APPLICATION FOR CONSTRUCTION PERMIT

K245CC - OLATHE, KANSAS
FACILITY ID: 140359
96.9 MHz / 250 W ERP ND

BOTT BROADCASTING COMPANY

JULY, 2017

JEREMY RUCK & ASSOCIATES, INC.
P.O. Box 415
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APPLICATION FOR CONSTRUCTION PERMIT

The following engineering statement and attached exhibits have been prepared for **Bott Broadcasting Company** ("Bott"), licensee of FM translator station K245CC at Olathe, Kansas, and are in support of their application for construction permit.[1] This application seeks to modify the authorized facility at Olathe by changing to a non-directional antenna, as well as correcting other technical parameters to bring them into agreement with the Antenna Structure Registration data associated with the facility.

K245CC is currently licensed to operate on channel 245 with a maximum effective radiated power of 250 Watts at a center of radiation of 451 meters above mean sea level utilizing a composite directional antenna. It is proposed that K245CC continue operation on channel 245 with an effective radiated power of 250 Watts utilizing a non-directional antenna. The proposed center of radiation is 449.9 meters. Although no actual change in the center of radiation relative to ground level would occur, the change in the center of radiation relative to mean sea level is a result of a modification of the ASRN data. Additionally, a small change in the geographic coordinates associated with the facility would also occur also as a result in the correction of the ASRN data.

The change in the geographic coordinates from those on the license to the proposed is approximately 2.5 seconds of latitude. This distance is sufficiently small to allow for a reasonable inference that the proposed and licensed 60 dBu contours overlap each other, and therefore the proposed facility is a minor change to the existing facility. Exhibit E-1 provides a comparison between the proposed and licensed 60 dBu service contours for K245CC.

[1] The Facility ID for K245CC at Olathe, Kansas is 140359.

The primary station for K245CC is co-owned AM station KCCV at Overland Park, Kansas.[2] Exhibit E-2 illustrates the proposed 60 dBu service contour for K245CC along with the KCCV 2 mV/m daytime contour and a twenty-five mile radius centered on the KCCV transmitter site. As this map demonstrates, the K245CC contour is contained within the greater of the two KCCV constructs at all azimuths.

The proposed facility complies with the provisions of Section 74.1204 of the Commission's Rules. Section 74.1205 is not applicable due to operation on channel 245. Exhibit E-3 is a tabular interference study for the proposed facility. This study demonstrates that the contour overlap provisions of Section 74.1204 would be met by the proposed facility to all relevant authorizations with the exception of KLRX at Lee's Summit, Missouri, and KRBZ at Kansas City, Missouri.[3] The interference situation to these full-power stations will be studied under Section 74.1204(d) of the Commission's Rules. The tabular interference study is graphically depicted in the contour map that comprises Exhibit E-4.

Exhibit E-3 indicates prohibited contour overlap with KLHW-LP at Kansas City, Missouri.[4] That facility was granted a construction permit under FCC File No. BPL-20170612ACA to change operation from channel 245 to channel 213. The licensee of that facility has submitted the license application for the channel change, which is assigned FCC File No. BLL-20170718ADS. KLHW-LP is therefore under the provisions of automatic program test authority on channel 213, and can be ignored for the purposes of contour overlap by K245CC on channel 245.

[2] The Facility ID for KCCV at Overland Park, Kansas is 6491.
[3] The Facility ID for KLRX at Lee's Summit, Missouri is 4933. The Facility ID for KRBZ at Kansas City, Missouri is 57119.
[4] The Facility ID for KLHW-LP at Kansas City, Missouri is 194138.

Although normally prohibited contour overlap would exist between the proposed K245CC facility, and both KLRX and KRBZ, no interference is predicted to occur within any population region. Exhibit E-5 illustrates the proposed transmitter site for K245CC along with the KLRX 75.79 dBu service contour and the KRBZ 80.83 dBu service contour. This exhibit demonstrates that these two service contours intersect the K245CC site.

These two full-power FM stations operate on channels second adjacent to K245CC. Therefore, interference to either is predicted to occur in regions where the translator field strength is at least 40 dB above the field strength of the full-power station under consideration. Specifically, interference to KLRX is predicted to occur in regions where the translator field strength is at least 115.79 dBu, and to KRBZ when at least 120.83 dBu. Since the former is more restrictive, it will be the basis of this analysis.

The power density for the interfering field strength is given by the following equation:

$$\boldsymbol{S = \frac{E^2}{Z_0}}$$

In this equation, S represents the calculated power density in Watts per square meter, E is the electric field intensity, and Z_0 is the characteristic impedance of free space of 377 ohms.

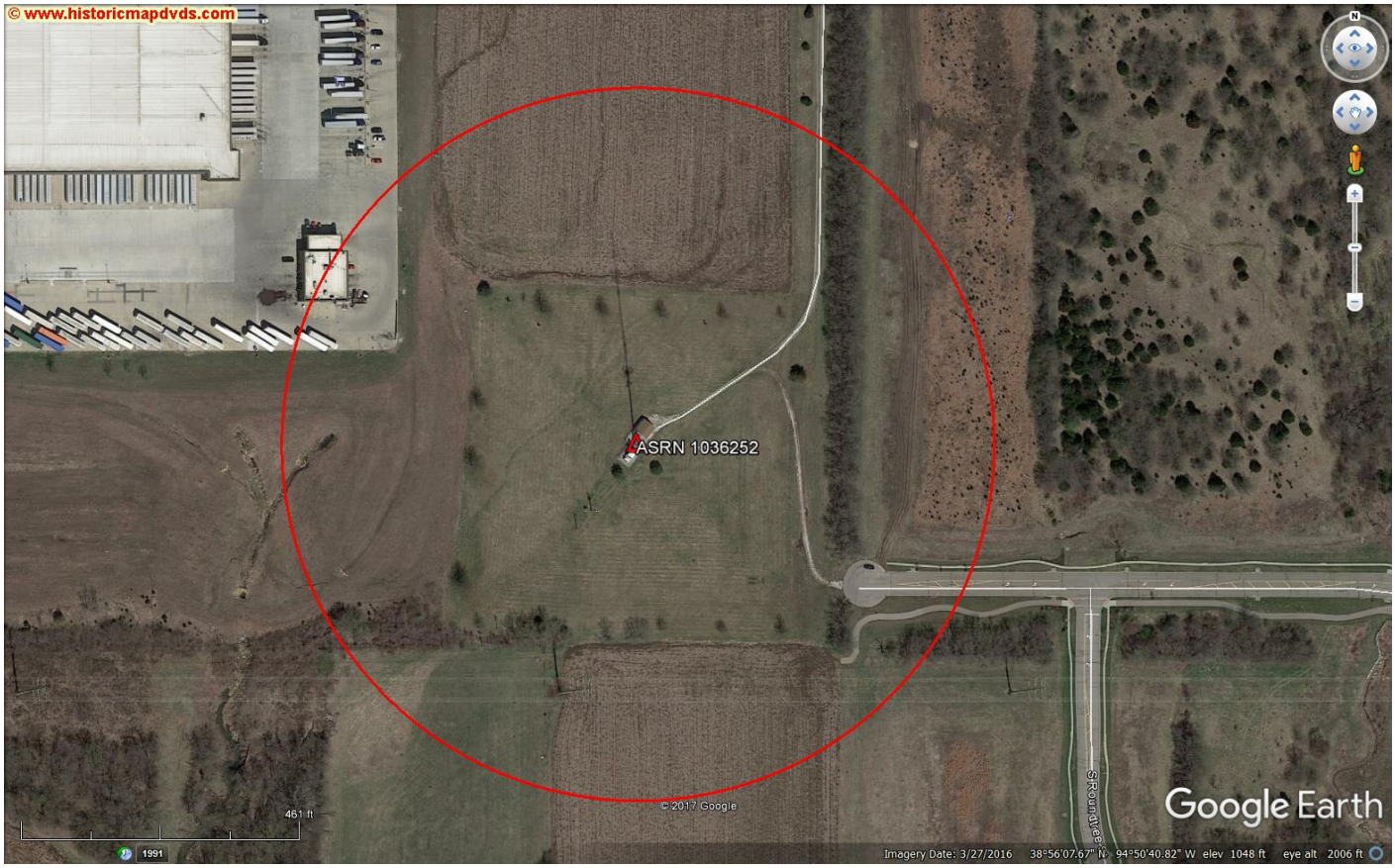
The power density is also given by:

