TABLE 2.0

FM ALLOCATION STUDY - CHANNEL 207A (89.3 MHz) - READING, OH

SOUTHWESTERN OHIO SENIORS' SERVICES, INC.
READING, OH

STUDY COORDINATES: 39/13/23 84/25/57

STATION	LOCATION	CHANNEL	CLASS	SPACING (km)	REQUIRED SPACING* (km)	NOTES
NEW	Windsor, ON	204	C1	349.20	90.0	
ALLOTMENT	Orillia, ON	205	B	717.58	76.0	10
ALLOTMENT	Paris, ON	206	B	559.23	132.0	10
ALLOTMENT	Chatham, ON	207	B	409.39	206.0	10
CIUTFM	Toronto, ON	208	B	649.08	132.0	
ALLOTMENT	Goderich, ON	209	A	551.45	45.0	10
CBEFM	Windsor, ON	210	C1	348.49	90.0	
WVUDFM	Kettering, OH	260	B	61.21	15.0	
WIKI	Carrollton, KY	261	A	91.22	10.0	4

* Required Spacing Per Section 73.207 of The FCC Rules

Notes:

1 - Applied For Under Section 73.215
2 - Construction Permit
3 - Channel Deletion Proposed
4 - Move From This Channel Ordered
5 - Move to This Channel Ordered
6 - Pending Application
7 - Proposed Rulemaking
8 - Rulemaking Petition
9 - Short-Spaced
10 - Vacant Allotment

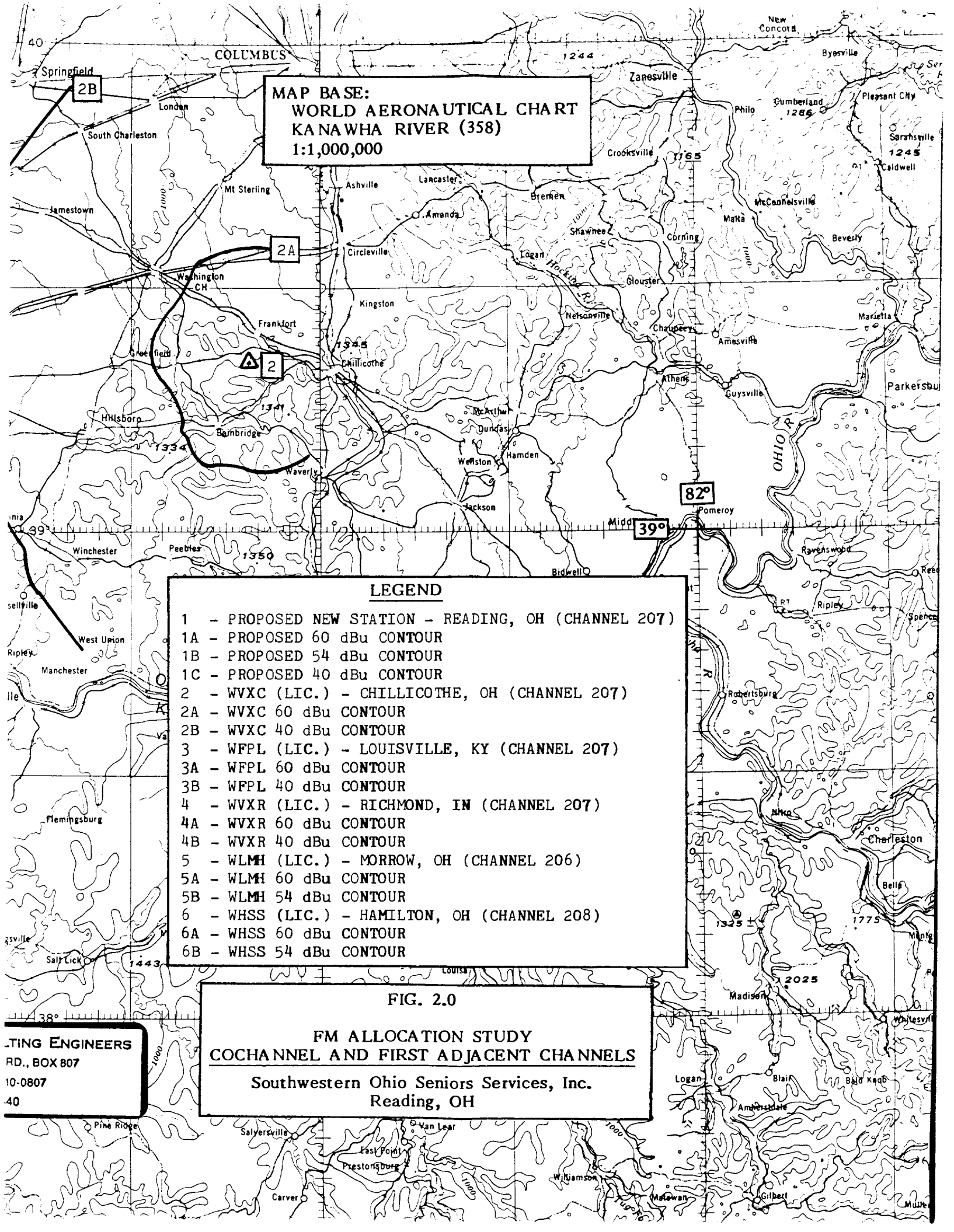
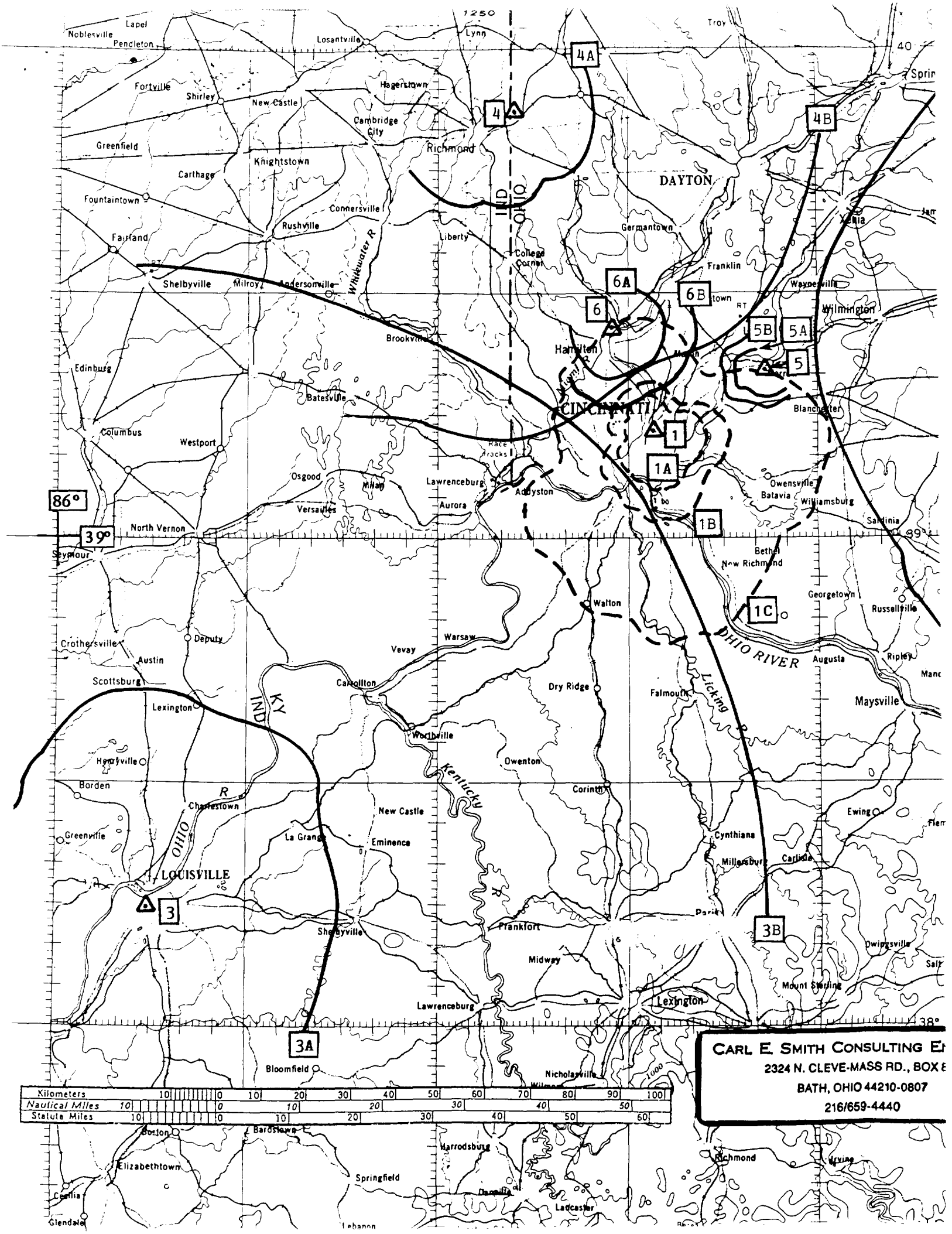


