

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
FM STATION WKSW
ENON, OHIO
CH 268A 6 KW (MAX-DA) 71 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support application for a construction permit for FM station WKSW at Urbana, Ohio. Station WKSW is currently licensed (BLH-19950324KD, Facility ID 10113) to operate on channel 269A (101.7 MHz) with an effective radiated power (ERP) of 3.2 kilowatts (kW) and an antenna height above average terrain (HAAT) of 124 meters.

The purpose of this instant application is to substitute channel 268A (101.5 MHz) for channel 269A and specify a change in the city of license of WKSW as permitted by the new rules adopted by the FCC allowing community of license changes by application.¹ Specifically it is proposed to operate on channel 268A at Enon, Ohio with a directional antenna maximum ERP of 6 kW and an HAAT of 71 meters. This instant application is being filed under the contingent application rule [Section 73.3517(e)], as grant of this application is contingent on the grant of an application for construction permit for WDHT on channel 275B at Springfield, Ohio to change its city of license to Urbana, Ohio (replacement service) which is being filed concurrently with this application. The instant application is considered a "minor" change in facilities in accordance with Section 73.3573(a)(1)(i) and 73.3573(g). Processing under Section 73.215 is requested with respect to a short-spacing with WFMG's channel 267B1 licensed operation at Richmond, Indiana as detailed below.

Response to Paragraph 13 - Allotment

Figure 1 is a separation study from the proposed allotment reference coordinates. As shown, the proposed allotment reference site complies with the minimum distance separation requirements of Section 73.207 for Class A operation

¹ *Report and Order in the Matter of Revision of Procedures Governing Amendments to the FM Table of Allotments and Changes of Community of License in the Radio Broadcast Services*, MB Docket No. 05-210, RM-10960, FCC 06-163, released November 29, 2006 ("Report and Order").

on channel 268 towards all existing, authorized and proposed stations.

Figure 2 is a map which demonstrates that the allotment reference point complies with the FCC's city coverage requirements (73.315) based on maximum Class A facilities (ERP 6 kW/HAAT 100 m). The Enon city limits shown on Figure 2 were obtained from a map contained in the 2000 U.S. Census of Population.

Response to Paragraph 14 - Community Coverage

Figure 3 is a map that demonstrates the proposed transmitter site complies with the provisions of Section 73.315 and provides the entire community of license, Enon, Ohio, with a 70-dBu signal.

Response to Paragraph 16 - Interference

Figure 4 is a separation study from the proposed transmitter site coordinates. As shown, the proposed transmitter site complies with the minimum distance separation requirements of Section 73.207 for Class A operation on channel 268 towards all existing, authorized and proposed stations and allotments, with the exceptions of the Class B1 licensed operation (BLH-20060613ACE) for WFMG on channel 267B1 at Richmond, Indiana. Therefore, it is proposed to utilize the contour protection provisions of Section 73.215 with respect to these short-spacings.

Figure 5 demonstrates that the proposed Enon channel 268A operation complies with the contour protection provisions of Section 73.215 with respect to WFMG's channel 267B1 licensed operation. Station WFMG is designated as a 73.215 facility, therefore actual facilities have been presumed for WFMG's licensed operation and actual facilities have also been presumed for the proposed WKSX facility, as specified in Section 73.215².

Response to Paragraph 17 - Environmental Considerations

The proposed WKSX facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". This Bulletin provides assistance in determining whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields.

The calculated power density at 2 meters above ground level at the base of the tower was calculated using the appropriate equation of the Bulletin. Using a worst-case relative field value of 1.0, the total effective radiated power of 12 kW (H+V), and an antenna center of radiation height above ground level of 74 meters, the calculated power density at 2 meters above ground level at the base of the tower is 0.0773 milliwatt per square centimeter (mW/cm^2), or 38.7 percent of the Commission's recommended limit for an "uncontrolled" exposure areas ($0.2 \text{ mW}/\text{cm}^2$ for FM frequencies). Therefore the proposal complies with RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, procedures will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.

² The distances between the proposed WKSX transmitter site and WFMG's channel 267B1 licensed site (74.4 km) complies with the minimum distance separation requirement of Section 73.215(e) (72 km).

Response to Paragraph 18 - Community of License Change -
Section 307(b)

1. *Proposal*

It is proposed to substitute channel 268A for channel 269A and specify a change in the city of license of WKSX from Urbana, Ohio to Enon, Ohio as permitted by the new rules adopted by the FCC allowing community of license changes by application.³

2. *Contingent Application*

This instant application is being filed under the contingent application rule [Section 73.3517(e)], as a grant is contingent upon grant of an application for construction permit for WDHT on channel 275B at Springfield, Ohio to change its city of license to Urbana, Ohio (replacement service) which is being filed concurrently with this application.

3. *City Populations and Local Service*

Urbana has a 2000 U.S. Census population of 11,613 persons. Urbana has no other local FM or AM service. However, the proposal will not remove the only local service at Urbana as licensed FM station WDHT on channel 275B at Springfield, Ohio will be reallocated from Springfield to Urbana. Furthermore, Springfield, which has a 2000 U.S. Census population of 65,358 persons, will not be deprived of its sole existing service as FM stations WEEC (Ch. 264B) and WUSO (Ch. 206A) and AM stations WIZE (1340 kHz) and WULM (1600 kHz) are assigned to Springfield.

