

APPLICATION FOR CONSTRUCTION PERMIT

NEW FM TRANSLATOR STATION
PITTSBURG, KANSAS
BNPFT-20030312BCM
95.9 MHz / 0.250 kW ND

COMMUNITY BROADCASTING, INC.

MARCH, 2013

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3.18.2013

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 Pittsburg, Kansas, 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-20030312BCM.¹

The proposed facility would operate with an effective radiated power of 250 Watts at a center of radiation of 375.8 meters AMSL utilizing a non-directional antenna. The primary station for the proposed facility is KARF(FM) at Independence, Kansas.² The proposed facility would not, however, function as a fill-in translator for KARF(FM) due to the location of the 60 dBu contour of that facility relative to the proposed translator contour. Exhibit E-1 illustrates the predicted 60 dBu service contour of the proposed translator as well as the licensed KARF(FM) 60 dBu service contour.

The proposed 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 210 degree true radial was the lowest of any of the sampled radials. The average elevation on that radial is 268.9 meters AMSL, which when combined with the afore mentioned center of radiation above mean sea level yields an antenna height above average terrain of 106.9 meters.

¹ The Facility ID for NEW / BNPFT-20030312BCM at Pittsburg, Kansas is 141943.

² The Facility ID for KARF(GM) at Independence, Kansas is 78930.

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The proposed site location is different from the location proposed in the original short-form engineering. The proposed change to the transmitter site location would be a minor change to the short-form engineering. Exhibit E-2 illustrates the predicted 60 dBu service contour of the short-form facility along with the 60 dBu service contour of the proposed long-form facility. As this map demonstrates, there is overlap between these two contours.

The proposed facility would not affect LPFM licensing opportunities within any of the Appendix A markets. The proposed facility is not located in any Appendix A market, market grid, or market grid buffer. The two closest Appendix A markets to the proposed site are the Springfield, MO and Tulsa markets. Exhibit E-3 illustrates the location of the proposed site relative to the market boundaries, market grid, and market grid buffer of these two markets.

The proposed facility would comply with the contour overlap and interference provisions of Section 74.1204 of the Commission's Rules. Exhibit E-4 is a tabular based allocation study for the proposed facility. As this study demonstrates, the proposed facility would meet all of the contour overlap requirements under the above referenced rule section. This tabular study is graphically illustrated in Exhibit E-5. Exhibit E-6 is a single channel spacing study that demonstrates that the proposed facility would comply with the intermediate frequency spacing requirements.

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.

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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 antenna. The Commission's *FM Model* software package predicts a maximum power density of $0.322 \mu\text{W}/\text{cm}^2$ at a distance of 56 meters from the tower base for the proposed facility.

In addition to the proposed translator, the tower is also specified as the supporting structure for BNPFT-20030317FDT at Pittsburg, Kansas and LPTV station KJOM-LP at Asbury, Missouri. *FM Model* predicts a maximum power density of $0.321 \mu\text{W}/\text{cm}^2$ at a distance of 32 meters from the tower base for BNPFT-20030317FDT, assuming a ring-stub type antenna. For KJOM-LP the equations in OET Bulletin 65 were utilized assuming uniform radiation in all directions from that facility. The resulting calculated power density for the LPTV station is $167.4 \mu\text{W}/\text{cm}^2$.

For a worst case scenario it will be assumed that the maximum predicted power density from all three antennas occurs at all locations in the vicinity of the tower. The aggregate worst-case power density is therefore $168.0 \mu\text{W}/\text{cm}^2$. If the more restrictive FM limits are utilized, then the total worst-case power density is less than the upper limit permissible under the uncontrolled environment condition. As a result, the proposed facility will not constitute an RF exposure hazard.