$$\boldsymbol{S = \frac{P}{4\pi R^2}}$$

Where S is the same units, P is the total power in Watts and R is the distance from the antenna. Rearranging the terms in the equation, it can be solved for the distance to the desired power density as follows:

$$R^2 = \frac{P}{4\pi S}$$

The results of these calculations for depression angles of 0 degrees to 90 degrees are tabulated in Exhibit E-6. The values listed for the relative field at the various depression angles wee obtained from published manufacturer data for the proposed ERI LPX-2E-HW antenna. The listed radii values on the tabulation indicate the boundary of the worst-case three-dimensional region in which interference may occur. As this tabulation demonstrates, the maximum radius from the antenna within which interference may potentially occur is 180.1 meters. The following satellite image illustrates this radius.



As this image demonstrates, there are no structures within the maximum potential interference radius, except for an industrial building near the interference perimeter. As is further demonstrated in Exhibit E-6, the closest approach to site level of the potential interference region is at approximately 80 meters or 262 feet above ground level. From this image, it can be reasonably inferred that this structure is significantly less in height than that value. As a result, it is respectfully submitted that there is no population within the potential interference region.

Bott is also the licensee of FM translator station K268CF at Kansas City, Missouri. The Facility ID of K268CF, which also utilizes KCCV as its Primary Station, is 92765. Exhibit E-7 provides a comparison between the proposed K245CC 60 dBu contour and the K268CF 60 dBu contour, and demonstrates that there is a small area of overlap between the contours.no contour overlap between the two translators.

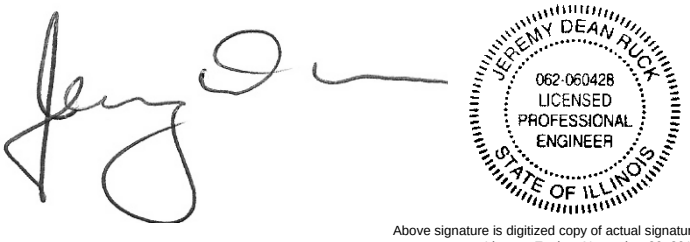
The proposed facility would not constitute a significant environmental impact, and is exempt from environmental processing. This application represents a change to an existing facility at this location, which utilizes a structure registered with the Commission. Implementation of the resulting construction permit would necessitate only the change of the current translator antenna at the registered tower, which would not increase the existing environmental impact already present from the structure.

In addition, the proposed facility would not constitute a radiofrequency radiation hazard to persons at the site. The Commission's on-line *FM Model* utility calculates a maximum power density of 0.089 $\mu W/cm^2$ at a distance of 263 meters from the tower. This value complies with the uncontrolled environment condition of the Commission's safety standard, and is sufficiently low to categorically exclude the facility.[5]

Bott certifies that it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

[5] The calculated value is 0.0445% of the uncontrolled environment limit.