Enon has a U.S. Census population of 2,638 persons and has no local FM or AM service. Thus, the proposal will result in first local aural transmission service to the community of Enon.

³ Enon is listed in the U.S. Census as a Village.

4. *Urbanized Area Considerations*

Figure 6 is a map which depicts the Enon city limits and the Dayton Urbanized area. As indicated, the majority of Enon is located within the Dayton Urbanized area. Also shown are the 70 dBu contours for a channel 268A operation from the allotment reference coordinates as well as for the proposed WKSJ operation. The proposed 70 dBu contour for the allotment reference coordinates will encompass 2% of the Dayton Urbanized Area. In addition, the proposed WKSJ operation on channel 268A will encompass 27% of the Dayton Urbanized Area.

4. *Gain and Loss Areas and Available Aural Services*

Figure 7, Sheet 1, is a map showing the FM 60 dBu (1 mV/m) primary service contours for WKSJ'S licensed operation on channel 269A at Urbana and the proposed channel 268A allotment at Enon. Maximum facilities and uniform terrain were utilized. The 60 dBu "gain" and "loss" areas are also indicated.

The following tabulates the land areas and populations within the 60 dBu FM contours for the WKSJ licensed operation on channel 269A and the proposed operation on channel 268A at Enon. Also tabulated are the gain, loss and "net" gain areas.

<i>Facilities</i>	<i>Within 60 dBu Contour</i>	
	<i>2000 Census Population</i>	<i>Area (km²)</i>
Licensed Ch. 269A Urbana, OH	189,869	2,461
Allotment Ch. 268A Enon, OH	348,103	2,461
Gain	205,659	1,321
Loss	47,425	1,321
"Net" Gain	158,234	0

Figure 7, Sheet 1, also shows the other aural services available to the gain and loss areas within the 60 dBu contours.⁴ Figure 7, Sheet 2, tabulates the FM and AM stations

⁴The determination of available reception services was based on the criteria set forth in footnote 1 of the Notice of Proposed Rule Making in MM Docket No. 96-219 (DA 96-1774; adopted October 25, 1996, released November 1, 1996).

whose contours are shown on Figure 7, Sheet 1. As shown, there are at least five (5) other aural services available to the 60 dBu gain area which is considered to be well-served. The loss area contains underserved areas (areas with less than 5 aural services). Figure 7, Sheet 2, tabulates the FM and AM stations whose contours are shown on Figure 7. The following tabulates the underserved areas within the 60 dBu loss area.

Area	No. of Services	Within 60 dBu Contour	
		2000 Census Population	Area (km ²)
Loss	4	232	13

5. 70 dBu and 60 dBu Coverage

The following tabulates the area and population within the 70 dBu and 60 dBu contours depicted on Figure 3.

Contour	Population (2000 Census)	Area (sq. km)
70 dBu	183,058	559
60 dBu	670,278	1,783

Contour locations calculated in accordance with the provisions of Section 73.313. Population calculated using a computer program that utilizes the 2000 U.S. Census database of "population centroids". Area calculated using a root mean square algorithm.

6. Protected FM and AM Services Available to Enon

It has been determined that there are 23 protected FM and AM services available to Enon as shown on Figure 8.⁵

⁵ For FM stations, the pertinent primary service contour has been used. For AM stations, the daytime 2 mV/m contour has been used.

If there are any questions, or additional information is required, please contact the office of the undersigned.