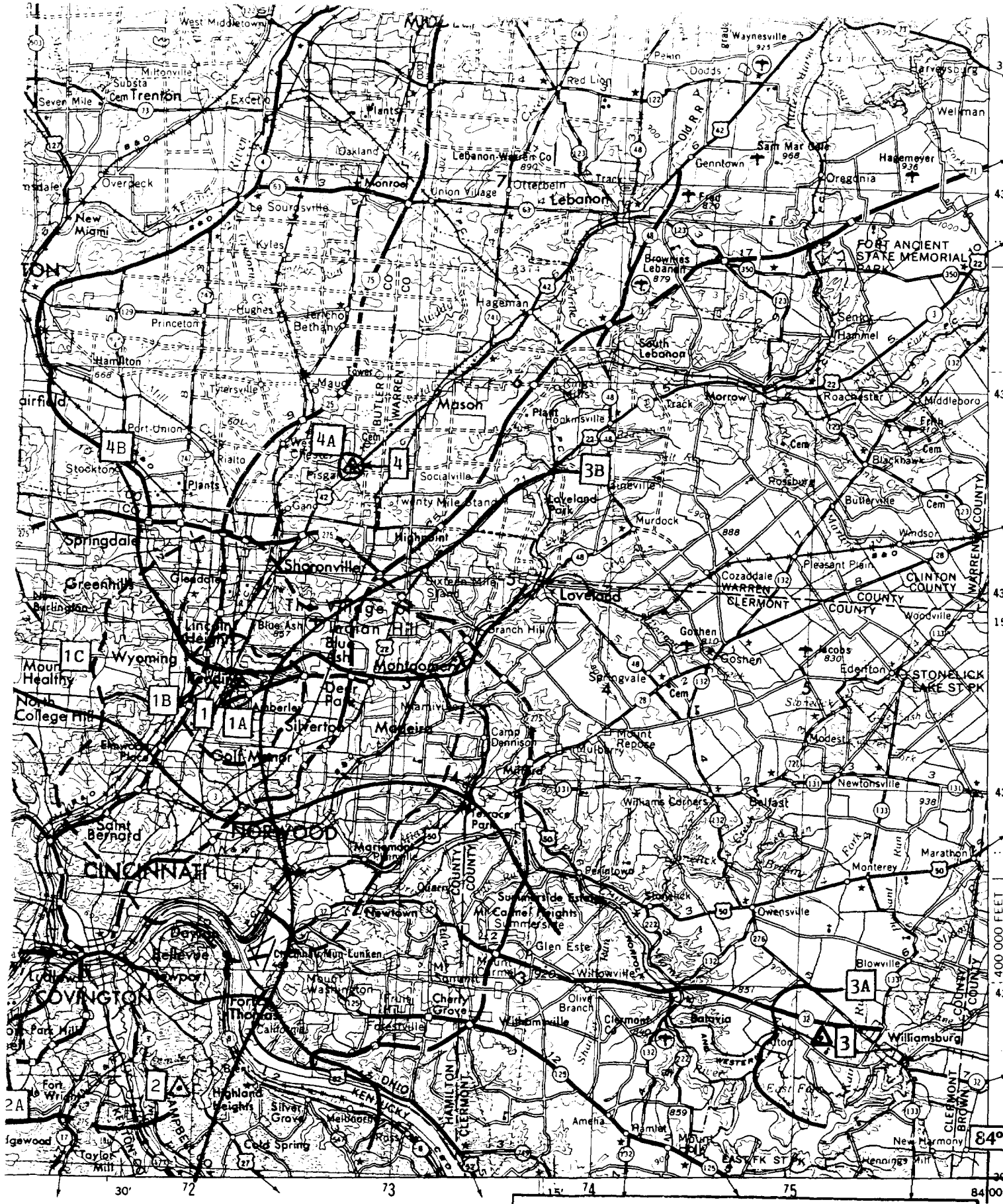
FIG. 2.0

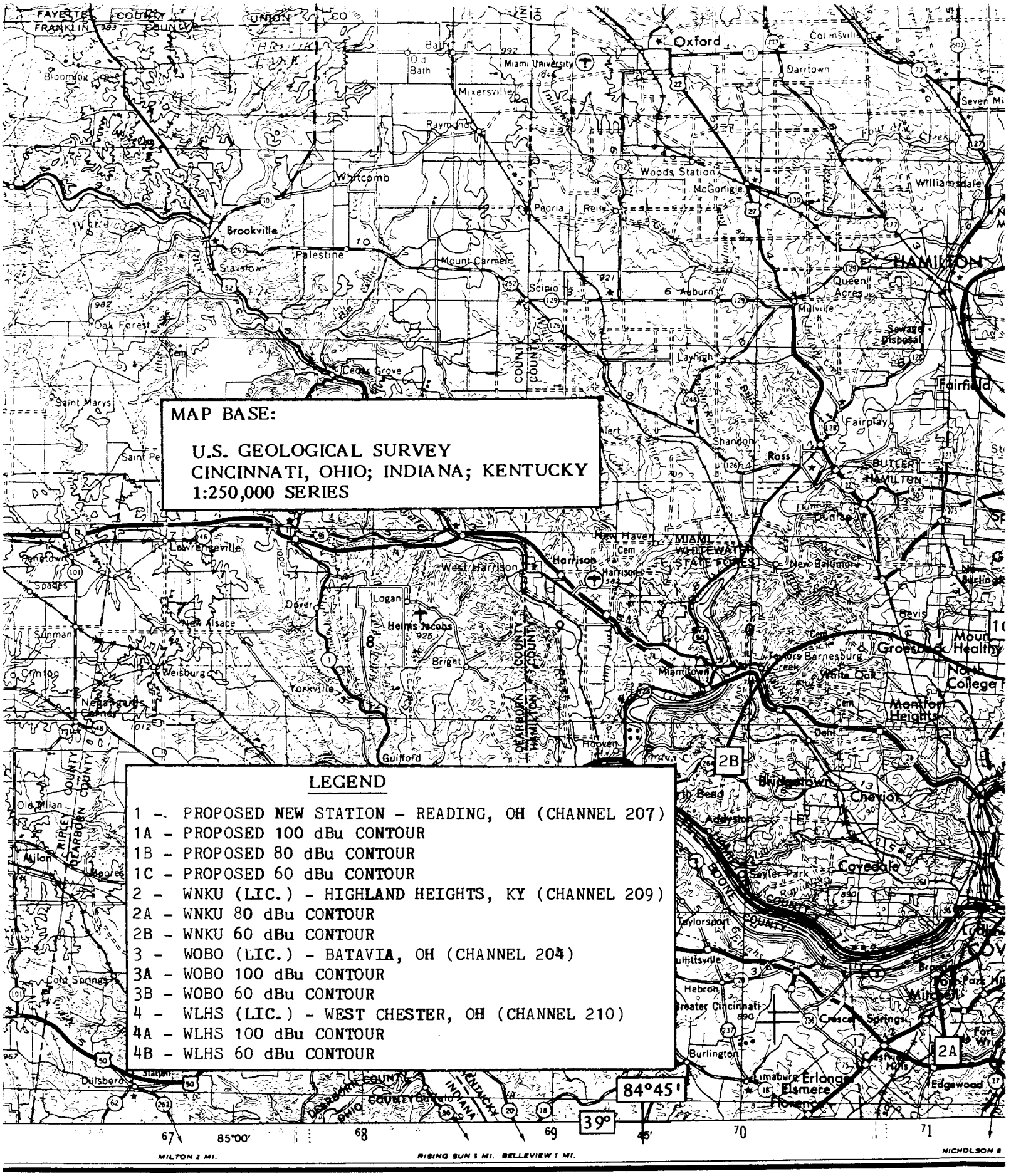
FM ALLOCATION STUDY
COCHANNEL AND FIRST ADJACENT CHANNELS