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, 2017

Jeremy D. Ruck, PE
July 18, 2017

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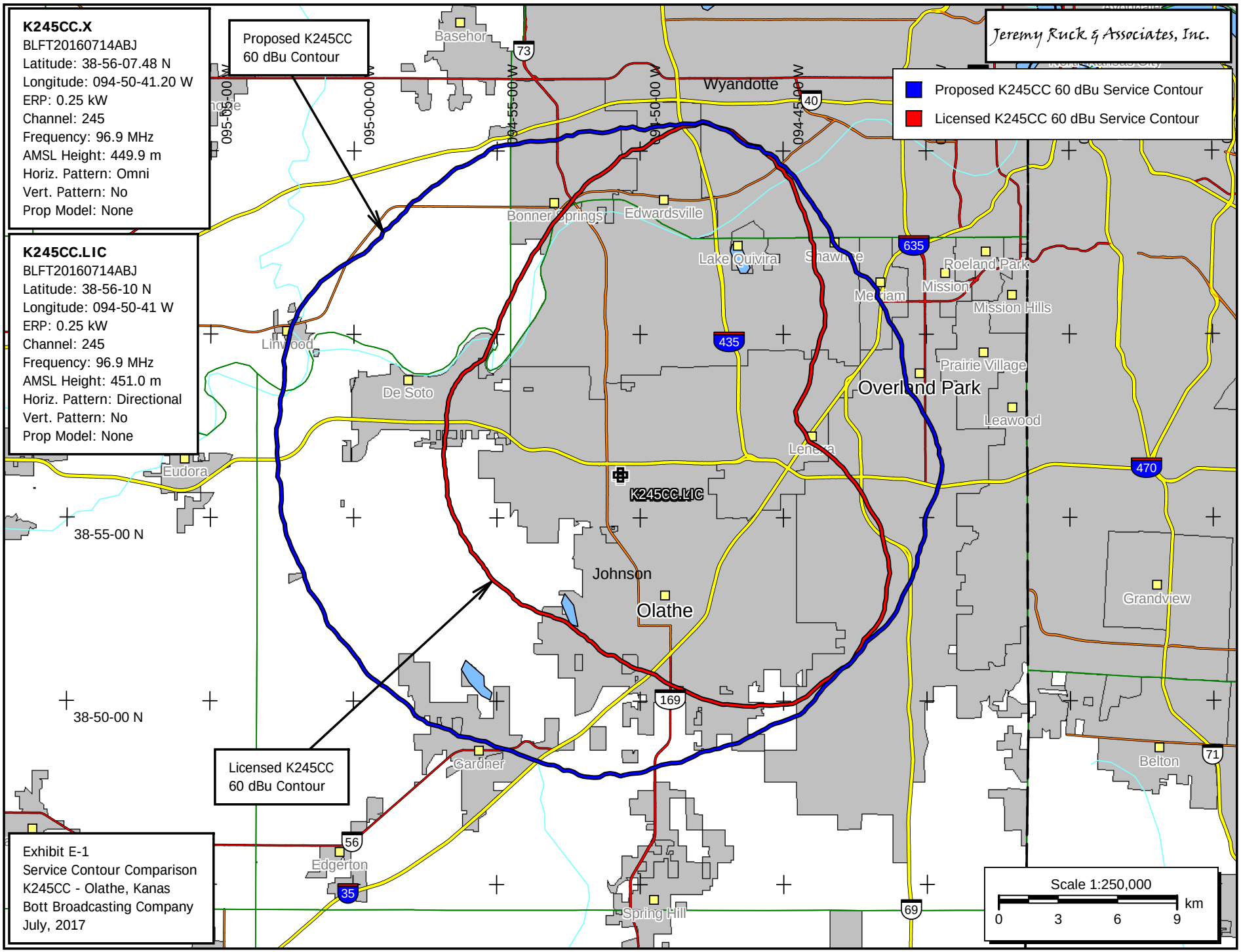
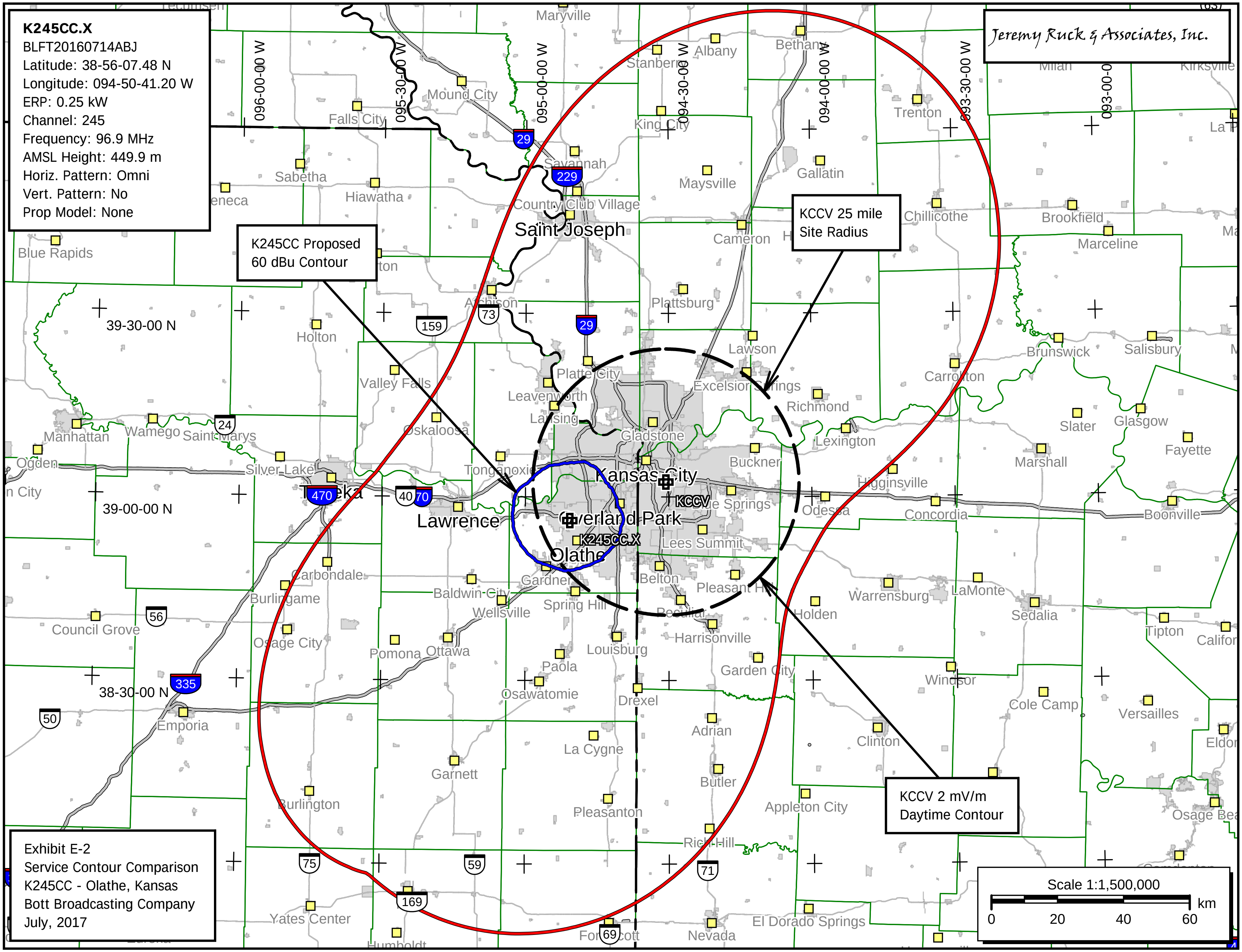

K245CC.X
BLFT20160714ABJ
Latitude: 38-56-07.48 N
Longitude: 094-50-41.20 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 449.9 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
K245CC.LIC
BLFT20160714ABJ
Latitude: 38-56-10 N
Longitude: 094-50-41 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 451.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None
Proposed K245CC
60 dBu Contour
Licensed K245CC
60 dBu Contour
Jeremy Ruck & Associates, Inc.
Proposed K245CC 60 dBu Service Contour
Licensed K245CC 60 dBu Service Contour
Exhibit E-1
Service Contour Comparison
K245CC - Olathe, Kanas
Bott Broadcasting Company
July, 2017
Scale 1:250,000
0 3 6 9 km
K245CC.LIC
Basehor
Wyandotte
Bonner Springs
Edwardsville
Lake Quivira
Shawnee
Roeland Park
Mission
Merriam
Mission Hills
Prairie Village
Overland Park
Leawood
Lenexa
Linwood
De Soto
Eudora
Johnson
Olathe
Grandview
Gardner
Belton
Edgerton
Spring Hill
38-55-00 N
38-50-00 N
095-05-00 W
095-00-00 W
094-55-00 W
094-50-00 W
094-45-00 W
73
40
635
435
470
169
71
56
35
69


