TABLE 25

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WVXR/CP
HAAT (m): 57

Latitude: 39-52-08
Longitude: 84-47-47

Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
0.0	342.7	48.3
45.0	347.5	43.5
90.0	349.4	41.6
135.0	350.3	40.7
180.0	335.5	55.5
225.0	300.2	90.8
270.0	312.4	78.6
315.0	333.9	57.1
* 156.4	359.6	31.4
Average:	334.0	57.0

* Radial not included in average

TABLE 26

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WFPL
HAAT (m): 72

Latitude: 38-14-40
Longitude: 85-45-27

Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
0.0	136.1	82.3
45.0	123.3	95.1
90.0	159.8	58.6
135.0	151.3	67.1
180.0	132.5	85.9
225.0	123.8	94.6
270.0	169.3	49.1
315.0	174.9	43.5
* 46.2	123.1	95.3
Average:	146.4	72.0

* Radial not included in average

TABLE 27

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WHSS
HAAT (m): 87

Latitude: 39-25-51
Longitude: 84-37-40

	Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
	0.0	247.2	70.0
	45.0	232.6	84.6
	90.0	194.9	122.3
	135.0	204.4	112.8
	180.0	205.1	112.1
	225.0	240.1	77.1
	270.0	256.4	60.8
	315.0	260.6	56.6
*	143.9	213.1	104.1
	Average:	230.2	87.0

* Radial not included in average

TABLE 28

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WDPS/WDPR
HAAT (m): 61

Latitude: 39-45-26
Longitude: 84-12-24

	Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
	0.0	273.8	58.1
	45.0	259.2	72.7
	90.0	275.6	56.3
	135.0	291.8	40.1
	180.0	263.5	68.4
	225.0	249.8	82.1
	270.0	278.5	53.4
	315.0	274.7	57.2
*	198.1	248.6	83.3
	Average:	270.9	61.0

* Radial not included in average

TABLE 29

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WDPR/CP
HAAT (m): 64

Latitude: 39-45-28
Longitude: 84-11-36

Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
0.0	269.0	66.6
45.0	259.7	75.9
90.0	278.0	57.6
135.0	292.9	42.7
180.0	270.5	65.1
225.0	247.6	88.0
270.0	275.7	59.9
315.0	279.7	55.9
* 199.1	253.1	82.5
Average:	271.6	64.0

* Radial not included in average

TABLE 30

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WVXM/CP
HAAT (m): 114

Latitude: 38-51-36
Longitude: 83-36-42

Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
0.0	271.4	106.5
45.0	237.0	140.9
90.0	244.9	133.0
135.0	267.1	110.8
180.0	264.6	113.3
225.0	244.9	133.0
270.0	278.1	99.8
315.0	303.3	74.6
* 299.9	293.3	84.6
Average:	263.9	114.0

* Radial not included in average

TABLE 31

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WLHS
HAAT (m): 104

Latitude: 39-19-10
Longitude: 84-22-04

Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
0.0	245.0	89.1
45.0	237.0	97.1
90.0	244.9	89.2
135.0	232.2	101.9
180.0	237.8	96.3
225.0	203.9	130.2
270.0	212.9	121.2
315.0	227.4	106.7
* 207.5	210.7	123.4
Average:	230.1	104.0

* Radial not included in average

TABLE 32

REMAINING UNDESIRED LIMITS

Station	1 mV/m Contour (km)	Undesired dBu	Station Separation (km)	Proposed ERP Limit (kW)	Proposed F(50,10) Undesired Contour (km)	Margin (km)
WCNE	20.84	100	30.45	0.445	1.49	8.12
WLMH	6.92	54	29.00	0.276	14.41	7.67
WVXR/CP	14.64	40	78.23	0.078	28.22	35.37
WFPL	49.97	40	158.4	0.176	43.32	65.11
WHSS	12.27	54	28.56	0.094	11.37	4.92
WDPS/WDPR	11.18	54	62.41	0.084	11.14	40.09
WDPR/CP(DA)	25.84*	54	62.83	0.085	10.88	26.11
WVXM/CP	22.68	54	81.70	0.475	18.68	40.34

* Maximum ERP assumed for DA

TABLE 33

REMAINING 1 mV/m LIMITS

Station	Undesired dBu	Undesired Contour (km)	Station Separation (km)	Proposed ERP Limit (kW)	Proposed F(50,50) 1 mV/m Contour (km)	Margin (km)
WCNE	100	2.06	30.45	0.445	12.26	16.13
WLMH	54	9.95	29.00	0.276	10.37	8.68
WVXR/CP	40	61.07	78.23	0.078	8.51	8.65
WHSS	54	18.18	28.56	0.094	7.97	2.41
WDPS/WDPR	54	15.71	62.41	0.084	7.79	38.91
WDPR/CP	54	39.79	62.83	0.085	7.58	15.46
WVXM/CP	54	33.97	81.70	0.475	12.65	35.08
WLHS	100	0.71	12.07	0.097	6.48	4.88

TABLE 34

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WSYX/APP
HAAT (m): 298

Latitude: 40-01-02
Longitude: 83-01-11

	Bearing (Deg-true)	3.2-16.1 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
	0.0	260.8	287.0
	45.0	262.0	285.8
	90.0	252.6	295.2
	135.0	231.3	316.5
	180.0	213.6	334.2
	225.0	255.5	292.3
	270.0	264.9	282.9
	315.0	257.6	290.2
*	209.4	240.5	307.3
*	214.4	244.1	303.7
*	219.4	250.8	297.0
*	224.4	255.2	292.6
*	229.4	257.9	289.9
*	234.4	259.9	287.9
*	239.4	260.4	287.4
*	244.4	260.5	287.3
*	249.4	260.9	286.9
*	254.4	266.0	281.8
*	259.4	270.9	276.9
	Average:	249.8	298.0

* Radial not included in average

TABLE 35

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: Proposed Reading toward Ch. 6 TV Latitude: 39-13-23
HAAT (m): 72 Longitude: 84-25-57