Southwestern Ohio Seniors Services, Inc.
Reading, OH



CARL E. SMITH CONSULTING E
2324 N. CLEVE-MASS RD., BOX
BATH, OHIO 44210-0807
216/659-4440


Trenton
Lebanon
Mason
Loveland
Springdale
Sharonville
Greenhills
Wyoming
Mount Healthy
Montgomery
Silverton
Madeira
Norwood
CINCINNATI
COVINGTON
Newport
Bellevue
Fort Thomas
Fort Wright
Williamsburg
Batavia
Milford
Goshen
Morrow
Roachester
Blackhawk
Butlerville
Newtonsville
Owensville
Blowville
Marathon
Monterey
Belfast
Williams Corners
Mount Repose
Camp Dennison
Glen Este
Mt. Carmel Heights
Summerside Estates
Newtown
Cherry Grove
Milford
Amelia
Hamlet
Mount Orab
New Harmony
Henning's Mill
Highland Heights
Silver Grove
Melbourne
Cold Spring
Taylor Mill
Ross
Fort Ancient State Memorial Park
Stonelick Lake St. Pk
East Fk St. Pk
Clermont Co
Warren Co
Hamilton Co
Clinton County
Brown Co
Kentucky
Ohio
Indiana
Cozaddale
Pleasant Plain
Windsor
Woodville
Edenton
Jacobs
Hagemeyer
Oregonia
Genntown
Sam Mar Gdns
Wellman
Harveysburg
Dodds
Red Lion
Waynesville
Lebanon-Warren Co
Otterbein
Union Village
Monroe
Le Sourdsville
Overpeck
New Miami
Hamilton
Princeton
Hughes
Jericho
Bethany
Tyersville
Port Union
Stockton
Rialto
Plants
Socialville
Twenty Mile Stand
Highpoint
Sixteen Mile Stand
Loveland Park
Murdock
Rossburg
Morrow
Hookstown
Hageman
South Lebanon
Hammel
Senior
Middleboro
Fish Rfg
Cem
Oakland
Substa
Seven Mile
Milltonville
Excello
West Middletown
Kyles
Tower
Maud
Fisgal
Gano
Blue Ash
Lincoln Heights
Branch Hill
Deer Park
Amberley
Miamiville
Mulberry
Modest
Terrace Park
Mariemont
Pendleton
Newport
Dayton
Ludlow
Park Hill
Cincinnati Mun. Lunken
Mt. Washington
Fruita
Calhoun
Forestville
Williamsville
Olive Branch
Clermont Co
Hilton
Ft. Ancient
Hill
Cem
Blackhawk
Butlerville
Windsor
Woodville
Edenton
Jacobs
Goshen
Springvale
Modest
Newtonsville
Williams Corners
Belfast
Marathon
Monterey
Owensville
Blowville
Williamsburg
Batavia
Milford
Mulberry
Camp Dennison
Mount Repose
Madeira
Silverton
Amberley
Deer Park
Miamiville
Blue Ash
Montgomery
Kenwood
Wyoming
Mount Healthy
North College Hill
Golf Manor
Elmwood Place
Lincoln Heights
Greenhills
Springdale
Sharonville
Highpoint
Sixteen Mile Stand
Loveland Park
Murdock
Rossburg
Morrow
Roachester
Blackhawk
Butlerville
Cem
Hill
Cem
Cem
Cem



Scale 1:250,000

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

CONTOUR INTERVAL 100 FEET

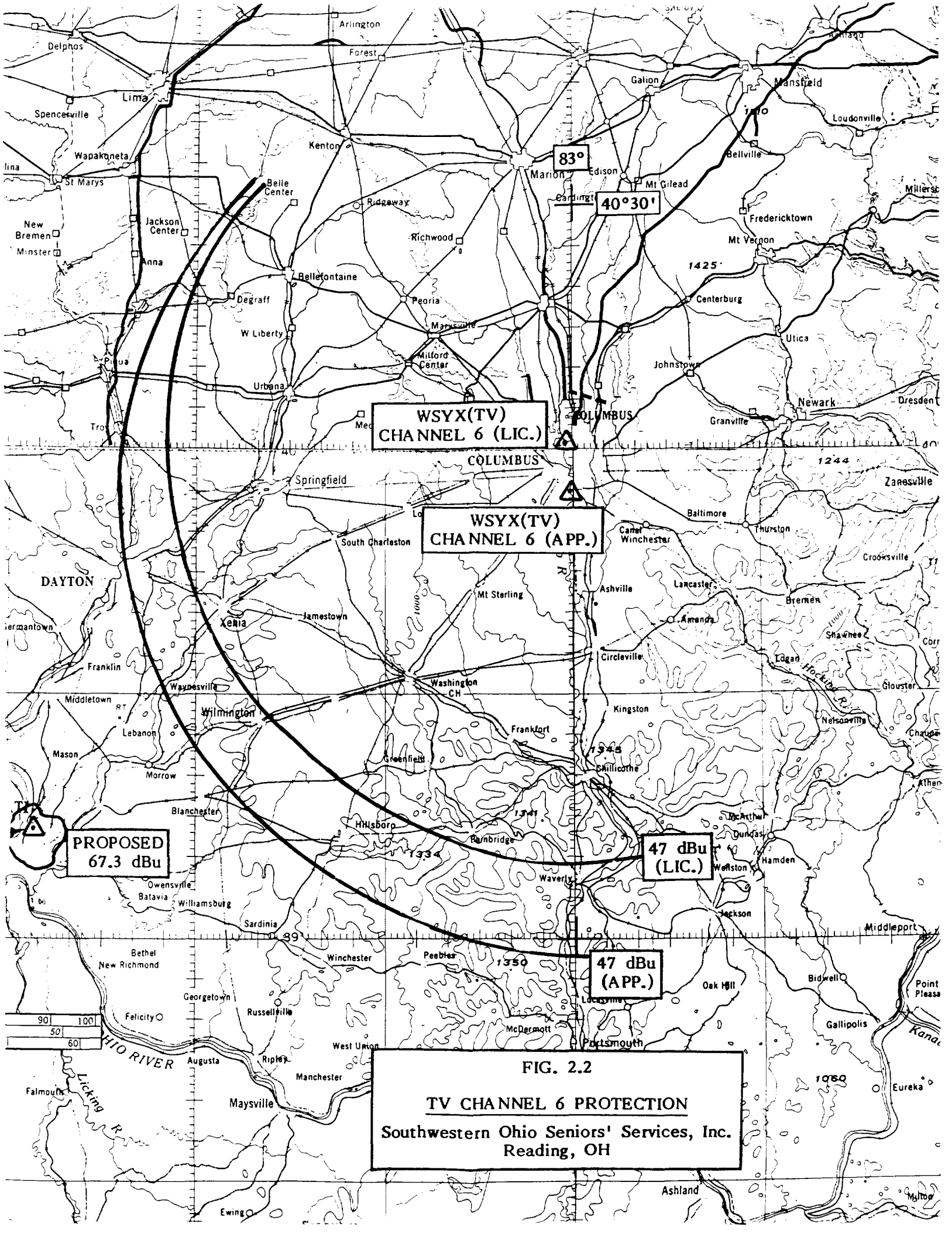
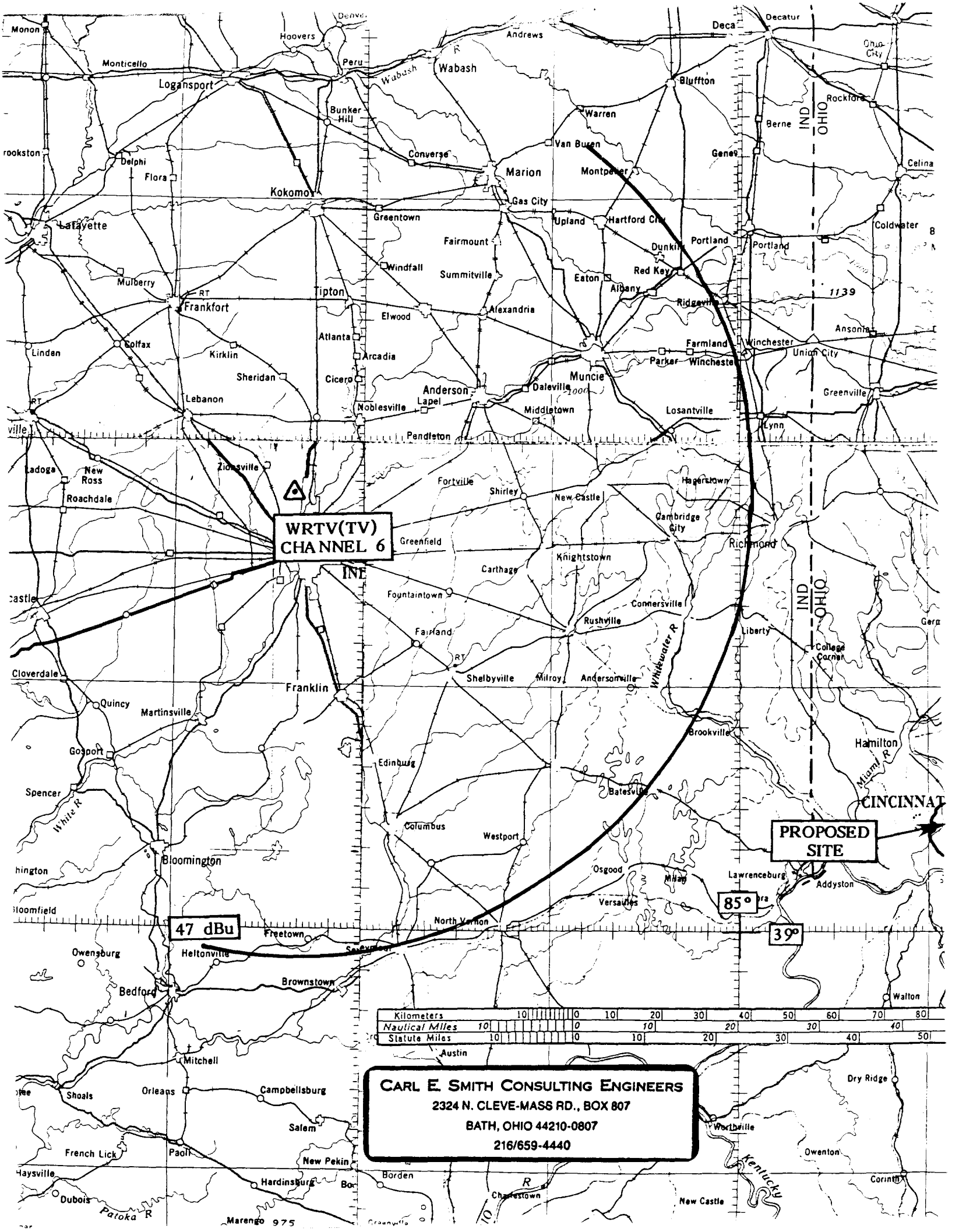