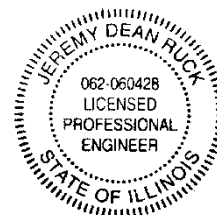
CBI certifies that it will coordinate with all present and future users of the site to ensure that workers having access to the facility are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Such coordination will include, but is not necessarily limited to, 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
March 18, 2013

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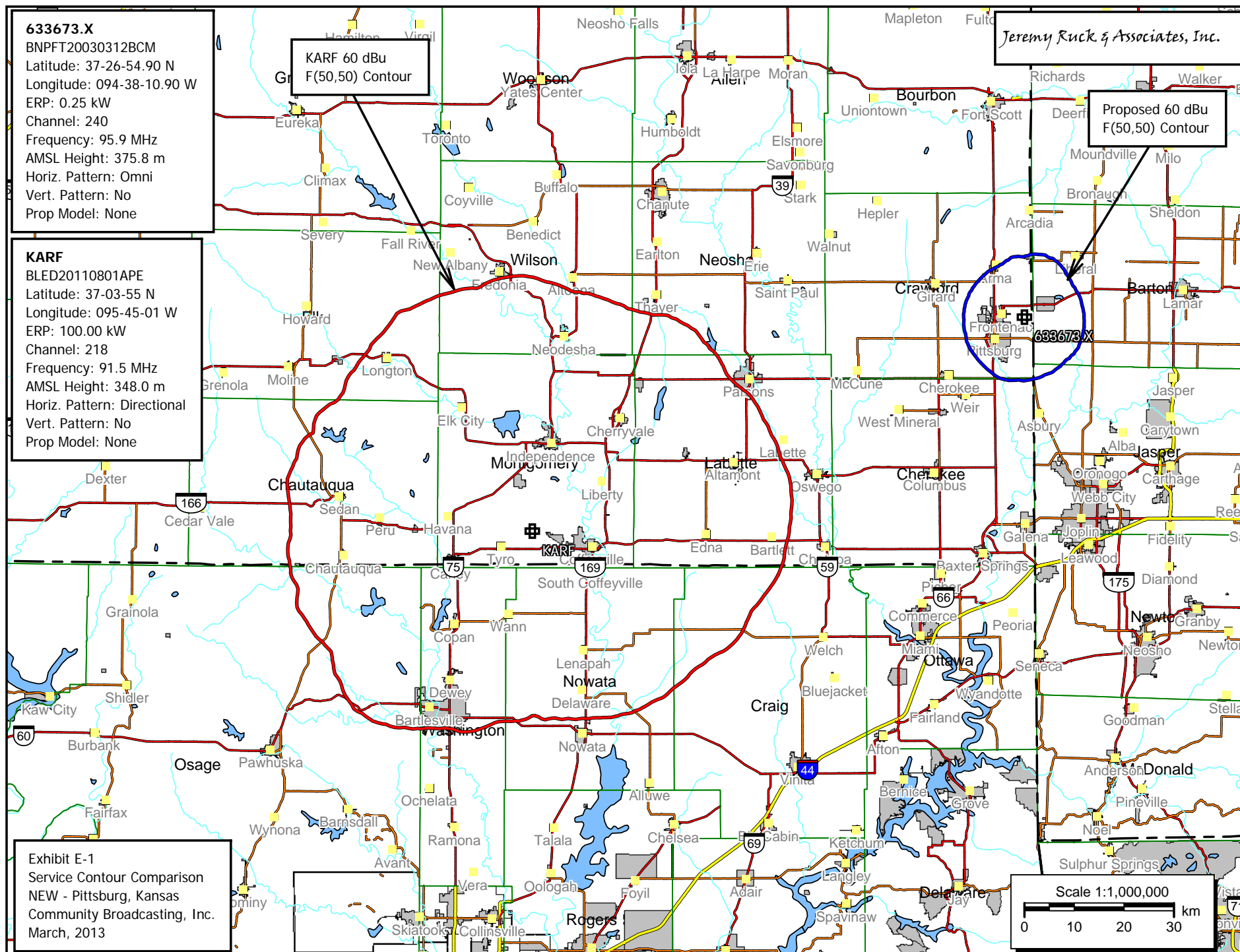
BNPFT20030312BCM
Latitude: 37-26-54.90 N
Longitude: 094-38-10.90 W
ERP: 0.25 kW
Channel: 240
Frequency: 95.9 MHz
AMSL Height: 375.8 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

BLEDD20110801APE
 Latitude: 37-03-55 N
 Longitude: 095-45-01 W
 ERP: 100.00 kW
 Channel: 218
 Frequency: 91.5 MHz
 AMSL Height: 348.0 m
 Horiz. Pattern: Directional
 Vert. Pattern: No
 Prop Model: None

Exhibit E-1
Service Contour Comparison
NEW - Pittsburg, Kansas
Community Broadcasting, Inc.
March, 2013

KARF 60 dBu
F(50,50) Contour

Jeremy Ruck & Associates, Inc.

