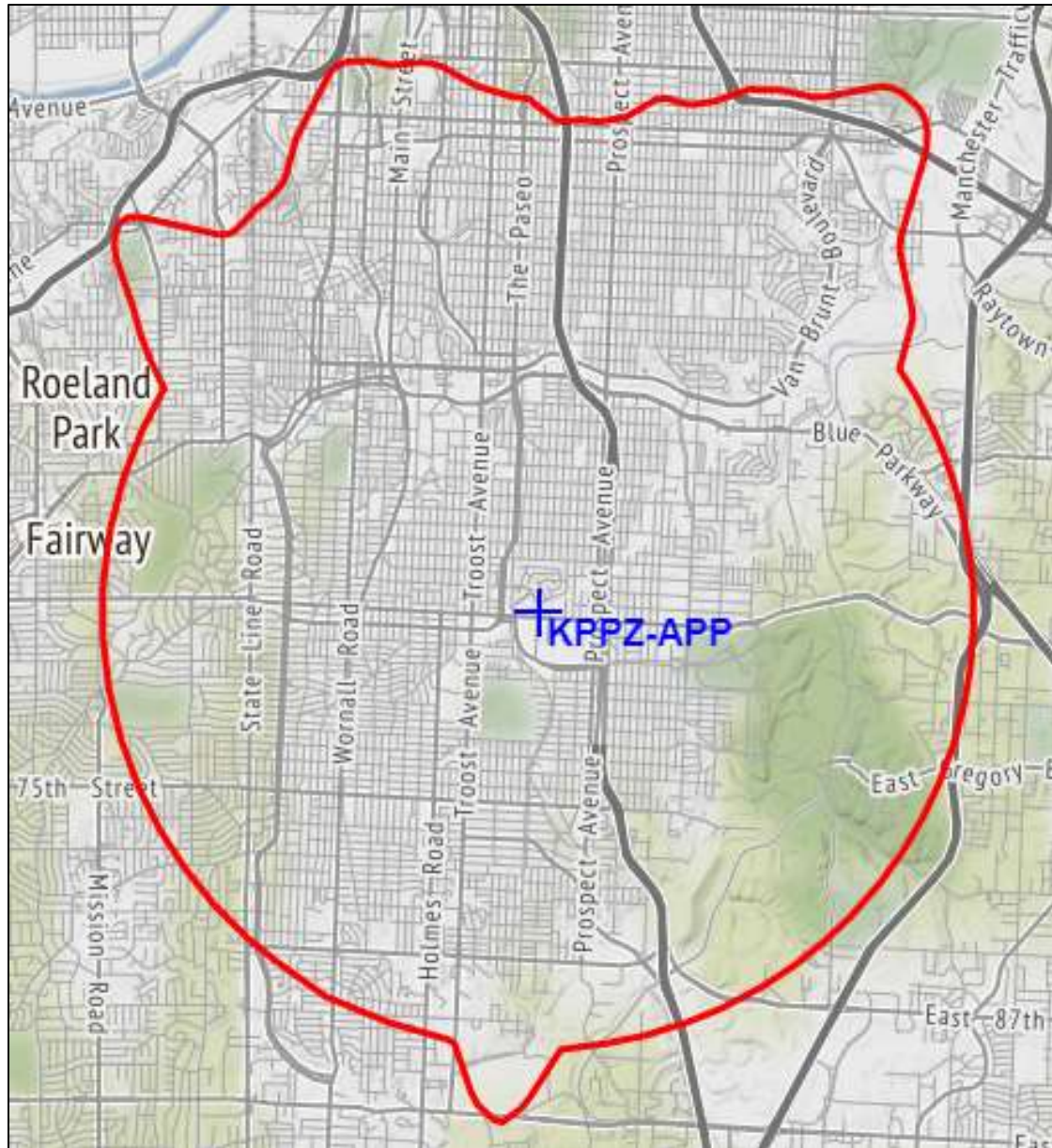




REC Networks
11541 Riverton Wharf Rd.
Mardela Springs, MD 21837
844.REC.LPFM/202.621.2355
recnet.com

Modify CP for KPPZ-LP
KANSAS CITY, MO
AOT DELTA, INC.
BPL-20180607ABD

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



KANSAS CITY, MO – Channel 253L1 (98.5 MHz) ~ ERP 0.100 kW
Elev: 264 meters ~ RCAGL: 38 meters ~ RCAMSL: 302 meters ~ HAAT: 30m
Overall tower height: 44 meters meters – ASR: None (no nearby airports)
NAD27 Latitude: 39° 00' 47.8" NL – Longitude: 94° 33' 53.4" WL
NAD83 Latitude: 39° 00' 47.8" NL – Longitude: 94° 33' 54.2" WL