FIG. 2.2

TV CHANNEL 6 PROTECTION

Southwestern Ohio Seniors' Services, Inc.
Reading, OH


WRTV(TV)
CHANNEL 6
PROPOSED
SITE
47 dBu
85°
39°
Kilometers
Nautical Miles
Statute Miles
CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
216/659-4440
Monon
Monticello
Logansport
Hoovers
Peru
Wabash
Andrews
Decatur
Bluffton
Rockford
Berne
Warren
Van Buren
Bunker Hill
Converse
Marion
Montpelier
Delphi
Flora
Kokomo
Gas City
Greentown
Upland
Hartford City
Portland
Dunkirk
Red Key
Eaton
Albany
Ridgeville
Coldwater
Celina
Lafayette
Mulberry
Frankfort
Tipton
Windfall
Summitville
Fairmount
Alexandria
Elwood
Atlanta
Arcadia
Cicero
Linden
Colfax
Kirklin
Sheridan
Lebanon
Noblesville
Anderson
Lapel
Daleville
Muncie
Middletown
Parker
Farmland
Winchester
Union City
Ansonia
Greenville
Losantville
Lynn
Pendleton
Ladoga
New Ross
Roachdale
Zionsville
Fortville
Shirley
New Castle
Hagerstown
Cambridge City
Richmond
Greenfield
Knightstown
Carthage
Fountaintown
Connersville
Rushville
Fairland
Liberty
College Corner
Cloverdale
Shelbyville
Milroy
Andersonville
Franklin
Quincy
Martinsville
Brookville
Hamilton
Gosport
Edinburg
Spencer
Batesville
CINCINNATI
Columbus
Westport
Bloomington
Osgood
Milan
Lawrenceburg
Addyston
Versailles
North Vernon
Freetown
Seymour
Heltonville
Owensburg
Bedford
Brownstown
Walton
Austin
Mitchell
Shoals
Orleans
Campbellsburg
Salem
Dry Ridge
Worthville
French Lick
Paoli
New Pekin
Owenton
Haysville
Hardinsburg
Borden
Corinth
Dubois
Charlestown
New Castle
Marengo
Patoka R
White R
Whitewater R
Miami R
Wabash R
Kentucky R
IND
OHIO

3.0 PROPOSED ANTENNA SYSTEM

The proposed antenna will be a Jampro JSCP-2R (DA) two bay circularly polarized directional antenna mounted on a proposed new tower which will stand 60 meters AGL. Table 3.0 presents a tabulation of the proposed directional pattern. Figure 3.0 presents this same data in polar form. Finally, Figure 3.1 presents the proposed vertical radiation pattern for this antenna. It should be noted that the directional pattern shown herein in a composite envelope, or idealized pattern. When final pattern modeling is conducted by the antenna manufacturer, both the horizontally and vertically polarized radiation patterns will be totally encompassed within this envelope. Furthermore, the vertically polarized radiation pattern will be totally contained within horizontally polarized pattern. Following the completion of this pattern modeling, the antenna will be mounted on the tower in accordance with the manufacturer's instructions. Any other antennas which might be mounted within or in close proximity to the aperture of this antenna will be included in the pattern modeling conducted by the antenna manufacturer. Furthermore, there will be no platform or other similar structure at the top of the proposed tower which could possibly distort the directional pattern of this antenna. The maximum proposed effective radiated power in both the horizontal and vertical polarizations will be 0.34 kilowatts. The maximum pattern suppression does not exceed the 15 dB value permitted by Section 73.316 of the FCC Rules. Furthermore, the slope of this pattern does not exceed 2 dB/10 degrees at any point on the pattern.

Figure 3.2 is a vertical plan view of the proposed installation.