Proposed 60 dBU
F(50,50) Contour

633673.X

BNPFT20030312BCM
Latitude: 37-26-54.90 N
Longitude: 094-38-10.90 W
ERP: 0.25 kW
Channel: 240
Frequency: 95.9 MHz
AMSL Height: 375.8 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

633673.A

BNPFT20030312BCM
Latitude: 37-23-10 N
Longitude: 094-42-30 W
ERP: 0.25 kW
Channel: 240
Frequency: 95.9 MHz
AMSL Height: 334.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Jeremy Ruck & Associates, Inc.

- Proposed 60 dBu F(50,50) Service Contour
- Short-Form 60 dBu F(50,50) Service Contour

Proposed Transmitter
Site Location

Short-Form
Transmitter Site

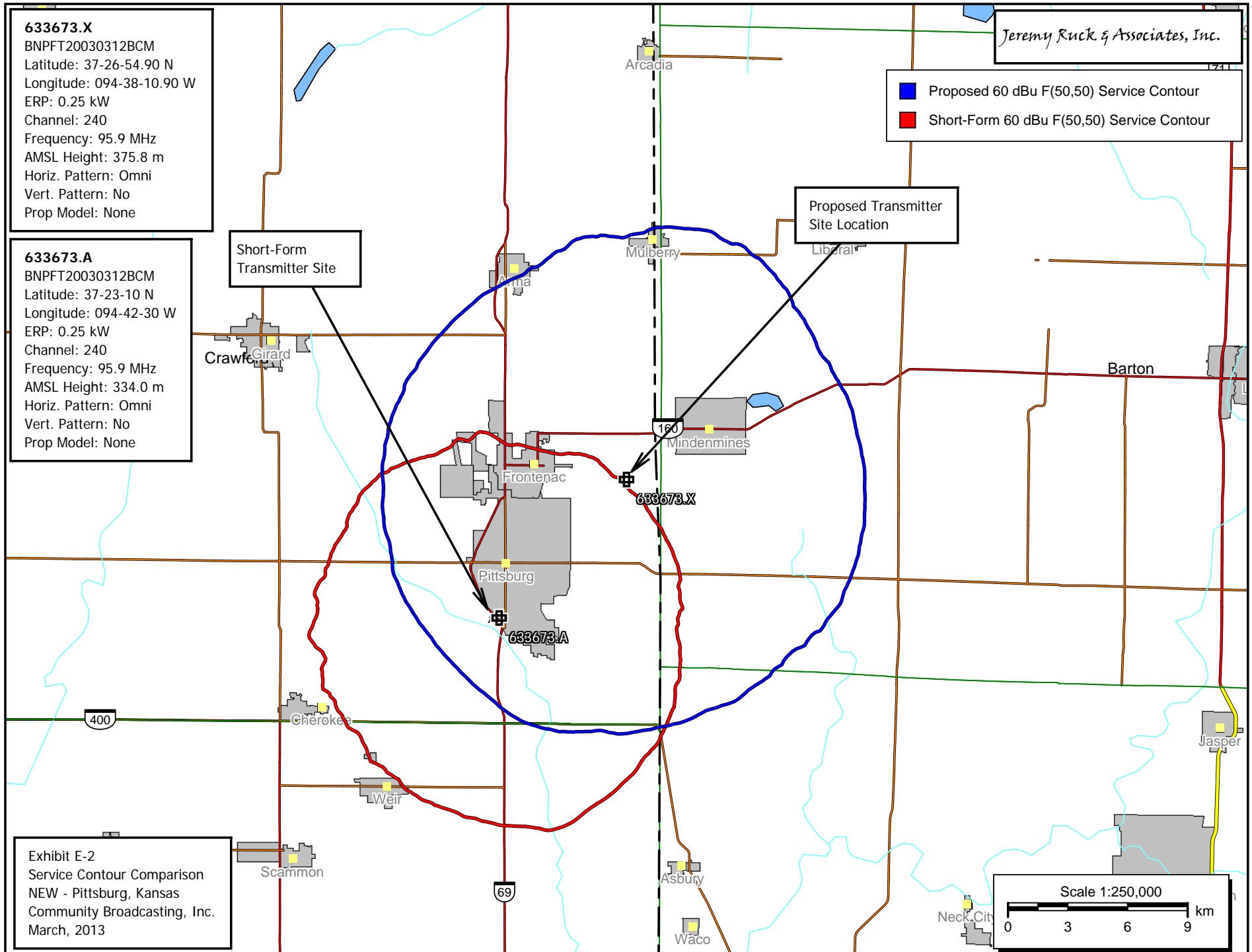
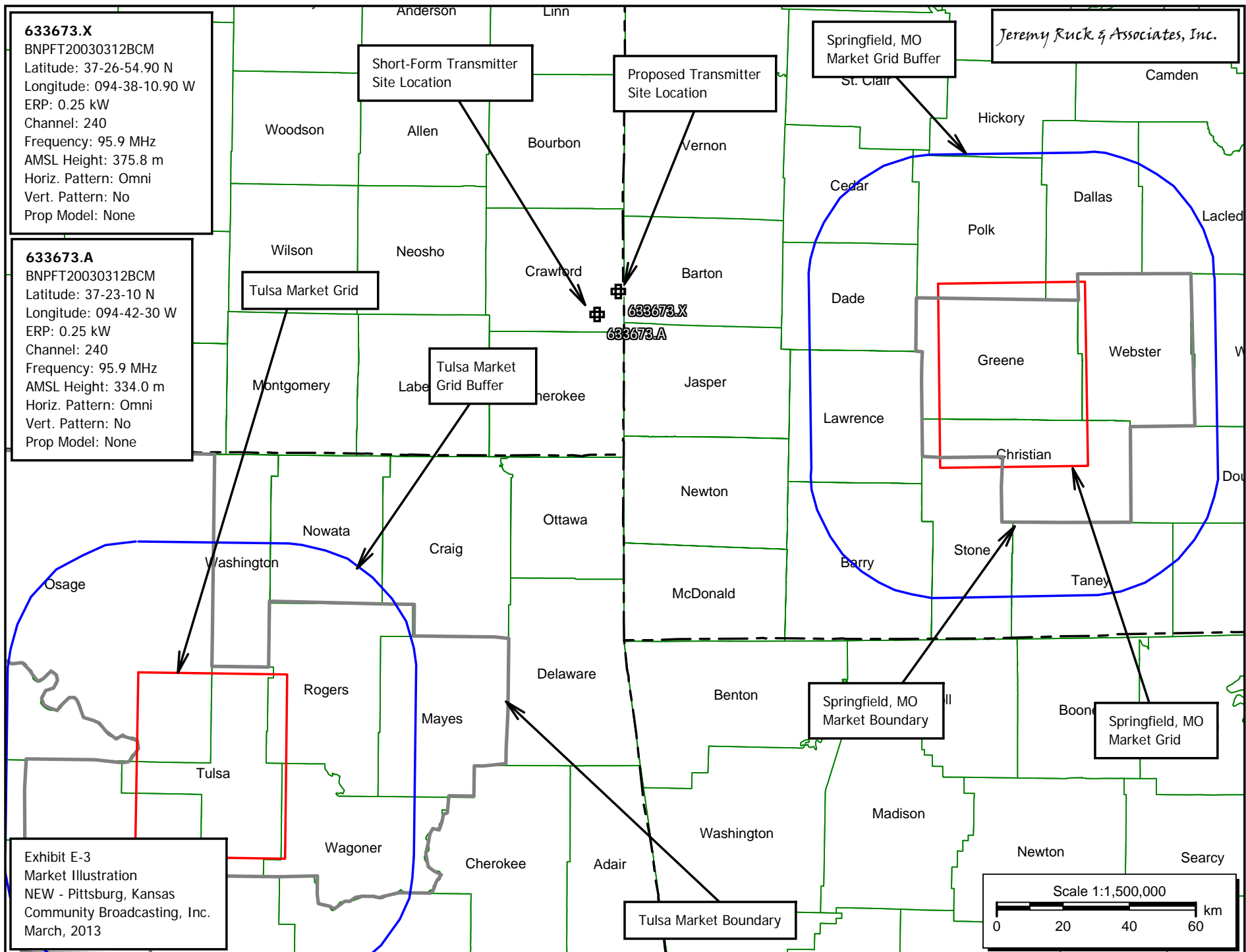