	Bearing (Deg-true)	3-16 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
	0.0	197.0	90.9
	45.0	257.4	30.5
	90.0	219.7	68.2
	135.0	225.5	62.4
	180.0	185.3	102.6
	225.0	174.4	113.5
	270.0	244.5	43.4
	315.0	223.1	64.8
*	33.3	250.2	37.7
*	42.7	257.7	30.2
*	53.3	244.1	43.8
*	64.0	225.3	62.6
*	73.6	217.9	70.0
*	81.5	224.4	63.5
*	266.1	245.6	42.3
*	270.1	244.5	43.4
*	275.3	244.3	43.6
*	281.6	245.2	42.7
*	289.0	247.0	40.9
*	297.0	230.2	57.7
*	305.0	233.1	54.8
*	312.5	226.8	61.1
	Average:	215.9	72.0

* Radial not included in average

LOUIS A. WILLIAMS, JR. & ASSOCIATES
MARCH 1989

TABLE 36

WSYX/APP/PROPOSED READING CONTOURS

Bearing from WSYX/APP (Degrees)	WSYX/APP Effective Height (Meters)	WSYX/APP F(50,50) 47 dBu (km)	Bearing from Proposed to WSYX/APP 47 dBu (Degrees)	Distance from Proposed to WSYX/APP 47 dBu (km)	Proposed Effective Height (Meters)	Proposed ERP (kW)	Proposed F(50,10) 67.4 dBu (km)	Margin (km)
N219.4E	297.0	103.3	N81.5E	56.8	63.5	0.610	8.5	48.3
224.4	292.6	102.9	73.6	51.7	70.0	0.475	8.3	43.4
229.4	289.9	102.7	64.0	48.4	62.6	0.308	7.0	41.4
234.4	287.9	102.5	53.3	47.4	43.8	0.199	5.3	42.1
239.4	287.4	102.5	42.7	48.6	30.2	0.141	4.0	44.6
244.4	287.3	102.5	33.3	52.0	37.7	0.109	4.2	47.8

TABLE 37

Louis A. Williams, Jr. and Associates
Cincinnati, Ohio

March, 1989

Terrain Averaging Program

Job Title: WRTV
HAAT (m): 302

Latitude: 39-53-59
Longitude: 86-12-02

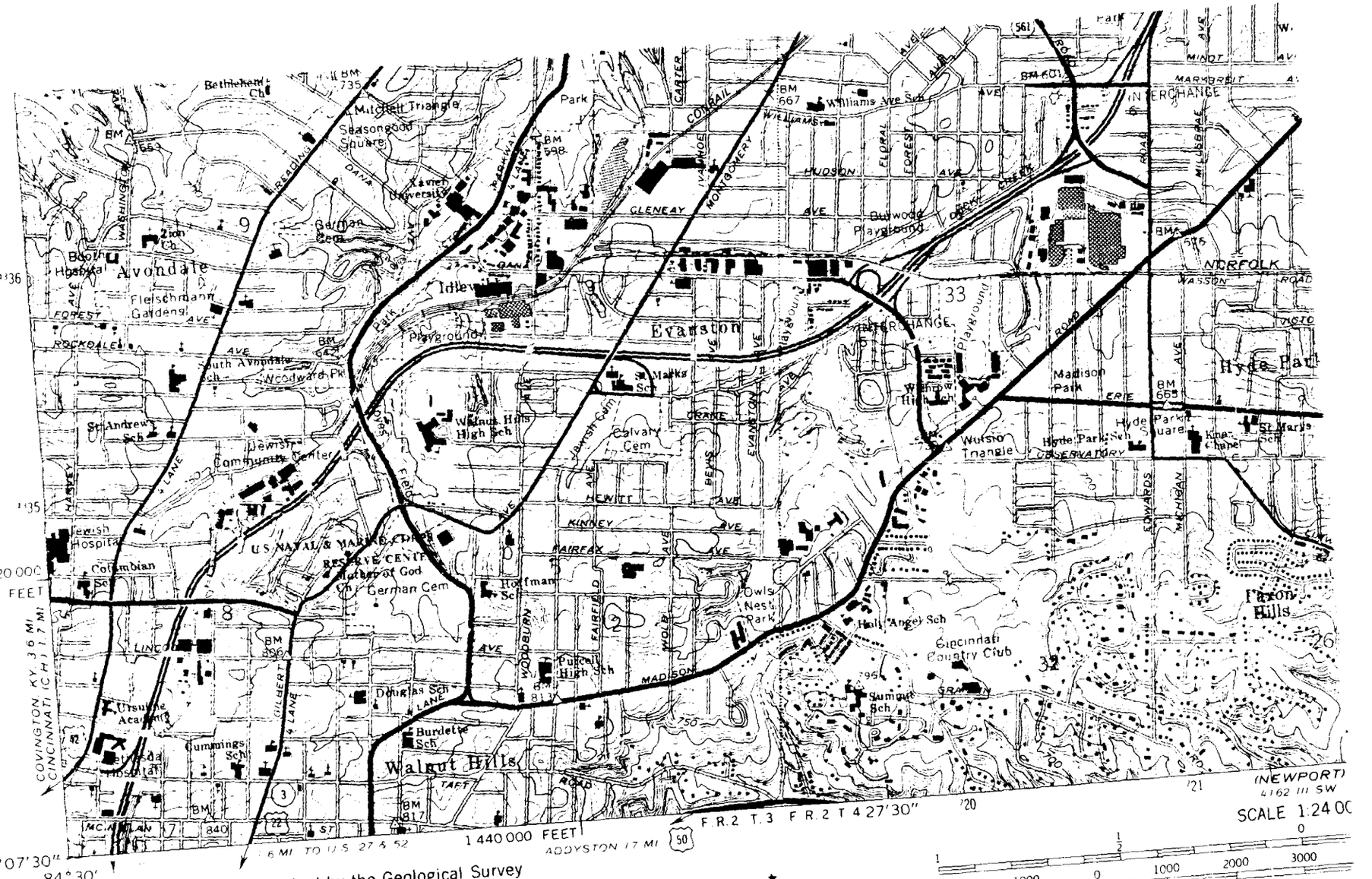
	Bearing (Deg-true)	3.2-16.1 km Avg. Terrain Elev. (m)	Height Above Average Terrain (m)
	0.0	273.6	281.1
	45.0	253.0	301.7
	90.0	243.5	311.2
	135.0	238.5	316.2
	180.0	222.8	331.9
	225.0	248.8	305.9
	270.0	268.9	285.8
	315.0	272.2	282.5
*	90.8	243.3	311.4
*	95.8	242.4	312.3
*	100.8	241.0	313.7
*	105.8	237.7	317.0
*	110.8	239.8	314.9
*	115.8	240.0	314.7
*	120.8	238.9	315.8
*	125.8	239.6	315.1
*	130.8	240.0	314.7
*	135.8	238.3	316.4
*	140.8	235.9	318.8
	Average:	252.7	302.0

