As a result of this structure being critical to flight safety, it is

required that the FAA be kept apprised as to the status of this project. Failure to respond to periodic FAA inquiries could invalidate this determination.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, frequency(ies) or use of greater power will void this determination. Any future construction or alteration, including increase in heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at 404-305-5581. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 99-ASO-4152-OE.

Wade Carpenter

Wade Carpenter
Specialist, Airspace Branch

(DNE)

7460-2 Attached

World Headquarters
6718 W. Plank Rd.
Peoria, IL 61604 USA
Ph: 309-697-4400
FAX: 309-697-5612

ROHN Industries, Inc.

PURCHASER: A&D COMMUNICATIONS

NAME OF PROJECT: PRICE, FLOYD COUNTY, KENTUCKY
300 FT. MODEL SSVMW TOWER

ROHN FILE NUMBER: 41713TR

ROHN DRAWING NUMBER: A992322

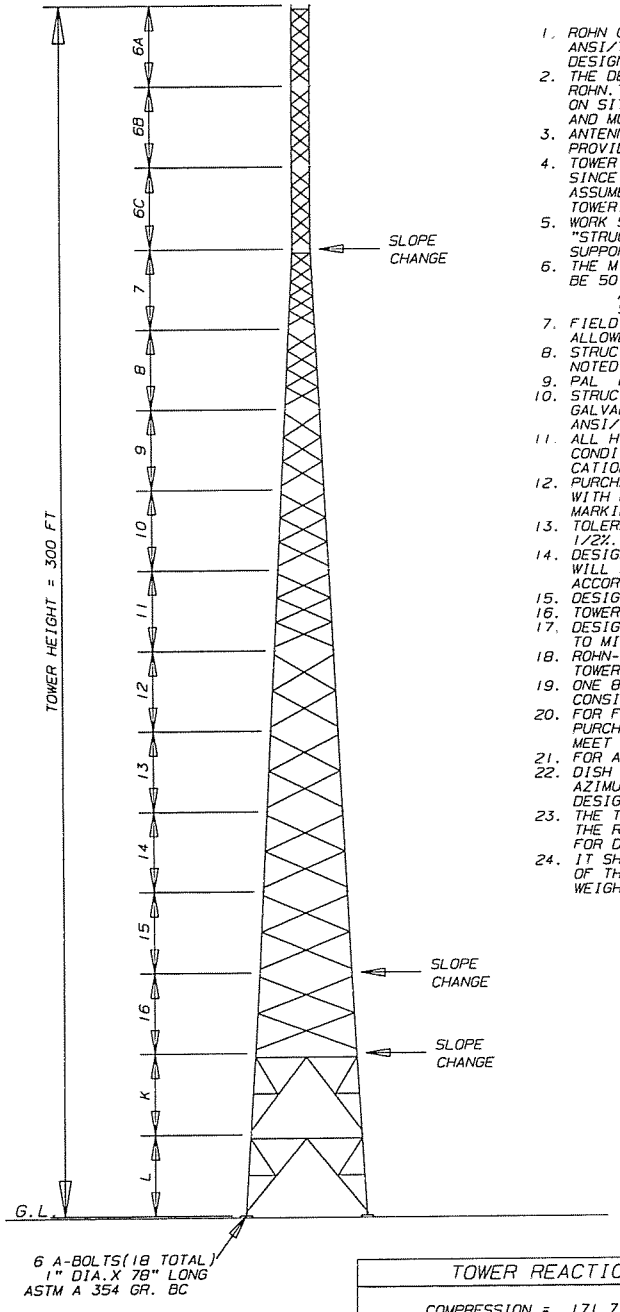
I CERTIFY THAT THE REFERENCED TOWER DESIGN WAS PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH THE LOADING AND SOIL CRITERIA SPECIFIED BY THE PURCHASER AND THAT I AM A REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF KENTUCKY.

THE REFERENCED FOUNDATIONS ARE STANDARD FOUNDATIONS DESIGNED IN ACCORDANCE WITH ANSI/EIA-222-F NORMAL SOIL PARAMETERS. STANDARD FOUNDATIONS SHOULD NOT BE RELIED UPON FOR THE REFERENCED SITE WITHOUT COMPETENT PROFESSIONAL EXAMINATION AND VERIFICATION OF THEIR SUITABILITY BASED ON THE SUBSURFACE CONDITIONS EXISTING AT THE SITE.

CERTIFIED BY: _____

DATE: 9-7-

STATE OF KENTUCKY
THOMAS W. SCHEPKE
17102
LICENSED PROFESSIONAL ENGINEER



GENERAL NOTES

1. ROHN COMMUNICATION TOWER DESIGNS CONFORM TO ANSI/TIA/EIA-222-F UNLESS OTHERWISE SPECIFIED UNDER TOWER DESIGN LOADING.
2. THE DESIGN LOADING CRITERIA INDICATED HAS BEEN PROVIDED TO ROHN. THE DESIGN LOADING CRITERIA HAS BEEN ASSUMED TO BE BASED ON SITE-SPECIFIC DATA IN ACCORDANCE WITH ANSI/TIA/EIA-222-F AND MUST BE VERIFIED BY OTHERS PRIOR TO INSTALLATION.
3. ANTENNAS AND LINES LISTED IN TOWER DESIGN LOADING TABLE ARE PROVIDED BY OTHERS UNLESS OTHERWISE SPECIFIED.
4. TOWER MEMBER DESIGN DOES NOT INCLUDE STRESSES DUE TO ERECTION SINCE ERECTION EQUIPMENT AND CONDITIONS ARE UNKNOWN. DESIGN ASSUMES COMPETENT AND QUALIFIED PERSONNEL WILL ERECT THE TOWER.
5. WORK SHALL BE IN ACCORDANCE WITH ANSI/TIA/EIA-222-F, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES".
6. THE MINIMUM YIELD STRENGTH OF STRUCTURAL STEEL MEMBERS SHALL BE 50 KSI, EXCEPT AS NOTED BELOW.
   ANGLE BRACES L1-1/2X1/8 THRU L 3X3X3/16 SHALL BE 36 KSI.
   STRUCTURAL PLATES SHALL BE 36 KSI.
7. FIELD CONNECTIONS SHALL BE BOLTED. NO FIELD WELDS SHALL BE ALLOWED.
8. STRUCTURAL BOLTS SHALL CONFORM TO ASTM A-325, EXCEPT WHERE NOTED.
9. PAL NUTS SHALL BE PROVIDED FOR ALL TOWER BOLTS.
10. STRUCTURAL STEEL AND CONNECTION BOLTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION. IN ACCORDANCE WITH ANSI/TIA/EIA-222-F
11. ALL HIGH STRENGTH BOLTS ARE TO BE TIGHTENED TO A "SNUGTIGHT CONDITION AS DEFINED IN THE NOVEMBER 13, 1985, AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
12. PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
13. TOLERANCE ON TOWER STEEL HEIGHT IS EQUAL TO PLUS 1% OR MINUS 1/2%.
14. DESIGN ASSUMES THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA/EIA-222-F.
15. DESIGN ASSUMES LEVEL GRADE AT TOWER SITE.
16. TOWER ORIENTATION TO BE DETERMINED BY OTHERS.
17. DESIGN ASSUMES WHIP ANTENNAS ARE MOUNTED SYMMETRICALLY TO MINIMIZE TORQUE.
18. ROHN-LOC SAFETY DEVICE FOR CLIMBING THE ENTIRE HEIGHT OF THE TOWER CONSIDERED FOR DESIGN.
19. ONE 8-HOLE WAVEGUIDE LADDER FROM 10' TO TOP OF THE TOWER CONSIDERED FOR DESIGN.
20. FOR FOUNDATION DETAILS, SEE DRAWING NUMBER DB70532 (F15). THE PURCHASER SHALL VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED E.I.A. "NORMAL" SOIL PARAMETERS.
21. FOR ANCHOR BOLT LAYOUT DETAILS, SEE DRAWING CB80726 (ABL617).
22. DISH AZIMUTH SHOWN IS A NOMINAL AZIMUTH USED FOR DESIGN. ACTUAL AZIMUTH(TO BE DETERMINED BY OTHERS) MUST NOT RESULT IN INCREASED DESIGN LOADS.
23. THE TOWER AZIMUTH SHOWN IS A RELATIVE AZIMUTH USED TO ESTABLISH THE RELATIVE POSITION OF THE ANTENNA WITH RESPECT TO THE TOWER FOR DESIGN.
24. IT SHALL BE THE RESPONSIBILITY OF THE PURCHASER OR MANUFACTUERER OF THE WHIP ANTENNAS TO VERIFY THAT THE PROJECTED AREAS AND WEIGHTS USED FOR DESIGN MEET OR EXCEED ACTUAL LOADING CONDITIONS.

TOWER DESIGN LOADING

DESIGN WIND LOAD PER ANSI/TIA/EIA-222-F-1996, 70 MPH BASIC WIND SPEED (1/2" RADIAL ICE LOAD).
THIS TOWER IS DESIGNED TO SUPPORT THE FOLLOWING LOADS:

ELEV-ATION (FT)	ANTENNA TYPE	E.P.A. (SF) NO ICE	E.P.A. (SF) W/ICE	LINE SIZE (NOM)
TOP	(1)BEACON AND (3)12' WHIP ANTENNAS W/(3)6' SIDE ARMS	37.0 (TOTAL)	50.0 (TOTAL)	(1)3/4" & (3)1-5/8" (TOTAL)
250	6' STD DISH W/RADOME [0]	25.4	25.4	(1)EW63

NOTE: ANTENNA AZIMUTH IS SHOWN IN DEGREES WITHIN THE [BRACKETS]

SEE STRESS ANALYSIS FOR A COMPLETE LISTING OF ALL LOADS ON TOWER

SECTION MEMBER SCHEDULE

SECTION	LEG SIZE	LEG BOLTED FLANGE CONNECTION NO.	LEG BOLTED FLANGE CONNECTION SIZE (IN)	BRACE SIZE	BRACE BOLTED END CONNECTION NO.	BRACE BOLTED END CONNECTION SIZE (IN)
6A	PIPE2.0STD	4	5/8	L1-1/2X1/8	1	1/2
6B	PIPE2.0STD	4	5/8	L1-1/2X1/8	1	1/2
6C	PIPE2.5STD	4	5/8	L1-1/2X1/8	1	1/2
7	PIPE2.5E.H	4	5/8	L1-1/2X1/8	1	1/2
8	PIPE2.5E.H	4	3/4	L1-1/2X1/8	1	1/2
9	PIPE3.0E.H	4	7/8	L1-3/4X1/8	1	1/2
10	PIPE3.0E.H	4	7/8	L 2X2X1/8	1	1/2
11	PIPE3.5E.H	4	7/8	L 2.5X3/16	1	1/2
12	PIPE4.0E.H	4	1	L 3X3X3/16	1	5/8
13	PIPE5.0STD	4	1	L 3X3X3/16	1	5/8
14	PIPE5.0E.H	4	1	L3-1/2X1/4	1	5/8
15	PIPE5.0E.H	4	1	L 4X4X1/4	1	5/8
16	PIPE5.0E.H	4	1	L 4X4X1/4	1	5/8
K	PIPE5.0E.H	6	1	PIPE2.5STD	3	3/4
				PIPE2.5STD(H)	2	3/4
L	PIPE6.0EHS	6	1	PIPE2.5STD	3	3/4
				PIPE2.5STD(H)	2	3/4

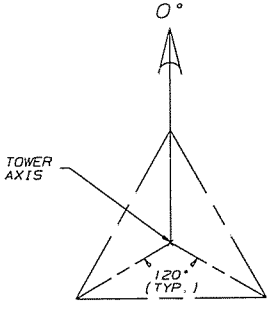
NOTE: (H) REPRESENTS THE HORIZONTAL BRACE
NOTE: SECTION NUMBERS ARE FOR REFERENCE ONLY
FOR NOMINAL FACE WIDTH DIMENSIONS, REFER TO STRESS ANALYSIS.

TUBULAR MEMBER PROPERTIES

MEMBER	SIZE O.D. (IN)	SIZE THICK. (IN)
PIPE 2 STD	2.375	0.154
PIPE2.5STD	2.875	0.203
PIPE2.5E.H	2.875	0.276
PIPE 3 E.H	3.500	0.300
PIPE3.5E.H	4.000	0.318
PIPE 4 E.H	4.500	0.337
PIPE 5 STD	5.563	0.258
PIPE 5 E.H	5.563	0.375
PIPE 6 EHS	6.625	0.340

TOWER REACTIONS

COMPRESSION	=	171.7 KIPS
TENSION	=	147.9 KIPS
TOTAL SHEAR	=	28.0 KIPS
O.T.M.	=	4115.5 FT-KIPS



TOWER CONFIGURATION
N.T.S.

No.▲ Revision Description	▲ Date	▲ Rev By	▲ Ckd By	▲ Appd By

ROHN

	By	Date
Scale: NONE		
Drawn:	DLB	08/30/99
Checked:	HA	8/31/99
App. Eng.:	JS	8/31/99
Parent File:		

300' SSVMW TOWER DESIGN FOR A&D COMMUNICATIONS

ENG. FILE: 41713TR

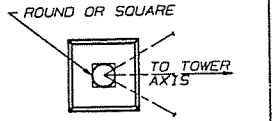
DWG. NO.: A992322

SHEET 1 OF 1

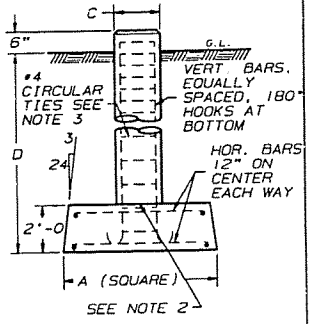
REV.

FDN. I.D. NO.	MAX ANCHOR BOLT SIZE, ALL FND TYPES	LIMITS FOR TYPES 1,2 & 3			PIER AND PAD (TYPE 1)								DRILL AND BELL (TYPE 2)						DRILLED PIER (TYPE 3)					MAT (TYPE 4)			
		ALLOW. LEG LOAD (KIPS)	ALLOW. SHEAR (KIPS PER LEG)	MIN ANCHOR BOLT SIZE (NOTE 6)	MIN FACE SPREAD	D	A	C	VERT. BARS	HOR. BARS	REQ'D CONC. (CU. YDS. 3 FDNS) ROUND	REQ'D CONC. (CU. YDS. 3 FDNS) SQUARE	MIN FACE SPREAD	D	X	Y	VERT. BARS	REQ'D CONC. (CU. YDS. 3 FDNS)	MIN FACE SPREAD	D	Y	VERT. BARS	REQ'D. CONC. (CU. YDS. 3 PIERS)	MAX FACE SPREAD	MAX O.T.M. FOOT KIPS	W	REQ'D CONC. (CU. YDS.) (NOTE 7)
F1	(4) 5/8	4.5		N/A																			1' 6	12.8	4' 0	2.4
F2	(4) 5/8	11.2		N/A																			2' 10	33.2	5' 6	4.5
F3	(4) 5/8	19.6		N/A																			3' 11	61.5	6' 9	6.8
F4	(4) 5/8	28.0		N/A																			5' 0	102	8' 0	9.5
F5	(4) 5/8	36.0		N/A																			5' 8	133	8' 9	11.3
F6	(4) 7/8	33.7	4.0	5/8X42	6' 6	8' 0	4' 6	2' 0	8 #6	#6	6.3	6.9											7' 7	304	11' 6	19.6
F7	(4) 7/8	43.6	6.0	5/8X42	8' 6	8' 9	5' 6	2' 0	8 #7	#6	8.7	9.4	7' 6	11' 0	4' 6	2' 6	10 #6	7.8	7' 6	16' 0	2' 6	10 #6	9.0	10' 0	578	14' 3	30.1
F8	(4) 7/8	52.5	6.0	5/8X42	8' 6	8' 9	5' 6	2' 0	8 #7	#6	8.7	9.4	7' 6	11' 0	4' 6	2' 6	10 #6	7.8	7' 6	18' 6	2' 6	10 #6	10.4	11' 1	819	16' 0	37.9
F9	(4) 7/8	56.0	8.0	5/8X42	8' 6	9' 0	5' 6	2' 0	8 #7	#6	8.8	9.5	7' 6	11' 0	5' 0	2' 6	10 #6	8.7	7' 6	19' 6	2' 6	10 #6	10.9	13' 0	1210	18' 3	49.3
F10	(4) 1	64.9	10.0	3/4X48	8' 6	10' 0	5' 6	2' 6	8 #8	#6	10.8	12.0	7' 6	12' 0	5' 0	2' 6	10 #6	9.2	7' 6	21' 9	2' 6	10 #6	12.2	14' 11	1780	20' 9	63.8
F11	(4) 1	85.6	10.0	3/4X48	8' 6	11' 0	5' 6	2' 6	10 #8	#6	11.3	12.7	8' 0	12' 6	6' 0	2' 6	10 #6	11.8	9' 0	22' 9	3' 0	12 #6	18.3	16' 10	2430	23' 0	7.
F12	(6) 1	114.0	15.0	7/8X60	9' 6	12' 0	6' 3	3' 0	12 #8	#6	16.3	18.5	9' 0	14' 0	6' 6	3' 0	10 #7	16.7	10' 6	25' 0	3' 6	12 #7	27.3	18' 11	3610	26' 3	102
F13	(6) 1	129.0	15.0	7/8X60	10' 0	12' 6	6' 6	3' 0	12 #8	#6	17.3	19.7	9' 0	14' 0	7' 0	3' 0	12 #7	18.4	10' 6	27' 6	3' 6	12 #7	30.0				
F14	(6) 1	152.0	15.0	7/8X60	11' 0	13' 0	7' 3	3' 0	12 #8	#6	19.9	22.4	9' 3	15' 0	7' 3	3' 0	12 #8	20.1	12' 0	30' 0	4' 0	12 #8	42.6				
F15	(8) 1	184.0	20.0	7/8X60	12' 6	13' 9	7' 9	3' 6	16 #8	#6	25.6	29.2	10' 6	16' 0	8' 0	3' 6	12 #8	27.6	12' 0	38' 0	4' 0	12 #8	53.8				
F16	(8) 1	215.0	25.0	1X78	14' 0	14' 0	8' 9	3' 6	16 #8	#6	29.4	33.1	10' 9	16' 0	8' 9	3' 6	16 #8	31.4	13' 6	38' 0	4' 6	16 #8	68.0				
F17	(8) 1	242.0	25.0	1X78	15' 3	14' 0	9' 9	3' 6	16 #9	#7	33.4	37.1	11' 3	17' 0	9' 3	3' 6	16 #8	35.4	13' 6	44' 0	4' 6	16 #8	78.6				
F18	(8) 1	268.0	35.0	1X78	16' 6	14' 0	10' 9	4' 0	21 #9	#7	42.0	46.7	12' 0	17' 0	9' 9	4' 0	16 #9	42.7	13' 6	49' 0	4' 6	16 #8	87.5				

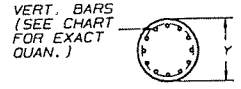
NOTE: MAX O.T.M. IS ABOUT MAT CENTERLINE AT BOTTOM OF MAT.



