

# *APPLICATION FOR CONSTRUCTION PERMIT*

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NEW FM TRANSLATOR STATION  
CLINTON, MISSOURI  
BNPFT-20030312BBJ  
103.9 MHz / 0.250 kW ND

COMMUNITY BROADCASTING, INC.

FEBRUARY, 2013

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**2.28.2013**

## **APPLICATION FOR CONSTRUCTION PERMIT**

The following engineering statement and attached exhibits have been prepared for **Community Broadcasting, Inc.** ("CBI"), applicant for a new FM translator facility to serve Clinton, Missouri, and are in support of their application for construction permit for that facility. This application is being filed as the long-form submission for the original short-form engineering proposal under FCC File No. BNPFT-20030312BBJ.<sup>1</sup>

The proposed facility would operate with an effective radiated power of 250 Watts at a center of radiation of 321.9 meters AMSL utilizing a non-directional antenna. The primary station for the proposed facility is KYLF(FM) at Adrian, Missouri.<sup>2</sup> The proposed facility would not operate as a fill-in translator for KYLF. Exhibit E-1 illustrates the predicted 60 dBu service contour of both the translator and its primary facility.

The center of radiation and effective radiated power are consistent with the power and height limitations table in Section 74.1235 of the Commission's Rules. The average terrain was determined through a 12 radial sample of a 30-second linearly interpolated terrain database. That study indicated that the average elevation along the 150 degree true radial was the lowest of any of the sampled radials. The average elevation on this radial was determined to be 214.9 meters AMSL. This yields a center of radiation height above average terrain of 107.0 meters.

This application proposes a change to the site specified in the original short-form application submitted in 2003. The change in the technical parameters would not, however, constitute a major

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<sup>1</sup> The Facility ID for NEW / BNPFT-20030312BBJ at Clinton, Missouri is 140421.

<sup>2</sup> The Facility ID for KYLF(FM) at Adrian, Missouri is 174965.

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change to the original short-form engineering proposal. Exhibit E-2 illustrates the predicted 60 dBu service contour resulting from the original short-form proposal along with the 60 dBu service contour based on the technical parameters described in this application. As this map demonstrates, there would be overlap of the 60 dBu service contours.

The coordinates specified in this application vary slightly from those originally submitted with the short-form proposal. No actual change in the facility location is proposed. Rather the difference in the coordinates is a result of a modification of the ASR data by the owner of that structure. The proposed facility would not affect any of the Appendix A markets. The closest Appendix A market to the proposed facility is the Kansas City market. Exhibit E-2 illustrates that the site for the proposed facility would lie outside the market boundaries, outside the market grid, and outside the market grid buffer.

The proposed facility would comply with the contour overlap and interference provisions of Section 74.1204 of the Commission's Rules. Exhibit E-3 is a tabular based allocation study for the proposed facility. As this study demonstrates, there would be no areas of prohibited contour overlap between the proposed facility, and any other proposed or authorized facility of relevance. Exhibit E-4 illustrates the tabular study in a graphical contour format.

As indicated on the form pages, the proposed facility would operate with an effective radiated power of 250 Watts. Exhibit E-5 is a single channel spacing study for the proposed translator. As this study demonstrates, the requisite intermediate frequency spacing requirements would be met.

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CBI has several other pending translator applications and licensed translator facilities in the region. There is no overlap of the proposed 60 dBu service contour with the 60 dBu service contour of any other CBI translator facility. As a result, the proposed facility would be in compliance with the multiple translator provisions of the Commission's Rules.

The facility specified in this application would not constitute a significant environmental impact, and is exempt from environmental processing. The translator would utilize an existing tower that is registered with the Commission. The addition of the translator antenna to this tower would not increase the existing environmental impact already present from the facility.

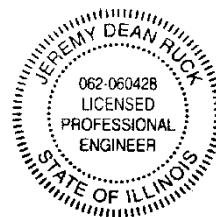
In addition, the proposed facility would not constitute a radiofrequency radiation hazard to persons at the site. As indicated on the form pages, the proposed facility would operate with a Shively model 6812B-2 model antenna. The Commission's *FM Model* software package predicts a maximum power density of  $0.34 \mu\text{W}/\text{cm}^2$  at a distance of 52 meters from the base of the tower. This value is considerably less than the maximum value permissible under the applicable safety standards. CBI certifies that it will coordinate with all present and future users of the site to ensure that workers having access to the site are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Such coordination will include, but is not necessarily limited to, a reduction in transmitter power or cessation of operation.