* Radial not included in average

TABLE 38

WRTV/PROPOSED READING CONTOURS

Bearing from WRTV (Degrees)	WRTV Effective Height (Meters)	WRTV F(50,50) 47 dBu (km)	Bearing from Proposed to WRTV 47 dBu (Degrees)	Distance from Proposed to WRTV 47 dBu (km)	Proposed Effective Height (Meters)	Proposed ERP (kW)	Proposed F(50,10) 67.4 dBu (km)	Margin (km)
N105.8E	317.0	104.9	N312.5E	68.5	61.1	0.127	5.6	62.9
110.8	314.9	104.8	305.0	65.6	54.8	0.166	5.7	59.9
115.8	314.7	104.7	297.0	64.6	57.7	0.241	6.4	58.2
120.8	315.8	104.8	289.0	65.6	40.9	0.348	5.8	59.8
125.8	315.1	104.8	281.6	68.6	42.7	0.489	6.5	62.1
130.8	314.7	104.7	275.3	73.4	43.6	0.654	7.0	66.4
135.8	316.4	104.9	270.1	79.4	43.4	0.830	7.5	71.9
140.8	318.8	105.0	266.1	86.5	42.3	0.998	7.7	78.8



Mapped, edited, and published by the Geological Survey

Control by USGS, NOS/NOAA, USCE, and City of Cincinnati

Topography by photogrammetric methods from aerial photographs taken 1949 and in part by City of Cincinnati. Field checked 1953. Revised 1961

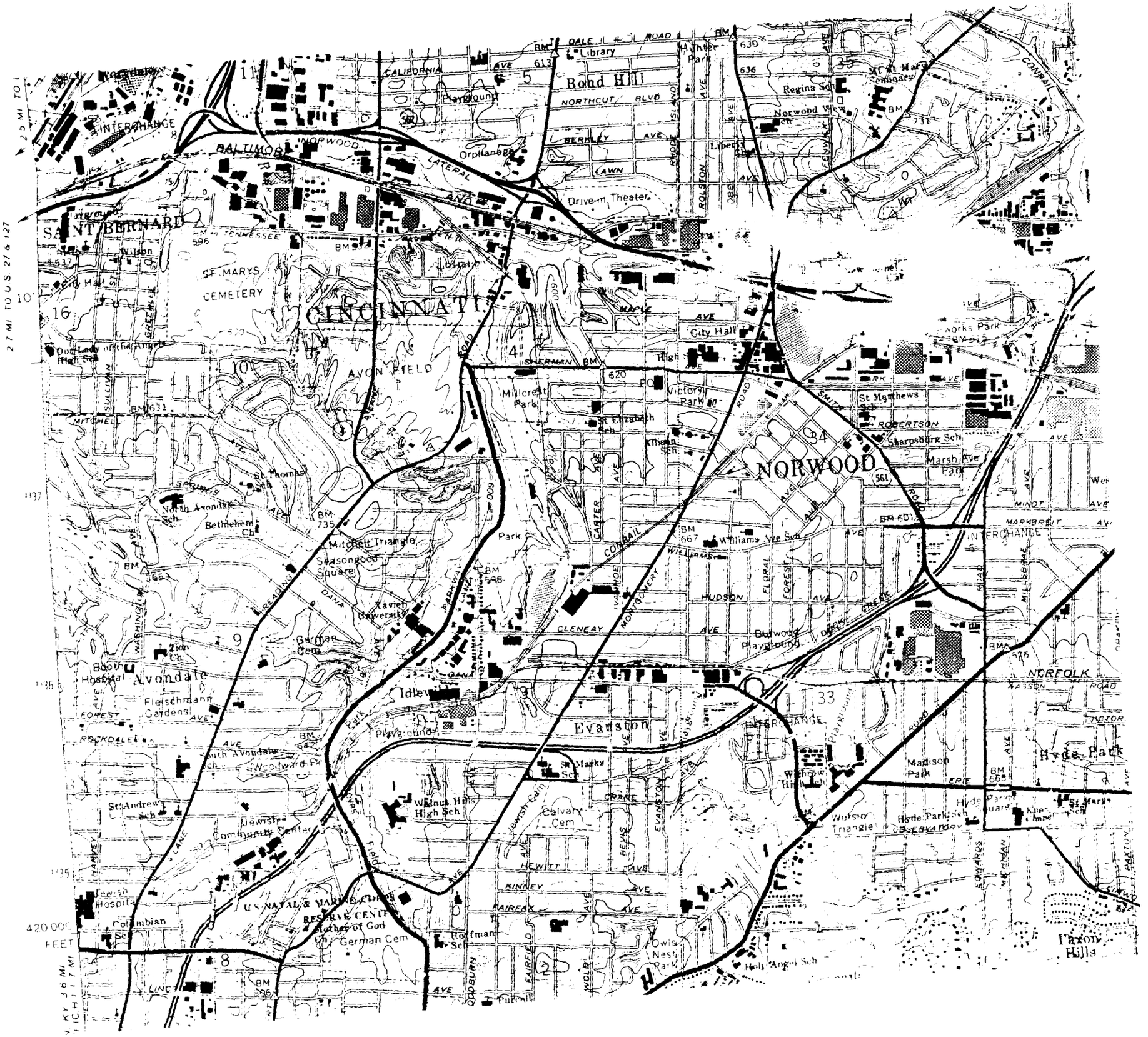
Polyconic projection. 10,000-foot grid ticks based on Ohio coordinate system, south zone. 1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue. 1927 North American Datum. To place on the predicted North American Datum 1983 move the projection lines 3 meters south and 6 meters west as shown by dashed corner ticks