TABLE 3.0

PROPOSED DIRECTIONAL ANTENNA PATTERN

Southwestern Ohio Seniors' Services, Inc.
Reading, OH

Azimuth (Degrees)	Relative Field	ERP dBk	ERP kW
0	0.300	-15.15	0.031
10	0.330	-14.32	0.037
20	0.360	-13.56	0.044
30	0.390	-12.87	0.052
40	0.420	-12.23	0.060
45	0.435	-11.92	0.064
50	0.450	-11.63	0.069
60	0.560	-9.73	0.106
70	0.700	-7.79	0.166
80	0.880	-5.80	0.263
90	1.000	-4.69	0.340
100	1.000	-4.69	0.340
110	1.000	-4.69	0.340
120	1.000	-4.69	0.340
130	1.000	-4.69	0.340
135	1.000	-4.69	0.340
140	1.000	-4.69	0.340
150	1.000	-4.69	0.340
160	1.000	-4.69	0.340
170	1.000	-4.69	0.340
180	1.000	-4.69	0.340
190	1.000	-4.69	0.340

TABLE 3.0 (cont'd)

Azimuth (Degrees)	Relative Field	ERP dBk	ERP kW
200	0.870	-5.90	0.257
210	0.740	-7.31	0.186
220	0.600	-9.13	0.122
225	0.575	-9.50	0.112
230	0.560	-9.73	0.106
240	0.590	-9.27	0.118
250	0.610	-8.98	0.126
260	0.620	-8.84	0.131
270	0.610	-8.98	0.126
280	0.580	-9.42	0.114
290	0.540	-10.04	0.099
300	0.500	-10.71	0.085
310	0.440	-11.82	0.066
315	0.425	-12.12	0.061
320	0.410	-12.43	0.057
330	0.380	-13.09	0.049
340	0.350	-13.81	0.042
350	0.320	-14.59	0.035

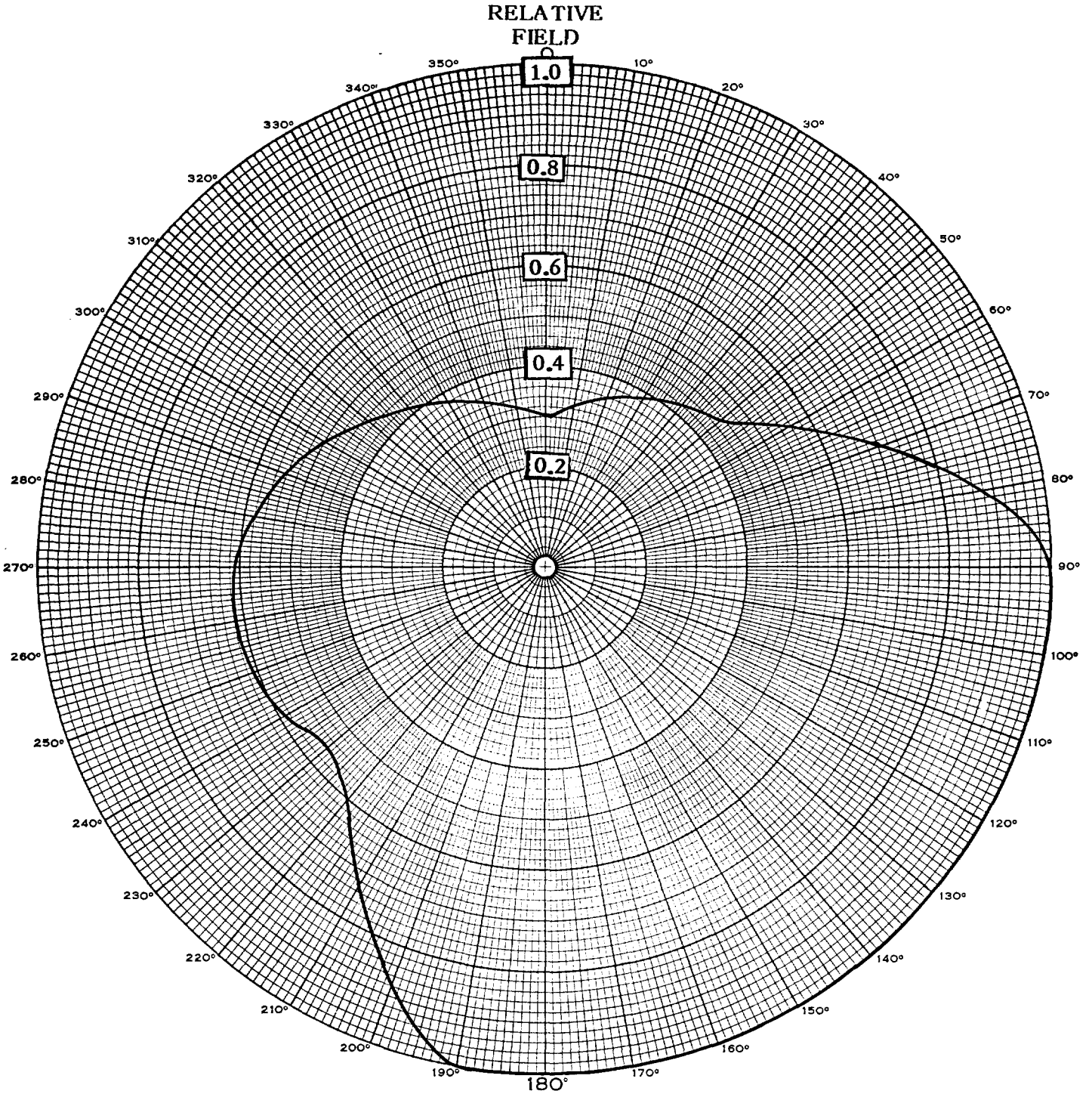


FIG. 3.0

PROPOSED DIRECTIONAL ANTENNA PATTERN

Southwestern Ohio Seniors' Services, Inc.
Reading, OH

CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 317
BATH, OHIO 44210-0317
216/659-4440

Cetec Antennas

ELEVATION PATTERN
JSCP - 2

DATE: 9/1/79
RMS GAIN= 1

BEAM TILT= 0
NULL FILL= 0%

FIELD	ELEVATION
.437	20.00
.527	18.00
.613	16.00
.695	14.00
.770	12.00
.836	10.00
.893	8.00
.939	6.00
.973	4.00
.993	2.00
1.000	0.00
.993	-2.00
.973	-4.00
.939	-6.00
.893	-8.00
.836	-10.00
.770	-12.00
.695	-14.00
.613	-16.00
.527	-18.00
.437	-20.00
.347	-22.00
.257	-24.00
.169	-26.00
.084	-28.00
.004	-30.00
.069	-32.00
.137	-34.00
.197	-36.00
.249	-38.00
.294	-40.00
.331	-42.00
.361	-44.00
.383	-46.00
.399	-48.00
.408	-50.00
.412	-52.00
.410	-54.00
.405	-56.00
.396	-58.00
.383	-60.00