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The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature  
License Expires November 30, 2013

Jeremy D. Ruck, PE  
February 28, 2013

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2.28.2013

**631745.X**  
BNPFT20030312BBJ  
Latitude: 38-23-02.40 N  
Longitude: 093-47-58 W  
ERP: 0.25 kW  
Channel: 280  
Frequency: 103.9 MHz  
AMSL Height: 321.9 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

*Jeremy Ruck & Associates, Inc.*

KYLF 60 dBu  
Service Contour

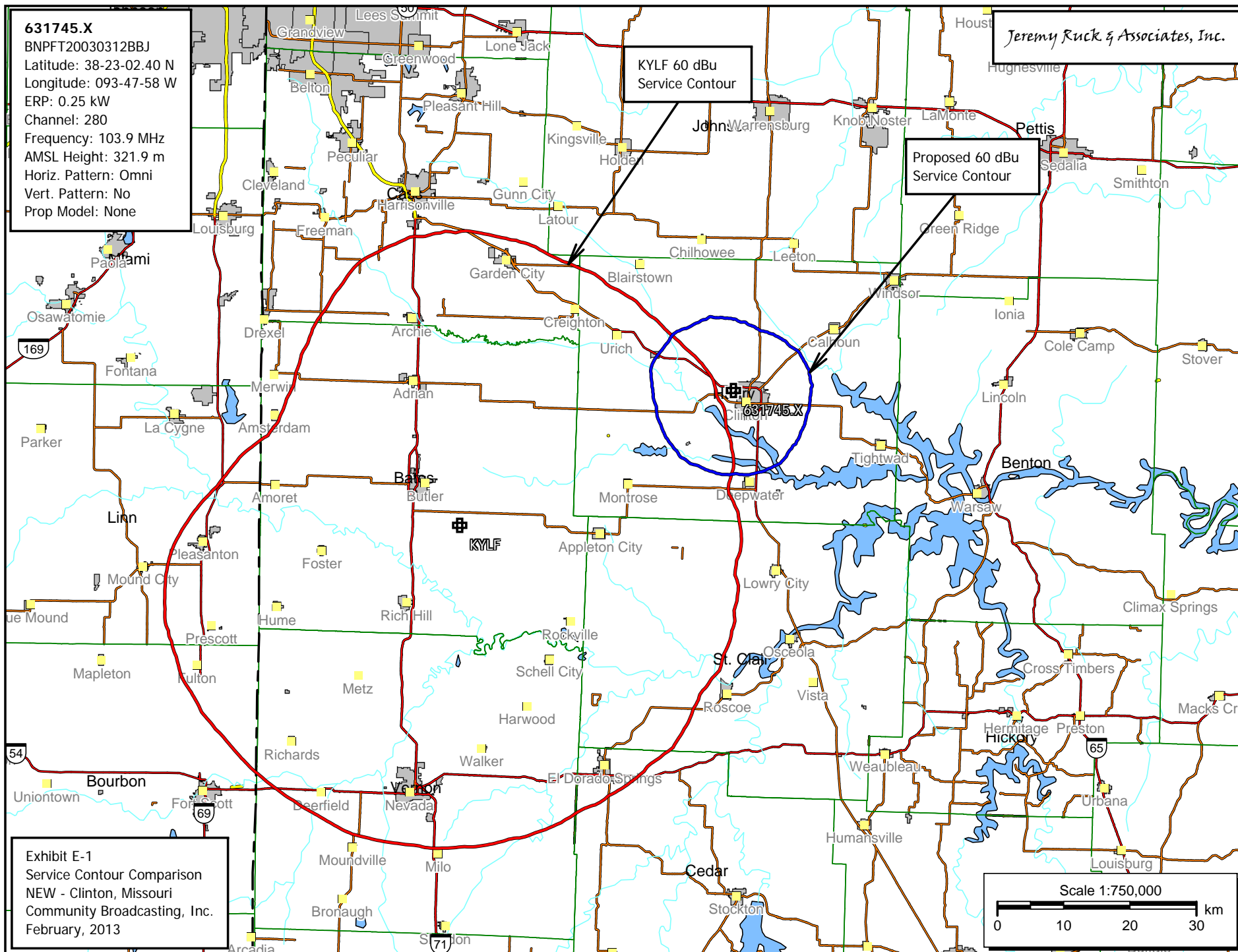
Proposed 60 dBu  
Service Contour

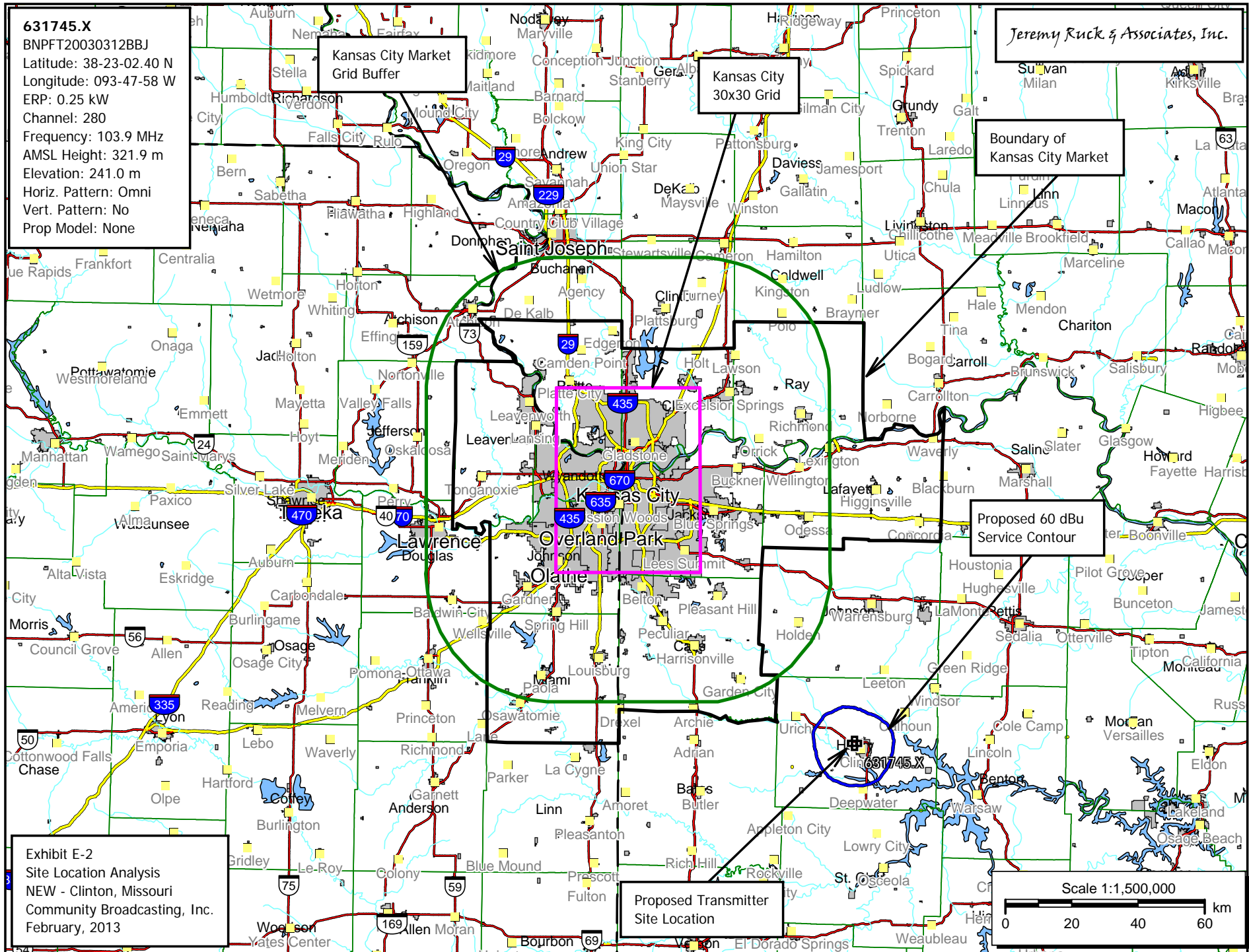
631745.X

Exhibit E-1  
Service Contour Comparison  
NEW - Clinton, Missouri  
Community Broadcasting, Inc.  
February, 2013