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January 17, 2007

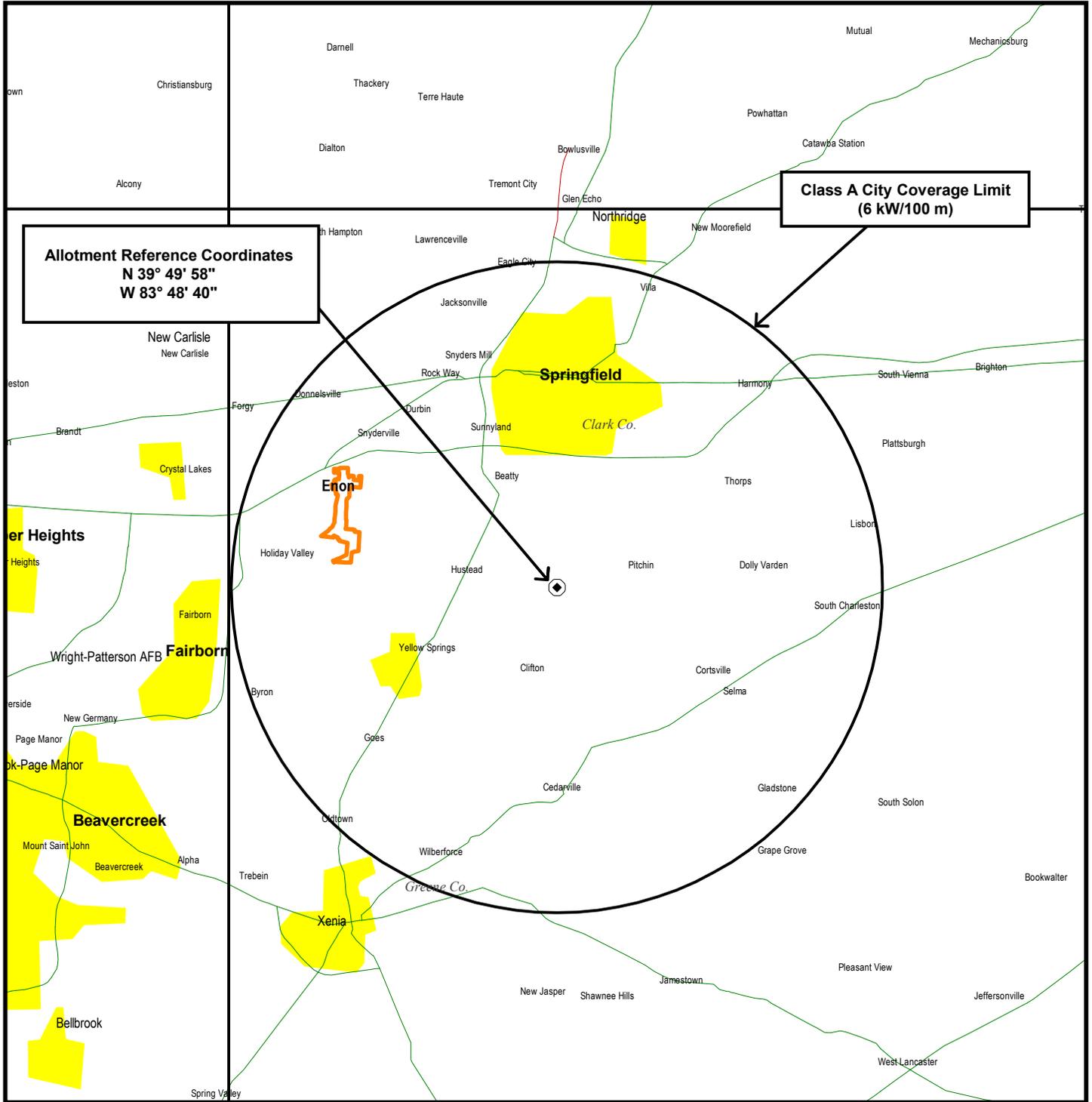
Figure 1

CDBS FM SEPARATION STUDY

Job Title: WKSU CH 268A - Allotment Reference Point Separation Buffer: 32 km
 Channel: 268 A Coordinates: 39-49-58 083-48-40

Call Id	City St	File Status Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km) 215 207	
WFMG 41845	RICHMOND IN LIC C	BLH 20060613ACE	267 B1 101.3	20.500 83	N	39-49-41 084-55-57	Y	270.0	96.00 0.00	72.0 Close	96.0
WRYV 70691	GALLIPOLIS OH LIC C	BLH 19870923KB	268 B 101.5	50.000 150	N	38-48-19 082-13-36	N	129.5	178.00 0.00	143.0 Close	178.0
WKKG 72259	COLUMBUS IN LIC C	BLH 19890619KA	268 B 101.5	50.000 150	N	39-11-12 085-57-00	N	249.3	197.44 19.44	143.0 Clear	178.0
WRVF 62188	TOLEDO OH LIC C	BLH 20060309ACK	268 B 101.5	33.000 164	N	41-40-23 083-25-31	Y	8.9	206.94 28.94	143.0 Clear	178.0
WKSU 10113	URBANA OH LIC C	BLH 19950324KD	269 A 101.7	3.200 124	N	40-02-57 083-46-06	Y	8.6	24.30 -47.70	49.0 Short	72.0
WKRQ 11276	CINCINNATI OH LIC C	BLH 19991004ABU	270 B 101.9	16.000 264	N	39-06-59 084-30-07	N	216.9	99.29 30.29	63.0 Clear	69.0
WIMT 37497	LIMA OH LIC C	BMLH 20050707ADI	271 B 102.1	11.000 323	N	40-38-03 084-12-29	N	339.4	95.18 26.18	63.0 Clear	69.0