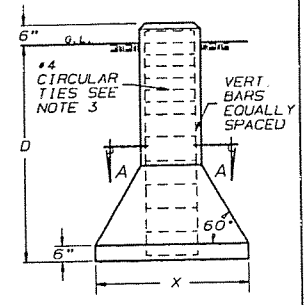
PLAN VIEW



ELEVATION VIEW
PIER AND PAD

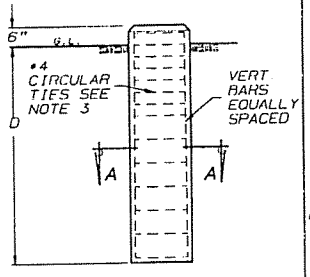


SECTION A-A

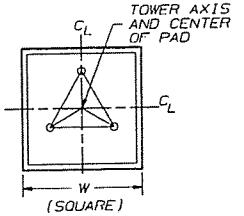


ELEVATION VIEW
DRILL AND BELL

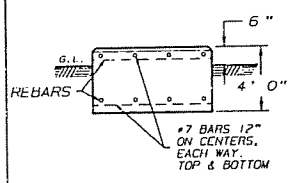
SECTION A-A



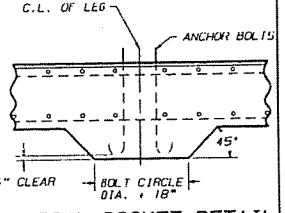
ELEVATION VIEW
DRILLED PIER



PLAN VIEW



ELEVATION VIEW
MAT



TYPICAL POCKET DETAIL
(SEE NOTE 7)

GENERAL NOTES

1. FOR REQUIRED MATERIAL SPECIFICATIONS, INSTALLATION NOTES, AND TOLERANCES SEE DRAWING NUMBER B841300.
2. ROUGHEN CONSTRUCTION JOINT TO A FULL AMPLITUDE OF 1/4 INCH.
3. CIRCULAR TIES TO BE PLACED ON 3 INCH CENTERS FOR TOP 4 FEET AND 12 INCH CENTERS FROM 4 FEET TO BOTTOM, WITH 22 INCH LAPS.
4. FOR ANCHOR BOLT SETTING TEMPLATE INFORMATION AND BASE DETAILS SEE DRAWING NUMBER B730521.
5. FOR ANCHOR BOLT SIZE AND QUANTITY SEE ANCHOR BOLT LAYOUT DWG. FOR TOWER.
6. MIN ANCHOR BOLT SIZE SHOWN IS REQUIRED FOR DEVELOPMENT WITH VERTICAL REINFORCING BARS. LARGER ANCHOR BOLTS MAY BE REQU BASED ON TOWER REACTIONS.
7. ANCHOR BOLTS OVER 48" LONG REQUIRE POCKETS UNDERNEATH EACH LEG FOR MAT FOUNDATIONS. CONCRETE VOLUME INDICATED IN TABLE DOES NOT INCLUDE VOLUME OF POCKETS. SEE TYPICAL POCKET DETAILS FOR MAT FOUNDATION.

No.	Revision Description	Date	By	Rev. By	Cod. By	Appd. By
R2	ADDED LARGER MATS	2/6/98	SAH	WMH	KK	

ROHN

	By	Date
Scale: NONE		
Drawn:	WOJ	12-10-87
Checked:	RAM	5/2/88
App. Eng.:	KK	5/2/88
App. Sales:	AE	5-2-88

Title: STANDARD FOUNDATIONS FOR SELF SUPPORTING TOWERS

END. FILE:

DRAWING NO.: D870532 R2

STANDARD FOUNDATION NOTES

1. FOUNDATION DESIGNS ARE IN ACCORDANCE WITH ANSI/EIA-222-E, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES", SECTION 7, FOR "NORMAL" SOIL CONDITIONS. "NORMAL" SOIL IS DEFINED AS DRY, COHESIVE SOIL WITH AN ALLOWABLE NET VERTICAL BEARING CAPACITY OF 4000 PSF (192 kPa) AND AN ALLOWABLE NET HORIZONTAL PRESSURE OF 400 PSF PER LINEAL FOOT OF DEPTH (62.8 kPa PER LINEAL METER OF DEPTH) TO A MAXIMUM OF 4000 PSF (192 kPa).

2. THE PURCHASER MUST VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED E.I.A. "NORMAL" SOIL PARAMETERS AND THAT THE DEPTH OF STANDARD FOUNDATIONS ARE ADEQUATE BASED ON THE FROST PENETRATION AND/OR ZONE OF SEASONAL MOISTURE VARIATION AT THE SITE. FOUNDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT "NORMAL" SOIL PARAMETERS ARE NOT APPLICABLE FOR THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED.

3. FOUNDATION DESIGNS ASSUME FIELD INSPECTIONS WILL BE PERFORMED BY THE PURCHASER'S REPRESENTATIVE TO VERIFY THAT CONSTRUCTION MATERIALS, INSTALLATION METHODS AND ASSUMED DESIGN PARAMETERS ARE ACCEPTABLE BASED ON THE CONDITIONS EXISTING AT THE SITE.

4. WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, SAFETY REGULATIONS AND UNLESS OTHERWISE NOTED, THE LATEST REVISION OF ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION.

5. ANCHOR BOLTS SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM A354 GRADE BC AND SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION (FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH).

6. PAL NUTS OR ANCO NUTS SHALL BE INSTALLED ON ALL ANCHOR BOLTS.

7. CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE STATE REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE.

8. PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR RESISTANCE TO LOCAL ANTICIPATED AGGRESSIVE ACTIONS. THE DURABILITY REQUIREMENTS OF ACI 318 CHAPTER 4 SHALL BE SATISFIED BASED ON THE CONDITIONS EXPECTED AT THE SITE. AS A MINIMUM, CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI (20.7 MPa) IN 28 DAYS.

9. MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOIDS.

10. REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60 UNLESS OTHERWISE NOTED. SPLICES IN REINFORCEMENT SHALL NOT BE ALLOWED UNLESS OTHERWISE INDICATED.

11. REINFORCING CAGES SHALL BE BRACED TO RETAIN PROPER DIMENSIONS DURING HANDLING AND THROUGHOUT PLACEMENT OF CONCRETE.

12. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.

13. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3 INCHES (76 mm) UNLESS OTHERWISE NOTED. APPROVED SPACERS SHALL BE USED TO INSURE A 3 INCH (76 mm) MINIMUM COVER ON REINFORCEMENT.

14. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 3 INCHES (76 mm) NOR BE LESS THAN 2 INCHES (51 mm).

15. SPACERS SHALL BE ATTACHED INTERMITTENTLY THROUGHOUT THE ENTIRE LENGTH OF VERTICAL REINFORCING CAGES TO INSURE CONCENTRIC PLACEMENT OF CAGES IN EXCAVATIONS.

16. FOUNDATION DESIGNS ASSUME STRUCTURAL BACKFILL TO BE COMPACTED IN 8 INCH (200 mm) MAXIMUM LAYERS TO 95% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16 kN/m3).

17. FOUNDATION DESIGNS ASSUME LEVEL GRADE AT TOWER SITE.

18. FOUNDATION INSTALLATION SHALL BE SUPERVISED BY PERSONNEL KNOWLEDGEABLE AND EXPERIENCED WITH THE PROPOSED FOUNDATION TYPE. CONSTRUCTION SHALL BE IN ACCORDANCE WITH GENERALLY ACCEPTED INSTALLATION PRACTICES.

19. FOR FOUNDATION AND ANCHOR TOLERANCES SEE DRAWING A810214.

20. LOOSE MATERIAL SHALL BE REMOVED FROM BOTTOM OF EXCAVATION PRIOR TO CONCRETE PLACEMENT. SIDES OF EXCAVATION SHALL BE ROUGH AND FREE OF LOOSE CUTTINGS.

21. CONCRETE SHALL BE PLACED IN A MANNER THAT WILL PREVENT SEGREGATION OF CONCRETE MATERIALS AND OTHER OCCURRENCES WHICH MAY DECREASE THE STRENGTH OR DURABILITY OF THE FOUNDATION.

22. FREE FALL CONCRETE MAY BE USED PROVIDED FALL IS VERTICAL DOWN WITHOUT HITTING SIDES OF EXCAVATION, FORMWORK, REINFORCING BARS, FORM TIES, CAGE BRACING OR OTHER OBSTRUCTIONS. UNDER NO CIRCUMSTANCES SHALL CONCRETE FALL THROUGH WATER.

23. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL EXCEPT FOR PIERS OF PIER AND PAD FOUNDATIONS. FORMS FOR PIERS SHALL BE REMOVED PRIOR TO PLACING STRUCTURAL BACKFILL.

24. CONSTRUCTION JOINTS, IF REQUIRED IN PIER MUST BE AT LEAST 12 INCHES (305MM) BELOW BOTTOM OF EMBEDMENTS AND MUST BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 1/4 INCH (6MM). FOUNDATION DESIGN ASSUMES NO OTHER CONSTRUCTION JOINTS.

25. TOP OF FOUNDATION OUTSIDE LIMITS OF ANCHOR BOLTS SHALL BE SLOPED TO DRAIN WITH A FLOATED FINISH. AREA INSIDE LIMITS OF ANCHOR BOLTS SHALL BE LEVEL WITH A SCRATCHED FINISH.

26. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" X 3/4" (19 mm X 19 mm) MINIMUM.

27. FOR ANCHOR BLOCK TYPE FOUNDATIONS, THE PORTION OF ALL STEEL ANCHORS, FROM TOP OF ANCHOR BLOCK TO GROUND LEVEL, SHALL BE COATED WITH BITUMEN. DESIGN ASSUMES PERIODIC INSPECTIONS WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE TO DETERMINE IF ADDITIONAL ANCHOR CORROSION PROTECTION MEASURES MUST BE IMPLEMENTED BASED ON OBSERVED SITE-SPECIFIC CONDITIONS

No. ▲ Revision Description	▲ Date	▲ Rev By	▲ Ckd By	▲ Appd By
R10 REVISED NOTE #9 & #24	11/3/94	CSR	KTL	XK
R9 REV'D NOTES 27 & 9	1-18-94	RKB	WDU	XK

ROHN

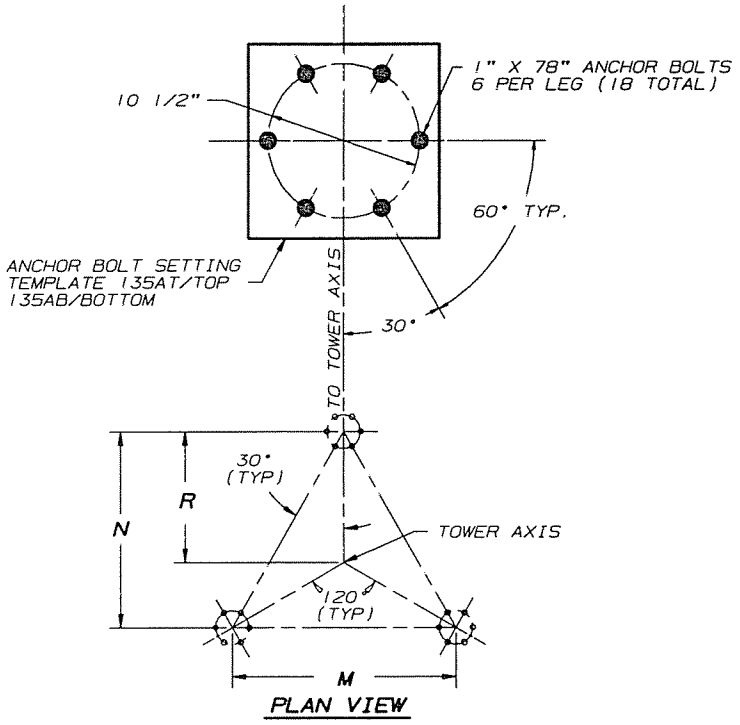
Scale: NONE	By	Date
Drawn:	CSR	6/17/87
Checked:	HA	1/6/88
App. Eng.:	XK	1/6/88
App. Sales:	AE	2/2/88

Title:

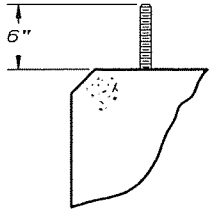
FOUNDATION MATERIAL SPECIFICATIONS, INSTALLATION NOTES AND TOLERANCES

DRAWING NO.: B841300R10

ID#	M	N	R
ABL61	12' 11	11' 2 1/4	7' 5 1/2
ABL62	14' 11	12' 11	8' 7 3/8
ABL63	16' 10 1/4	14' 7 3/16	9' 8 3/4
ABL64	18' 10 1/4	16' 3 15/16	10' 10 5/8
ABL65	20' 10 3/8	18' 0 13/16	12' 0 9/16
ABL66	22' 10 3/8	19' 9 5/8	13' 2 7/16
ABL67	24' 10 3/8	21' 6 3/8	14' 4 1/4
ABL68	8' 9 1/2	7' 7 3/8	5' 0 15/16
ABL69	10' 9 1/2	9' 4 1/8	6' 2 3/4
ABL610	12' 9 1/2	11' 0 15/16	7' 4 5/8
ABL611	15' 0 1/2	13' 0 5/16	8' 8 3/16
ABL612	17' 6 1/2	15' 2 5/16	10' 1 9/16
ABL613	20' 0 1/2	17' 4 1/4	11' 6 7/8
ABL614	22' 6 1/2	19' 6 1/4	13' 0 3/16
ABL615	25' 0 1/2	21' 8 1/4	14' 5 1/2
ABL616	27' 6 1/2	23' 10 1/4	15' 10 13/16
ABL617	30' 0 1/2	26' 0 3/16	17' 4 1/8
ABL618	32' 6 1/2	28' 2 3/16	18' 9 7/16
ABL619	36' 3 1/2	31' 5 3/16	20' 11 7/16
ABL620	40' 0 1/2	34' 8 1/8	23' 1 7/16
ABL621	43' 9 1/2	37' 11 1/8	25' 3 3/8
ABL622	14' 9 1/4	12' 9 1/2	8' 6 5/16
ABL623	20' 9 3/8	17' 11 15/16	12' 0
ABL624	17' 5 1/2	15' 1 7/16	10' 0 15/16
ABL625	18' 9 1/4	16' 3 1/16	10' 10 1/16
ABL626	22' 9 3/8	19' 8 3/4	13' 1 13/16
ABL627	32'-5 1/2	28'-1 5/16	18'-8 7/8
ABL628	24'-9 3/8	21'-5 9/16	14'-3 11/16
ABL629	16'-9 1/4	14'-6 5/16	9'-8 3/16
ABL630	14' 11 1/2	12' 11 7/16	8' 7 5/8
ABL631	12' 9	11' 0 1/2	7' 4 5/16
ABL632	14' 10	12' 10 1/8	8' 6 3/4
ABL633	12' 10	11' 1 3/8	7' 4 15/16
ABL634	6' 11	5' 11 7/8	3' 11 15/16