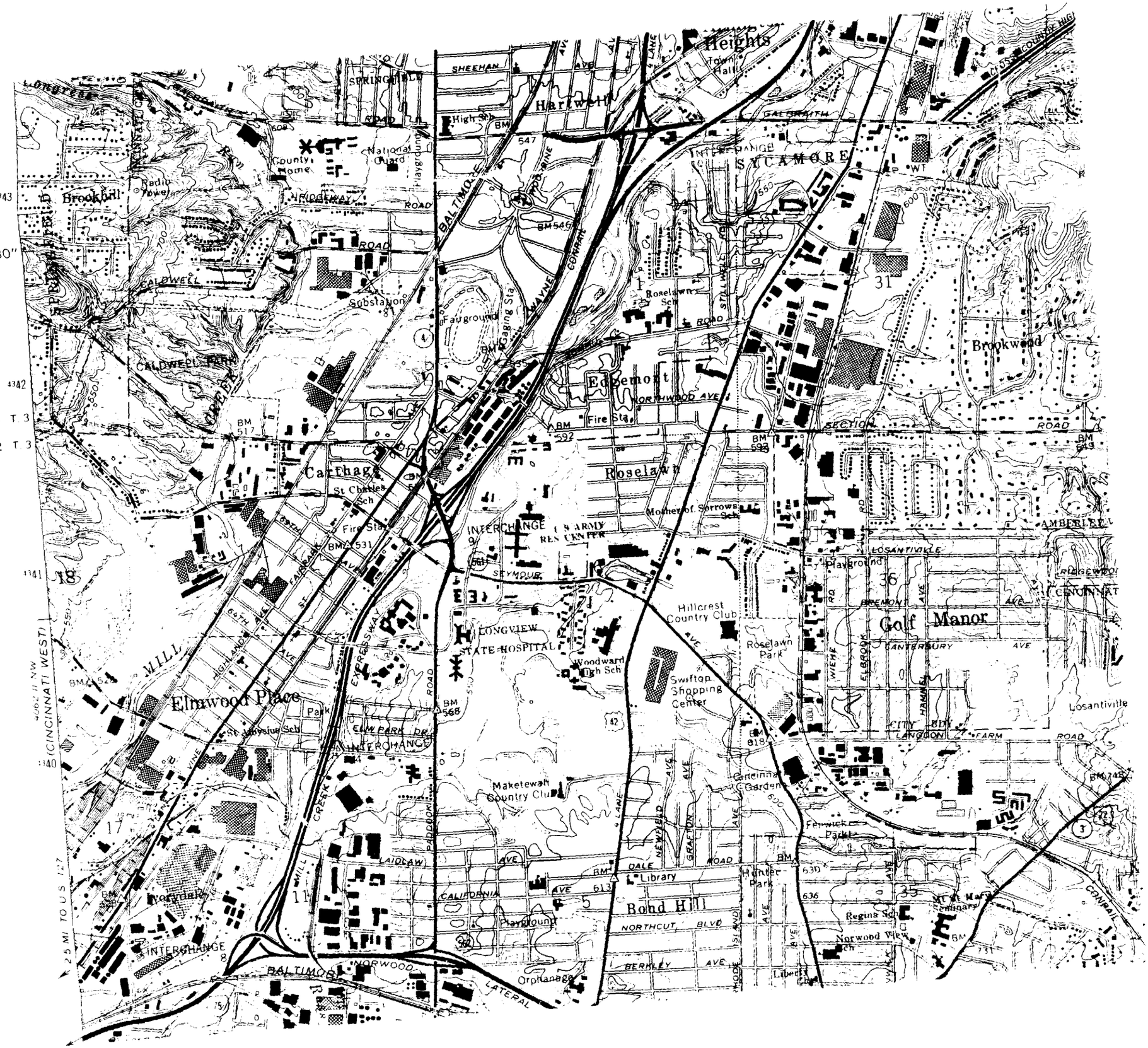
Red tint indicates areas in which only landmark buildings are shown

Area east of the Little Miami River lies within the Virginia Military District. Area west of the Little Miami River lies within the Between the Miamis. Land lines based on the Great Miami River Base. Dotted land lines established by private subdivision of the Symmes Purchase

There may be private inholdings within the boundaries of the National or State reservations shown on this map

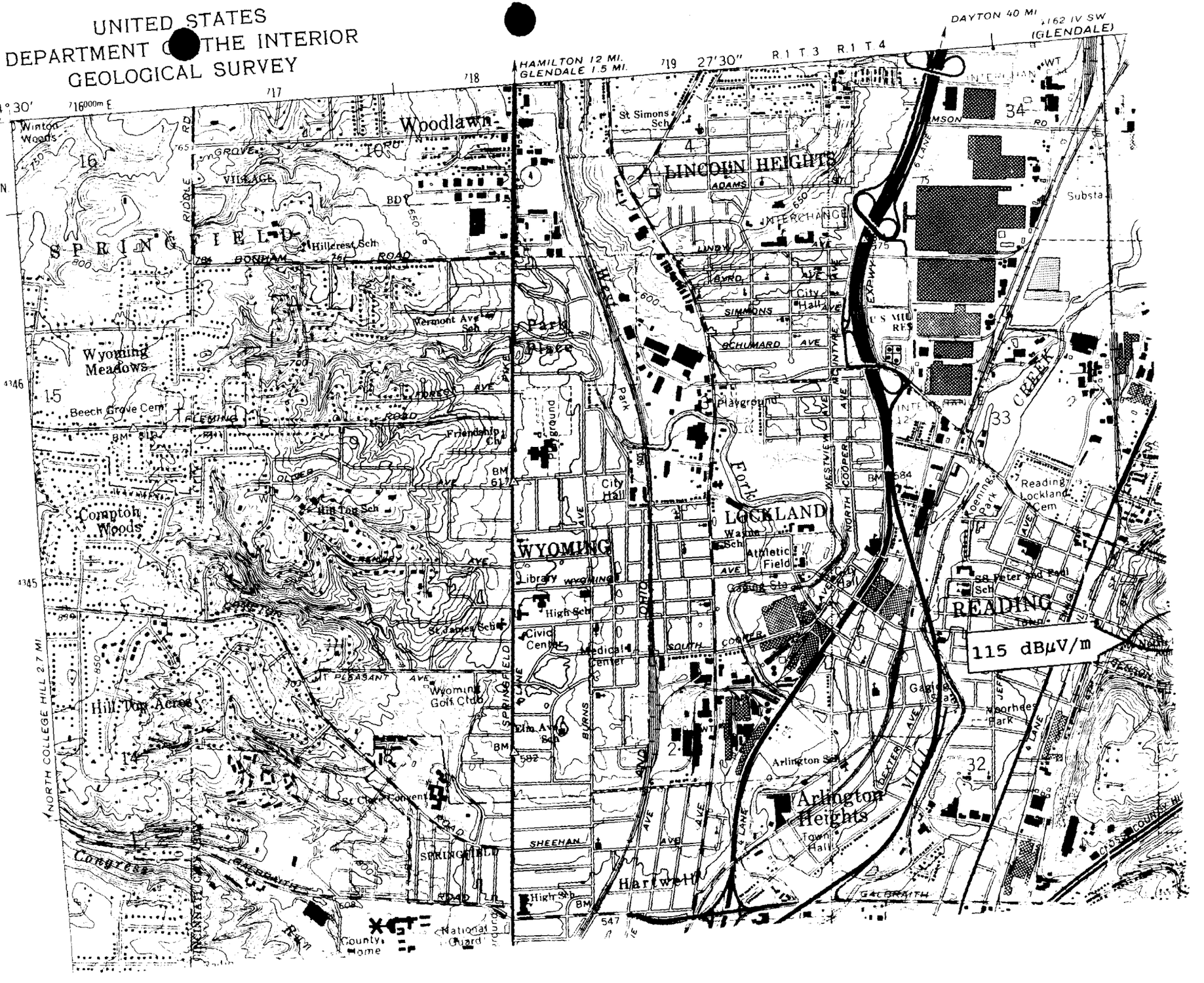
THIS MAP COMPLIES WITH NATIONAL M
FOR SALE BY U. S. GEOLOGICAL SURVEY
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND S