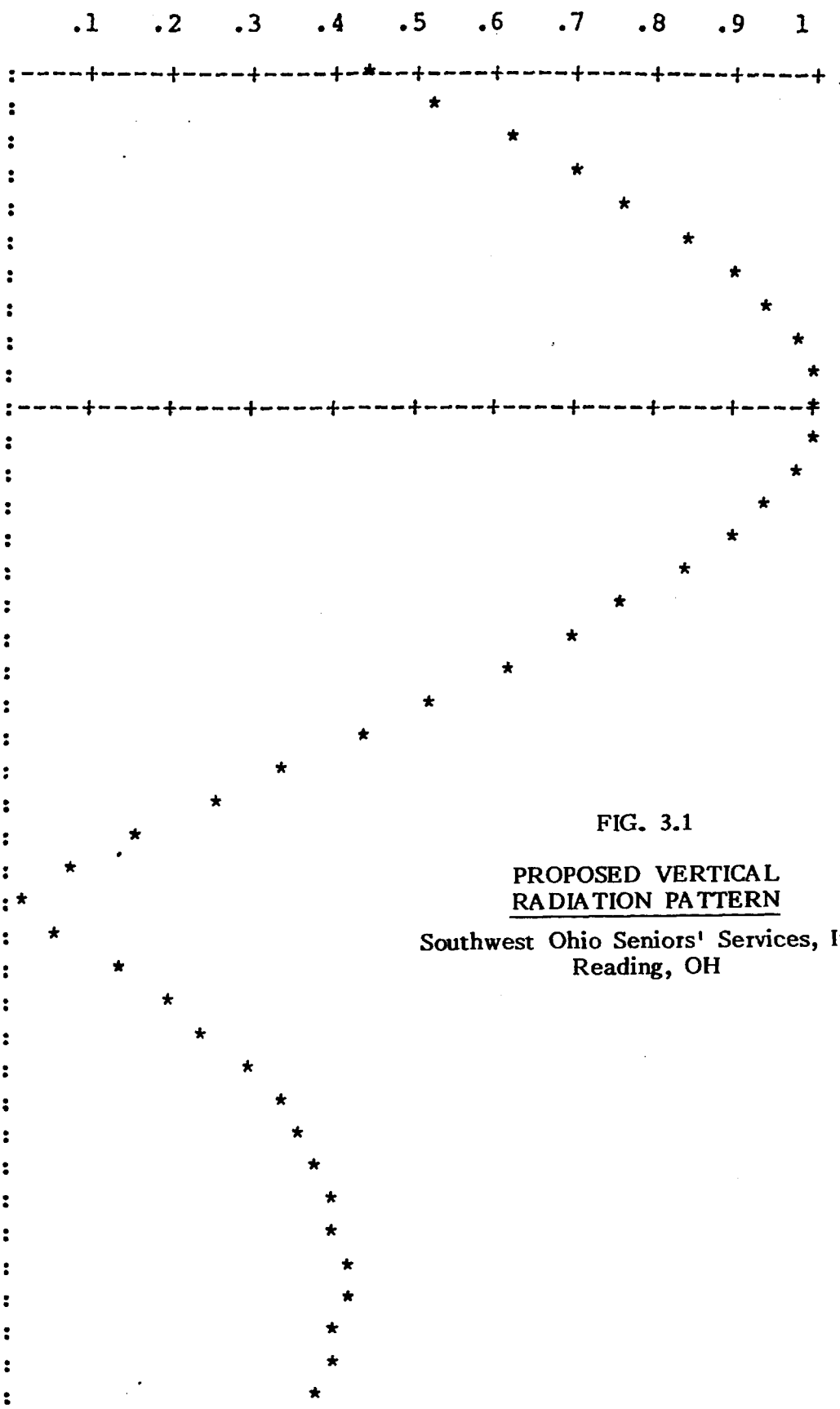
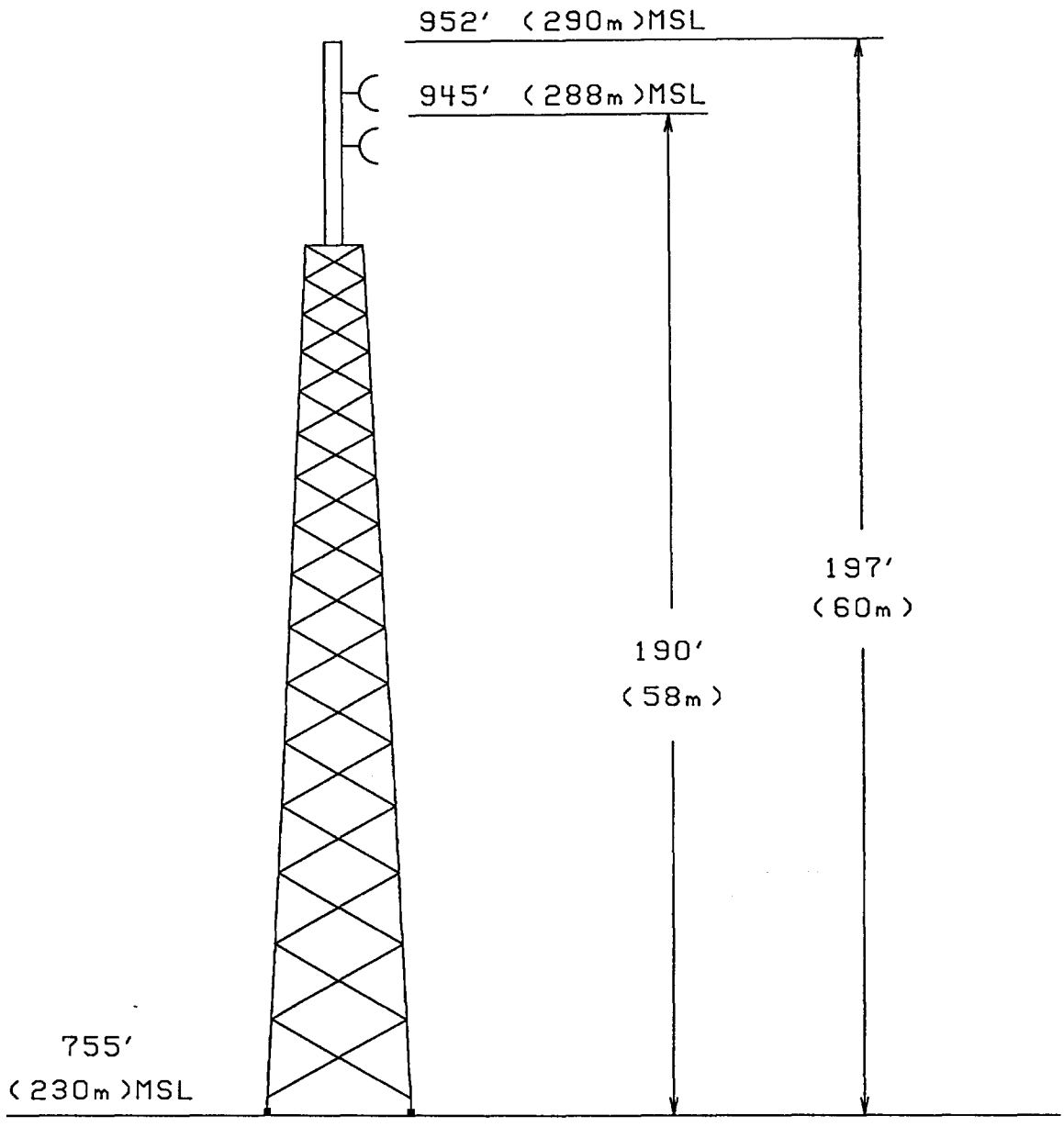


FIG. 3.1

PROPOSED VERTICAL RADIATION PATTERN

Southwest Ohio Seniors' Services, Inc.
Reading, OH

3/28/91 SENVP1



NOT TO SCALE

NL - 39° 13' 23"
WL - 84° 25' 57"

CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
(216) 659-4440

FIG. 3.2

VERTICAL PLAN VIEW

SOUTHWESTERN OHIO
SENIORS' SERVICES, INC.
READING, OH

4.0 PREDICTED SERVICE CONTOURS

The predicted proposed 1 mV/m contour is listed in Table 4.0. Because a directional antenna is involved, this contour was projected at azimuth intervals of no more than 10 degrees, to insure sufficient detail. The average elevation of each radial was extracted from the NGDC 30 second terrain database. Only the eight cardinal radials, however, were utilized in calculating the overall height above average terrain. Utilizing these average elevations and the proposed value of effective radiated power for each bearing, this contour was calculated as required by Section 73.313 of the FCC Rules. This contour is shown on an appropriate map base in Figure 4.0.

The population within the 1 mV/m contour was determined from the 1980 U.S. Census and Ohio and Kentucky minor civil division maps using proportional parts of the civil divisions covered. The land area within the 1 mV/m contour was measured using a polar planimeter. These figures are shown in Paragraph 15 of FCC Form 340, Section V-B.