PLAN VIEW



ANCHOR BOLT PROJECTION

NOTES

1. FOR ANCHOR AND FOUNDATION TOLERANCES REFER TO THE LATEST REVISION OF DWG. NO. A810214.
2. ALL ANCHOR BOLTS SHALL MEET OR EXCEED REQUIREMENTS OF ASTM A354 GR BC AND ARE HOOKED 180° AT THE BOTTOM.
3. WHEN FOUNDATIONS ARE DESIGNED BY OTHERS, IT SHALL BE THE RESPONSIBILITY OF THE PURCHASER'S FOUNDATION ENGINEER TO INSURE THAT THE ANCHORAGES PROVIDED ARE COMPATIBLE WITH THE PROPOSED FOUNDATION DESIGNS AND THAT THE CAPACITIES OF THE ANCHORAGES ARE NOT LIMITED BY THE STRENGTH OF THE FOUNDATIONS.
4. FOR ANCHOR BOLT TEMPLATE DETAILS SEE DRAWING B730521

No.	Revision Description	Date	Rev By	Ckd By	Appd By
R3	ADDED ABL630-ABL634	12/13/95	PJD	JDM	TS
R2	REVISED NOTE 2 AND ADDED ABL627-ABL629	6/8/90	WEB	WDU	TS
R1	REV'D. PLAN VIEW, ADDED ID NO'S. ABL622-ABL626	4-14-89	KTL	RKB	TS

ROHN

	By	Date
Scale: NONE		
Drawn:	WDU	6/15/88
Checked:	KTL	7-21-88
App. Eng.:	TS	7-28-88
App. Sales:	AE	7-28-88

Title: 6 HOLE ANCHOR BOLT LAYOUT

ENG. FILE:

DRAWING NO.: C880726 R3

8/12/99

DATE-03/17/98 ROHN SELF-SUPPORTING TOWER ANALYSIS FOR A&D Comm PAGE NO. 1
TIME-15:00:58 Output is NOT to be reproduced without Rohn's written consent.- BY: JLR
LEVEL - 4R3.9NT
NOTE-TOWER DESIGN, WIND PRESSURES, AND SHAPE FACTORS CONFORM TO STANDARDS SET BY TIA/EIA-222-F-1996. HA

A BRIEF DESCRIPTION OF THE DESIGN REQUIREMENTS FOLLOWS-

1. 300' SSV - ANSI/EIA/TIA-222-F-1996
2. 70 mph BWS - 1/2" Radial Ice Load
3. SITE ;
4. This data is located@ Z:\Engr\W\jlr\37532ae.ssv

INPUT PARAMETERS
****

TOWER HEIGHT = 300.0 FEET
BASE ELEVATION = .0 FEET
WIND VELOCITY = 70.00 MPH
EXPOSURE = C
IMPORTANCE FACTOR = 1.000
RADIAL ICE = .00 IN.
Gh = 1.088
PROJ. AREA OF LADDER, ROUND = .000 SQ.FT/FT FACE =
PROJ. AREA OF LADDER, FLAT = .019 SQ.FT/FT FACE =
UNIFORM WEIGHT OF LADDER = .001 KIPS/FT

ESCALATED WINDLOADS ARE CALCULATED AT EACH SECTION MID-HEIGHT,
WINDLOADS ARE LISTED FROM TOP TO BOTTOM :

FROM 300.0 FEET TO 280.0 FEET USE .0254 KSF
FROM 280.0 FEET TO 260.0 FEET USE .0249 KSF
FROM 260.0 FEET TO 240.0 FEET USE .0243 KSF
FROM 240.0 FEET TO 220.0 FEET USE .0238 KSF
FROM 220.0 FEET TO 200.0 FEET USE .0232 KSF
FROM 200.0 FEET TO 180.0 FEET USE .0225 KSF
FROM 180.0 FEET TO 160.0 FEET USE .0218 KSF
FROM 160.0 FEET TO 140.0 FEET USE .0210 KSF
FROM 140.0 FEET TO 120.0 FEET USE .0202 KSF
FROM 120.0 FEET TO 100.0 FEET USE .0192 KSF
FROM 100.0 FEET TO 80.0 FEET USE .0182 KSF
FROM 80.0 FEET TO 60.0 FEET USE .0169 KSF
FROM 60.0 FEET TO 40.0 FEET USE .0154 KSF
FROM 40.0 FEET TO 20.0 FEET USE .0136 KSF
FROM 20.0 FEET TO .0 FEET USE .0136 KSF

DESCRIPTION OF LOADS	ANTENNA ELEVATION (FEET)	WIND PRESSURE (K/SQ-FT)	EFF. ANT. PROJ.AREA (SQ.FT.)	DEAD LOAD OF ANT. (KIPS)	PROJ. AREA OF APPURTENANCES (SQ.FT./FT.) ROUNDS	FACE	FLATS	FACE	DEAD LOAD OF APPUR. (KIPS/FT)	EFF.PROJ. AREA*M.A. (SQ.FT-FT)	ASSUME TORQUE (FT-K)
(3) BEACON & WHIPS W/6'-5" A'S	300.0	.0256	37.00	1.00	.592	1	.279	1	.009	42.00	1.08
6' DISH W/ RAD	250.0	.0243	25.40	.80	.167	1	.000	0	.001	87.00	2.12

THIS ANALYSIS CONTROLS

WINDLOAD ON TOWER SECTIONS AND SUMMARY OF WEIGHTS

COLUMN 1 TOWER SECTION NUMBER		COLUMN 2 WIND ON SECTION & UNIF. APPURT. (KIPS)	COLUMN 3 WIND ON CONCENTR. EFF.PROJ AREAS (KIPS)	COLUMN 4 TOTAL WIND FOR EA. TWR. SECTION (KIPS)	COLUMN 5 WEIGHT OF HDWE. FOR EACH SECTION (KIPS)	COLUMN 6 WT. OF EA. SECTION W/ ICE/HDWE. IF PRESENT (KIPS)	COLUMN 7 TOTAL ACCUM- ULATED SEC.WTS. (KIPS)	COLUMN 8 WT./SEC. OF TOWER STEEL ONLY (KIPS)	COLUMN 9 ACCUM. WEIGHT OF TOWER STEEL (KIPS)
6NST	..N	1.333	.949	2.281	1.20	1.71	1.71	.51	.51
6NST	..N	1.306	.000	1.306	.20	.71	2.42	.51	1.02
6NST	*.N	1.348	.618	1.966	1.01	1.66	4.08	.65 (.14)	1.67
7N	*.N	1.411	.000	1.411	.22	.91	4.98	.69 (.14)	2.35
8N	*.N	1.467	.000	1.467	.22	1.04	6.02	.82 (.12)	3.17
9NH	*.N	1.598	.000	1.598	.22	1.28	7.30	1.06 (.22)	4.23
10NH	*.N	1.756	.000	1.756	.22	1.39	8.69	1.17 (.22)	5.40
11N	*.N	2.066	.000	2.066	.22	1.94	10.63	1.72 (.31)	7.12
12NH	*.N	2.047	.000	2.047	.22	2.11	12.74	1.89 (.16)	9.01
13NH	*.N	2.160	.000	2.160	.22	2.27	15.01	2.05 (.09)	11.06
14NH	*.N	2.318	.000	2.318	.22	3.04	18.06	2.82 (.09)	13.89
15NH	..N	2.441	.000	2.441	.22	3.72	21.78	3.50	17.39
16NHMW	..N	2.341	.000	2.341	.22	3.86	25.64	3.64	21.03
MWK	*..	1.379	.000	1.379	.22	4.12	29.76	3.90	24.93
MWL	*..	1.428	.000	1.428	.22	4.28	34.04	4.06	28.99

TOTAL INCREASED TOWER WEIGHT, IN ADDITION TO THE STANDARD TOWER SECTIONS = 1.49 KIPS

***** SECTION STATUS INDICATORS *****

FOR EXAMPLE, 6NST ..N
- ...HORIZONTAL BRACE INDICATOR
- ....DIAGONAL BRACE INDICATOR
- .....LEG INDICATOR

INDICATORS ARE:
- . (PERIOD) ---- = MEMBER NOT BEEFED
- * (ASTERISK) -- = MEMBER BEEFED
- ! (EXCLAMATION) = NO MEMBER LARGE ENOUGH
- ? (QUESTION) -- = INCORRECT DATA
- N ---------- = NOT APPLICABLE

SHEARS, OVERTURNING MOMENTS AND LEG DATA

COLUMN 10 TOWER SECTION NUMBER		*COLUMN 11* DIST-ANCE BELOW TOP (FT.)	*COLUMN 12* APPROX. CENTER-CENTER OF LEGS (FT.)	*COLUMN 13* TOTAL ACCUM. SHEAR ON TOWER (KIPS)	*COLUMN 14* TOTAL OVER-TURNING MOMENTS (FT-KIPS)	*COLUMN 15* MAXIMUM TENSION FOR ONE LEG (KIPS)	*COLUMN 16* MAXIMUM COMP. FOR ONE LEG (KIPS)	*COLUMN 17* MAXIMUM *ALLOWABLE* LEG *CAPACITY (KIPS)	*COLUMN 18* TOWER LEG *DIMENSION* (INCHES)
6NST	..N	20.0	4.54	2.28	32.30	7.71	8.92	33.73	PIPE2.0STD
6NST	..N	40.0	4.54	3.59	90.97	22.47	24.21	33.73	PIPE2.0STD
6NST	*.N	60.0	4.58	5.55	182.25	44.77	47.69	56.91	PIPE2.5STD
7N	*.N	80.0	6.58	6.96	307.42	52.55	56.15	74.65	PIPE2.5E/I
8N	*.N	100.0	8.54	8.43	461.36	60.72	65.09	68.25	PIPE2.5E/I
9NH	*.N	120.0	10.61	10.03	645.96	68.28	73.57	87.12	PIPE3.0E.H
10NH	*.N	140.0	12.65	11.79	864.11	76.46	82.75	87.12	PIPE3.0E.H
11N	*.N	160.0	14.70	13.85	1120.47	85.03	92.69	113.57	PIPE3.5E.H
12NH	*.N	180.0	16.74	15.90	1417.96	94.19	103.33	114.21	PIPE4.0E.H
13NH	*.N	200.0	18.79	18.06	1757.51	103.72	114.45	129.03	PIPE5.0STD
14NH	*.N	220.0	20.87	20.38	2141.85	113.28	126.11	180.00	PIPE5.0E/I
15NH	..N	240.0	22.78	22.82	2573.77	124.07	139.45	180.00	PIPE5.0E.H
16NHMW	..N	260.0	24.96	25.16	3053.51	133.65	151.68	180.00	PIPE5.0E.H
MWK	*..	280.0	27.54	26.54	3570.44	140.79	161.64	181.57	PIPE5.0E.H
MWL	*..	300.0	30.04	27.96	4115.45	147.93	171.71	214.61	PIPE6.0E.H

<<<<< NOTE >>>>> THE ALLOWABLE CAPACITIES ON THIS ANALYSIS INCLUDE A 33.3 PERCENT INCREASE.

REACTIONS FOR FOUNDATION DESIGN

COMPRESSION/LEG	171.71 KIPS
TENSION/LEG	147.93 KIPS
SHEAR/LEG	18.64 KIPS
TOTAL SHEAR	27.96 KIPS
OVERTURNING MOMENT	4115.45 FT-KIPS

ANCHOR BOLTS REQUIRED (18) 1x78 AB

F15

BRACING LOADS, SIZES AND BOLTS

COLUMN 19 TOWER SECTION NUMBER	*COLUMN 20* HORIZ. COMP. OF SHEAR IN ONE FACE (KIPS)	*COLUMN 21* HORIZ. COMP. OF LEG LOAD (KIPS)	*COLUMN 22* REMAINING SHEAR TO BE TAKEN BY BRACES (KIPS)	*COLUMN 23* MAX.AXIAL LOAD FOR TOWER BRACING (KIPS)	*COLUMN 24* AXIAL LD. COLUMN CAPACITY OF BRACES (KIPS)	*COLUMN 25* ANGLE/PIPE */SOLID RD. BAR/ BRACE DIMENSION (INCHES)	*COLUMN 26* BRACE CONNECT. CAPACITY (KIPS)	*COLUMN 27* NO.& SIZE OF BRACE BOLTS REQUIRED PER CONN.
6NST ..N	1.795	.000	1.795	1.196	5.400	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
6NST ..N	2.665	.000	2.665	1.776	5.400	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
6NST *.N	4.507	.000	4.507	3.004	5.400	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
7N *.N	5.203	3.114	2.089	1.190	3.560	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
8N *.N	6.053	3.602	2.451	1.382	2.040	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
9NH *.N	7.034	4.058	2.976	1.715	2.000	L1-3/4X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
10NH *.N	8.148	4.553	3.595	1.986	2.307	L 2X2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
11N *.N	9.485	5.081	4.404	2.421	5.187	L 2.5X3/16	<M> 5.44	1-1/2 IN. DIA .188 IN. CLI
12NH *.N	10.819	5.646	5.173	3.043	6.120	L 3X3X3/16	<M> 6.80	1-5/8 IN. DIA .250 IN. CLI
13NH *.N	12.235	6.236	5.999	3.422	5.133	L 3X3X3/16	<M> 6.80	1-5/8 IN. DIA .250 IN. CLI
14NH *.N	13.760	6.842	6.918	3.839	9.133	L3-1/2X1/4	<B> 8.59	1-5/8 IN. DIA .250 IN. CLI
15NH ..N	15.373	7.532	7.841	4.308	11.760	L 4X4X1/4	<B> 8.59	1-5/8 IN. DIA .250 IN. CL
16NHMW ..N	16.919	8.873	8.046	4.333	10.160	L 4X4X1/4	<B> 8.59	1-5/8 IN. DIA .250 IN. CL
MWK *..	17.825	10.804	7.021	6.138	15.600	PIPE2.5STD .375 IN. END PLATE	<M> 48.94	3-3/4IN.DIA(.375 IN. CL
				3.510 (H)	14.440(H)	PIPE2.5STD (H) .375 IN. END PLATE	<M> 32.63(H)	2-3/4IN.DIA(.375 IN. CL
MWL *..	18.766	11.417	7.349	6.046	14.573	PIPE2.5STD .375 IN. END PLATE	<M> 48.94	3-3/4IN.DIA(.375 IN. CL
				3.675 (H)	11.880(H)	PIPE2.5STD (H) .375 IN. END PLATE	<M> 32.63(H)	2-3/4IN.DIA(.375 IN. CL

<<<<< NOTE >>>>> THE ALLOWABLE CAPACITIES ON THIS ANALYSIS INCLUDE A 33.3 PERCENT INCREASE.

IF THE SYMBOL--(*)--APPEARS AFTER THE BOLT SIZE, IT INDICATES THAT THREADS MUST BE EXCLUDED FROM SHEAR PLANES.
IF THE SYMBOL--(H)--APPEARS AFTER THE LOADS ABOVE, IT INDICATES THAT THE LOADS ARE FOR THE MAIN HORIZONTAL.
IF THE SYMBOL--*--APPEARS AFTER THE CLIP SIZE, IT INDICATES THAT THE HORIZONTAL BRACE CONTROLLED THE CLIP AND BOLT S
IF THE SYMBOL--(+)--APPEARS AFTER THE DIAGONAL CAPACITY(COL. 24), IT INDICATES THE HORIZONTAL BRACE CAPACITY CONTROL
THE DIAGONAL BRACE CAPACITY.

THE LETTER APPEARING BEFORE THE CONNECTION CAPACITY IN COLUMN 26 INDICATES THE CONTROLLING FACTOR.
<B> = BRACE BOLT CONTROLS CONNECTION CAPACITY; <C> = BRACE CLIP CONTROLS; <M> = BRACE CONTROLS.