Bond Hill
Library
Playground
Hunter Park
Regina Sch
Norwood Wing Sch
Orphanage
Liberty Park
Drive-in Theater
CALIFORNIA AVE
NORTHCUT BLVD
BERKLEY AVE
LAWN AVE
DALE ROAD
RHODE ISLAND AVE
ROLSTON AVE
FENWICK AVE
CONRAIL
BALTIMORE AND OHIO
NORWOOD LATERAL
INTERCHANGE
SAINT BERNARD
TENNESSEE AVE
Wilson Sch
City Hall
ST MARYS CEMETERY
CINCINNATI
Our Lady of the Angels High Sch
GREENLEE AVE
SULLIVAN AVE
MITCHELL AVE
AVON FIELD
MAPLE AVE
SHERMAN AVE
City Hall
High Sch
Works Park
Millcrest Park
Victory Park
St Elizabeth Sch
Athena Sch
St Matthews Sch
ROBERTSON AVE
Sharpsburg Sch
Marsh Ave Park
NORWOOD
SMITH ROAD
MONTGOMERY ROAD
MINOT AVE
MARKBREIT AVE
INTERCHANGE
MILLSBERRY ROAD
St Thomas Sch
North Avondale Sch
Bethlehem Ch
Mitchell Triangle
Seasongood Square
READING ROAD
DAHLIA AVE
WASHINGTON AVE
Xavier University
Park
CARTER AVE
CONRAIL
Williams Ave Sch
WILLIAMS AVE
HUDSON AVE
FLORAL AVE
FOREST AVE
IVANHOE AVE
CLENEAY AVE
Dunwoody Playground
DRAKE AVE
Garman Cem
Zion Ch
Booth Hospital
Avondale
Fleischmann Gardens
FOREST AVE
ROCKDALE AVE
South Avondale Sch
Woodward Pk
Idlewild
Playground
Evanston
Playground
NORFOLK
WASSON ROAD
VICTOR AVE
Hyde Park
Madison Park
ERIE AVE
Wilson High Sch
St Marks Sch
Walnut Hills High Sch
Jewish Cem
Calvary Cem
CRANE AVE
EVANSTON AVE
BEHS AVE
Wilson Triangle
Hyde Park Sch
Hyde Park Square
Hyde Park Playground
St Marys Sch
EDWARDS ROAD
MICHIGAN AVE
FAIRFAX AVE
HEWITT AVE
KINNEY AVE
Newish Community Center
ST ANDREWS AVE
LANE AVE
Jewish Hospital
Columbian Sch
U S NAVAL & MARINE CORPS RESERVE CENTER
Mother of God Ch
German Cem
Hoffman Sch
ODDBURN AVE
FAIRFIELD AVE
WOLF AVE
Owls Nest Park
Holy Angels Sch
Turrill
Parson Hills
420 000 FEET
2.5 MI TO
2.7 MI TO US 27 & 127



Heights
Town Hall
Hartwell
SYCAMORE
Brookhill
Radio Tower
County Home
National Guard
Playground
Substation
Fairground
Gaging Sta
Roselawn Sch
Edgemont
Fire Sta
Brookwood
Carthage
St Charles Sch
Roselawn
Mother of Sorrows Sch
INTERCHANGE
U S ARMY RES CENTER
Playground
Hillcrest Country Club
Golf Manor
LONGVIEW STATE HOSPITAL
Woodward High Sch
Roselawn Park
Swifton Shopping Center
Elmwood Place
St Aloysius Sch
Park
INTERCHANGE
Maketewah Country Club
Cincinnati Garden
Fenwick Park
Library
Hunter Park
Bond Hill
Playground
Regina Sch
Norwood View Sch
Mt St Mary Seminary
Orphanage
Liberty
Losantiville
Ivorydale
INTERCHANGE
BALTIMORE
NORWOOD
LATERAL
CONRAIL
CALDWELL PARK
CALDWELL
SPRINGFIELD
SHEEHAN
GALBRAITH
STILLWELL
NORTHWOOD AVE
SECTION ROAD
LOSANTIVILLE
BREMONT AVE
CANTERBURY AVE
LANGDON FARM ROAD
CITY BDY
EXPRESSWAY
MILL CREEK
PADDOCK
NEWFIELD
GRAFTON
LAIDLAW
CALIFORNIA
DALE ROAD
NORTHCUT BLVD
BERKLEY AVE
SEYMOUR
HIGHLAND AVE
FAIRPARK
ELM PARK DR
VINE
WIEHE RD
ELBROOK
HAMMEL
CONRAIL
12'30"
R.1 T.3
F.R.2 T.3
2.5 MI TO U.S. 127
(CINCINNATI WEST)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