Figure 2

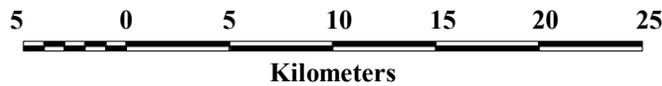
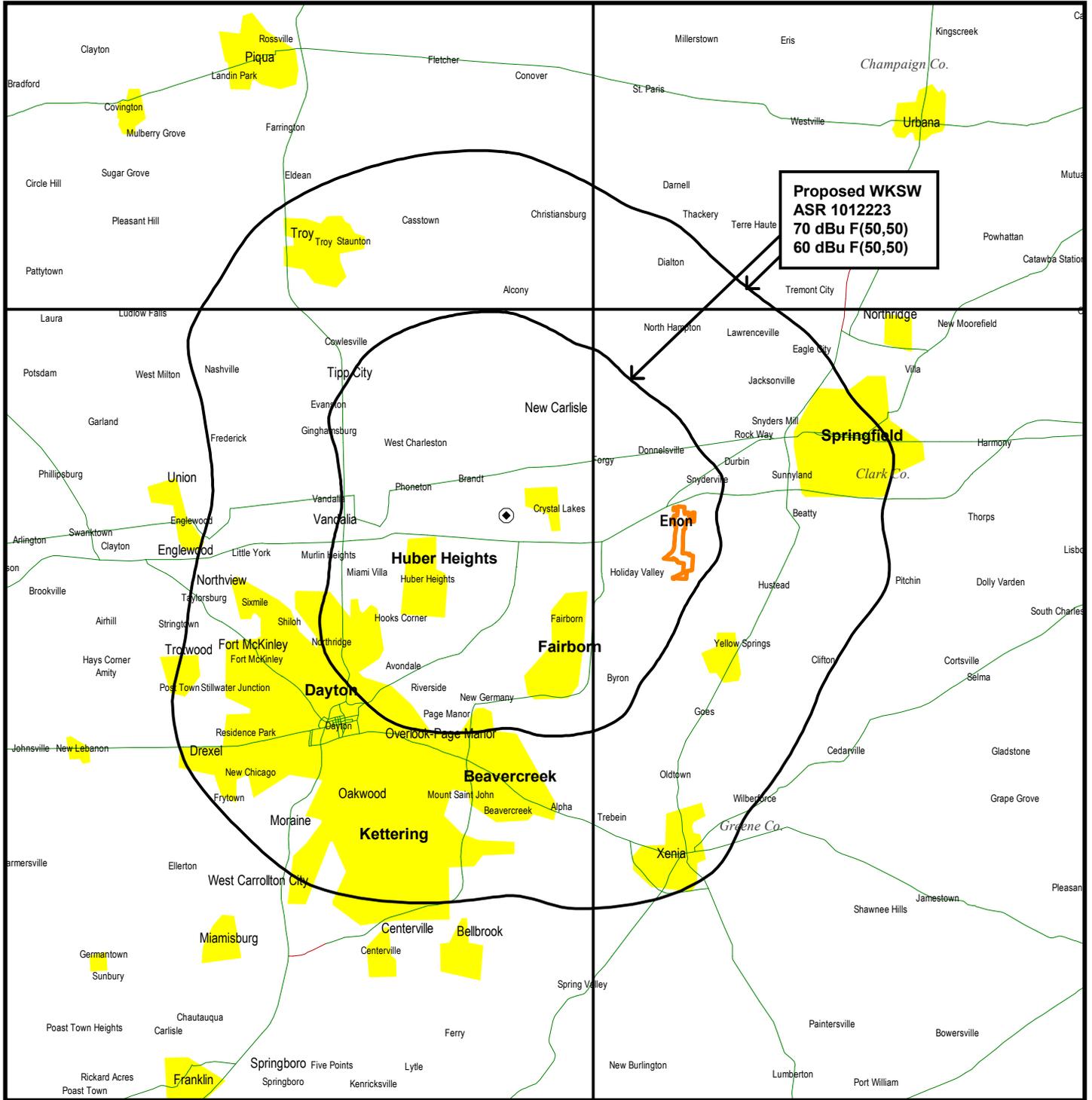


COMPLIANCE WITH SECTION 73.203(b)

FM STATION WKSW
ENON, OHIO
CH 268A 6 KW-DA 71 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3



COMPLIANCE WITH SECTION 73.315
FM STATION WKSX
ENON, OHIO
CH 268A 6 KW-DA 71 M
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 4

CDBS FM SEPARATION STUDY

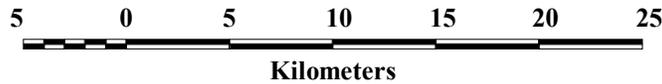
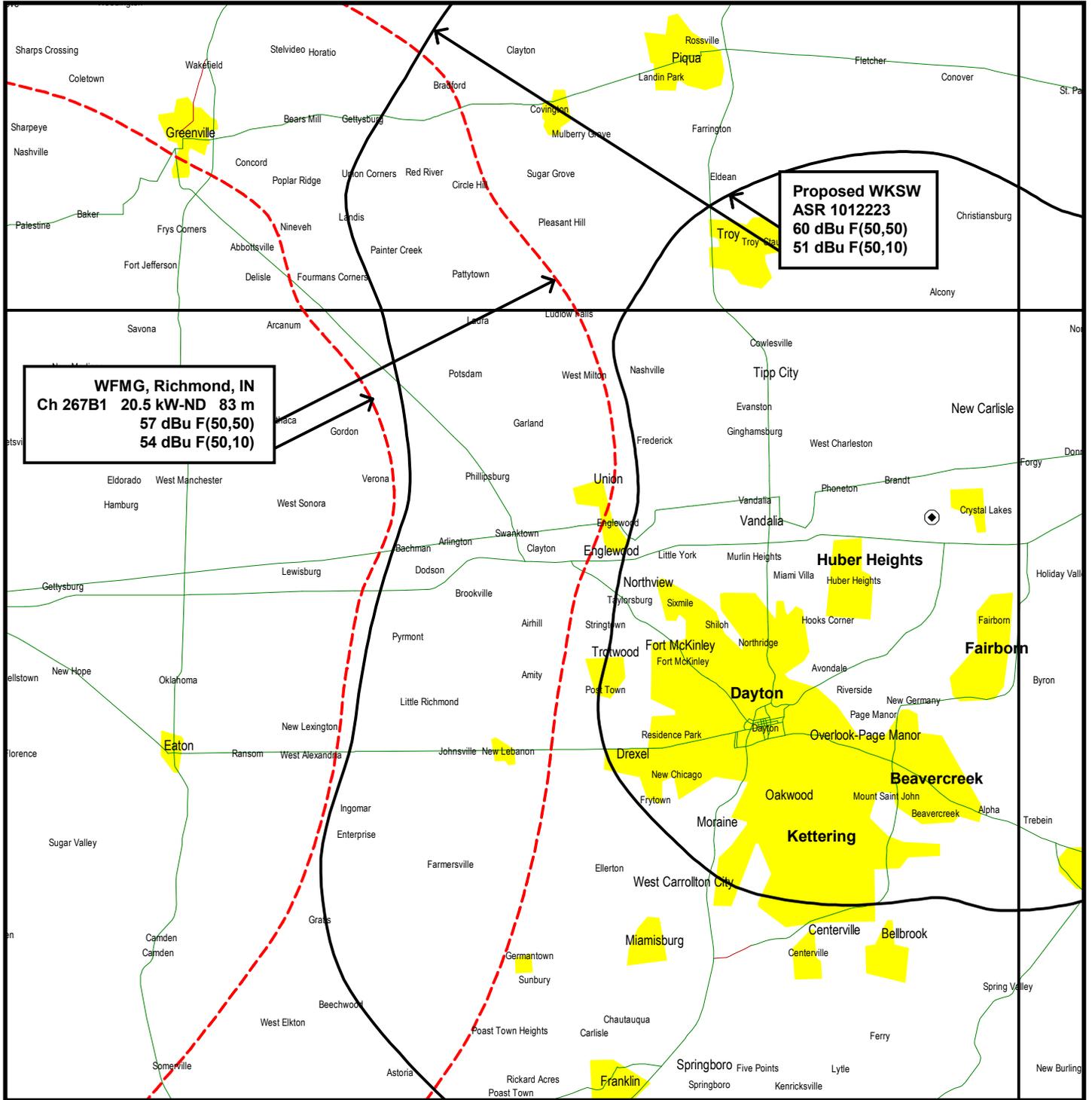
Job Title: WKSW CH 268A - ASR 1012223
 Channel: 268 A