K245CC.X
BLFT20160714ABJ
Latitude: 38-56-07.48 N
Longitude: 094-50-41.20 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 449.9 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
Jeremy Ruck & Associates, Inc.
K245CC Proposed
60 dBu Contour
KCCV 25 mile
Site Radius
KCCV 2 mV/m
Daytime Contour
Exhibit E-2
Service Contour Comparison
K245CC - Olathe, Kansas
Bott Broadcasting Company
July, 2017
Scale 1:1,500,000
km
0
20
40
60
096-00-00 W
095-30-00 W
095-00-00 W
094-30-00 W
094-00-00 W
093-30-00 W
39-30-00 N
39-00-00 N
38-30-00 N
KCCV
K245CC.X
Kansas City
Overland Park
Olathe
Saint Joseph
Lawrence
Maryville
Albany
Bethany
Stanberry
Trenton
Mound City
Falls City
King City
Savannah
Gallatin
Maysville
Sabetha
Hiawatha
Country Club Village
Chillicothe
Brookfield
Marceline
Cameron
Blue Rapids
Plattsburg
Atchison
Holton
Lawson
Brunswick
Salisbury
Carrollton
Platte City
Excelsior Springs
Valley Falls
Leavenworth
Lansing
Richmond
Slater
Glasgow
Manhattan
Wamego
Saint Marys
Oskaloosa
Gladstone
Lexington
Fayette
Ogden
Silver Lake
Tonganoxie
Buckner
Marshall
Higginsville
Odessa
Concordia
Boonville
Lees Summit
Carbondale
Gardner
Belton
Burlingame
Baldwin City
Pleasant Hill
Warrensburg
LaMonte
Wellsville
Spring Hill
Holden
Sedalia
Council Grove
Osage City
Harrisonville
Tipton
Pomona
Ottawa
Louisburg
Paola
Garden City
Windsor
Osawatomie
Drexel
Cole Camp
Versailles
Emporia
Adrian
Clinton
La Cygne
Garnett
Butler
Burlington
Pleasanton
Appleton City
Osage Beach
Rich Hill
Yates Center
El Dorado Springs
Nevada
Humboldt
Fort Scott

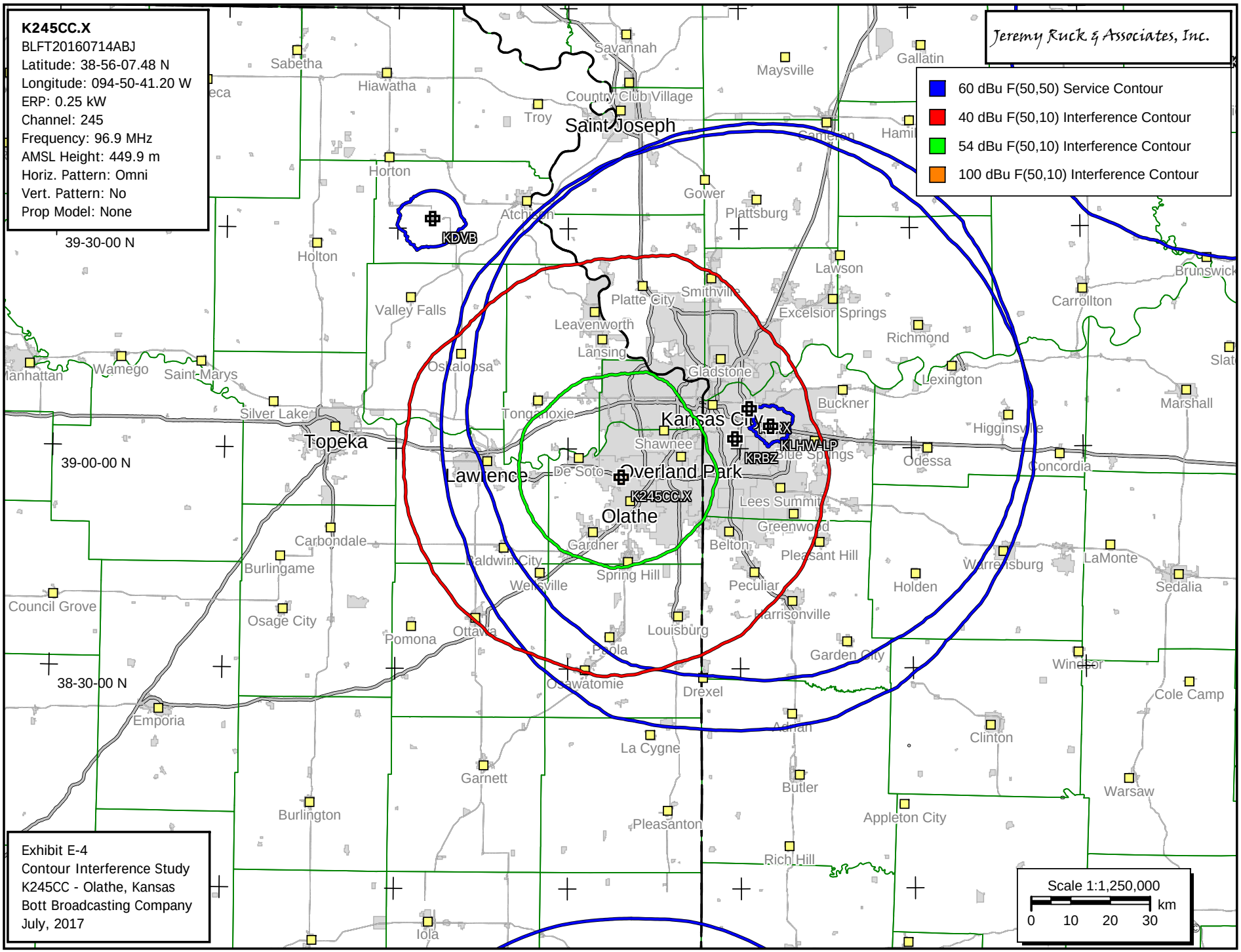
Jeremy Ruck & Associates, Inc.
Consulting Engineers - Canton, Illinois

Exhibit E-3 - Tabular Interference Study
K245CC - Olathe, Kansas

REFERENCE CH# 245D - 96.9 MHz, Pwr= 0.25 kW, HAAT= 158.7 M, COR= 449.9 M DISPLAY DATES
38 56 07.5 N. Average Protected F(50-50)= 16.45 km DATA 07-18-17
94 50 41.2 W. Omni-directional SEARCH 07-18-17