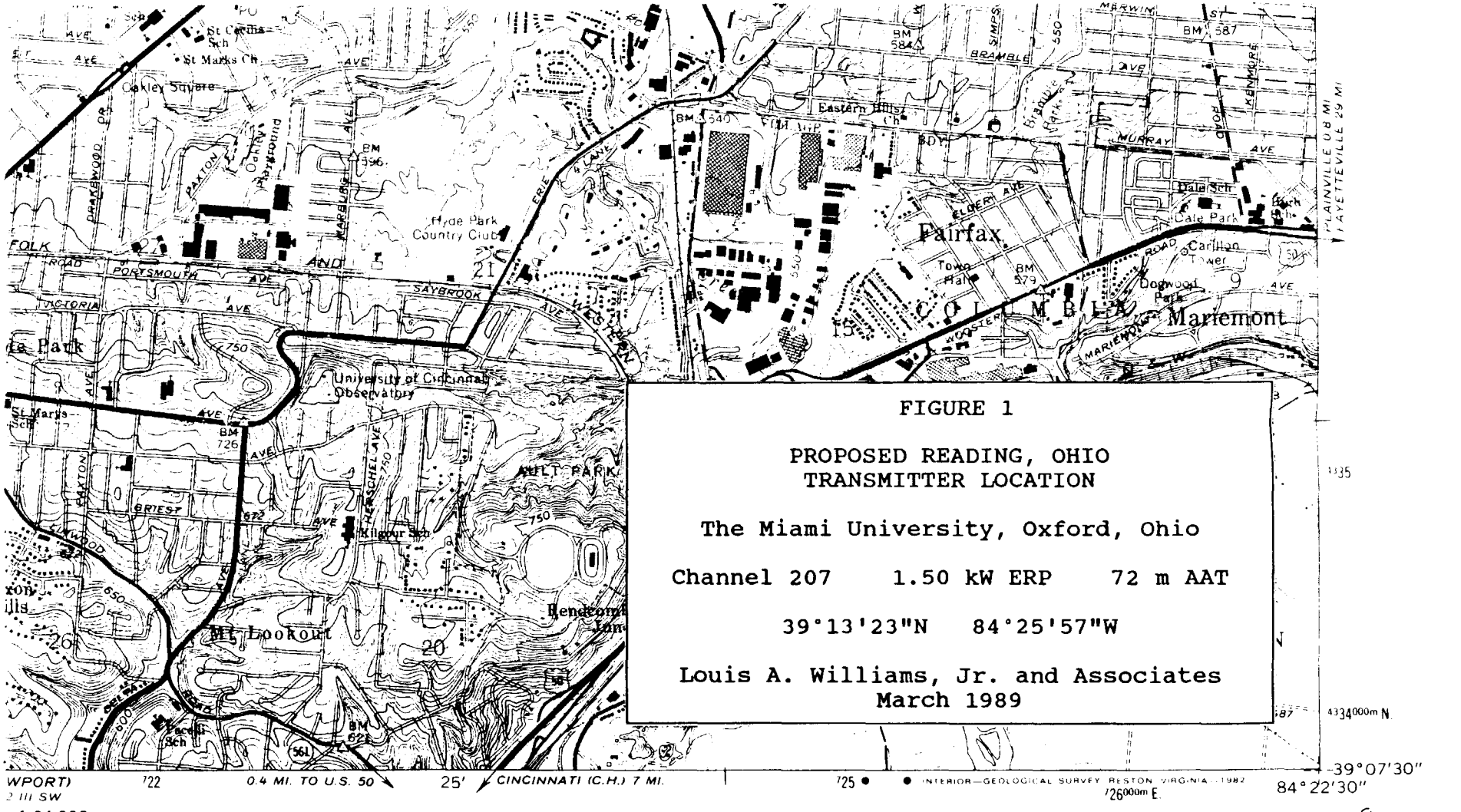


FIGURE 1

PROPOSED READING, OHIO
TRANSMITTER LOCATION

The Miami University, Oxford, Ohio

Channel 207 1.50 kW ERP 72 m AAT

39°13'23"N 84°25'57"W

Louis A. Williams, Jr. and Associates
March 1989

1:24 000

0 1 MILE

3000 4000 5000 6000 7000 FEET

0 1 KILOMETER

TERVAL 10 FEET
VERTICAL DATUM OF 1929

IONAL MAP ACCURACY STANDARDS
SURVEY, RESTON, VIRGINIA 22092
PS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

Revisions shown in purple and woodland compiled in cooperation with State of Ohio agencies from aerial photographs taken 1979 and other sources. This information not field checked. Map edited 1981