Site: KPPZ-LP(APP)
 Coordinates: 39-00-47.8 N, 94-33-53.4 W
 Freq: 98.50000 MHz
 ERP: 100.00 W

Bearing	ERP W	HAAT	DH	Distance	Lat	Lon
0	100.00	51	60	7.33	39.079207	-94.564833
5	100.00	49	60	7.16	39.077468	-94.557599
10	100.00	50	70	7.25	39.077469	-94.550253
15	100.00	52	50	7.41	39.077679	-94.542603
20	100.00	55	80	7.64	39.077839	-94.534562
25	100.00	59	50	7.91	39.077719	-94.526121
30	100.00	63	50	8.18	39.077017	-94.517422
35	100.00	72	50	8.77	39.077842	-94.506584
40	100.00	66	50	8.38	39.071021	-94.502406
45	100.00	52	90	7.41	39.060409	-94.504115
50	100.00	47	80	7.00	39.053726	-94.502733
55	100.00	40	90	6.46	39.046579	-94.503567
60	100.00	34	90	5.95	39.040034	-94.505132
65	100.00	31	90	5.72	39.035020	-94.504763
70	100.00	29	90	5.65	39.030630	-94.503403
75	100.00	28	40	5.65	39.026404	-94.501691
80	100.00	28	70	5.65	39.022078	-94.500461
85	100.00	30	60	5.65	39.017686	-94.499721
90	100.00	34	40	5.95	39.013258	-94.495922
95	100.00	32	40	5.80	39.008711	-94.497942
100	100.00	33	40	5.88	39.004080	-94.497844
105	100.00	34	40	5.95	38.999401	-94.498284
110	100.00	31	30	5.72	38.995653	-94.502585
115	100.00	34	30	5.95	38.990633	-94.502399
120	100.00	36	30	6.12	38.985730	-94.503484
125	100.00	36	30	6.12	38.981680	-94.506808
130	100.00	32	30	5.80	38.979728	-94.513417
135	100.00	34	40	5.95	38.975406	-94.516132
140	100.00	35	30	6.03	38.971701	-94.519969
145	100.00	34	30	5.95	38.969411	-94.525332
150	100.00	28	30	5.65	38.969294	-94.532175
155	100.00	34	40	5.95	38.964747	-94.535730
160	100.00	33	60	5.88	38.963603	-94.541582
165	100.00	28	40	5.65	38.964224	-94.547929
170	100.00	26	60	5.65	38.963266	-94.553492
175	100.00	34	40	5.95	38.959938	-94.558832
180	100.00	43	70	6.70	38.953033	-94.564833
185	100.00	50	80	7.25	38.948343	-94.572138
190	100.00	39	70	6.38	38.956782	-94.577644
195	100.00	31	80	5.72	38.963547	-94.581971
200	100.00	25	50	5.65	38.965556	-94.587172
205	100.00	32	50	5.80	38.965986	-94.593194
210	100.00	36	50	6.12	38.965586	-94.600243
215	100.00	30	60	5.65	38.971673	-94.602299
220	100.00	23	50	5.65	38.974369	-94.606821
225	100.00	21	50	5.65	38.977360	-94.611024
230	100.00	22	30	5.65	38.980625	-94.614877
235	100.00	14	30	5.65	38.984138	-94.618349
240	100.00	5	20	5.65	38.987873	-94.621414
245	100.00	-4	30	5.65	38.991801	-94.624049
250	100.00	-4	50	5.65	38.995893	-94.626234
255	100.00	2	40	5.65	39.000117	-94.627952
260	100.00	5	50	5.65	39.004442	-94.629190
265	100.00	6	70	5.65	39.008834	-94.629938
270	100.00	7	60	5.65	39.013260	-94.630190
275	100.00	10	60	5.65	39.017686	-94.629946
280	100.00	11	70	5.65	39.022078	-94.629206
285	100.00	17	70	5.65	39.026404	-94.627975
290	100.00	22	50	5.65	39.030630	-94.626264
295	100.00	27	60	5.65	39.034724	-94.624085
300	100.00	35	40	6.03	39.040394	-94.625337
305	100.00	46	60	6.93	39.049021	-94.630598
310	100.00	56	90	7.71	39.057810	-94.633210
315	100.00	58	70	7.84	39.063123	-94.629052
320	100.00	47	60	7.00	39.061490	-94.616947
325	100.00	47	40	7.00	39.064836	-94.611338
330	100.00	49	70	7.16	39.069074	-94.606331
335	100.00	56	70	7.71	39.076089	-94.602566
340	100.00	62	70	8.12	39.081887	-94.597005
345	100.00	60	70	7.97	39.082536	-94.588741
350	100.00	58	80	7.84	39.082722	-94.580608
355	100.00	54	70	7.57	39.081124	-94.572480