Separation Buffer: 32 km
 Coordinates: 39-52-49 084-03-56

Call Id	City St	File Status Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km) 215 207	
WFMG 41845	RICHMOND IN LIC C	BLH 20060613ACE	267 B1 101.3	20.500 83	N	39-49-41 084-55-57	Y	265.8	74.42 -21.58	72.0 Short¹	96.0
WKKG 72259	COLUMBUS IN LIC C	BLH 19890619KA	268 B 101.5	50.000 150	N	39-11-12 085-57-00	N	245.1	179.38 1.38	143.0 Close	178.0
WRYV 70691	GALLIPOLIS OH LIC C	BLH 19870923KB	268 B 101.5	50.000 150	N	38-48-19 082-13-36	N	126.5	198.43 20.43	143.0 Clear	178.0
WRVF 62188	TOLEDO OH LIC C	BLH 20060309ACK	268 B 101.5	33.000 164	N	41-40-23 083-25-31	Y	14.9	206.29 28.29	143.0 Clear	178.0
WKSW 10113	URBANA OH LIC C	BLH 19950324KD	269 A 101.7	3.200 124	N	40-02-57 083-46-06	Y	53.4	31.57		
WKRQ 11276	CINCINNATI OH LIC C	BLH 19991004ABU	270 B 101.9	16.000 264	N	39-06-59 084-30-07	N	203.9	92.74 23.74	63.0 Clear	69.0
WIMT 37497	LIMA OH LIC C	BMLH 20050707ADI	271 B 102.1	11.000 323	N	40-38-03 084-12-29	N	351.8	84.58 15.58	63.0 Close	69.0

¹ It is proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with WFMG licensed operation. A directional antenna will be used to eliminate contour overlap. See Technical Narrative and Figure 5.