Purple tint indicates extension of urban areas

ROAD CLASSIFICATION

Heavy-duty — Light-duty

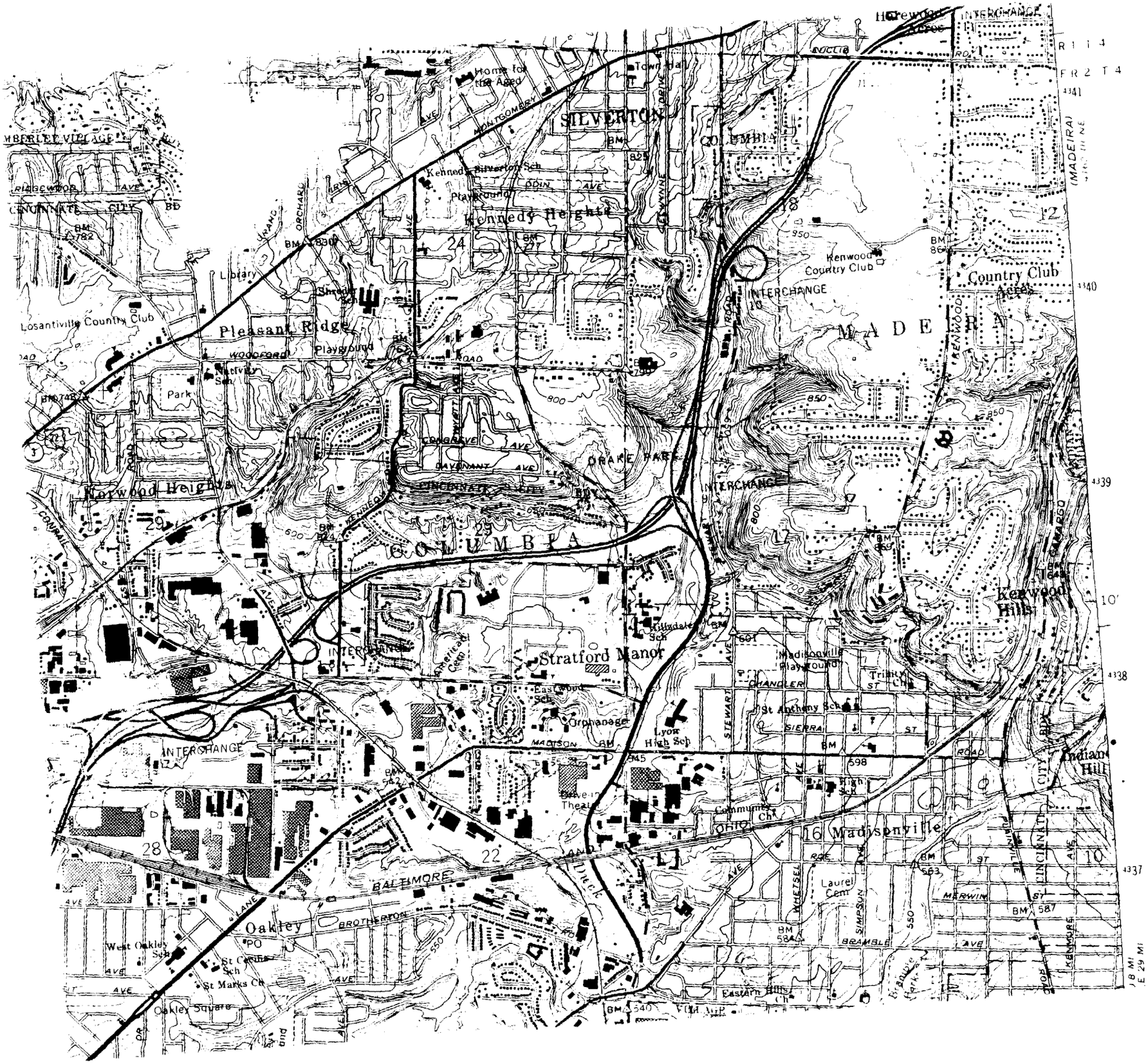
Medium-duty — Unimproved dirt

Interstate Route — U. S. Route — State Route

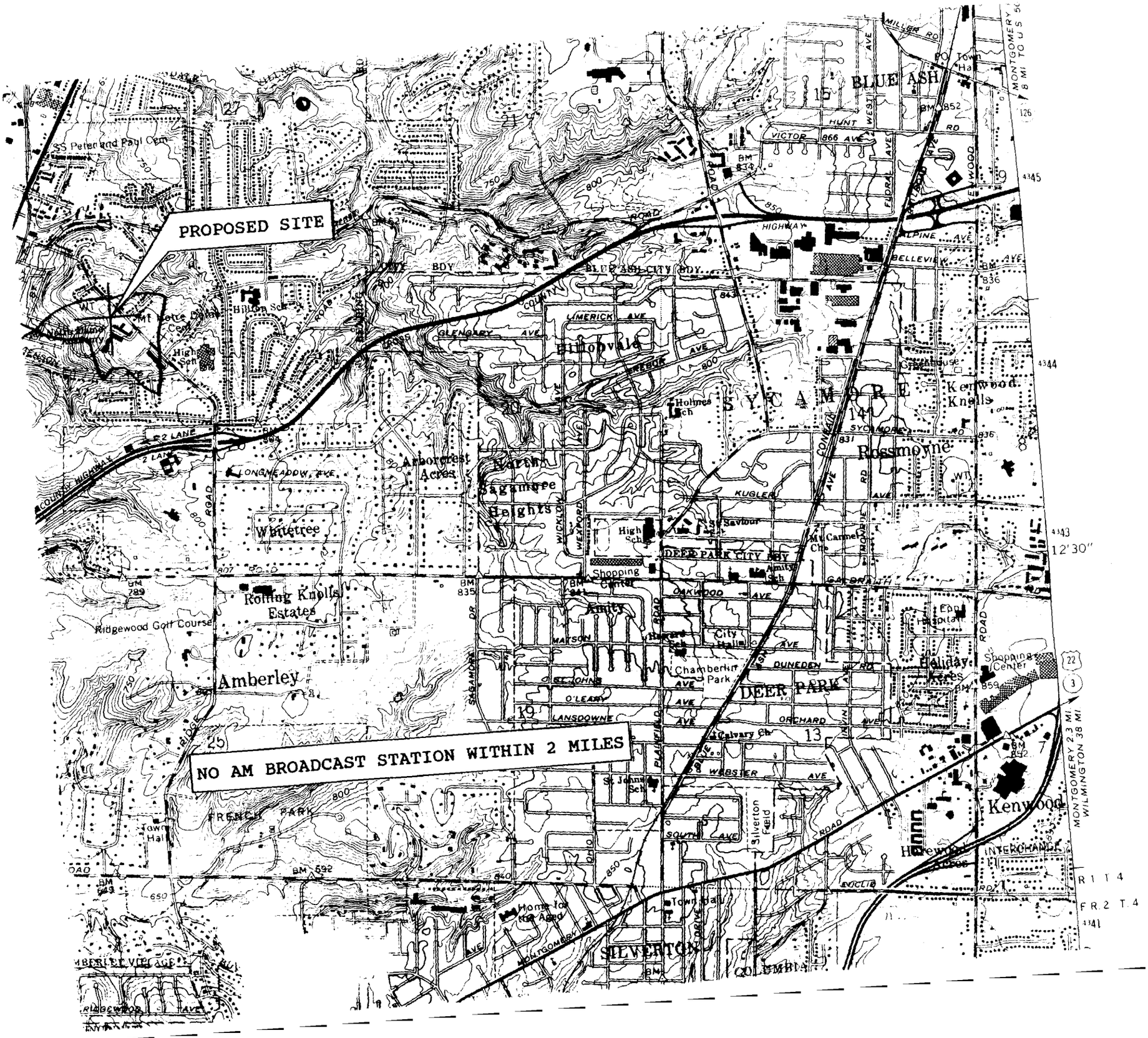
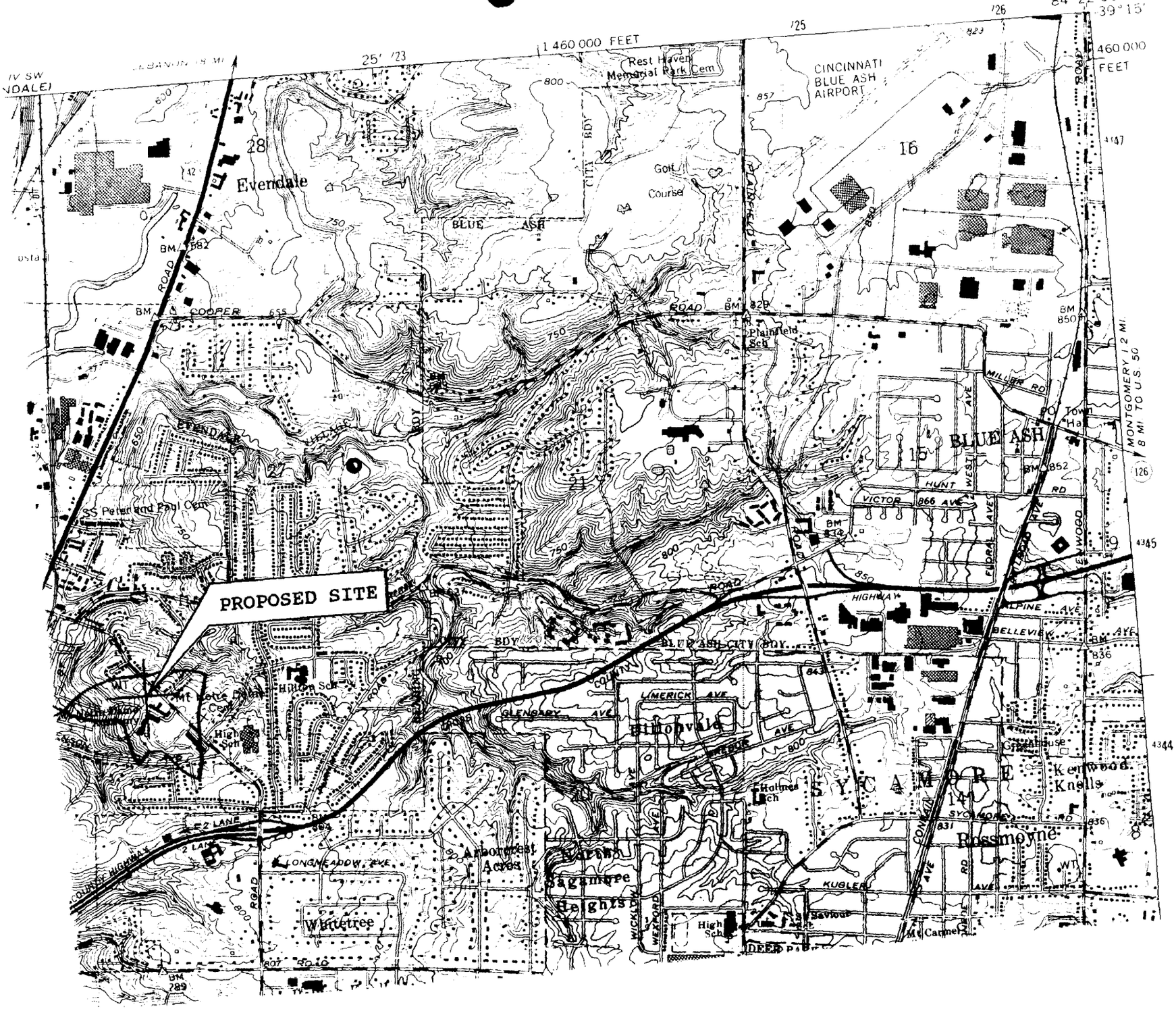
CINCINNATI EAST, OHIO