Exhibit E-2
Service Contour Comparison
NEW - Pittsburg, Kansas
Community Broadcasting, Inc.
March, 2013

Scale 1:250,000

0 3 6 9 km



Jeremy Ruck & Associates, Inc.
Consulting Engineers - Canton, Illinois

Exhibit E-4 - Tabular Allocation Study

NEW - Pittsburg, Kansas

REFERENCE CH# 240D - 95.9 MHz, Pwr= 0.25 kW, HAAT= 94.1 M, COR= 375.8 M
37 26 54.6 N.
94 38 10.9 W.
Average Protected F(50-50)= 12.49 km
Omni-directional

DISPLAY DATES
DATA 03-18-13
SEARCH 03-18-13

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*
240D Pittsburg	633673	APP _C_ KS	222.5 42.5	9.40 BNPFT20030312BCM	37 23 10.0 94 42 30.0	0.250 55	32.0 334	9.6 Community Broadcasting, In	-35.8*	-45.4*
240A Monett	KKBL	LIC NCN MO	131.8 312.3	84.83 BLH19901026KE	36 56 15.0 93 55 30.0	6.000 82	85.4 484	27.3 Eagle Broadcasting, Inc.	-13.1*	14.8
241C2 Vineta	KITO-FM	LIC _CN OK	199.9 19.7	102.34 BLH19890508KD	36 34 56.0 95 01 35.0	50.000 150	76.0 376	50.3 Kxoj, Inc.	12.9	31.8
241C0 Clinton	KLRQ	LIC _CN MO	40.6 221.3	150.96 BMLED20030926AQB	38 28 27.0 93 30 28.0	100.000 301	107.7 560	74.2 Educational Media Foundati	30.2	57.8
294D Nevada	631721«	APP _C_ MO	27.1 207.3	49.99 BNPFT20030312BAM	37 50 56.0 94 22 36.0	0.250 88	14.2 334	10.2 Community Broadcasting, In	9.5R	40.5M
293D Nevada	632176«	APP DV_ MO	28.7 208.9	54.58 BNPFT20030310BGD	37 52 45.0 94 20 15.0	0.100 13	14.2 258	10.2 Full Smile, Inc.	9.5R	45.1M
237C3 Humboldt	KINZ	RSV-A _ KS	290.8 110.2	87.00 RM10017	37 43 21.0 95 33 41.0	25.000 100	4.3 394	40.9 My Town Media Inc	70.5	45.1
237C3 Humboldt	KINZ	LIC _CX KS	292.5 111.9	87.97 BLH20020903ACT	37 44 52.0 95 33 39.0	24.000 102	4.3 400	41.2 My Town Media Inc	71.5	45.7

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.
« = Station meets FCC minimum distance spacing for its class.

633673.X

BNPFT20030312BCM

Latitude: 37-26-54.90 N

Longitude: 094-38-10.90 W

ERP: 0.25 kW

Channel: 240

Frequency: 95.9 MHz

AMSL Height: 375.8 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: None

Jeremy Ruck & Associates, Inc.