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*
245D K245CC Olathe	LIC DC_ KS	3.9 183.9	0.07 BLFT20160714ABJ	38 56 10.0 94 50 41.0	0.250	30.4 451	9.1 Bott Broadcasting Company	-47.9*	-64.4*
247C1 KLRX Lee's Summit	RSV-A ___ MO	54.7 234.8	26.34 RM10017	39 04 20.0 94 35 45.0	100.000 299	9.6 565	69.8 Educational Media Foundati	0.6	-44.6*
243C0 KRBZ Kansas City	LIC _C_ MO	71.3 251.5	30.20 BLH20030422ABI	39 01 20.0 94 30 49.0	100.000 335	10.3 611	73.0 Entercom License, Llc	4.3	-44.0*
247C1 KLRX Lee's Summit	LIC NC_ MO	61.7 242.0	36.55 BMLED20080102ABC	39 05 26.0 94 28 18.0	55.000 357	9.2 617	69.8 Educational Media Foundati	11.6	-34.4*
245L1 KLHW-LP Kansas City	LIC ___ MO	71.1 251.3	39.73 BLL20170125AAA	39 03 02.0 94 24 34.0	0.026 42	309	Multicultural Professional	8.0	-16.1*
245C1 KKOW-FM Pittsburg	LIC _CN KS	179.2 359.2	180.48 BLH19891207KA	37 18 44.0 94 48 58.0	100.000 278	168.1 552	68.9 American Media Investments	-2.8	61.5
245A KDVB Effingham	LIC _CX KS	324.0 143.7	80.76 BLH20161121AEC	39 31 19.0 95 23 53.0	0.250 31	23.8 355	7.1 Cumulus Licensing Llc	39.6	18.7
245C2 KZBK Brookfield	LIC _CN MO	54.0 235.1	186.50 BLH19960117KC	39 54 32.0 93 04 34.0	50.000 150	139.2 401	53.6 Best Broadcasting, Inc.	31.3	80.7
245D K245BO Warrensburg	LIC _C_ MO	99.2 280.0	106.99 BLFT20140627ABV	38 46 28.0 93 37 35.0	0.250	43.0 321	12.3 Community Broadcasting, In	48.1	43.2

Terrain database is FCC 30 meter , 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 restricted contour.


K245CC.X
BLFT20160714ABJ
Latitude: 38-56-07.48 N
Longitude: 094-50-41.20 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 449.9 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
Jeremy Ruck & Associates, Inc.
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
39-30-00 N
39-00-00 N
38-30-00 N
KDVB
KLHW-LP
KREZ
K245CC.X
Savannah
Sabetha
Hiawatha
Maysville
Gallatin
Country Club Village
Troy
Saint Joseph
Horton
Gower
Atchison
Plattsburg
Holton
Lawson
Brunswick
Valley Falls
Platte City
Smithville
Carrollton
Leavenworth
Excelsior Springs
Richmond
Lansing
Oskaloosa
Gladstone
Lexington
Manhattan
Wamego
Saint Marys
Silver Lake
Tonganoxie
Buckner
Marshall
Kansas City
Higginsville
Topeka
Shawnee
Blue Springs
Odessa
Concordia
Lawrence
De Soto
Overland Park
Olathe
Lees Summit
Greenwood
Carbondale
Gardner
Belton
Pleasant Hill
Baldwin City
Burlingame
Spring Hill
Warrensburg
LaMonte
Wellsville
Peculiar
Holden
Sedalia
Council Grove
Osage City
Harrisonville
Pomona
Ottawa
Louisburg
Paola
Garden City
Winetsor
Osawatomie
Drexel
Cole Camp
Emporia
Adrian
Clinton
La Cygne
Garnett
Butler
Warsaw
Burlington
Pleasanton
Appleton City
Rich Hill
Iola
Exhibit E-4
Contour Interference Study
K245CC - Olathe, Kansas
Bott Broadcasting Company
July, 2017
Scale 1:1,250,000
km
0 10 20 30

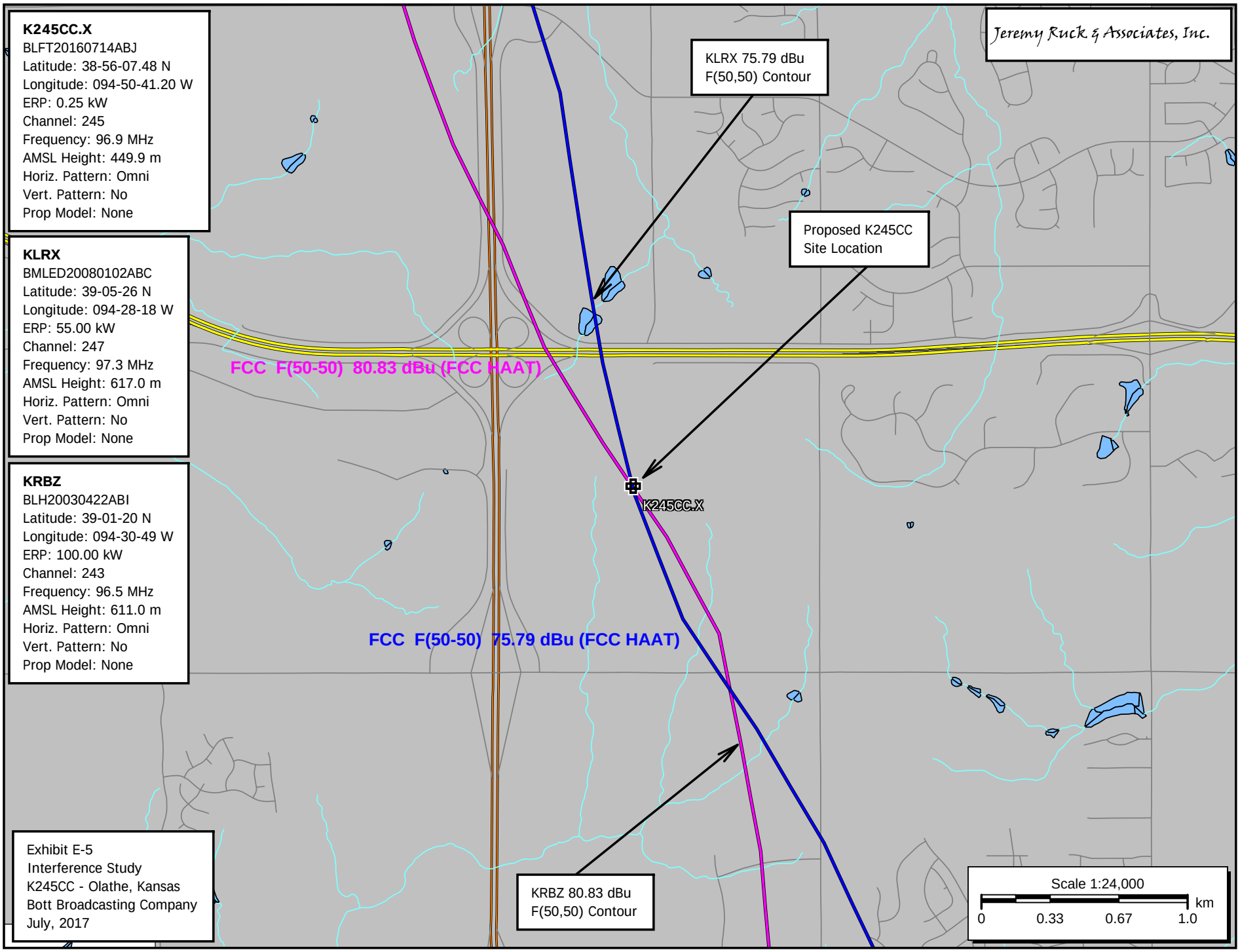
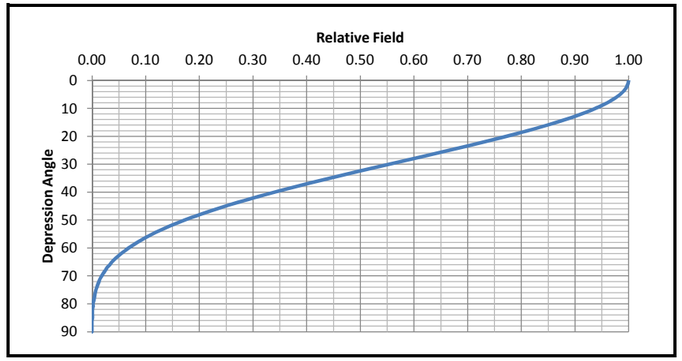