Figure 5



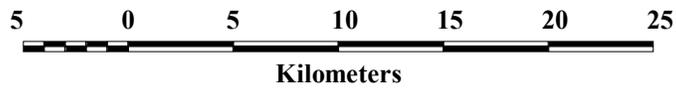
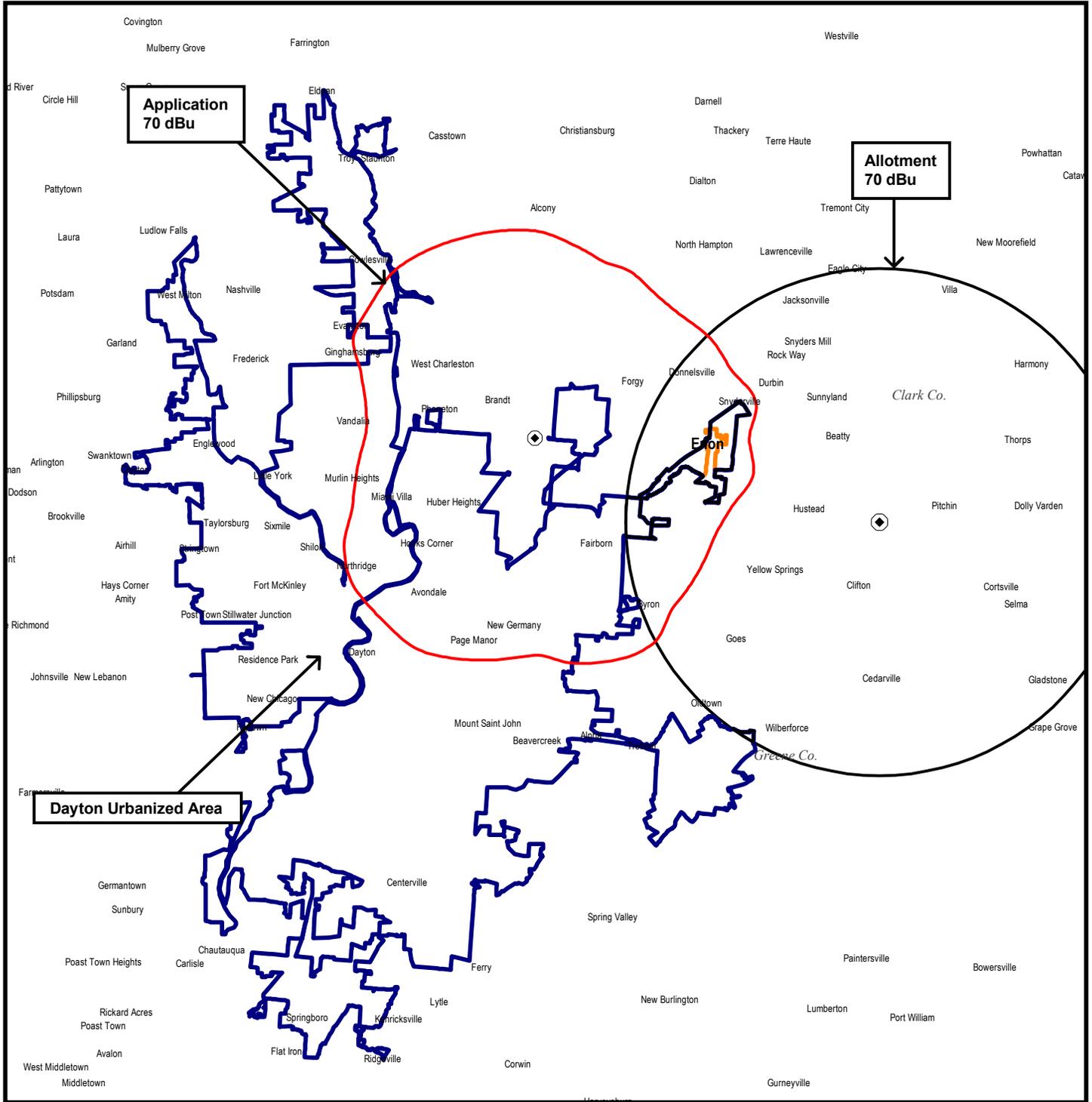
COMPLIANCE WITH SECTION 73.215

FM STATION WKSW
ENON, OHIO

CH 268A 6 KW-DA 71 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 6



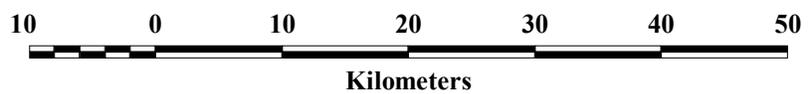
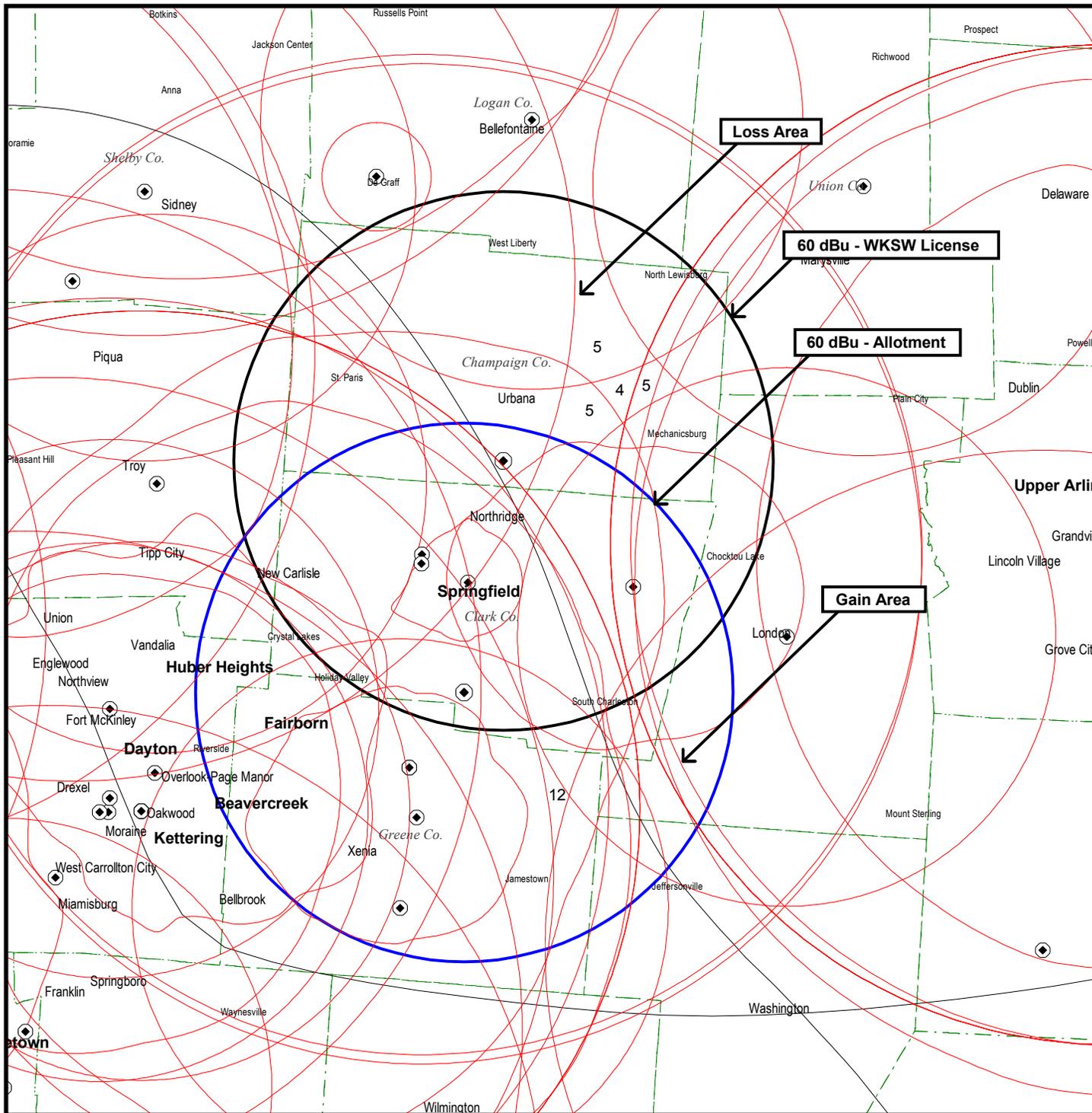
URBANIZED AREA COVERAGE