TWIST AND DEFLECTION DATA

COLUMN 28 TOWER SECTION NUMBER		*COLUMN 29* TWIST FOR EACH TOWER SECTION (DEGREES)	*COLUMN 30* TOTAL ACCUMULATED TWIST (DEGREES)	*COLUMN 31* DEFLECTION FOR EA. TOWER SECTION (DEGREES)	*COLUMN 32* TOTAL ACCUMULATED DEFL. (DEGREES)
6NST	..N	.032	.259	.058	1.852
6NST	..N	.032	.227	.220	1.794
6NST	*.N	.095	.195	.302	1.575
7N	*.N	.041	.100	.262	1.273
8N	*.N	.025	.059	.185	1.011
9NH	*.N	.013	.034	.129	.826
10NH	*.N	.008	.021	.124	.697
11N	*.N	.004	.013	.099	.574
12NH	*.N	.002	.009	.081	.475
13NH	*.N	.002	.007	.083	.394
14NH	*.N	.001	.005	.082	.311
15NH	..N	.001	.004	.059	.229
16NHMW	..N	.001	.003	.058	.170
MWK	*..	.001	.003	.056	.112
MWL	*..	.001	.001	.055	.055

8/12/99

DATE-03/17/98 ROHN SELF-SUPPORTING TOWER ANALYSIS FOR A&D Comm PAGE NO. 1
TIME-14:57:36 Output is NOT to be reproduced without Rohn's written consent.- BY: JLR
LEVEL - 4R3.9NT
NOTE-TOWER DESIGN, WIND PRESSURES, AND SHAPE FACTORS CONFORM TO STANDARDS SET BY TIA/EIA-222-F-1996. HM

A BRIEF DESCRIPTION OF THE DESIGN REQUIREMENTS FOLLOWS-

1. 300' SSV - ANSI/EIA/TIA-222-F-1996
2. 70 mph BWS - 1/2" Radial Ice Load
3. SITE 1
4. This data is located@ Z:\Engr\W\jlr\37532ae.ssv

INPUT PARAMETERS
****

TOWER HEIGHT = 300.0 FEET
BASE ELEVATION = .0 FEET
WIND VELOCITY = 70.00 MPH
EXPOSURE = C
IMPORTANCE FACTOR = 1.000
RADIAL ICE = .50 IN.
Gh = 1.088
PROJ. AREA OF LADDER, ROUND = .000 SQ.FT/FT FACE =
PROJ. AREA OF LADDER, FLAT = .069 SQ.FT/FT FACE =
UNIFORM WEIGHT OF LADDER = .001 KIPS/FT

ESCALATED WINDLOADS ARE CALCULATED AT EACH SECTION MID-HEIGHT,
WINDLOADS ARE LISTED FROM TOP TO BOTTOM :

FROM	300.0 FEET	TO 280.0 FEET	USE .0190 KSF
FROM	280.0 FEET	TO 260.0 FEET	USE .0187 KSF
FROM	260.0 FEET	TO 240.0 FEET	USE .0183 KSF
FROM	240.0 FEET	TO 220.0 FEET	USE .0178 KSF
FROM	220.0 FEET	TO 200.0 FEET	USE .0174 KSF
FROM	200.0 FEET	TO 180.0 FEET	USE .0169 KSF
FROM	180.0 FEET	TO 160.0 FEET	USE .0163 KSF
FROM	160.0 FEET	TO 140.0 FEET	USE .0158 KSF
FROM	140.0 FEET	TO 120.0 FEET	USE .0151 KSF
FROM	120.0 FEET	TO 100.0 FEET	USE .0144 KSF
FROM	100.0 FEET	TO 80.0 FEET	USE .0136 KSF
FROM	80.0 FEET	TO 60.0 FEET	USE .0127 KSF
FROM	60.0 FEET	TO 40.0 FEET	USE .0115 KSF
FROM	40.0 FEET	TO 20.0 FEET	USE .0102 KSF
FROM	20.0 FEET	TO .0 FEET	USE .0102 KSF

>>>>>> >>> NOTE : ALL WIND PRESSURES HAVE BEEN REDUCED TO 75% OF ORIGINAL PRESSURES <<< <<<<<<

DESCRIPTION OF LOADS	ANTENNA ELEVATION (FEET)	WIND PRESSURE (K/SQ-FT)	EFF. ANT. PROJ.AREA (SQ.FT.)	DEAD LOAD OF ANT. (KIPS)	PROJ. AREA OF APPURTENANCES (SQ.FT./FT.) ROUNDS	FACE	FLATS	FACE	DEAD LOAD OF APPUR. (KIPS/FT)	EFF.PROJ. AREA*M.A. (SQ.FT-FT)	ASSUME TORQUE (FT-K)
BEACON & (3) WHIPS W/6'S.A's	300.0	.0192	50.00	1.50	.423	1	.760	1	.017	57.00	1.10
6' DISH W/RAD.	250.0	.0183	25.40	1.00	.000	0	.188	1	.002	87.00	1.59

DOES NOT CONTROL.

WINDLOAD ON TOWER SECTIONS AND SUMMARY OF WEIGHTS

COLUMN 1 TOWER SECTION NUMBER		COLUMN 2 WIND ON SECTION & UNIF. APPURT. (KIPS)	COLUMN 3 WIND ON CONCENTR. EFF.PROJ AREAS (KIPS)	COLUMN 4 TOTAL WIND FOR EA. TWR. SECTION (KIPS)	COLUMN 5 WEIGHT OF HDWE. FOR EACH SECTION (KIPS)	COLUMN 6 WT. OF EA. SECTION W/ ICE/HDWE.-IF PRESENT (KIPS)	COLUMN 7 TOTAL ACCUM- ULATED SEC.WTS. (KIPS)	COLUMN 8 WT./SEC. OF TOWER STEEL ONLY (KIPS)	COLUMN 9 ACCUM. WEIGHT OF TOWER STEEL (KIPS)
6NST-1	..N	1.328	.961	2.290	1.86	2.74	2.74	.51	.51
6NST-1	..N	1.301	.000	1.301	.36	1.24	3.98	.51	1.02
6NST-1	*.N	1.341	.464	1.804	1.38	2.40	6.38	.65 (.14)	1.67
7N-1	*.N	1.407	.000	1.407	.40	1.49	7.86	.69 (.14)	2.35
8N-1	*.N	1.467	.000	1.467	.40	1.66	9.52	.82 (.12)	3.17
9NH-1	*.N	1.561	.000	1.561	.40	1.94	11.46	1.06 (.22)	4.23
10NH-1	*.N	1.689	.000	1.689	.40	2.14	13.60	1.17 (.22)	5.40
11N-1	*.N	1.920	.000	1.920	.40	2.88	16.48	1.72 (.31)	7.12
12NH-1	*.N	1.875	.000	1.875	.40	3.04	19.52	1.89 (.16)	9.01
13NH-1	*.N	1.955	.000	1.955	.40	3.34	22.86	2.05 (.09)	11.06
14NH-1	*.N	2.063	.000	2.063	.40	4.20	27.07	2.82 (.09)	13.89
15NH-1	..N	2.140	.000	2.140	.40	4.72	31.79	3.50	17.39
16NHMW-1	..N	2.048	.000	2.048	.40	5.31	37.10	3.64	21.03
MWK-1	*..	1.327	.000	1.327	.40	5.23	42.33	3.90	24.93
MWL-1	*..	1.373	.000	1.373	.40	5.46	47.79	4.06	28.99

TOTAL INCREASED TOWER WEIGHT, IN ADDITION TO THE STANDARD TOWER SECTIONS = 1.49 KIPS

***** SECTION STATUS INDICATORS *****

FOR EXAMPLE, 6NST-1 ..N
- ...HORIZONTAL BRACE INDICATOR
- ....DIAGONAL BRACE INDICATOR
- .....LEG INDICATOR

INDICATORS ARE:
- . (PERIOD) ---- = MEMBER NOT BEEFED
- * (ASTERISK) -- = MEMBER BEEFED
- ! (EXCLAMATION) = NO MEMBER LARGE ENOUGH
- ? (QUESTION) -- = INCORRECT DATA
- N ------------ = NOT APPLICABLE

SHEARS, OVERTURNING MOMENTS AND LEG DATA

COLUMN 10 TOWER SECTION NUMBER		*COLUMN 11* DIST-ANCE BELOW TOP (FT.)	*COLUMN 12* APPROX. CENTER-CENTER OF LEGS (FT.)	*COLUMN 13* TOTAL ACCUM. SHEAR ON TOWER (KIPS)	*COLUMN 14* TOTAL OVER-TURNING MOMENTS *(FT-KIPS)*	*COLUMN 15* MAXIMUM TENSION FOR ONE LEG (KIPS)	*COLUMN 16* MAXIMUM COMP. FOR ONE LEG (KIPS)	*COLUMN 17* MAXIMUM *ALLOWABLE* LEG *CAPACITY (KIPS)	*COLUMN 18* TOWER LEG *DIMENSION* *(INCHES)
6NST-1	..N	20.0	4.54	2.29	32.51	7.48	9.42	33.73	PIPE2.0STD
6NST-1	..N	40.0	4.54	3.59	91.32	22.14	25.03	33.73	PIPE2.0STD
6NST-1	*.N	60.0	4.58	5.40	181.01	43.86	48.47	56.91	PIPE2.5STD
7N-1	*.N	80.0	6.58	6.80	302.98	51.03	56.77	56.91	PIPE2.5STD
8N-1	*.N	100.0	8.54	8.27	453.70	58.80	65.78	68.52	PIPE2.5E.H
9NH-1	*.N	120.0	10.61	9.83	634.69	66.01	74.41	87.12	PIPE3.0E.H
10NH-1	*.N	140.0	12.65	11.52	848.19	73.78	83.74	87.12	PIPE3.0E.H
11N-1	*.N	160.0	14.70	13.44	1097.78	81.76	93.78	113.57	PIPE3.5E.H
12NH-1	*.N	180.0	16.74	15.31	1385.33	90.21	104.39	114.21	PIPE4.0E.H
13NH-1	*.N	200.0	18.79	17.27	1711.18	98.84	115.39	129.03	PIPE5.0STD
14NH-1	*.N	220.0	20.87	19.33	2077.22	107.35	126.82	129.03	PIPE5.0STD
15NH-1	..N	240.0	22.78	21.47	2485.29	116.95	139.71	180.00	PIPE5.0E.H
16NHMW-1	..N	260.0	24.96	23.52	2935.25	125.12	151.56	180.00	PIPE5.0E.H
MWK-1	*..	280.0	27.54	24.85	3418.95	131.07	161.13	181.57	PIPE5.0E.H
MWL-1	*..	300.0	30.04	26.22	3929.65	137.09	170.91	181.57	PIPE5.0E.H

<<<<< NOTE >>>>> THE ALLOWABLE CAPACITIES ON THIS ANALYSIS INCLUDE A 33.3 PERCENT INCREASE.

REACTIONS FOR FOUNDATION DESIGN

COMPRESSION/LEG	170.91 KIPS
TENSION/LEG	137.09 KIPS
SHEAR/LEG	17.48 KIPS
TOTAL SHEAR	26.22 KIPS
OVERTURNING MOMENT	3929.65 FT-KIPS

ANCHOR BOLTS REQUIRED _____

BRACING LOADS, SIZES AND BOLTS

COLUMN 19 TOWER SECTION NUMBER		COLUMN 20 HORIZ. COMP. OF SHEAR IN ONE FACE (KIPS)	COLUMN 21 HORIZ. COMP. OF LEG LOAD (KIPS)	COLUMN 22 REMAINING SHEAR TO BE TAKEN BY BRACES (KIPS)	COLUMN 23 MAX.AXIAL LOAD FOR TOWER BRACING (KIPS)	COLUMN 24 AXIAL LD. COLUMN CAPACITY OF BRACES (KIPS)	COLUMN 25 ANGLE/PIPE /SOLID RD. BAR/ BRACE DIMENSION (INCHES)	COLUMN 26 BRACE CONNECT. CAPACITY (KIPS)	COLUMN 27 NO.& SIZE OF BRACE BOLTS REQUIRED PER CONN.
6NST-1	..N	1.805	.000	1.805	1.203	5.400	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
6NST-1	..N	2.673	.000	2.673	1.781	5.400	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
6NST-1	*.N	4.273	.000	4.273	2.848	5.400	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
7N-1	*.N	5.006	3.069	1.937	1.103	3.560	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
8N-1	*.N	5.876	3.542	2.334	1.316	2.040	L1-1/2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
9NH-1	*.N	6.846	3.987	2.858	1.647	2.000	L1-3/4X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
10NH-1	*.N	7.925	4.469	3.455	1.909	2.307	L 2X2X1/8	<M> 3.63	1-1/2 IN. DIA .188 IN. CLI
11N-1	*.N	9.171	4.978	4.192	2.304	5.187	L 2.5X3/16	<M> 5.44	1-1/2 IN. DIA .188 IN. CLI
12NH-1	*.N	10.395	5.516	4.879	2.870	6.120	L 3X3X3/16	<M> 6.80	1-5/8 IN. DIA .250 IN. CLI
13NH-1	*.N	11.678	6.072	5.607	3.198	5.133	L 3X3X3/16	<M> 6.80	1-5/8 IN. DIA .250 IN. CLI
14NH-1	*.N	13.038	6.636	6.402	3.553	9.133	L3-1/2X1/4	<B> 8.59	1-5/8 IN. DIA .250 IN. CLI
15NH-1	..N	14.452	7.273	7.179	3.944	11.760	L 4X4X1/4	<B> 8.59	1-5/8 IN. DIA .250 IN. CLI
16NHMW-1	..N	15.805	8.530	7.275	3.918	10.160	L 4X4X1/4	<B> 8.59	1-5/8 IN. DIA .250 IN. CLI
MWK-1	*..	16.678	10.345	6.333	5.537	15.600	PIPE2.5STD	<M> 48.94	3-3/4IN.DIA(* .375 IN. END PLATE .375 IN. CLI
					3.166 (H)	14.440(H)	PIPE2.5STD (H)	<M> 32.63(H)	2-3/4IN.DIA(* .375 IN. END PLATE .375 IN. CLI
MWL-1	*..	17.584	10.901	6.683	5.498	14.573	PIPE2.5STD	<M> 48.94	3-3/4IN.DIA(* .375 IN. END PLATE .375 IN. CLI
					3.341 (H)	11.880(H)	PIPE2.5STD (H)	<M> 32.63(H)	2-3/4IN.DIA(* .375 IN. END PLATE .375 IN. CLI

<<<<< NOTE >>>>> THE ALLOWABLE CAPACITIES ON THIS ANALYSIS INCLUDE A 33.3 PERCENT INCREASE.

IF THE SYMBOL--(*)--APPEARS AFTER THE BOLT SIZE, IT INDICATES THAT THREADS MUST BE EXCLUDED FROM SHEAR PLANES.
IF THE SYMBOL--(H)--APPEARS AFTER THE LOADS ABOVE, IT INDICATES THAT THE LOADS ARE FOR THE MAIN HORIZONTAL.
IF THE SYMBOL--*--APPEARS AFTER THE CLIP SIZE, IT INDICATES THAT THE HORIZONTAL BRACE CONTROLLED THE CLIP AND BOLT S
IF THE SYMBOL--(+)--APPEARS AFTER THE DIAGONAL CAPACITY(COL. 24), IT INDICATES THE HORIZONTAL BRACE CAPACITY CONTROL
THE DIAGONAL BRACE CAPACITY.

THE LETTER APPEARING BEFORE THE CONNECTION CAPACITY IN COLUMN 26 INDICATES THE CONTROLLING FACTOR.
<B> = BRACE BOLT CONTROLS CONNECTION CAPACITY; <C> = BRACE CLIP CONTROLS; <M> = BRACE CONTROLS.

TWIST AND DEFLECTION DATA

COLUMN 28 TOWER SECTION NUMBER		COLUMN 29 TWIST FOR EACH TOWER SECTION (DEGREES)	COLUMN 30 TOTAL ACCUMULATED TWIST (DEGREES)	COLUMN 31 DEFLEC-TION FOR EA. TOWER SECTION (DEGREES)	COLUMN 32 TOTAL ACCUMULATED DEFL. (DEGREES)
6NST-1	..N	.033	.229	.058	1.825
6NST-1	..N	.033	.197	.221	1.767
6NST-1	*.N	.080	.164	.301	1.546
7N-1	*.N	.035	.084	.259	1.246
8N-1	*.N	.021	.049	.182	.987
9NH-1	*.N	.011	.029	.127	.805
10NH-1	*.N	.007	.018	.121	.678
11N-1	*.N	.003	.011	.097	.557
12NH-1	*.N	.002	.008	.079	.460
13NH-1	*.N	.002	.006	.081	.380
14NH-1	*.N	.001	.004	.080	.300
15NH-1	..N	.001	.003	.057	.220
16NHMW-1	..N	.001	.003	.056	.163
MWK-1	*..	.001	.002	.054	.107
MWL-1	*..	.001	.001	.053	.053

Federal Aviation Administration
Southern Region, ASO-520
P.O. Box 20636
Atlanta, GA 30320

AERONAUTICAL STUDY
No: 99-ASO-4152-OE

ISSUED DATE: 09/14/99

C/O LUKAS,NACE,GUTIERREZ & SACHS
APPALACHIAN CELLULAR, LLC
1111 19TH ST N.W., STE 1200
WASHINGTON, DC 20036

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Description: NEW ANTENNA TOWER
880-890 MHZ/200 WATTS;MW 6 GHZ/1 WATT
Location: PRICE KY
Latitude: 37-24-35.36 NAD 83
Longitude: 082-44-13.16
Heights: 325 feet above ground level (AGL)
2080 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

-As a condition to this determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting, Chapters 4, 8(M-Dual), & 13.