PROPOSED READING
60.0 dBu CONTOUR
(FM(50,50) Curves Utilized)

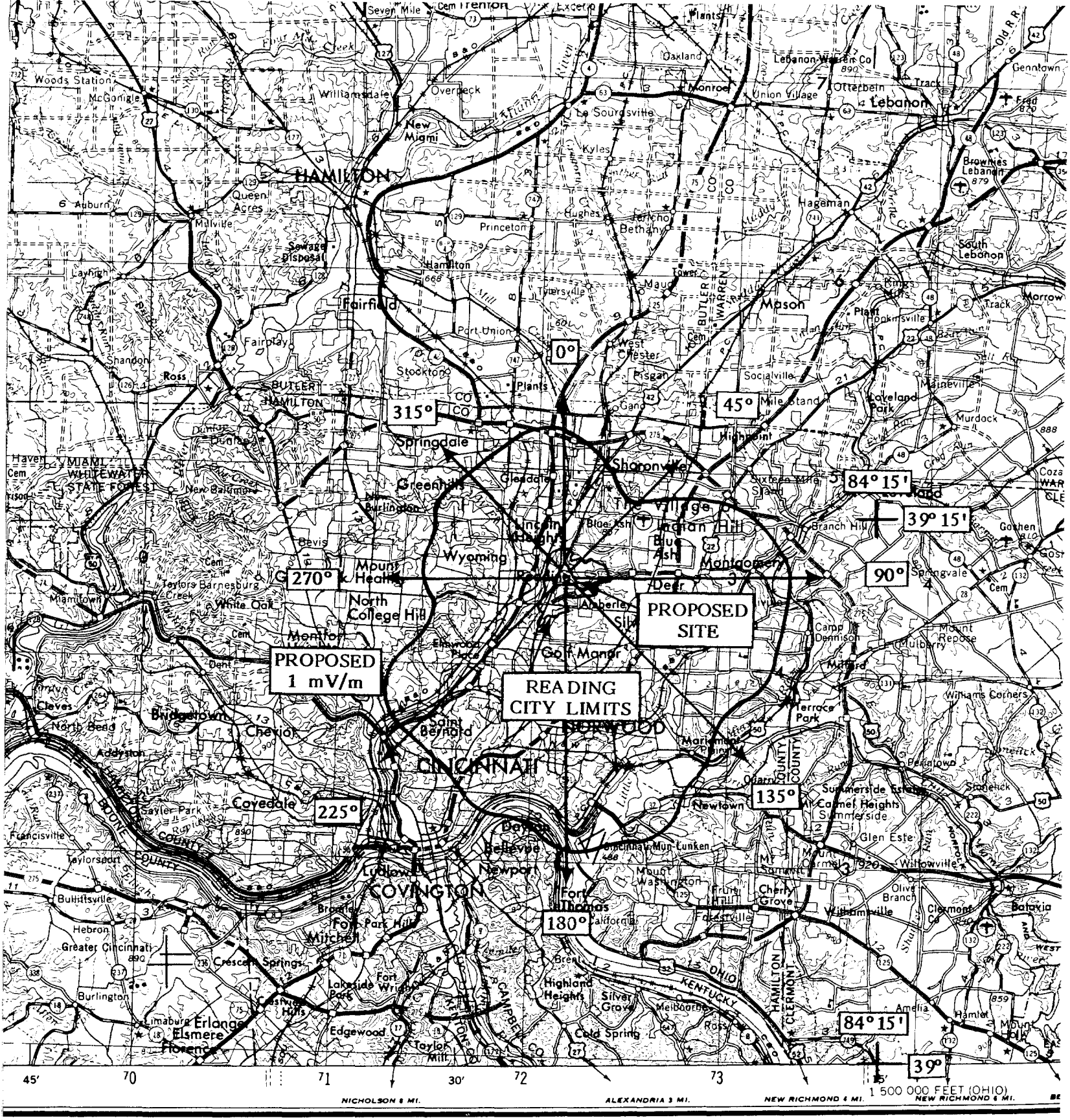
BEARING (Degrees)	AVERAGE TERRAIN ELEVATION (meters)	ANTENNA HAAT (meters)	HORIZONTAL RELATIVE FIELD	HORIZONTAL ERP (dBk)	DISTANCE TO CONTOUR (km)
0.0 *	196.4	91.6	0.300	-15.15	7.3
10.0	208.8	79.2	0.330	-14.32	7.1
20.0	232.7	55.3	0.360	-13.56	6.2
30.0	247.6	40.4	0.390	-12.87	5.5
40.0	256.5	31.5	0.420	-12.23	5.1
50.0	251.2	36.8	0.450	-11.63	5.7
60.0	230.9	57.1	0.560	-9.73	7.9
70.0	223.0	65.0	0.700	-7.79	9.5
80.0	222.9	65.1	0.880	-5.80	10.7
90.0 *	219.6	68.4	1.000	-4.69	11.6
100.0	220.4	67.6	1.000	-4.69	11.5
110.0	220.6	67.4	1.000	-4.69	11.5
120.0	219.1	68.9	1.000	-4.69	11.6
130.0	227.5	60.5	1.000	-4.69	11.0
140.0	216.6	71.4	1.000	-4.69	11.8
150.0	203.4	84.6	1.000	-4.69	12.8
160.0	184.6	103.4	1.000	-4.69	14.1
170.0	187.9	100.1	1.000	-4.69	13.9
180.0 *	183.9	104.1	1.000	-4.69	14.2
190.0	206.9	81.1	1.000	-4.69	12.5
200.0	189.5	98.5	0.870	-5.90	12.9
210.0	193.4	94.6	0.740	-7.31	11.7
220.0	181.4	106.6	0.600	-9.13	11.2
230.0	175.1	112.9	0.560	-9.73	11.1
240.0	196.5	91.5	0.590	-9.27	10.3
250.0	244.6	43.4	0.610	-8.98	7.1
260.0	252.3	35.7	0.620	-8.84	6.5
270.0 *	244.5	43.5	0.610	-8.98	7.1
280.0	244.6	43.4	0.580	-9.42	6.9
290.0	245.5	42.5	0.540	-10.04	6.6
300.0	229.7	58.3	0.500	-10.71	7.5
310.0	229.4	58.6	0.440	-11.82	7.1
320.0	225.3	62.7	0.410	-12.43	7.0
330.0	217.1	70.9	0.380	-13.09	7.2
340.0	210.2	77.8	0.350	-13.81	7.2
350.0	194.4	93.6	0.320	-14.59	7.6
45.0 *	257.3	30.7	0.435	-11.92	5.1
135.0 *	225.4	62.6	1.000	-4.69	11.2
225.0 *	174.1	113.9	0.575	-9.50	11.3
315.0 *	222.8	65.2	0.425	-12.12	7.3

AVERAGE(*) = 215.5 meters

TABLE 4.0

PROPOSED 1 mV/m CONTOUR

Southwestern Ohio Seniors' Services, Inc.
Reading, OH



Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
216/659-4440

FIG. 4.0

PREDICTED PROPOSED
1 mV/m CONTOUR

Southwestern Ohio Seniors' Services, Inc.
Reading, OH

5.0 PROPOSED SITE

The proposed site is located at 601 East Columbia Avenue, within the city limits of Reading, Hamilton County, Ohio. Figure 5.0 is a topographic map showing the location of this site.

There are no AM broadcast stations located within 3 kilometers of this site. Nor are there any FM, TV, or nonbroadcast radio facilities in the immediate vicinity which would be impacted by the proposed construction.

Application has been made to the FAA for the proposed construction. A copy of this application is included as a part of this exhibit.