FM STATION WKSX

ENON, OHIO

CH 268A 6 KW-DA 71 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



GAIN AND LOSS AREA/OTHER AVAILABLE SERVICES

FM STATION WKSX

ENON, OHIO

CH 268A 6 KW-DA 71 M

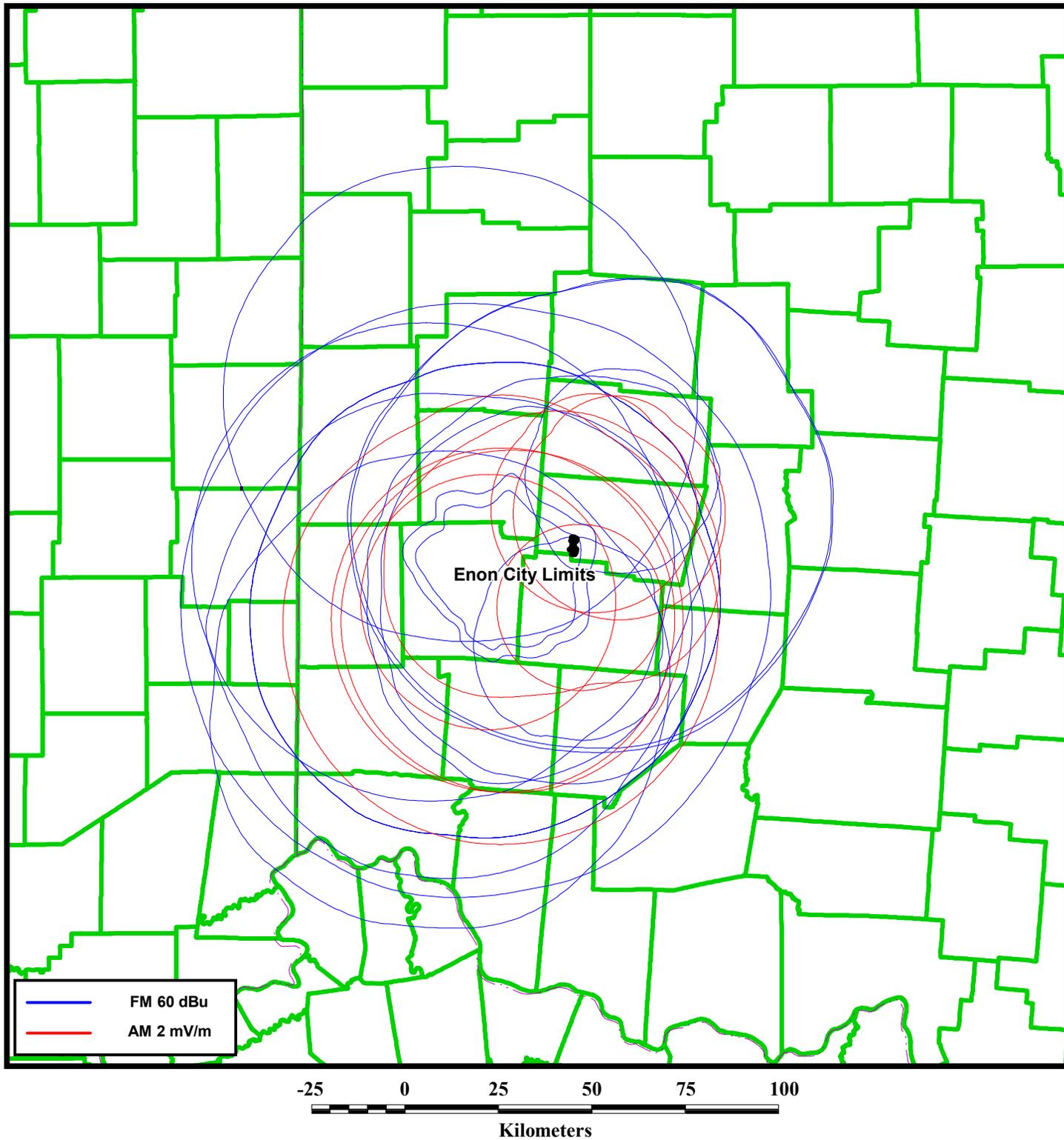
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