-It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

N/A At least 10 days prior to start of construction (7460-2, Part I)

X Within 5 days after construction reaches its greatest height (7460-2, Part II)

While the structure does not consitute a hazard to air navigation, it would be located within or near a military training area and/or route.

This determination expires on 03/14/01 unless:

(a) extended, revised or terminated by the issuing office or
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case the determination expires on the date prescribed by the FCC for completion of construction or on the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

-As a result of this structure being critical to flight safety, it is

required that the FAA be kept apprised as to the status of this project. Failure to respond to periodic FAA inquiries could invalidate this determination.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, frequency(ies) or use of greater power will void this determination. Any future construction or alteration, including increase in heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at 404-305-5581. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 99-ASO-4152-OE.

Wade Carpenter

Wade Carpenter (DNE)
Specialist, Airspace Branch

7460-2 Attached

LUKAS, NACE, GUTIERREZ & SACHS
CHARTERED
1111 NINETEENTH STREET, N.W.
SUITE 1200
WASHINGTON, D.C. 20036
(202) 857-3500

RUSSELL D. LUKAS
DAVID L. NACE
THOMAS GUTIERREZ
ELIZABETH R. SACHS
GEORGE L. LYON, JR.
JOEL R. KASWELL
PAMELA L. GIST
DAVID A. LaFURIA
J. JUSTIN McCLURE
MARILYN SUCHECKI MENSE
PAMELA GAARY HOLRAN
B. LYNN F. RATNAVALE
ELIZABETH H. CRONISE*
+ NOT ADMITTED IN D.C.
*ADMITTED ONLY IN VIRGINIA

CONSULTING ENGINEERS
THOMAS G. ADCOCK, P.E.
MEHRAN NAZARI
ALI KUZEHKANANI
LEROY A. ADAM
LEILA REZANAVAZ
—
OF COUNSEL
JOHN J. McAVOY
J.K. HAGE III+

TELECOPIER
(202) 842-4485

Email: lngs@fcclaw.com
http://www.fcclaw.com

WRITER'S DIRECT DIAL
(202) 828-9489
TELECOPIER
(202) 828-8405

August 12, 1999

Via Federal Express

Ms. Sandy Brodnax
Federal Aviation Administration
Southern Regional Office
Air Traffic Division, Airspace Branch ASO-520
1701 Columbia Avenue
College Park, Georgia 30337

Dear Sandy:

Enclosed please find one FAA Form 7460-1 (Notice of Proposed Construction) for a 325' self-supported communications tower structure (300' tower plus 25' antenna/lightning rod) proposed near Price (Floyd County), Kentucky. The proposed site is approximately .56 miles NNE of Price.

The proponent, Appalachian Cellular, LLC, is the licensee for Cellular Block B service in Kentucky RSA-9 (Elliott), Market No. 451. Transmit frequencies to be used at this station are Cellular Band B (880-890 MHz); the maximum ERP will be 200 Watts. A 6 GHz point-to-point microwave system will also be operated with maximum ERP of 1.0 Watt.

The transmitting system proposed for this site will be installed and maintained such that transmitter spurious radiation in the frequency range of 118 MHz to 137 MHz shall be attenuated at least 71 dB below the unmodulated carrier level.

Geographic coordinates are based on 1927 North American Datum.

The ground elevation at the site was read from a 7.5 minute USGS topographic map.

The proponent respectfully requests FAA permission to install dual obstruction lighting (red and medium intensity white) in lieu of other marking and lighting for the proposed Price tower.

Should you have any questions or require additional information, please do not hesitate to call the undersigned at the above identified telephone number.

Sincerely,

LeRoy A. (Art) Adam
Consulting Engineer

Enclosure
cc: Appalachian Cellular, LLC
Attention: Gerald Robinette

638S25\Brodnax.812

Please Type or Print on This Form — Form Approved OMB NO. 2120-0001

U.S. Department of Transportation
Federal Aviation Administration

Notice of Proposed Construction or Alteration

Failure To Provide All Requested Information May Delay Processing Of Your Notice

Aeronautical Study Number

1. Nature of Proposal

A. Type	B. Class	C. Work Schedule Dates
[X] New Construction	[X] Permanent	Beginning 10/11/99
[ ] Alteration *	[ ] Temporary (Duration ______ months)	End 10/29/99

* If Alteration, provide previous FAA Aeronautical Study Number, if available :

3A. Name, address, and telephone number of individual, company corporation, etc. proposing the construction or alteration. (Number, Street, City, State, and Zip Code)

Appalachian Cellular, LLC
c/o Lukas, Nace, Gutierrez & Sachs
1111 19th St. N.W., Suite 1200
Washington, DC 20036

Area Code 202 Telephone Number 857-3500

3B. Name, address and telephone number of proponent's representative, if different than 3A. above.

LeRoy A. (Art) Adam
Lukas, Nace, Gutierrez & Sachs
1111 19th St. N.W., Suite 1200
Washington, DC 20036

(202) Area Code 828-9489 Telephone Number

2. Complete Description of Structure

Please describe the proposed construction or alteration.

A. For proposals involving transmitting stations, include effective radiated power (ERP) and assigned frequency. If not known, give frequency band and maximum ERP.

B. For proposals involving overhead wire, transmission lines, etc., include the size and the configuration of the wires and their supporting structures.

C. For buildings, include site orientation, dimensions, and construction materials.

D. **Optional**— Describe the type of obstruction marking and lighting system desired. The FAA will consider this in their study.

A: Band B Cellular (880-890 MHz)
ERP = 200 W. (max.)

point-to-point microwave
(6 GHz Band)

D: Dual lighting (Red and Medium intensity white)

4. Location Of Structure

A. Coordinates (to hundredths of seconds, if known)	B. Nearest City or Town and State	C. Nearest public or military airport, heliport, flightpark, or seaplane base
Latitude 37° 24' 35.0"	Price	Pikeville Co.-Hatcher Field (7k0)
Longitude 82° 44' 13.6"	(1). Distance to 4B: .56 mi.	(1). Distance from structure to nearest point of nearest runway: 14.2 mi.
4D. Source for item 4A data: [X] USGS 7.5' Quad Chart [ ] Survey [ ] Other Specify	(2). Direction to 4B: N204°E	(2). Direction from structure to airport: N41.72°E

Indicate the reference datum: [X] NAD 27 [ ] NAD 83 [ ] Other Specify

5. Height and Elevation (to nearest foot)

A. Elevation of ground above mean sea level.	1755'
B. Height of structure including all appurtenances and lighting above ground or water.	325'
C. Overall height above mean sea level	2080'

4E. **Description of site location with respect to highways, street, airports, prominent terrain, features, existing structures, etc.** Please attach a U.S. Geological Survey Map (or equivalent) showing the construction site. If available, attach a copy of a documented site survey with the surveyor's certification.

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 1501). Persons who knowingly and willfully violate the Notice requirements of Part 77 are subject to a civil penalty of $1,000 per day until the notice is received, pursuant to Section 901(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app § 1471(a)) as well as the fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app § 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards as necessary.

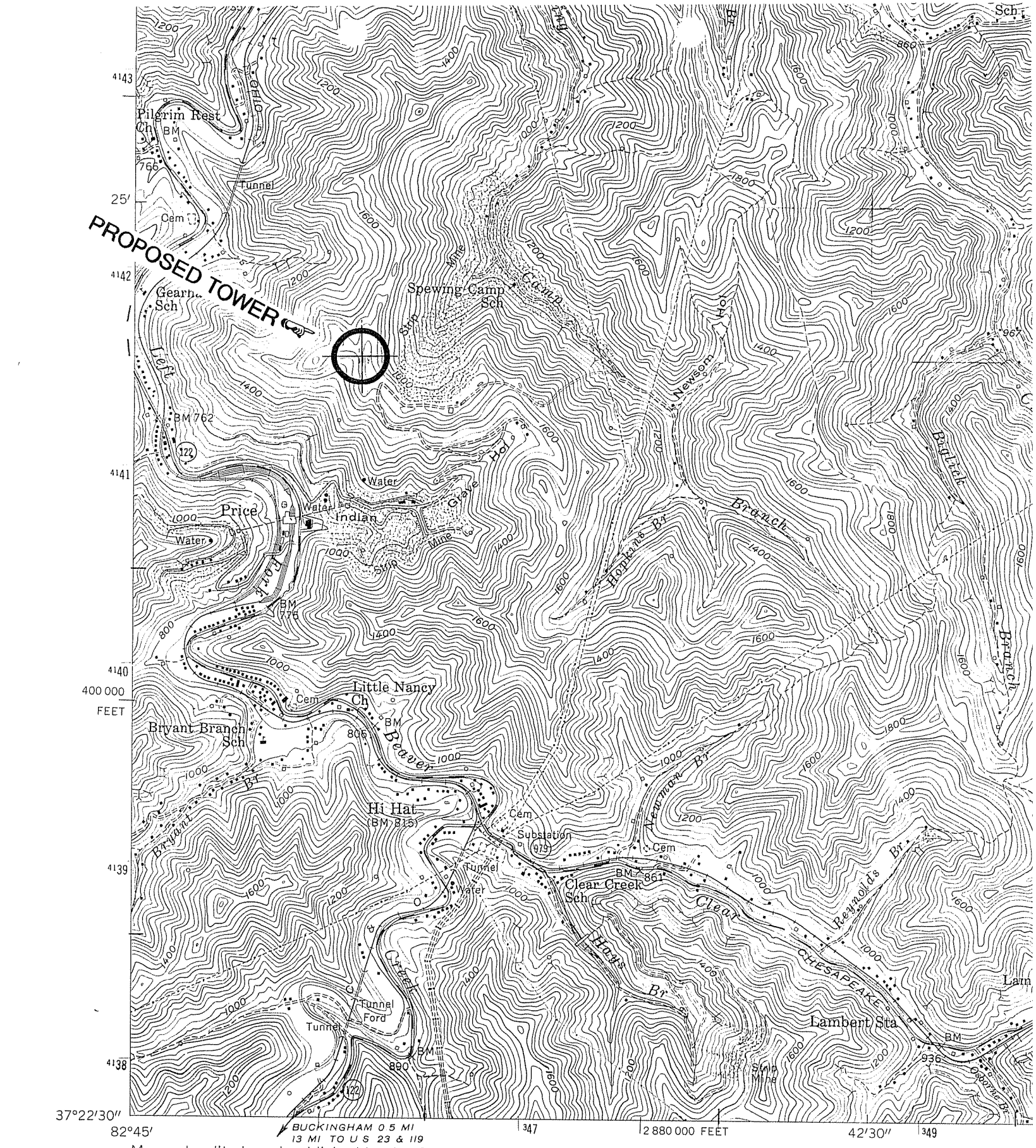
Date	Typed or Printed Name and Title of Person Filing Notice	Signature
8/12/99	LeRoy A. Adam, Consulting Engineer	LeRoy A. Adam

FOR FAA USE ONLY — FAA will either return this form or issue a separate acknowledgement

The Proposal:

NAD 83 Coordinates — Latitude — Longitude

Issued in	Signature	Date



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by stereophotogrammetric methods and from coal company maps stereo-compiled in 1947, revised from aerial photographs taken 1952. Entire map field checked 1954

Polycentric projection. 1927 North American datum
10,000-foot grid based on Kentucky coordinate system,

MN GN
3° 53 MILS
1°01' 18 MILS

MC DOWELL, KY.

NW/4 PIKEVILLE 15' QUADRANGLE
N3722 5—W8237 5/7 5

1954
PHOTOREVISED 1979
AMS 4458 I NW—SERIES V853

APPALACHIAN CELLULAR, LLC
dba
APPALACHIAN WIRELESS

Harold, Kentucky

REPORT ON AUDITS OF FINANCIAL STATEMENTS

for the years ended December 31, 1998 and 1997

ALAN M. ZUMSTEIN
Certified Public Accountant
204 Book Road
Floyds Knobs, Indiana 47119

CONTENTS

ALAN M. ZUMSTEIN
CERTIFIED PUBLIC ACCOUNTANT

204 BOOK ROAD
FLOYDS KNOBS, INDIANA 47119
(812) 923-7688

MEMBER:
AMERICAN INSTITUTE OF CPA'S
INDIANA SOCIETY OF CPA'S
KENTUCKY SOCIETY OF CPA'S
AICPA DIVISION FOR FIRMS

To the General Partners
Appalachian Cellular, LLC
d.b.a. Appalachian Wireless
Harold, Kentucky 41653

Independent Auditor's Report

I have audited the balance sheets of Appalachian Cellular, LLC (Appalachian Wireless), as of December 31, 1998 and 1997, and the related statements income and partners capital and cash flows for the years then ended. These financial statements are the responsibility of the Partnership's management. My responsibility is to express an opinion on these financial statements based on my audits.

I conducted my audits in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit includes examining on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. I believe that my audits provide a reasonable basis for my opinion.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Appalachian Wireless as of December 31, 1998 and 1997, and the results of its operations and cash flows for the years then ended, in conformity with generally accepted accounting principles.

Alan M. Zumstein

January 13, 1999

Appalachian Wireless

Balance Sheets, December 31, 1998 and 1997

Assets	1998	1997
Current Assets:		
Cash and cash equivalents	$998,225	$1,163,185
Accounts receivable, less allowance for 1998 of $304,651 and 1997 of $112,625	736,404	456,111
Materials	481,473	218,299
Other current assets	10,472	8,127
	2,226,574	1,845,722
Investments:		
Investment in affiliated companies	80,671	18,829
Deferred Charges, net of amortization (Note 1):		
Commissions capitalized	-	4,612
Patent name	114	198
Paging acquisition	106,806	24,708
Data frequency	19,712	19,712
Installation contract	-	145,690
	126,632	194,920
Cellular Plant, at original cost (Note 1):		
In service	11,785,064	7,871,369
Less accumulated depreciation	3,073,765	2,237,011
	8,711,299	5,634,358
Total	$11,145,176	$7,693,829
Liabilities and Partners' Capital		
Current Liabilities:		
Accounts payable	$236,624	$66,832
Note payable (Note 4)	$480,000	-
Current maturities of long term debt	65,000	93,000
Due related party (Note 6)	88,503	66,877
Customer deposits	54,676	52,267
Accrued expenses	26,519	1,875
	951,322	280,851
Long Term Debt (Note 5)	1,491,990	370,515
Partners' Capital:		
Partnership contributions	4,145,000	4,145,000
Retained earnings	4,556,864	2,897,463
	8,701,864	7,042,463
Total	$11,145,176	$7,693,829

The accompanying notes are an integral part of the financial statements.

Statement of Income and Partners' Capital

for the years ended December 31, 1998 and 1997

	1998	1997
Service Operating Revenues:		
Retail	$5,253,511	$4,847,246
Roamer	739,562	482,626
Long distance	136,210	114,098
Miscellaneous	227,572	301,210
Paging revenues	165,262	47,198
Uncollectibles	(441,044)	(280,808)
	6,081,073	5,511,570
Operating Expenses:		
Maintenance	325,294	238,003
Utility	215,697	176,624
Interconnection charges	836,776	1,175,663
Paging expenses	101,410	16,187
Depreciation	808,637	603,627
Amortization	175,711	177,839
Sales	238,259	239,054
Advertising	113,282	67,158
Customer	357,064	304,810
General and administrative	175,432	128,628
Interest	63,691	11,913
Taxes, other than income	93,065	(139,334)
	3,504,318	3,000,172
Income from service operations	2,576,755	2,511,398
Equipment Sales:		
Revenues	89,756	59,246
Cost of equipment sales and installations	(1,058,157)	(1,046,442)
	(968,401)	(987,196)
Other income, principally interest	51,047	62,855
Net income	1,659,401	1,587,057
Partnership capital, beginning of year	7,042,463	5,855,406
Capital distributions	-	(400,000)
Partnership capital, end of year	$8,701,864	$7,042,463

The accompanying notes are an integral part of the financial statements.