Scale 1:750,000

0 10 20 30 km





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Consulting Engineers - Canton, Illinois

Exhibit E-3 - Tabular Allocation Study

NEW - Clinton, Missouri

REFERENCE CH# 280D - 103.9 MHz, Pwr= 0.25 kW, HAAT= 88.4 M, COR= 321.9 M  
38 23 02.4 N.  
93 47 58.0 W.  
Average Protected F(50-50)= 12.12 km  
Omni-directional

DISPLAY DATES  
DATA 02-28-13  
SEARCH 02-28-13

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
280D Clinton	631745	APP _C_ MO	0.0 180.0	0.00 BNPFT20030312BBJ	38 23 03.0 93 47 58.0	0.250 89	44.4 322	12.9 Community Broadcasting, In	-55.3*	-49.9*
280C3 Fort Scott	KOMB	LIC _C_ KS	238.3 57.7	99.81 BLH20070906AAT	37 54 28.0 94 46 02.0	25.000 100	113.6 368	39.1 Fort Scott Broadcasting Co	-26.2*	17.5
280C2 Malta Bend	KRLI	LIC NCX MO	17.3 197.6	114.47 BLH20060301ABF	39 21 59.0 93 24 12.0	12.000 268	122.0 479	50.3 Kanza, Inc.	-18.1*	28.5
279C0 Lebanon	KJEL	LIC _CN MO	124.0 304.6	111.39 BLH19881115KC	37 49 10.0 92 44 51.0	100.000 300	107.9 620	74.1 Waynesville/ Lebanon Licen	-9.0	18.6
277C Kansas City	KPRS	LIC _CN MO	319.1 138.6	93.27 BLH19870522KA	39 00 57.0 94 30 24.0	100.000 303	10.0 577	71.9 Carter Broadcast Group, In	70.8	20.4
277D Osceola	K277AZ	LIC _C_ MO	165.2 345.2	39.33 BLFT20070726AHP	38 02 31.0 93 41 04.0	0.250 89	1.1 334	11.4 Community Broadcasting, In	24.8	26.6
282C0 Kansas City	KBEQ-FM	LIC _CY MO	323.0 142.6	97.60 BLH19850813KT	39 04 59.0 94 28 49.0	100.000 301	9.8 562	70.7 Wilks License Company-kans	75.5	25.9
279D Kansas City	K279BI	LIC _C_ MO	319.1 138.6	94.20 BLFT20100309ABW	39 01 20.0 94 30 49.0	0.250 349	36.0 621	23.9 Susquehanna Radio Corp.	45.8	52.3

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
\*\*\*affixed to 'IN' or 'OUT' values = site inside protected contour.



**631745.X**

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AMSL Height: 321.9 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

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- 60 dBu F(50,50) Service Contour
- 40 dBu F(50,10) Interference Contour
- 54 dBu F(50,10) Interference Contour
- 100 dBu F(50,10) Interference Contour