K245CC.X
BLFT20160714ABJ
Latitude: 38-56-07.48 N
Longitude: 094-50-41.20 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 449.9 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
KLRX
BMLED20080102ABC
Latitude: 39-05-26 N
Longitude: 094-28-18 W
ERP: 55.00 kW
Channel: 247
Frequency: 97.3 MHz
AMSL Height: 617.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
KRBZ
BLH20030422ABI
Latitude: 39-01-20 N
Longitude: 094-30-49 W
ERP: 100.00 kW
Channel: 243
Frequency: 96.5 MHz
AMSL Height: 611.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
Jeremy Ruck & Associates, Inc.
KLRX 75.79 dBu
F(50,50) Contour
Proposed K245CC
Site Location
FCC F(50-50) 80.83 dBu (FCC HAAT)
K245CC.X
FCC F(50-50) 75.79 dBu (FCC HAAT)
KRBZ 80.83 dBu
F(50,50) Contour
Exhibit E-5
Interference Study
K245CC - Olathe, Kansas
Bott Broadcasting Company
July, 2017
Scale 1:24,000
0
0.33
0.67
1.0
km

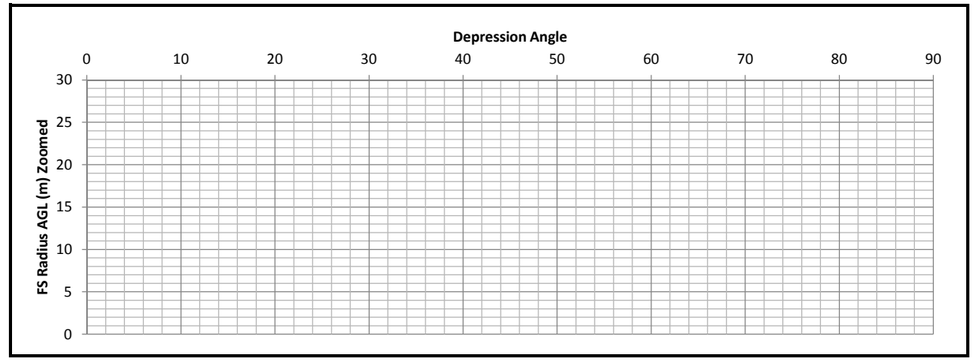
Exhibit E-6

Proximity Interference Analysis

K245CC - Olathe, Kansas

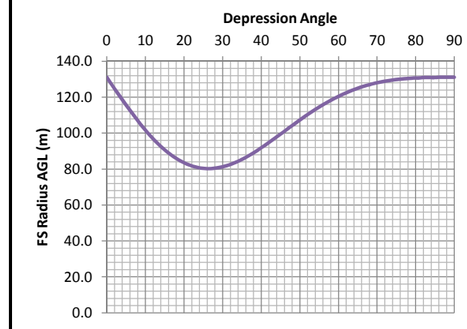
Antenna No:	21	Center of Radiation:	131.1 m AGL
Manufacturer:	ERI	Effective Radiated Power:	250 Watts
Model:	LPX-2E-HW	FS Contour:	115.79 dBu
Number of Bays:	2	E Field Strength:	0.61589 V/m
Bay Spacing:	Half	Z0:	377 Ohms
		Power Density:	0.001006141 W/m^2