Statement of Cash Flows

for the years ended December 31, 1998 and 1997

	1998	1997
Cash Flows from Operating Activities:		
Net income	$1,659,401	$1,587,057
Adjustments to reconcile to net cash provided by operating activities:		
Depreciation	808,637	603,627
Amortization	175,711	142,434
Net change in current assets and liabilities:		
Receivables	(280,293)	(72,245)
Materials	(263,174)	46,452
Other current assets	(2,345)	(2,431)
Deferred charges	(107,423)	(44,420)
Accounts payable	191,418	(83,172)
Customer deposits	2,409	5,838
Accrued expenses	24,644	(349,262)
	2,208,985	1,833,878
Cash Flows from Investing Activities:		
Plant additions	(3,885,578)	(1,570,420)
Purchase of investments	-	(17,829)
	(3,885,578)	(1,588,249)
Cash Flows from Financing Activities:		
Partnership contributions (distributions)	-	(400,000)
Short term borrowings	480,000	-
Long term borrowings	1,175,000	463,515
Payments on long term borrowings	(143,367)	-
	1,511,633	63,515
Net increase in cash balances	(164,960)	309,144
Cash balances, beginning of year	1,163,185	854,041
Cash balances, end of year	$998,225	$1,163,185
Supplemental cash flows information:		
Interest paid on long term debt	56,281	-
Loan funds used to purchase investments	61,842	-

The accompanying notes are an integral part of the financial statements.

1. Summary of Significant Accounting Policies

Appalachian Cellular, LLC (Appalachian Wireless) is a Kentucky company engaged in cellular telephone communications services to residential and business customers located in eastern Kentucky.

Cellular Plant

Cellular plant is stated at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the plant assets. The composite depreciation rate was 8.1% in 1998 and 9.1% in 1997. The total plant also includes the assets of two (2) paging companies that were purchased during 1997.

Cellular plant in service consisted of:

	1998	1997
General support	$1,090,195	$880,153
MTSO equipment	2,006,077	947,184
Cell equipment	7,814,159	5,447,641
Paging equipment	495,632	248,607
Intangible assets - paging	347,783	347,783
Total	$11,753,846	$7,871,368

Revenues

Revenues from operations consist of charges to customers for monthly access charges, cellular airtime usage, toll charges, roamer charges and vertical services. Revenues are recognized as services are rendered. Unbilled revenues, resulting from cellular service provided from the billing cycle date to the end of each month and from other cellular carriers' customers using Appalachian Wireless' cellular systems for the last half of each month, are estimated and recorded.

Accounts Receivable

Accounts receivable consists of amounts owed by customers for both service provided and by other cellular carriers' customers using Appalachian Wireless' cellular system. Certain customers are required to make deposits. There were no customers whose individual account balance exceeded 10% of outstanding accounts receivable at December 31, 1998 or 1997.

Fair Value of Financial Instruments

Financial instruments include cash and temporary investments. The carrying value approximates the fair value because of the short-term maturity of those investments.

Continued

1. Summary of Significant Accounting Policies, continued

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates used in the preparation of the financial statements.

Off Balance Sheet Risk

Appalachian Wireless has off-balance sheet risk in that they maintain cash deposits in financial institutions in excess of the amounts insured by the Federal Deposit Insurance Corporation (FDIC).

Statement of Cash Flows

For purposes of the statement of cash flows, Appalachian Wireless considers temporary investments having a maturity of three months or less to be cash equivalents.

2. Income Taxes

Appalachian Wireless is exempt from federal and state income taxes. The partners are subject to taxes on an individual basis.

3. Leases

Appalachian Wireless leases two (2) office spaces and two microwave sites from the officers and majority shareholders of the managing partner. The leases are for an unspecified length of time. The monthly lease payments are $450, $181, $35 and $100, respectively.

Appalachian Wireless also leases cable pairs and sites from each of the partners. The leases are for an unspecified length of time. The monthly lease payments are based on the facilities used and monthly useages.

Appalachian Wireless leases office and warehouse space from the managing partner. The lease is for an unspecified length of time. The monthly lease is $1,521.

Continued

1. **Summary of Significant Accounting Policies, continued**

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates used in the preparation of the financial statements.

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Appalachian Wireless leases office and warehouse space from the managing partner. The lease is for an unspecified length of time. The monthly lease is $1,521.

Continued

4. Short Term Borrowings

Appalachian Wireless has a short term loan commitment from Rural Telephone Finance Cooperative RTFC) in the amount of $480,000. As of December 31, 1998, Appalachian Wireless had advanced the entire amount of loan commitment.

5. Long Term Debt

The cellular plant and paging assets are pledged as collateral on loans from RTFC, DeLong Electronics, Inc. and Highland Communications, Inc. Long term debt consists of:

	1998	1997
RTFC first mortgage notes, 20 year term and 6.10% and 7.00% interest (6.65% in 1997)	$1,556,990	$345,651
Paul R. Delong, due in 1998, no interest	-	37,864
Highland Communications, Inc., one-half due in 1998 and one-half due in 1999, with interest at 6.00% on the unpaid balance	-	80,000
	1,556,990	463,515
Less current maturities	(65,000)	(93,000)
	$1,491,990	$370,515

The long-term debt to RTFC is payable in quarterly payments of approximately $39,000. At December 31, 1998, current maturities of long-term debt outstanding for the next five years are as follows: 1999 - $65,000; 2000 - $70,000; 2001 - $75,000; 2002 - $80,000; 2003 - $85,000.

6. Related Parties

Appalachian Wireless shares common office space, office equipment and personnel of the Managing partner of Appalachian Wireless. Appalachian Wireless pays a monthly fee for these services, including a 10% management fee, aggregating $1,048,187 in 1998 and $868,907 in 1997.

7. Subsequent Events

Appalachian Wireless has exercised an option to purchase an adjoining paging company from an unrelated party for $900,000. The purchase is contingent upon approval of the Federal Communications Commission (FCC) for licenses.

APPALACHIAN CELLULAR

DETAIL-CONSOLIDATED ALLOCATED INCOME STATEMENT FOR 11 PERIODS ENDING 11/30/99

PAGE 1 OF COMPANY/FACILITY # - 04/1000 Appalachian Cellular

	CURRENT PERIOD ACTUAL	% OF SALES	BUDGET	% OF SALES	VARIANCE	YEAR TO DATE ACTUAL	% OF SALES	BUDGET	% OF SALES	VARIANCE
RETAIL REVENUES-ACCES	389,688		0		389687-	3,757,896		0		3757895-
RETAIL REVENUES USAGE	147,746		0		147746-	1,611,805		0		1611805-
ROAMER - KEEPER	41,117		0		41116-	676,396		0		676396-
AMERICAN ROAMING NETWORK REV.	743		0		743-	4,352		0		4352-
ROAMER - PASS THROUGH	106,832		0		106831-	1,124,761		0		1124760-
ROAMER PASS THRU CHARGES	100,021-		0		100021	1,106,034-		0		1106033
SERVICE CHARGES	7,298		0		7298-	70,737		0		70737-
OTHER	44,865-		0		44864	127,767-		0		127767
EQUIPMENT SALES	9,364		0		9364-	84,841		0		84840-
TOTAL LOCAL NETWORK REV	557,903		0		557902-	6,096,987		0		6096986-
LONG DISTANCE REVENUES INTERST	6,741		0		6740-	77,766		0		77766-
LONG DISTANCE REVENUES INTRAST	1,504		0		1504-	13,658		0		13657-
TOTAL LONG DIST NETWORK	8,245		0		8244-	91,424		0		91424-
CANCELLATION PENALTY REVENUE	155-		0		155	6,342-		0		6341
LATE PAYMENT CHARGES	5,791		0		5790-	68,102		0		68101-
911 1.5% COLLECTION FEE	0		0		0	1,693		0		1692-
USAC/USF PAYOUTS	1,910		0		1909-	1,910		0		1909-
PAGING REVENUE	43,930		0		43930-	328,595		0		328595-
EXPANDED COVERAGE SOUTHERNET	626-		0		626	9,368-		0		9367
PAGING EXPENSES	16,322		0		16321-	134,232		0		134231-
TOTAL MISC. REVENUE	34,528		0		34528-	250,359		0		250358-
PATR DIV RTFC CASH	0		0		0	2,387		0		2387-
PATR DIV RTFC NON CASH	0		0		0	483		0		483-
UNCOLLECTIBLE REVENUES	45,075-		0		45074	436,400-		0		436400
TOTAL UNCOLLECTIBLES	45,075-		0		45074	433,529-		0		433529
TOTAL OPERATING REVENUES	555,601		0		555601-	6,005,241		0		6005240-
INVENTORY DEPLETION	100,000		0		100000-	1,125,000		0		1125000-
INSTALLATION EXPENSE	11,682		0		11682-	91,185		0		91185-
TOTAL COST OF GOODS SOLD	111,682		0		111682-	1,216,185		0		1216185-
MAINTENANCE EXPENSE										
MOTOR VEHICLE EXPENSE	3,306		0		3306-	34,190		0		34190-
OTHER MAINTENANCE EXPENSE	0		0		0	2,660		0		2659-
AMORTZ LAND LEASES	439		0		438-	4,584		0		4584-
BELCHER/ELKHORN TOWER LEASE	0		0		0	850		0		850-
POOR FARM TOWER LEASE	0		0		0	8,300		0		8300-
BRANHAMS CREEK LEASE	43		0		43-	9,573		0		9573-
WELLER REPEATER SITE	500		0		500-	2,000		0		2000-
GRUNDY LEASE	0		0		0	900		0		900-
BUILDING EXP CROSSROADS OFFICE	722		0		721-	11,280		0		11280-
LAND & BUILDING EXPENSE	5,237		0		5236-	49,986		0		49986-
GENERAL PURPOSE COMPUTER EXPEN	0		0		0	6,107		0		6106-
EXP. WILLIAMSON MALL OFFICE	950		0		950-	10,173		0		10172-
CELL SITE MAINTENANCE	24,343		0		24343-	188,951		0		188950-
REDBUSH ROAD MAIN	0		0		0	1,813		0		1813-

	CURRENT PERIOD ACTUAL	% OF SALES	BUDGET	% OF SALES	VARIANCE	YEAR TO DATE ACTUAL	% OF SALES	BUDGET	% OF SALES	VARIANCE
TOTAL MAINTENANCE EXPENSE	35,541		0		35540-	331,367		0		331366-
UTILITY EXPENSES										
TELEPHONE EXPENSE	24,320		0		24320-	195,150		0		195150-
HEAT, LIGHT, AND POWER EXPENSE	3,505		0		3504-	32,196		0		32196-
TOTAL UTILITIES	27,825		0		27825-	227,346		0		227346-
AT&T INTERCONNECT	17,980		0		17979-	156,003		0		156003-
GTE INTERCONNECT	4,355		0		4354-	27,774		0		27774-
SCB INTERCONNECT	21,984		0		21984-	222,080		0		222080-
ROAMER EXPENSE GTE	29,122		0		29121-	220,697		0		220696-
BILLING EXPENSE	71,498		0		71497-	386,772		0		386772-
HAROLD INTERCONNECT	16,402		0		16402-	84,987		0		84986-
WHEELWRIGHT INTERCONNECT	7,499		0		7499-	40,304		0		40303-
SALYERSVILLE INTERCONNECT	6,736		0		6736-	36,505		0		36505-
CHAPMAN INTERCONNECT	2,445		0		2445-	13,972		0		13972-
WEST LIBERTY INTERCONNECT	0		0		0	22,201		0		22200-
TOTAL CUSTOMER USAGE EXP	178,021		0		178021-	1,211,296		0		1211295-
DEPRECIATION & AMORTZ. EXPENSE										
DEPRECIATION EXPENSE	103,211		0		103211-	1,046,504		0		1046504-
AMORTIZATION EXPENSE	1,307		0		1307-	1,928		0		1928-
AMORTIZATION EXP. PAGING	7,399		0		7399-	47,335		0		47335-
TOTAL DEPREC. & AMORTZ.	111,918		0		111917-	1,095,768		0		1095768-
ACCESS EXPENSE (USF)	445-		0		445	24,904-		0		24904
SALES EXP. INCL. COMMISSIONS	29,943		0		29942-	273,841		0		273841-
TOTAL SALES EXPENSE	29,497		0		29497-	248,937		0		248936-
ADVERTISING EXPENSE/PROMOTIONS	23,611		0		23610-	171,653		0		171653-
TOTAL ADVERTISING EXPENSE	23,611		0		23610-	171,653		0		171653-
CUSTOMER ACCTS AND SERVICE EXP	39,593		0		39592-	281,940		0		281940-
MANAGEMENT SERVICES	332		0		332-	8,321		0		8320-
MANAGEMENT SERVICES (10%)	10,536		0		10535-	90,311		0		90310-
OFFICE EXPENSE	17,999		0		17998-	123,489		0		123489-
COLLECTION EXPENSE	227		0		227-	918		0		918-
TOTAL GENERAL OFICE EXP.	68,687		0		68686-	504,979		0		504978-
OTHER OPERATING EXPENSE	0		0		0	16,074		0		16074-
CONSULTING, LEGAL, AUDITING	3,399		0		3398-	45,652		0		45652-
INSURANCE EXPENSE	3,147		0		3146-	29,333		0		29333-
MISCELLANEOUS EXPENSE	8,063		0		8062-	21,057		0		21056-
ACCOUNTING, FINANCE, DATA PROC	2,249		0		2249-	35,065		0		35065-
OTHER GENERAL & ADMINISTATIVE	0		0		0	9		0		9-
TOTAL OTHER OPERATING EXP	16,858		0		16857-	147,191		0		147190-
OPERATING TAXES PROPERTY	10,000		0		10000-	110,000		0		110000-
INTEREST INCOME	1,933		0		1932-	36,032		0		36031-
RENT INCOME	453		0		452-	4,919		0		4918-

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	CURRENT PERIOD					YEAR TO DATE				
	ACTUAL	% OF SALES	BUDGET	% OF SALES	VARIANCE	ACTUAL	% OF SALES	BUDGET	% OF SALES	VARIANCE
INTEREST ON FUNDED DEBT RTFC	15,573		0		15573-	145,098		0		145097-
OTHER INTEREST CUSTOMER DEPOSI	0		0		0	771		0		770-
TOTAL OTHER INCOME & EXP	23,188		0		23187-	214,918		0		214917-
TOTAL OPERATING EXPENSES	626,827		0		626826-	5,369,639		0		5369639-
NET INCOME (- LOSS)	71,226-		0		71225	635,601		0		635601-

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	CURRENT PERIOD	LAST YEAR PERIOD	INCREASE/ DECREASE
ASSETS ..			
CASH AND EQUIVALENTS			
CASH--CHECKING	226,575	386,229	159,654-
CROSSROADS PETTY CASH	100	0	100
SOUTHSIDE MALL PETTY CASH	300	0	300
CASH--TEMPORARY INVESTMENTS	823,705	684,967	138,738
TOTAL CASH & EQUIVALENTS	1,050,680	1,071,196	20,516-
RECEIVABLES			
RECEIVABLES--CUSTOMERS	699,187	650,172	49,015
PAY/REC ROAMERS NET SETTLEMENT	439-	24,528-	24,089
PAY/REC ROAMER KY CELLULAR	0	1,543	1,543-
PAY/REC ROAMERS OTHER	1,087-	399-	688-
A/R APPALACHIAN PAGING	57-	0	57-
NOTE REC. PEOPLES RURAL COOP.	1,642,675	0	1,642,675
TOTAL ACCOUNTS RECEIVABLE	2,340,279	626,787	1,713,492
MATERIALS AND SUPPLIES			
MATERIALS AND SUPPLIES	522,780	332,307	190,473
TOTAL MATERIAL & SUPPLIES	522,780	332,307	190,473
PREPAYMENTS			
PREPAID INSURANCE	19,238	14,108	5,130
PREPAID OTHER EXPENSES	12,000	0	12,000
TOTAL PREPAYMENTS	31,238	14,108	17,130
TOTAL CURRENT ASSETS	3,944,977	2,044,398	1,900,579
NON CURRENT ASSETS			
RTFC - CTS	127,039	69,145	57,894
SUB. TO CAPTL TERM CERT RTFC UN	22,369	80,263	57,894-
SUB TO CAPTL CERT RTFC OFFSET	22,369-	80,263-	57,894
SUB. TO CAPITAL TERM CERT RTFC	483	0	483
DEFERRED CHARGES	1,037	2,665	1,629-
PAGING ACQUISTION	0	100,747	100,747-
INVESTMENT DATAFM	19,712	19,712	0
TOTAL NONCURRENT ASSETS	148,271	192,270	43,998-
CELLULAR PLANT IN SERVICE			
PAGING INVENTORY	0	189	189-
GENERAL SUPPORT ASSETS			
LAND LEASE	173,920	136,559	37,361
LAND LEASE AMORTIZATION	33,607	30,234	3,373
LAND	184,786	168,371	16,414
LAND LEASE DEWEY LAKE	5,000	0	5,000
LAND PURCHASE FALLSBURG	25,000	0	25,000
OTHER EQUIPMENT	13,694	9,741	3,953
INTANGIBLE ASSETS PAGING	1,331,736	347,853	983,883
PAGING TRANSMITTER EQUIP.	701,525	457,335	244,190
BUILDINGS	588,533	433,117	155,417
BUILDING - MAXIE	21,425	0	21,425