N3907.5—W8422.5/7.5

1961
PHOTOREVISED 1981
DMA 4162 III NW-SERIES V852



Horewood Acres
INTERCHANGE
R 1 T 4
F R 2 T 4
4341
Home for the Aged
Town Hall
SILVERTON
COLUMBIA
MONTGOMERY
Kennedy Silverton Sch
Playground
Kennedy Heights
ODIN AVE
CLEWYNNE DRIVE
MADEIRA
(MADEIRA)
Kenwood Country Club
Country Club Acres
INTERCHANGE
Library
Losantiville Country Club
Pleasant Ridge
Playground
WOODFORD ROAD
Park
Norwood Heights
CONGREVE AVE
DAVENANT AVE
CINCINNATI CITY BDY
DRAKE PARK
INTERCHANGE
COLUMBIA
Kenwood Hills
Stratford Manor
Hillsdale Sch
Madisonville Playground
Trinity Ch
CHANDLER ST
St Anthony Sch
SIERRA ST
Eastwood Sch
Orphanage
Lyon High Sch
MADISON
INTERCHANGE
Drive-in Theater
Community Ch
OHIO
Madisonville
Indian Hill
BALTIMORE
Oakley
BROTHERTON
West Oakley Sch
St Cecilia Sch
St Marks Ch
Oakley Square
Laurel Cem
MERWIN ST
BRAMBLE AVE
Eastern Hills Ch
Bramble Park
CINCINNATI CITY BDY
KENMORE
J 8 MI
E 29 MI


PROPOSED SITE
NO AM BROADCAST STATION WITHIN 2 MILES
BLUE ASH
SYCAMORE
Kenwood Knolls
Rossmoyne
Hillcrest Acres
North Sagamore Heights
Whitetree
Rolling Knolls Estates
Ridgewood Golf Course
Amberley
Amity
DEER PARK
Chamberlin Park
Holiday Acres
Kenwood
Harewood Acres
SILVERTON
COLUMBIA
Silverton Field
Shopping Center
Mt Carmel Ch
Calvary Ch
St Johns Sch
Holmes Sch
Hillcrest Sch
Home for the Aged
Town Hall
City Hall
Epp Hospital
SS Peter and Paul Cem
Mt Notre Dame Cem
BLUE ASH CITY BDY
DEER PARK CITY BDY
MONTGOMERY 8 MI TO U S 50
MONTGOMERY 2.3 MI
WILMINGTON 38 MI
INTERCHANGE
R 1 T 4
F R 2 T 4
12'30"

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