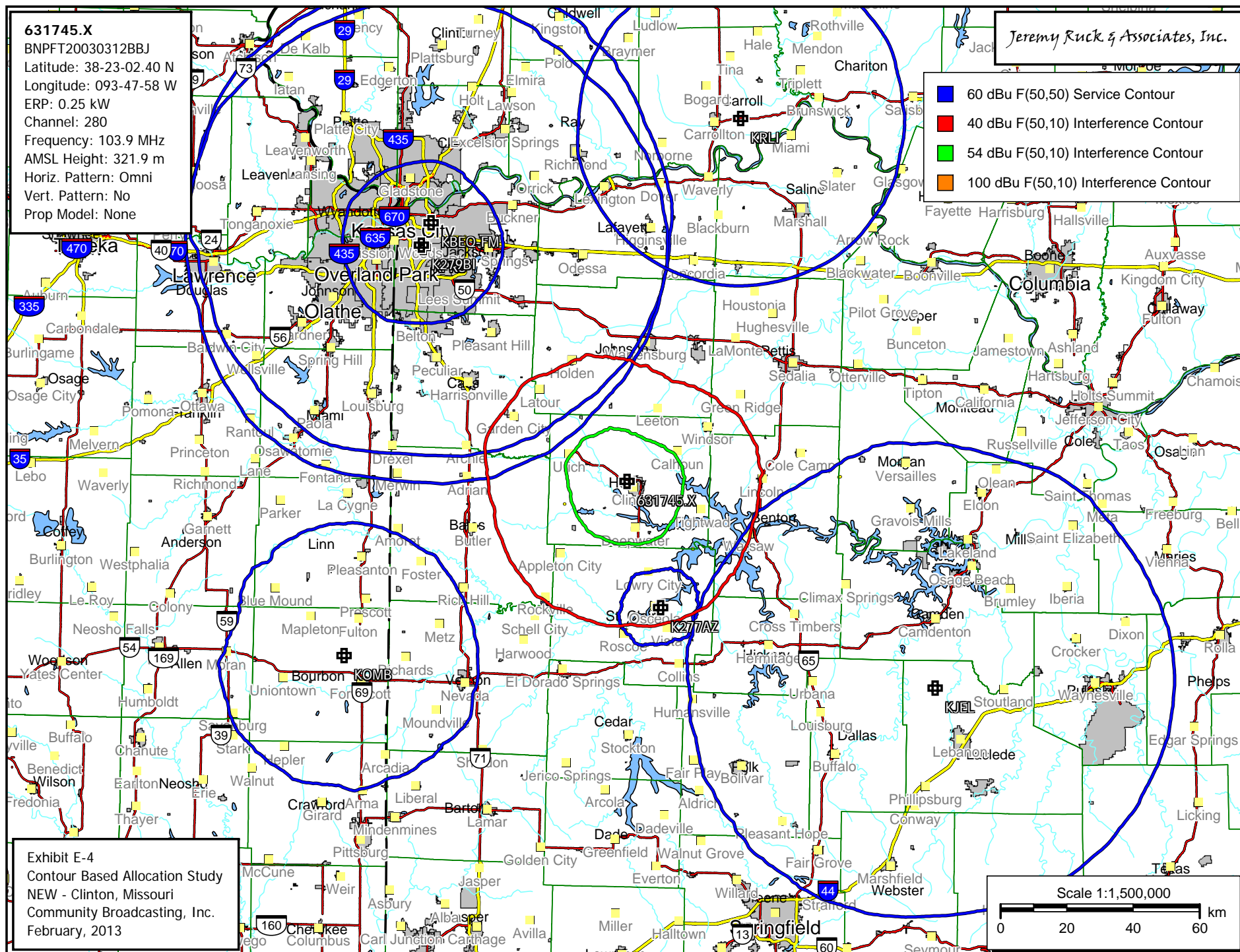
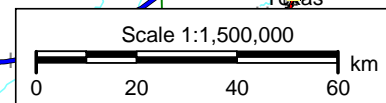


Exhibit E-4  
Contour Based Allocation Study  
NEW - Clinton, Missouri  
Community Broadcasting, Inc.  
February, 2013



Jeremy Ruck & Associates, Inc.  
Consulting Engineers - Canton, Illinois  
Exhibit E-5 - Single Channel Spacing Study  
NEW - Clinton, Missouri

REFERENCE		DISPLAY DATES
38 23 02.4 N.	CLASS = D	DATA 02-28-13
93 47 58.0 W.	Current Spacings to 3rd Adj.	SEARCH 02-28-13
----- Channel 280 - 103.9 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
631745	APP 280D	Clinton	MO 0.0	0.01	83.0	-83.0
K277AZ	LIC 277D	Osceola	MO 165.2	39.28	92.0	-52.7
KPRS	LIC 277C	Kansas City	MO 319.1	93.29	93.5	-0.21
KOMB	LIC 280C3	Fort Scott	KS 238.3	99.95	92.5	7.5
KRLI	LIC-N 280C2	Malta Bend	MO 17.3	114.34	104.5	9.8
KBEQ-FM	LIC 282C0	Kansas City	MO 323.0	97.60	83.5	14.1
KJEL	LIC 279C0	Lebanon	MO 124.0	111.53	93.5	18.0
K281AT	LIC 281D	Lebanon	MO 127.0	129.79	103.0	26.8
K279BI	LIC 279D	Kansas City	MO 319.1	94.22	60.5	33.7

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All separation margins include rounding