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	CURRENT PERIOD	LAST YEAR PERIOD	INCREASE/ DECREASE
BUILDING GRUNDY	126	0	126
OFFICE & COMPUTER EQUIPMENT	337,116	251,198	85,918
TOTAL GEN SUPPORT ASSETS	3,349,254	1,774,129	1,575,125
MTSO EQUIPMENT			
SWITCHING EQUIPMENT	2,633,220	2,005,330	627,890
TOTAL MTSO EQUIPMENT	2,633,220	2,005,330	627,890
CELL SITE EQUIPMENT			
ALLEN CELL SITE	863,864	733,652	130,211
BELCHER TOWER	23,545	16,430	7,115
BELCHER CELL SITE	2,303	0	2,303
BELCHER BASE SITE CONTROLLER	220,348	189,204	31,144
BIGGS CELL SITE	392,978	346,205	46,772
BOLDMAN CELL SITE	653,940	570,300	83,640
EASTERN CELL SITE	577,534	282,992	294,542
ELLIOTT CELL SITE	136,841	123,861	12,980
FALLSBURG CELL SITE	13,442	0	13,442
FLATWOODS CELL SITE	419,048	379,004	40,045
FREEBURN CELL SITE	341,145	305,587	35,558
GRUNDY CELL SITE	246,048	6,316	239,732
HAYSIDE CELL SITE	17,451	0	17,451
INEZ CELL SITE	144,179	131,001	13,178
JENNY WILEY CELL SITE	1,898	0	1,898
JEPTHA TOWER	1,977	0	1,977
JOES KNOB CELL SITE	717,867	638,534	79,332
KIMPER CELL SITE	365,326	323,786	41,541
2232LICK	17,643	0	17,643
LOUISA CELL SITE	432,702	393,477	39,225
LOWMANSVILLE CELL SITE	448,395	256,837	191,558
MAXIE CELL SITE	168,781	0	168,781
PAINTSVILLE CELL SITE	557,084	474,706	82,378
PARKWAY CELL SITE	568,346	499,640	68,706
PRESTONSBURG CELL SITE	675,812	574,492	101,320
POOR FARM CELL SITE	256,676	205,634	51,042
PRICE TOWER	399	0	399
REDBUSH CELL SITE	218,650	6,208	212,442
SALYERSVILLE CELL SITE	506,065	459,951	46,113
SO. WILLIAMSON CELL SITE	404,203	365,662	38,541
SPARE CELL SITE EQPT	0	55,182	55,182-
VIRGINIA #1 CELL SITE	8,353	0	8,353
WEST LIBERTY CELL SITE	343,637	312,126	31,511
LOWMANSVILLE EQUIP.	0	5,450	5,450-
TOTAL CELL SITE EQPT	9,746,479	7,656,239	2,090,240
OTHER EQUIPMENT			
TOTAL OTHER EQUIPMENT	0	0	0
TOTAL PLANT BEFORE DEPR:	15,728,953	11,435,698	4,293,255

	CURRENT PERIOD	LAST YEAR PERIOD	INCREASE/ DECREASE
ACCUMULATED DEPRECIATION	3,230,645	2,373,450	857,196
A/D CELL SITE EQUIPMENT	241,791	188,033	53,758
A/D GENERAL SUPPORT ASSETS	577,388	351,476	225,912
A/D HAROLD MTSO EQUIPMENT	87,937	38,667	49,269
ACCUM AMORTZ PAGING LIC.	4,137,761	2,951,626	1,186,135
TOTAL ACCUMULATED DEPREC			
A/D VIRGINIA #1	136	0	136
TOTAL CELLULAR PLANT	11,591,056	8,484,072	3,106,984
TOTAL ASSETS	15,684,304	10,720,740	4,963,564
CURRENT LIABILITIES			
ACCOUNTS PAYABLE	87,000	90,500	3,500-
A/P GENERAL	0	3	3-
A/P TAX CLEARING	33,655	17,232	16,423
A/P FEDERAL EXCISE TAX	34,518	59,209-	93,727
A/P SALES & USE TAX	18,830	19,821	991-
A/P SCHOOL TAXES	150	0	150
A/P WEST VIRGINIA SALES & USE	125,376	84,082	41,294
A/P HAROLD TELEPHONE COMPANY	0	161-	161
A/P INTER MOUNTAIN CABLE	280-	854	1,134-
A/P PHONE INSURANCE	569	10,049	9,479-
A/P 911 SURCHARGE	299,819	163,171	136,648
TOTAL ACCOUNTS PAYABLE			
CUSTOMER DEPOSITS	27,353	47,100	19,747-
CUSTOMER DEPOSITS	2,052	5,168	3,115-
ACCR. INTERST-CUSTOMER DEPOSIT	29,406	52,267	22,862-
TOTAL CUSTOMER DEPOSITS			
OTHER ACCRUED TAXES	94,894	35,300	59,594
ACCR. PROP. & ADVALOREM TAXES	94,894	35,300	59,594
TOTAL OTHER ACCRUED TAXES			
ACCRUED INTEREST	11,126-	20,700	31,826-
ACCRUED INTEREST RTFC	11,126-	20,700	31,826-
TOTAL ACCRUED INTEREST			
TOTAL CURRENT LIABILITIES	412,992	271,439	141,553
LONG-TERM DEBT			
FUNDED DEBT RTFC	1,167,724	1,226,316	58,592-
FUNDED DEBT RTFC PAGING	1,241,600	335,244	906,356
FUNDED DEBT RTFC CONSTRUCTION	1,394,737	1,605,263	210,526-
UNADVANCED DEBT RTFC	1,394,737-	1,605,263-	210,526
N/P APP. PAGING 3/31/2000	100,000	0	100,000
LINE OF CREDIT RTFC	480,000	480,000	0

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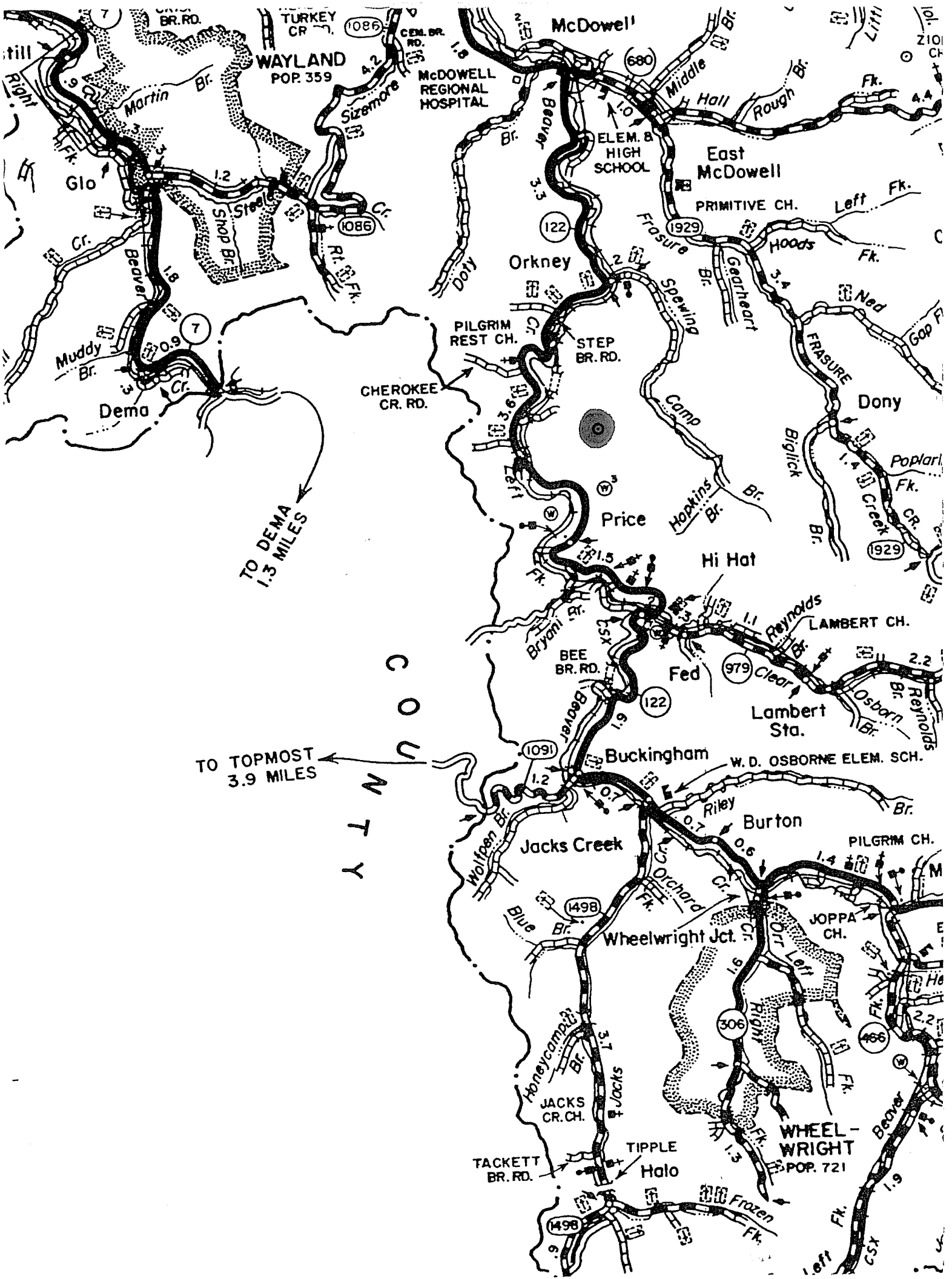
	CURRENT PERIOD	LAST YEAR PERIOD	INCREASE/ DECREASE
TOTAL LONG-TERM DEBT	2,989,323	2,041,560	947,763
PARTNERSHIP EQUITY			
CAPITAL CONTRIBUTIONS	4,501,832	4,145,000	356,832
CAPITAL WITHDRAWALS	100,000-	0	100,000-
PRIOR YEARS PROFIT (- LOSS)	4,855,542	2,897,462	1,958,080
CAPITAL CONTRIBUTION PEOPLES R	2,414,013	0	2,414,013
CAPITAL WITHDRAWALS PEOPLES R	25,000-	0	25,000-
CURRENT YEAR PROFIT (- LOSS)	0	0	0
CURRENT YEAR PROFIT/LOSS	635,601	1,365,278	729,677-
TOTAL PARTNERSHIP EQUITY	12,281,989	8,407,741	3,874,248
TOTAL LIAB. & PARTNERS' EQUITY	15,684,304	10,720,740	4,963,564
BALANCE SHEET TOTAL	0	0	0


WAYLAND
POP. 359
McDOWELL REGIONAL HOSPITAL
McDowell
ELEM. & HIGH SCHOOL
East McDowell
PRIMITIVE CH.
Orkney
PILGRIM REST CH.
STEP BR. RD.
CHEROKEE CR. RD.
TO DEMA 1.3 MILES
Glo
Dema
Price
Hi Hat
Dony
Fed
Lambert Sta.
LAMBERT CH.
Buckingham
W. D. OSBORNE ELEM. SCH.
TO TOPMOST 3.9 MILES
Jacks Creek
Burton
PILGRIM CH.
Wheelwright Jct.
JOPPA CH.
JACKS CR. CH.
TACKETT BR. RD.
TIPPLE
Halo
WHEEL-WRIGHT
POP. 721
BEE BR. RD.
Martin Br.
Sizemore
Steel Shop Br.
Muddy Br.
Beaver
Dotty
Spewing
Camp
Bryant Br.
Hall
Rough
Middle
Frasure
Gearheart Br.
Hoods Fk.
Ned
Gap
Biglick
Poplar Fk.
Reynolds
Osborn Br.
Clear
Riley
Wolfpen Br.
Orchard Fk.
Blue Br.
Honeycamp Br.
Jacks
Orr
Right Fk.
Left Fk.
Frozen Fk.
Beaver
CSX
COUNTY

Appalachian WIRELESS www.appwireless.com

P. O. BOX 520 • 15795 S. US 23
HAROLD, KENTUCKY 41635

(606) 478-2355
(800) 452-2355
FAX (606) 478-2356

August 2, 1999

Hal Yungmeyer
Business Analyst/Mining Engineer
Electric Fuels Corporation
First American Center
415 Broad Street, Suite 640-D
Kingsport, TN 37660

RE: Progress Land Corporation

We return herewith a completely executed copy of Lease Agreement between Progress Land Corporation and Appalachian Cellular General Partnership.

We also enclose our check in the amount of $25,000.00 for said lease.

If you have any questions, I may be called at **606 478 9401 ext 207** or email me at jcamp@eastky.net.

Sincerely,

James Campbell
Controller

JC/ndt

Enclosures

C:\FILES\ACGP\Progress Land Deed 1 (HalYungmeyer) JOC.doc

Hal Yungmeyer
Business Analyst/Mining Engineer

ELECTRIC
FUELS
CORPORATION

First American Center
415 Broad Street, Suite 640-D
Kingsport, Tennessee 37660
(423) 578-2570
FAX: (423) 578-2575

LEASE AGREEMENT

THIS LEASE, made and entered into this the 27th day of July, 1999, (the "Lease") by and between PROGRESS LAND CORPORATION, a Florida Corporation, Barnett Tower, One Progress Plaza, St. Petersburg, FL 33701, Party of the First Part, hereinafter sometimes referred to as ("LESSOR") and HAROLD TELEPHONE COMPANY, INC.; MOUNTAIN TELECOMMUNICATIONS, INC,: CELLULAR SERVICES, INC.; AND THACKER-GRIGSBY TELEPHONE COMPANY, INC.; AND PEOPLES RURAL TELEPHONE COOPERATIVE; CORPORATE PARTNERS d/b/a APPALACHIAN CELLULAR GENERAL PARTNERSHIP, P.O. Box 520, Harold, Kentucky 41635, herein referred to as ("LESSEE").

WHEREAS, the Party of the First Part is the owner of a tract of land located in Floyd County, Kentucky, upon which the Party of the Second part desires to construct a tower for transmitting and receiving cellular telephone signals and/or other related communication facilities, and the Party of the First Part desires to lease said property for such purposes, and

WHEREAS, the Party of the Second Part desires to use the property, hereinafter described, for the purpose above-stated, including, but not limited to, the construction and maintenance of a tower, access roads, power and telephone transmission lines, and any other related communication system either incident to or in conjunction with a cellular telephone receiving and transmission system.

NOW, THEREFORE, in consideration of the matters hereinafter set forth, said parties covenant and agree as follows:

> That for and in consideration of the sum of twenty-five thousand ($25,000) dollars (the "Rental Fee"), cash in hand paid, the receipt of which is hereby acknowledged, said Party of the First Part does hereby lease and let unto the Party of the Second Part, its successors and assigns, that certain tract or parcel of land located at Price, Kentucky, in Floyd County, at a point on top of the ridge between Left Beaver Creek and Spewing Camp Branch, said point being described by coordinates in The Elk Horn Coal Corporation System of S 144.40; W 164 533.73, thence S 01 23' 00 E 50.03 feet, S 88 30' 10" W 50.06 feet N 01 07' 53" W 50.03 feet, N 88 37' 21" E 49.91 feet to the beginning containing 0.06 acres, being part of the land conveyed to Progress Land Corporation by Southern Kentucky Energy Company by deed dated January 1, 1992 (the "Leased Premises").

IT IS FURTHER MUTUALLY COVENANTED AND AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. The Lessor further gives, grants, and leases unto the Lessee the nonexclusive right for ingress and egress over other properties owned by Lessor from the tower sited located on the Leased Premises for the purpose of constructing,

maintaining, and operating the tower and appurtenant facilities for the operation of a cellular radio telephone service and related communications services. Lessor further grants to the Lessee the right to construct, maintain, and operate telephone and power transmission lines over said property to the Leased Premises for service of the tower and related facilities only. Lessor reserves the right to use any existing access roads located on said premises provided Lessee shall be responsible for the maintenance of said roadways.

2. The initial term of this Lease shall be for a period of twenty-five (25) years from the date hereof, with the exclusive option of the Lessee to renew said lease for one (1) additional twenty-five (25) year period (the "Renewal Term") under the same terms and conditions as set out herein including, without limitation, payment of the Rental Fee of twenty-five thousand dollars ($25,000) on the first day of the Renewal Term. In the event that Lessee desires to renew and/or extend this Lease, it shall give Lessor notice of such intention in writing at least ninety (90) days before the expiration of the initial term.