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

Exhibit E-5

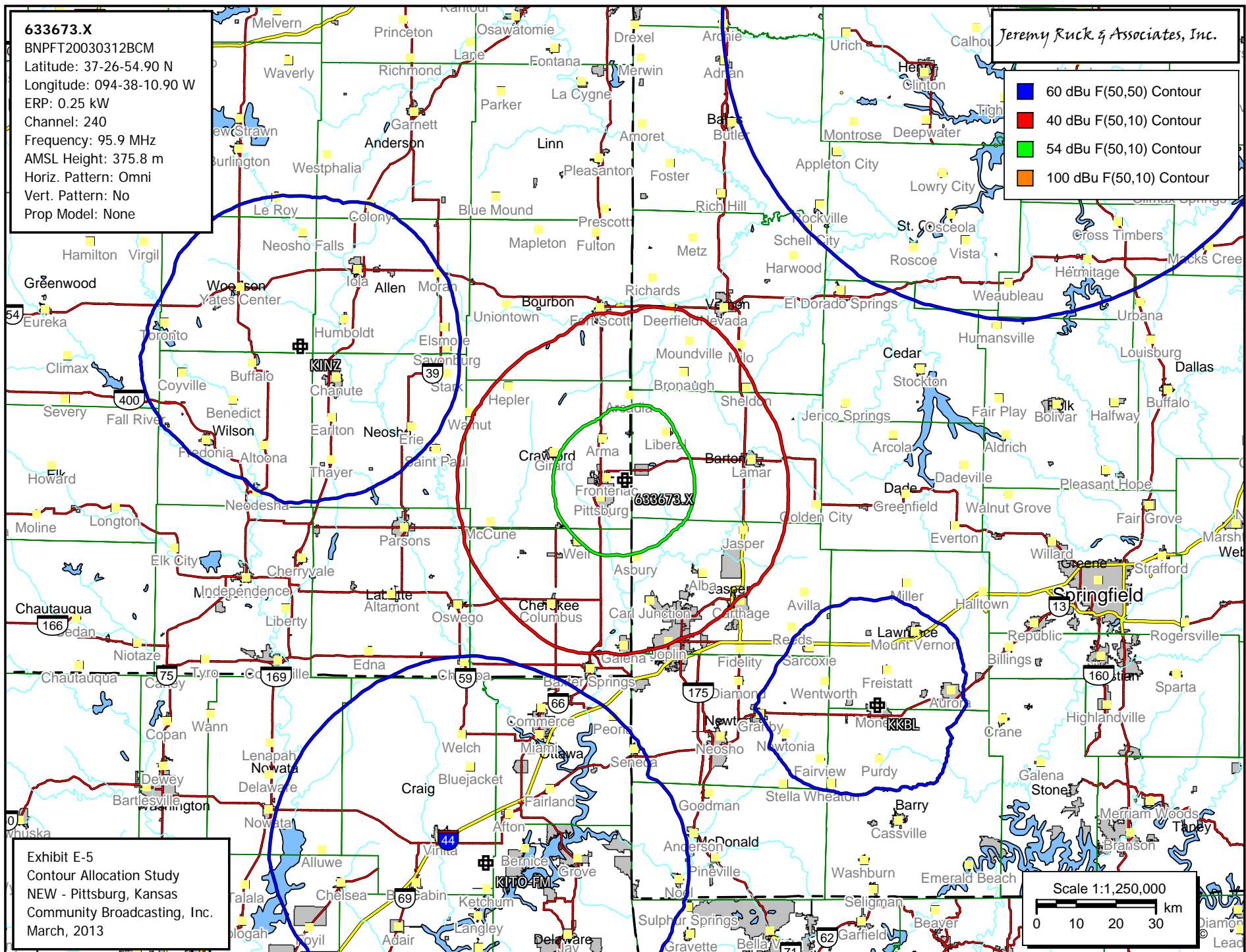
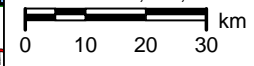
Contour Allocation Study

NEW - Pittsburg, Kansas

Community Broadcasting, Inc.

March, 2013

Scale 1:1,250,000



Jeremy Ruck & Associates, Inc.
Consulting Engineers - Canton, Illinois
Exhibit E-6 - Single Channel Spacing Study
NEW - Pittsburg, Kansas

REFERENCE		DISPLAY DATES
37 26 54.6 N.	CLASS = D	DATA 03-18-13
94 38 10.9 W.	Current Spacings to 3rd Adj.	SEARCH 03-18-13
----- Channel 240 - 95.9 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
633673	APP 240D	Pittsburg	KS 222.5	9.40	64.5	-55.1
KKBL	LIC-N 240A	Monett	MO 131.8	84.88	84.5	0.38
631721	APP 294D	Nevada	MO 27.1	49.99	9.5	40.5
KITO-FM	LIC 241C2	Vinita	OK 199.9	102.21	61.5	40.7
632176	APP-D 293D	Nevada	MO 28.7	54.58	9.5	45.1
KINZ	RSV-A 237C3	Humboldt	KS 290.8	87.18	40.5	46.7
KINZ	LIC 237C3	Humboldt	KS 292.5	88.14	40.5	47.6

RSV-R = reserved - needs protection, RSV-A = allocation
All separation margins include rounding