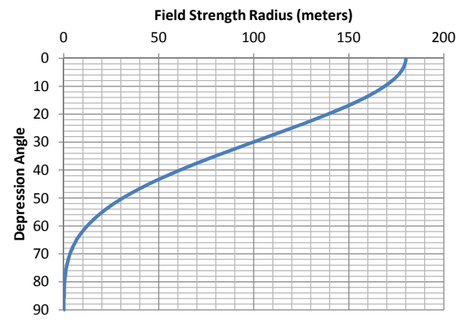


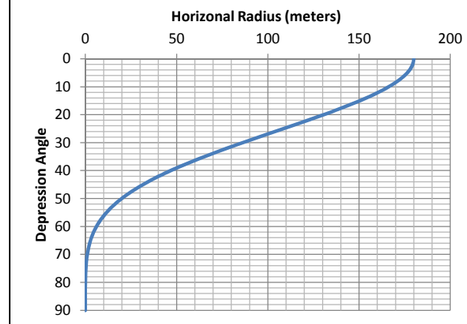


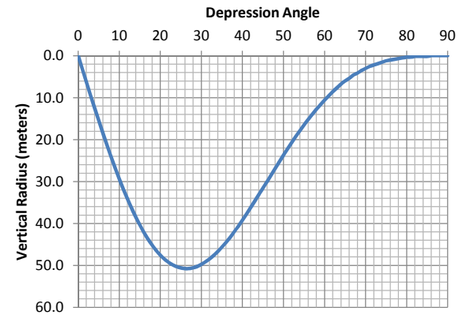
Depression Angle	Relative Field	Relative Power	ERP Watts	Radii in meters			
				Field Strength	Horizontal	Vertical	AGL
0	1.0000	1.0000	250.00	180.08	180.08	0.00	131.10
1	0.9990	0.9980	249.50	179.90	179.87	3.14	127.96
2	0.9970	0.9940	248.50	179.54	179.43	6.27	124.83
3	0.9940	0.9880	247.01	179.00	178.75	9.37	121.73
4	0.9900	0.9801	245.03	178.28	177.84	12.44	118.66
5	0.9840	0.9683	242.06	177.20	176.52	15.44	115.66
6	0.9770	0.9545	238.63	175.93	174.97	18.39	112.71
7	0.9690	0.9390	234.74	174.49	173.19	21.27	109.83
8	0.9600	0.9216	230.40	172.87	171.19	24.06	107.04
9	0.9490	0.9006	225.15	170.89	168.79	26.73	104.37
10	0.9380	0.8798	219.96	168.91	166.35	29.33	101.77
11	0.9250	0.8556	213.91	166.57	163.51	31.78	99.32
12	0.9120	0.8317	207.94	164.23	160.64	34.15	96.95
13	0.8970	0.8046	201.15	161.53	157.39	36.34	94.76
14	0.8820	0.7779	194.48	158.83	154.11	38.42	92.68
15	0.8650	0.7482	187.06	155.77	150.46	40.32	90.78
16	0.8480	0.7191	179.78	152.71	146.79	42.09	89.01
17	0.8300	0.6889	172.23	149.46	142.93	43.70	87.40
18	0.8110	0.6577	164.43	146.04	138.89	45.13	85.97
19	0.7920	0.6273	156.82	142.62	134.85	46.43	84.67
20	0.7720	0.5960	149.00	139.02	130.64	47.55	83.55
21	0.7510	0.5640	141.00	135.24	126.26	48.46	82.64
22	0.7300	0.5329	133.23	131.46	121.88	49.24	81.86
23	0.7090	0.5027	125.67	127.67	117.52	49.89	81.21
24	0.6870	0.4720	117.99	123.71	113.02	50.32	80.78
25	0.6650	0.4422	110.56	119.75	108.53	50.61	80.49
26	0.6430	0.4134	103.36	115.79	104.07	50.76	80.34
27	0.6210	0.3856	96.41	111.83	99.64	50.77	80.33
28	0.5980	0.3576	89.40	107.69	95.08	50.56	80.54
29	0.5760	0.3318	82.94	103.72	90.72	50.29	80.81
30	0.5530	0.3058	76.45	99.58	86.24	49.79	81.31
31	0.5300	0.2809	70.23	95.44	81.81	49.16	81.94
32	0.5080	0.2581	64.52	91.48	77.58	48.48	82.62
33	0.4860	0.2362	59.05	87.52	73.40	47.67	83.43
34	0.4640	0.2153	53.82	83.56	69.27	46.72	84.38
35	0.4420	0.1954	48.84	79.59	65.20	45.65	85.45
36	0.4210	0.1772	44.31	75.81	61.33	44.56	86.54
37	0.4000	0.1600	40.00	72.03	57.53	43.35	87.75
38	0.3790	0.1436	35.91	68.25	53.78	42.02	89.08
39	0.3590	0.1289	32.22	64.65	50.24	40.68	90.42
40	0.3390	0.1149	28.73	61.05	46.76	39.24	91.86
41	0.3200	0.1024	25.60	57.62	43.49	37.81	93.29
42	0.3010	0.0906	22.65	54.20	40.28	36.27	94.83
43	0.2830	0.0801	20.02	50.96	37.27	34.76	96.34
44	0.2650	0.0702	17.56	47.72	34.33	33.15	97.95
45	0.2480	0.0615	15.38	44.66	31.58	31.58	99.52

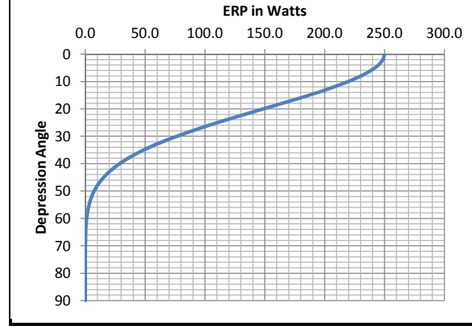
Depression Angle	Relative Field	Relative Power	ERP Watts	Radii in meters			
				Field Strength	Horizontal	Vertical	AGL
45	0.2480	0.0615	15.38	44.66	31.58	31.58	99.52
46	0.2320	0.0538	13.46	41.78	29.02	30.05	101.05
47	0.2160	0.0467	11.66	38.90	26.53	28.45	102.65
48	0.2010	0.0404	10.10	36.20	24.22	26.90	104.20
49	0.1860	0.0346	8.65	33.49	21.97	25.28	105.82
50	0.1720	0.0296	7.40	30.97	19.91	23.73	107.37
51	0.1590	0.0253	6.32	28.63	18.02	22.25	108.85
52	0.1460	0.0213	5.33	26.29	16.19	20.72	110.38
53	0.1340	0.0180	4.49	24.13	14.52	19.27	111.83
54	0.1230	0.0151	3.78	22.15	13.02	17.92	113.18
55	0.1120	0.0125	3.14	20.17	11.57	16.52	114.58
56	0.1020	0.0104	2.60	18.37	10.27	15.23	115.87
57	0.0930	0.0086	2.16	16.75	9.12	14.05	117.05
58	0.0840	0.0071	1.76	15.13	8.02	12.83	118.27
59	0.0760	0.0058	1.44	13.69	7.05	11.73	119.37
60	0.0680	0.0046	1.16	12.25	6.12	10.60	120.50
61	0.0610	0.0037	0.93	10.98	5.33	9.61	121.49
62	0.0540	0.0029	0.73	9.72	4.57	8.59	122.51
63	0.0480	0.0023	0.58	8.64	3.92	7.70	123.40
64	0.0420	0.0018	0.44	7.56	3.32	6.80	124.30
65	0.0370	0.0014	0.34	6.66	2.82	6.04	125.06
66	0.0330	0.0011	0.27	5.94	2.42	5.43	125.67
67	0.0280	0.0008	0.20	5.04	1.97	4.64	126.46
68	0.0250	0.0006	0.16	4.50	1.69	4.17	126.93
69	0.0210	0.0004	0.11	3.78	1.36	3.53	127.57
70	0.0180	0.0003	0.08	3.24	1.11	3.05	128.05
71	0.0150	0.0002	0.06	2.70	0.88	2.55	128.55
72	0.0130	0.0002	0.04	2.34	0.72	2.23	128.87
73	0.0110	0.0001	0.03	1.98	0.58	1.89	129.21
74	0.0090	0.0001	0.02	1.62	0.45	1.56	129.54
75	0.0070	0.0000	0.01	1.26	0.33	1.22	129.88
76	0.0060	0.0000	0.01	1.08	0.26	1.05	130.05
77	0.0050	0.0000	0.01	0.90	0.20	0.88	130.22
78	0.0040	0.0000	0.00	0.72	0.15	0.70	130.40
79	0.0030	0.0000	0.00	0.54	0.10	0.53	130.57
80	0.0020	0.0000	0.00	0.36	0.06	0.35	130.75
81	0.0020	0.0000	0.00	0.36	0.06	0.36	130.74
82	0.0010	0.0000	0.00	0.18	0.03	0.18	130.92
83	0.0010	0.0000	0.00	0.18	0.02	0.18	130.92
84	0.0010	0.0000	0.00	0.18	0.02	0.18	130.92
85	0.0010	0.0000	0.00	0.18	0.02	0.18	130.92
86	0.0000	0.0000	0.00	0.00	0.00	0.00	131.10
87	0.0000	0.0000	0.00	0.00	0.00	0.00	131.10
88	0.0000	0.0000	0.00	0.00	0.00	0.00	131.10
89	0.0000	0.0000	0.00	0.00	0.00	0.00	131.10
90	0.0000	0.0000	0.00	0.00	0.00	0.00	131.10