3. Lessee acknowledges that certain portions of Lessor's property in the vicinity of the demised premises are permitted for mining operations by the Kentucky DSMRE (the "Permitted Area(s)"). In the event that Lessee, its affiliates or contractors disturb a Permitted Area(s), Lessee shall restore such area(s) to its former condition at Lessee's sole expense, and in such manner as Lessor may direct. Further, Lessee shall indemnify Lessor for any and all additional expenses incurred by Lessor by virtue of any disturbance of a Permitted Area(s).

4. Lessee shall indemnify, hold harmless, and defend Lessor, its parent and affiliates and their respective shareholders, directors, officers, employees, agents, and representatives (collectively the "Lessor Group") against any and all liability, losses, damages, costs, fines, penalties, and expenses, including attorney's fees, that may be imposed upon, suffered, or incurred by the Lessor Group as a result of (i) or related, directly or indirectly, to this Lease and (ii) the acts or failure to act by Lessee, whether or not in connection with the performance under this Lease and including, without limitation, the following matters:

a. Injury or death of persons, including, without limitation, Lessee's employees, Lessor's employees, employees of other parties (including without limitation, worker's compensation claims), any loss or destruction or damage to property, including the conversion thereof, or claims for common law nuisance, caused by or resulting in any manner from any acts or omissions, negligent or otherwise, of Lessee or of any of Lessee's agents, servants or employees operating under this Lease.

b. Violations of any laws, rules, regulations, and ordinances, whether state, federal, or municipal, that are applicable to the operations under this Lease.

Upon Lessor's request, Lessee shall, at its sole expense, provide counsel to defend Lessor for any indemnity claim hereunder, provided that (i) counsel retained by Lessee shall be acceptable to Lessor and (ii) Lessor shall be consulted, from time to time, regarding any such claim and the defense thereof.

The provisions of this paragraph 4 shall survive termination of this Lease.

5. (a) Lessee will purchase and maintain such insurance as will protect Lessor and Lessee from claims under state or federal worker's compensation laws and from claims for damages because of bodily injury or death of Lessor's employees and claims insured by usual personal injury liability coverage; from claims for damages because of bodily injury, sickness or disease or death of any person other than Lessee's employees, and from claims for injury to or destruction of property including loss of use thereof which may arise out of or result from Lessee's operations under this Lease.

(b) At a minimum, Lessee shall maintain the following insurance during the entire term of this Lease and thereafter.

i. Worker's Compensation and Occupational Disease Disability Insurance with a minimum of $1,000,000 coverage for employer's liability and such other coverage as may be required by all federal and state laws applicable to the Lessee's operations hereunder.

ii. Comprehensive General Liability Insurance, including coverage for broad form contractual liability, specifically including the indemnity agreement in paragraph 4 of this Lease, with a minimum of $1,000,000 Combined Single Limit, or the equivalent.

iii. Comprehensive Automobile Liability Insurance applying to owned, non-owned, and hired vehicles with a minimum of $1,000,000 Combined Single Limit, or the equivalent.

iv. An umbrella liability policy (Excess Liability) providing coverage above the coverages in paragraphs 5(b)(ii) and 5(b)(iii) with a minimum of $10,000,000.00 combined single limit, or the equivalent.

The Comprehensive General Liability, Comprehensive Automobile Liability, and Umbrella Liability policies shall be endorsed to include Lessor as an additional insured and will contain a waiver of subrogation provision satisfactory to Lessor. Prior to the commencement of any operations by Lessee hereunder, and at each policy renewal date, Lessee shall furnish or have furnished to Lessor (i) a certificate or certificates evidencing the existence of the above-required insurance and (ii) written confirmation from the insurance carrier(s), or the authorized agent(s) for such insurance carriers, that Lessor is an additional insured under the policies set out in paragraphs 5(b)(ii), 5(b)(iii), and 5(iv). Furthermore, Lessee shall provide Lessor with not less than thirty (30) days prior written notice of any material change in or cancellation of the insurance obtained by Lessee.

Neither the maintenance of the insurance nor the limits provided therein shall be deemed a limitation on Lessee's responsibilities under this Lease.

The provisions of this paragraph 5 shall survive termination of this Lease.

6. Lessee agrees to operate and use the Leased Premises solely for the purposes above-stated and will not use same in the conduct of any illegal activity nor will it permit or suffer the property to be subject to waste. Lessee being in full compliance with the terms of this Agreement, will be permitted to use and occupy said premises for the initial term of this Lease or any Renewal Term, as provided herein, and shall continue to use and occupy said premises without interference or molestation on the part of Lessor.

7. If Lessee should fail to pay the Rental Fees when due; to construct, operate, and maintain the tower and appurtenant facilities for the operation of a cellular radio telephone service and related communications systems on the Leased Premises; to indemnify the Lessor Group from any and all claims related to Lessee's operations consistent with the provisions of paragraph 4 of this Lease; to maintain the insurance and name Lessor as an additional insured under Lessee's insurance as required under paragraph 5 of this Lease; or to otherwise comply, perform, or observe any and all of the applicable covenants, terms and conditions of this Lease, then any such failure shall be considered an event of default hereunder. If any event of default occurs and is not cured within ten (10) days after written notice of such default from Lessor to Lessee, then the Lessor may terminate this Lease at any time, effective upon giving the Lessee written notice of such termination. In addition to termination hereunder, Lessor specifically reserves any and all rights and remedies available to it under applicable law together with all remedies set forth herein.

8. Within ninety (90) days following termination of this Lease, the Lessee shall remove any and all of its fixtures, personal property, and equipment placed on the Leased Premises or adjoining properties of Lessor (the "Lessee Assets") by Lessor. If Lessee fails to remove any of the Lessee Assets within such time period, then Lessor, at its option, may (i) declare Lessee's interest in and to any remaining Lessee Assets abandoned and Lessor may take sole and exclusive possession and ownership of such assets, and/or (ii) remove any remaining Lessee Assets from the Leased Premises and Lessee shall reimburse Lessor for all costs incurred in removing the assets.

9. Lessee hereby acknowledges and agrees that this Lease is for surface use only and that Lessor specifically reserves the rights to any and all minerals including, without limitation, coal, oil and gas and the right to extract the same from the Leased Premises and the adjoining properties. If for any reason during the Initial Term or the Renewal Term of this Lease, it is necessary or convenient for Lessor, its successors and assigns, to move and/or relocate the tower located on the Leased Premises incident to its coal mining, oil and gas, and/or other mineral development, then in such event, the following shall occur:

a. Lessor shall provide written notice at least six (6) months prior to the date on which the tower is to be relocated;

b. Lessor shall provide Lessee an alternative tower site on other Lessor property, such site to be reasonably acceptable to Lessee;

c. Lessee, at Lessor's expense, shall relocate the tower and all ancillary facilities to the new site; and

d. The parties shall execute an amended lease agreement thereby deleting the Leased Premises and including new leased area under the terms and provisions of this Lease.

Lessee shall use its best efforts to minimize the cost of any relocation of the tower and appurtenant facilities. Except as set forth herein, the terms and provisions of this Lease shall remain in full force and effect during the remaining Initial Term or Renewal Term of this Lease.

10. This Agreement shall be construed under the laws of the Commonwealth of Kentucky.

IN WITNESS WHEREOF, the parties have hereunto set their name as of the day and year first above-written.

LESSOR:

PROGRESS LAND CORPORATION

By: Harold Gungmeyer

Its: VICE PRESIDENT

LESSEE:

APPALACHIA CELLULAR GENERAL PARTNERSHIP

By: Paul R Deaton

Its: MANAGING MEMBER

STATE OF ~~FLORIDA~~ Tennessee

COUNTY OF Sullivan

The foregoing Agreement of Lease was produced before me and in my presence acknowledged by S. Harold Gunsmyer, to me personally known to be the Vice President of Progress Land Corporation, to be his act and deed.

Given under my hand this 27th day of July, 1999.

NOTARY PUBLIC

MY COMMISSION EXPIRES: 7/22/2000

STATE OF KENTUCKY

COUNTY OF FLOYD

The foregoing Agreement of Lease was produced before me and in my presence acknowledged by Lessee, Paul R. Gearheart, President, Harold Telephone Company, Inc., as Managing General Partner for Appalachian Cellular General Partnership, to be his act and deed, this 13th day of JULY, 1999.

Given under my hand this 13th day of July, 1999.

Nell Davis Jackett
NOTARY PUBLIC

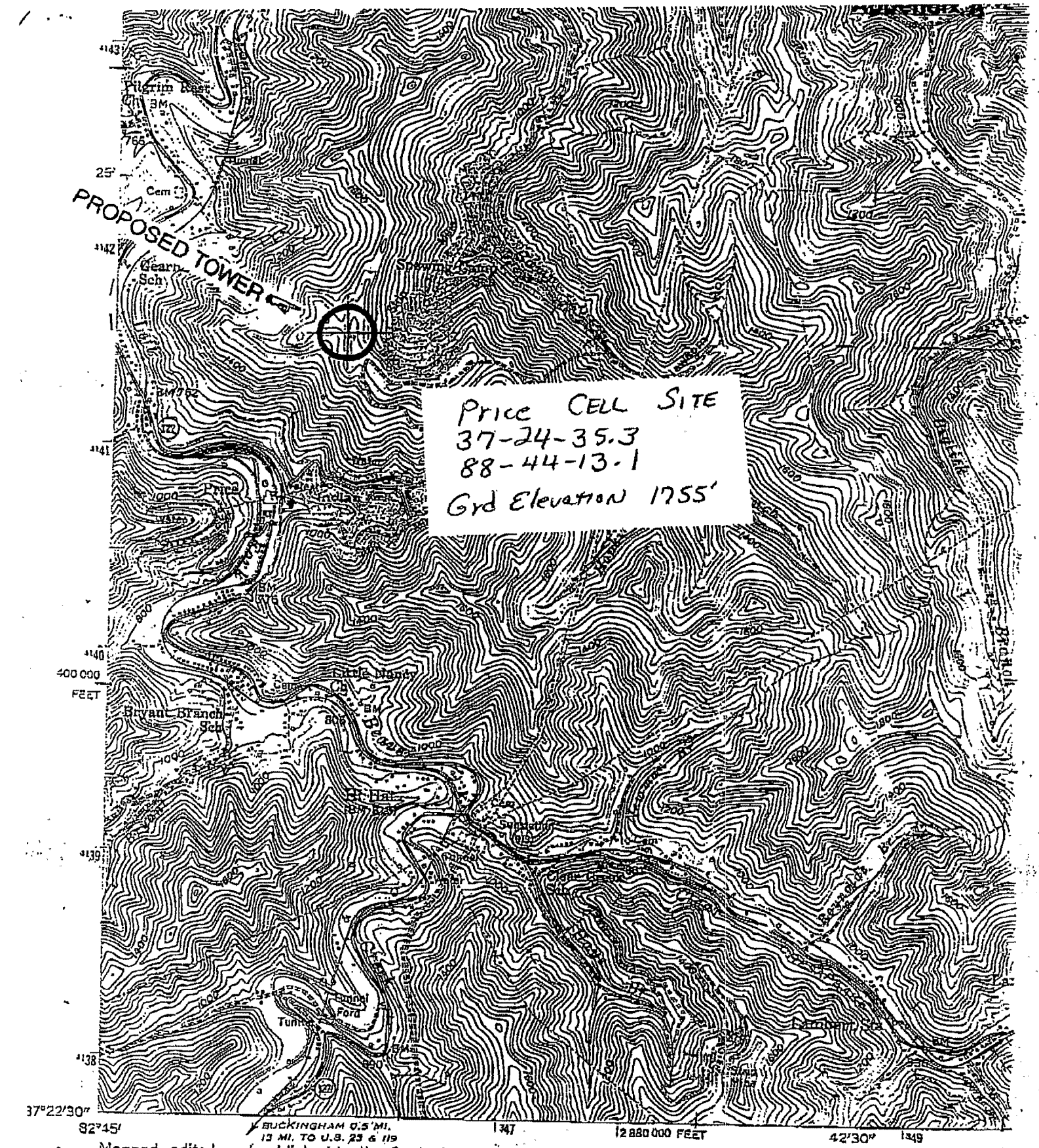
MY COMMISSION EXPIRES: Nov. 25, 2000

THIS INSTRUMENT PREPARED BY:

Clifford B. Latta

CLIFFORD B. LATTA
LATTA & BROWN LAW OFFICES
P. O. BOX 550
PRESTONSBURG, KY 41653
606 886 8132

LEASE15



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by stereophotogrammetric methods and from coal company maps stereo-compiled in 1947, revised from aerial photographs taken 1952. Entire map field checked 1954

Polyconic projection. 1927 North American datum

MC DOWELL, KY.

NW/4 PIKEVILLE 15' QUADRANGLE

N3722.5—W8237.5/7.5

1954

PHOTOREVISED 1979

AMS 4458 I NW—SERIES V853

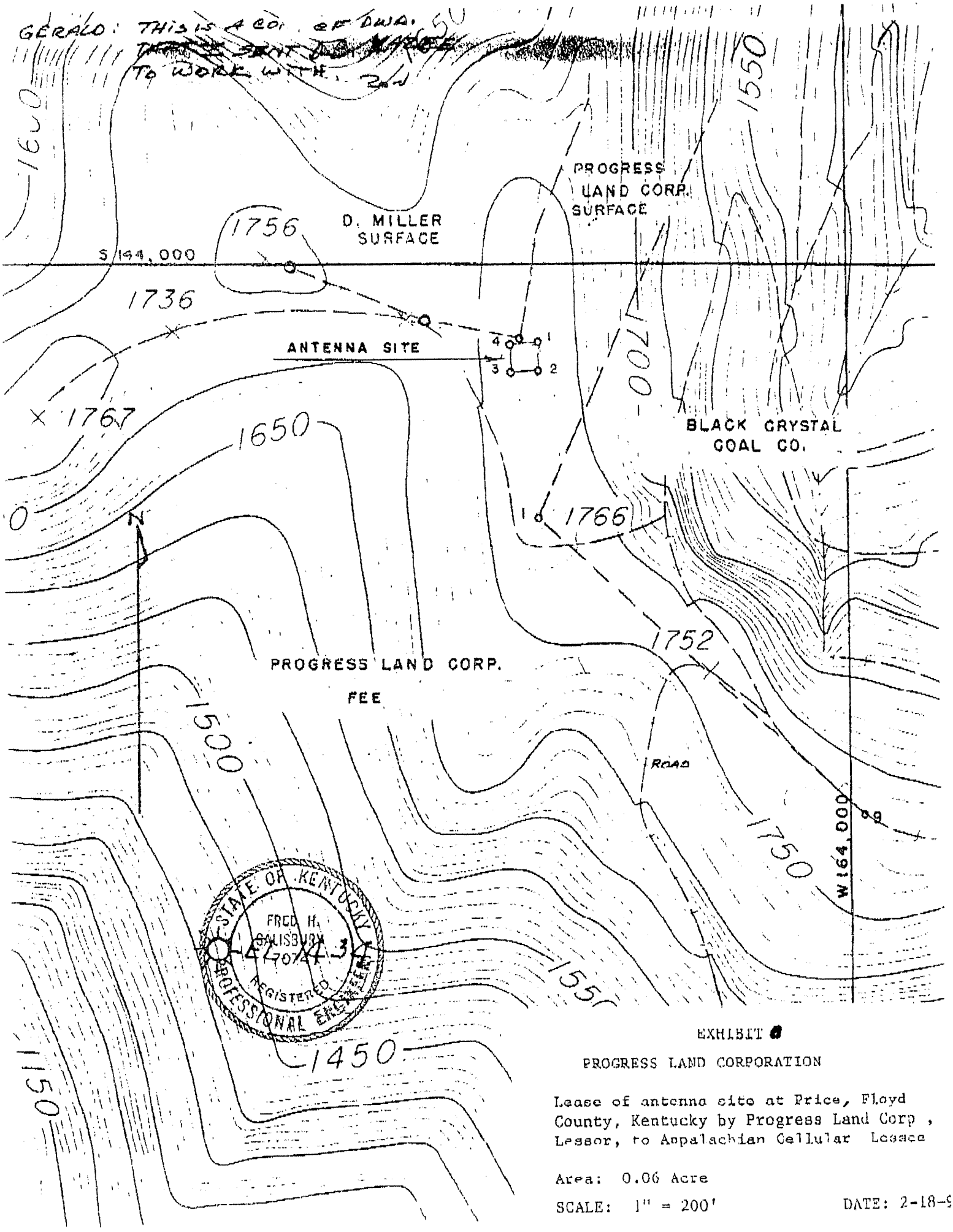


EXHIBIT A

PROGRESS LAND CORPORATION

Lease of antenna site at Price, Floyd County, Kentucky by Progress Land Corp , Lessor, to Appalachian Cellular Lessee

Area: 0.06 Acre

SCALE: 1" = 200'

DATE: 2-18-9