CINCINNATI EAST QUADRANGLE
OHIO–HAMILTON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

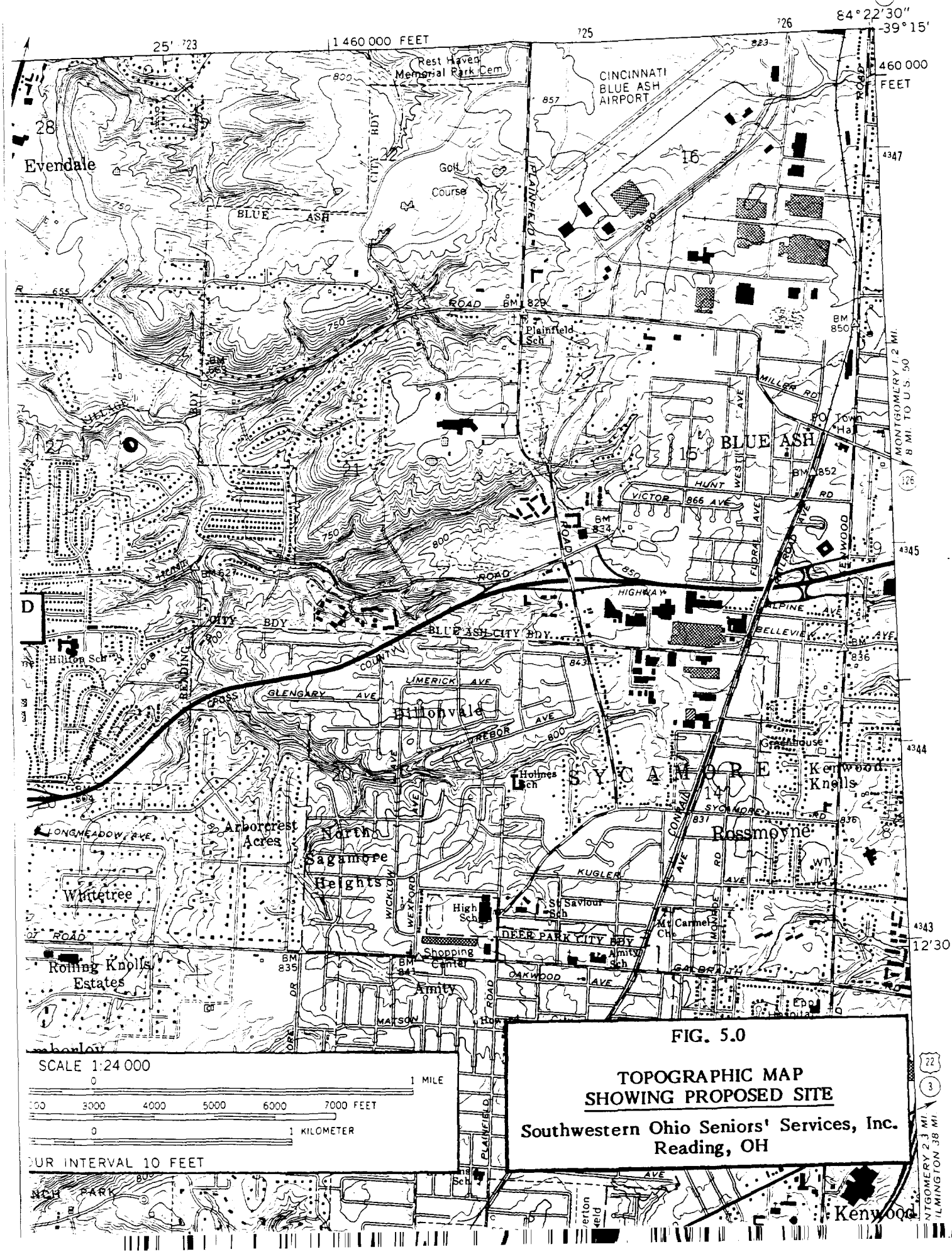
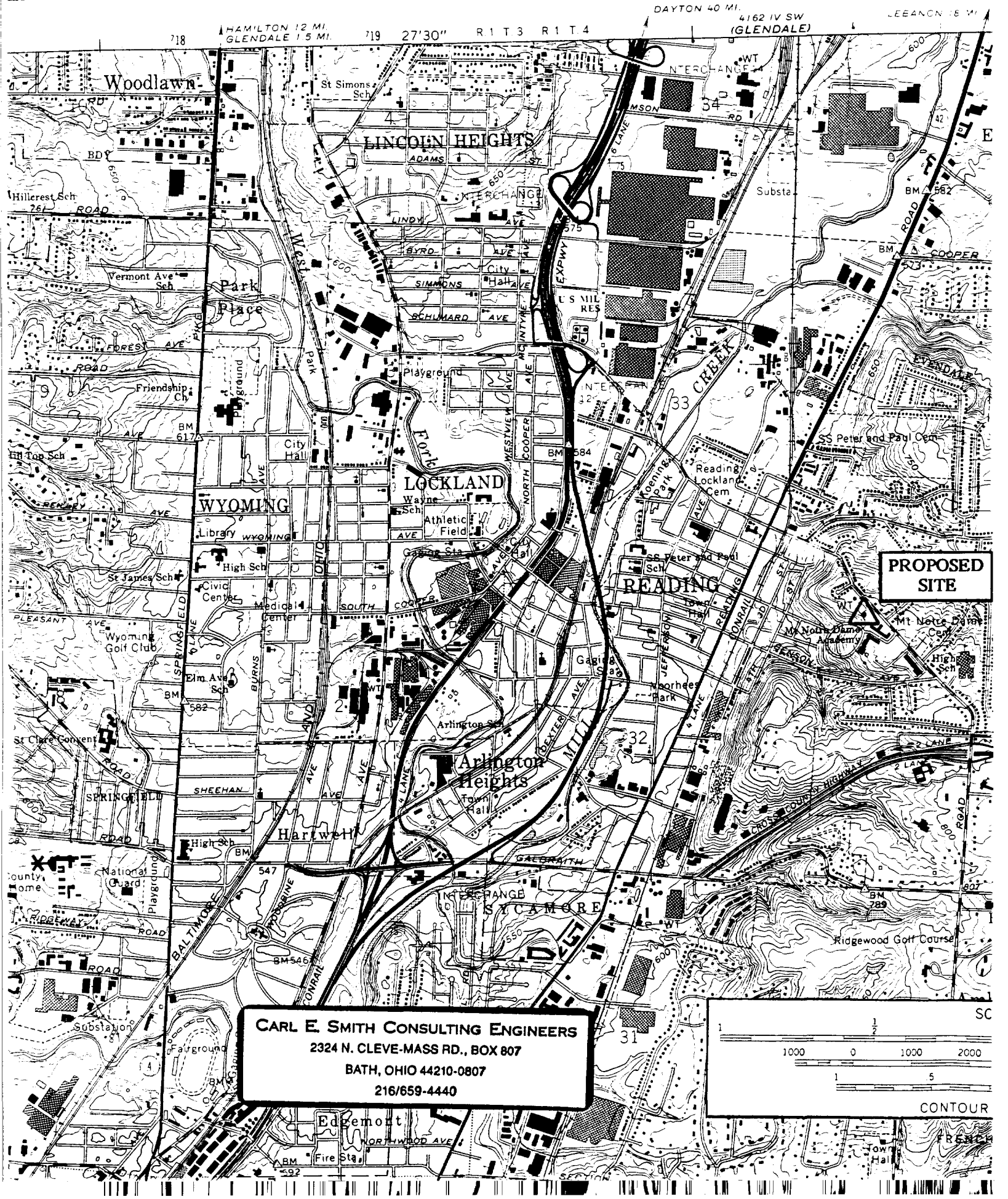


FIG. 5.0

TOPOGRAPHIC MAP
SHOWING PROPOSED SITE

Southwestern Ohio Seniors' Services, Inc.
Reading, OH

ERIOR



HAMILTON 12 MI.
GLENDALE 1.5 MI.
27'30"
R 1 T 3
R 1 T 4
DAYTON 40 MI.
4162 IV SW
(GLENDALE)
Woodlawn
St Simons Sch
LINCOLN HEIGHTS
ADAMS ST
INTERCHANGE
LINDY AVE
BYRD AVE
SIMMONS AVE
SCHUMARD AVE
City Hall
U S MIL RES
Hillcrest Sch
Vermont Ave Sch
Park Place
FOREST AVE
Playground
Friendship Ch
City Hall
LOCKLAND
Wayne Sch
Athletic Field
WYOMING
Library
High Sch
Civic Center
Medical Center
St James Sch
Wyoming Golf Club
Elm Ave Sch
Gaging Sta
SS Peter and Paul Sch
READING
Town Hall
Reading Lockland Cem
Koening Park
SS Peter and Paul Cem
Mt Notre Dame Academy
Mt Notre Dame Cem
High Sch
Noorhees Park
Arlington Sch
Arlington Heights
Town Hall
Hartwell
High Sch
National Guard
County Home
SPRINGFIELD
SHEEHAN AVE
GALBRAITH
SYCAMORE
Ridgewood Golf Course
Substation
Fairground
Edgemont
NORTHWOOD AVE
Fire Sta
Town Hall
BALTIMORE
CONRAIL
CREEK
MILL
EVENDALE
PROPOSED SITE
CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
216/659-4440
1000 0 1000 2000
CONTOUR