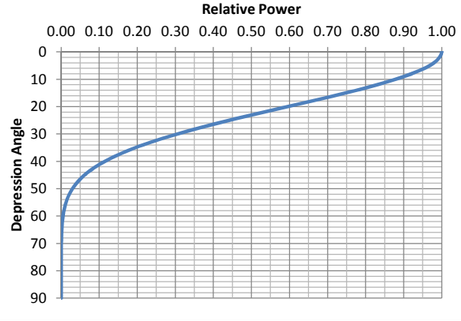


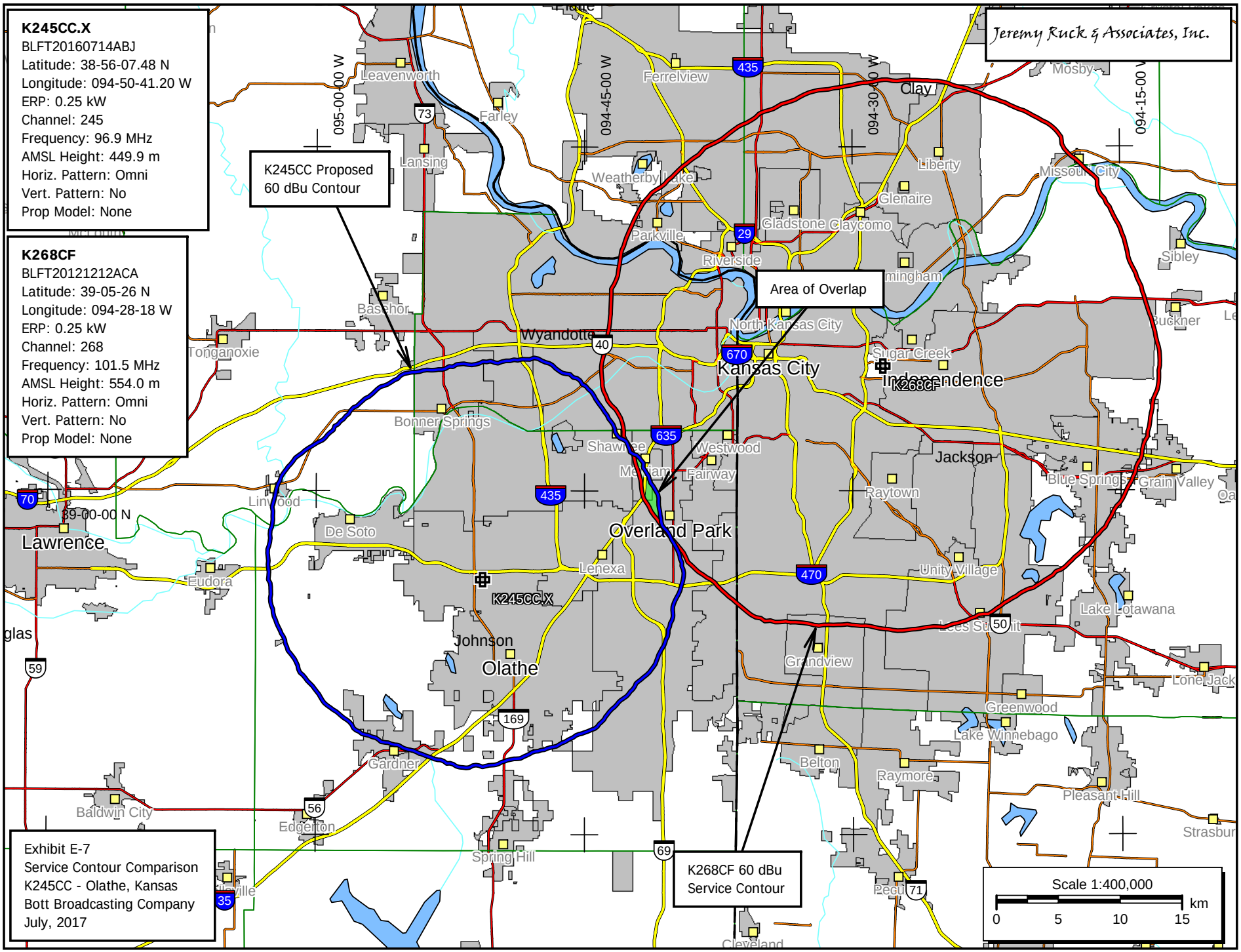











K245CC.X
BLFT20160714ABJ
Latitude: 38-56-07.48 N
Longitude: 094-50-41.20 W
ERP: 0.25 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 449.9 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
K268CF
BLFT20121212ACA
Latitude: 39-05-26 N
Longitude: 094-28-18 W
ERP: 0.25 kW
Channel: 268
Frequency: 101.5 MHz
AMSL Height: 554.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None
Jeremy Ruck & Associates, Inc.
K245CC Proposed
60 dBu Contour
Area of Overlap
K268CF 60 dBu
Service Contour
Exhibit E-7
Service Contour Comparison
K245CC - Olathe, Kansas
Bott Broadcasting Company
July, 2017
Scale 1:400,000
0 5 10 15 km
095-00-00 W
094-45-00 W
094-30-00 W
094-15-00 W
39-00-00 N
Leavenworth
Ferrelview
Clay
Mosby
Farley
Lansing
Weatherby Lake
Liberty
Missouri City
Glenaire
Gladstone
Claycomo
Parkville
Riverside
Sibley
Basehor
Wyandotte
North Kansas City
Buckner
Tonganoxie
Kansas City
Sugar Creek
Independence
Bonner Springs
Shawnee
Westwood
Jackson
Mission
Fairway
Blue Springs
Grain Valley
Raytown
Linwood
De Soto
Overland Park
Lawrence
Lenexa
Unity Village
Eudora
Lake Lotawana
Johnson
Olathe
Grandview
Lone Jack
Greenwood
Lake Winnebago
Gardner
Belton
Raymore
Pleasant Hill
Baldwin City
Edgerton
Spring Hill
Strasburg
Cleveland
Pecu
70
435
635
470
29
40
670
73
59
169
56
69
71
50
35