RADIO STATIONS CONSIDERED FOR GAIN/LOSS AREA SERVICE ANALYSIS

Call Sign	City of License	State	Status	Frequency
AM STATIONS				
WLW	CINCINNATI	OH	LIC	700 kHz
WJR	DETROIT	OH	LIC	760 kHz
WCKY	CINCINNATI	OH	LIC	1530 kHz
FM STATIONS				
WDPR	WEST CARROLLTON	OH	LIC	88.1
WVSO	SOUTH VIENNA	OH	LIC	88.3
WMUB	OXFORD	OH	LIC	88.5
WCSU-FM	WILBERFORCE	OH	LIC	88.9
WUSO	SPRINGFIELD	OH	LIC	89.1
WQRP	DAYTON	OH	LIC	89.5
WOSU-FM	COLUMBUS	OH	LIC	89.7
WDPG	GREENVILLE	OH	LIC	89.9
WCDR-FM	CEDARVILLE	OH	LIC	90.3
WCBE	COLUMBUS	OH	LIC	90.5
WGLE	LIMA	OH	LIC	90.7
WYSO	YELLOW SPRINGS	OH	LIC	91.3
WDEQ-FM	DE GRAFF	OH	LIC	91.7
WROU-FM	WEST CARROLLTON	OH	LIC	92.1
WCOL-FM	COLUMBUS	OH	LIC	92.3
WGTZ	EATON	OH	LIC	92.9
WLZT	CHILlicoTHE	OH	LIC	93.3
WFCJ	MIAMISBURG	OH	LIC	93.7
WDKF	ENGLEWOOD	OH	LIC	94.5
WSNY	COLUMBUS	OH	LIC	94.7
WZLR	XENIA	OH	LIC	95.3
WHIO-FM	PIQUA	OH	LIC	95.7
WQLK	RICHMOND	IN	LIC	96.1
WLVQ	COLUMBUS	OH	LIC	96.3
WFTK	LEBANON	OH	LIC	96.5
WOKL	TROY	OH	LIC	96.9
WBNS-FM	COLUMBUS	OH	LIC	97.1
WOXY	MASON	OH	CP	97.7
WNCI	COLUMBUS	OH	LIC	97.9
WPKO-FM	BELLEFONTAINE	OH	LIC	98.3
WHKO	DAYTON	OH	LIC	99.1
WBZX	COLUMBUS	OH	LIC	99.7
WLQT	KETTERING	OH	LIC	99.9
WEEC	SPRINGFIELD	OH	LIC	100.7
WIMT	LIMA	OH	LIC	102.1
WDHT	SPRINGFIELD	OH	LIC	102.9
WXEG	BEAVERCREEK	OH	LIC	103.9
WJZK	RICHWOOD	OH	LIC	104.3
WTUE	DAYTON	OH	LIC	104.7

Figure 7
Sheet 3 of 3

WMVR-FM	SIDNEY	OH	LIC	105.5
WPFB-FM	MIDDLETOWN	OH	LIC	105.9
WJYD	LONDON	OH	LIC	106.3
WDSJ	GREENVILLE	OH	LIC	106.5
WMMX	DAYTON	OH	LIC	107.7



OTHER FM AND AM PROTECTED SERVICES
AVAILABLE TO ENON, OHIO

FM STATION WKSW
ENON, OHIO

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

**ENGINEERING EXHIBIT
FM STATION WKSW**

Tabulation of Other Stations Available to Enon, Ohio

AM CONTOURS

<u>Call Sign</u>	<u>Community of License</u>	<u>State</u>	<u>Frequency (kHz)</u>
WONE	DAYTON	OH	980
WGNZ	FAIRBORN	OH	1110
WDAO	DAYTON	OH	1210
WHIO	DAYTON	OH	1290
WIZE	SPRINGFIELD	OH	1340
WING	DAYTON	OH	1410
WBZI	XENIA	OH	1500
WULM	SPRINGFIELD	OH	1600

FM CONTOURS

<u>Call Sign</u>	<u>Community of License</u>	<u>State</u>	<u>Channel</u>
WDPS	DAYTON	OH	208
WQRP	DAYTON	OH	208
WCDR-FM	CEDARVILLE	OH	212
WYSO	YELLOW SPRINGS	OH	217
WGTZ	EATON	OH	225
WFCJ	MIAMISBURG	OH	229
WZLR	XENIA	OH	237
WHIO-FM	PIQUA	OH	239
WHKO	DAYTON	OH	256
WLQT	KETTERING	OH	260
WEEC	SPRINGFIELD	OH	264
WDHT	SPRINGFIELD	OH	275
WTUE	DAYTON	OH	284
WPFB-FM	MIDDLETOWN	OH	290
WMMX	DAYTON	OH	299