R E C NETWORKS
CHANNEL REPORT

NAD27 LATITUDE: 39 - 00' 47.8" - LONGITUDE: 94 - 33' 53.4"
CHANNEL: 253 - CLASS: LI

CHAN	FREQ	CALL	LOCATION	CLS	DIST	REQ	CLEAR	BEAR
250	97.9	KFBD-FM : ALPHA MEDIA LICENSEE LLC	WAYNESVILLE	MO C3	226.2	0.0	226.2	121.0
250	97.9	KRBB : CAPSTAR TX, LLC, AS DEBTOR IN POSSESSION	WICHITA	KS C0	291.6	0.0	291.6	242.7
250	97.9	KXDG : ZIMMER RADIO, INC.	WEBB CITY	MO C3	196.6	0.0	196.6	178.5
250	97.9	KNSL : IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY	LAMONI	IA C2	209.4	0.0	209.4	16.9
251	98.1	KMBZ-FM : ENTERCOM LICENSE, LLC	KANSAS CITY	KS C0	4.5	84.0	-79.5	77.3
253	98.5	KQKQ-FM : NRG LICENSE SUB, LLC	COUNCIL BLUFFS	IA C0	283.5	122.0	161.5	334.4
253	98.5	KWKJ : D & H MEDIA, LLC	WINDSOR	MO C2	101.7	91.0	10.7	117.0
253	98.5	KSAJ-FM : ALPHA MEDIA LICENSEE LLC	BURLINGAME	KS C2	103.9	91.0	12.9	273.4
253	98.5	KPPZ-LP : AOT DELTA, INC. : Currently authorized site	KANSAS CITY	MO L1	4.5	24.0	-19.5	77.3
255	98.9	KQRC-FM : ENTERCOM LICENSE, LLC	LEAVENWORTH	KS C0	4.5	84.0	-79.5	77.3
256	99.1	KYOO-FM : BENNE BROADCASTING OF BOLIVAR, LLC	HALF WAY	MO C3	179.7	0.0	179.7	140.4
256	99.1	KSEK-FM : AMERICAN MEDIA INVESTMENTS, INC.	GIRARD	KS A	171.6	0.0	171.6	188.3
256	99.1	KTLI : EL DORADO LICENSES, INC.	EL DORADO	KS C1	242.8	0.0	242.8	241.2
256	99.1	KMA-FM : KMA BROADCASTING, L.P.	CLARINDA	IA C1	200.6	0.0	200.6	351.8
256	99.1	KDWD : MY COUNTRY RADIO, LLC	MARCELINE	MO C3	158.5	0.0	158.5	60.2

LPFM SECOND ADJACENT CHANNEL WAIVER STUDY
WAIVER REQUEST §73.807(a)

KPPZ-LP
Kansas City, Missouri
Channel 253L1 (98.5 MHz)

The proposed channel at the currently authorized location does not meet second-adjacent channel minimum distance separation in respect to KMBZ-FM, Kansas City, Kansas and KQRC-FM, Leavenworth, Kansas.

Both KMBZ-FM and KQRC-FM operates 98.5 kW ERP at 335 meters above average terrain (HAAT) from a combined antenna and is co-located on the same tower as KPPZ-LP at 341 meters above ground level. Both stations place a 111.0 dBu field strength at the proposed LPFM site.

Using the U/D method¹, the proposed LPFM station is predicted to produce an undesired interference overlap in respect to KMBZ-FM and KQRC-FM to the proposed LPFM station's 151.0 dBu interfering contour ("overlap zone"). Based on the free-space calculation, the overlap zone extends approximately 2 meters from the radiation center.

The proposed antenna is located on the roof of a building 9 meters above the highest point on the building. As the overlap zone only reaches out to 2 meters, the interference remains above the roof and does not penetrate the building.

Based on the information presented, the operation of KPPZ-LP from this site as proposed on Channel 253L1 will not create any new interference to listeners or potential listeners of KMBZ-FM or KQRC-FM.

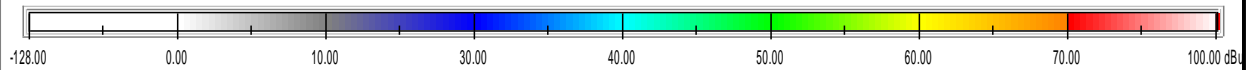
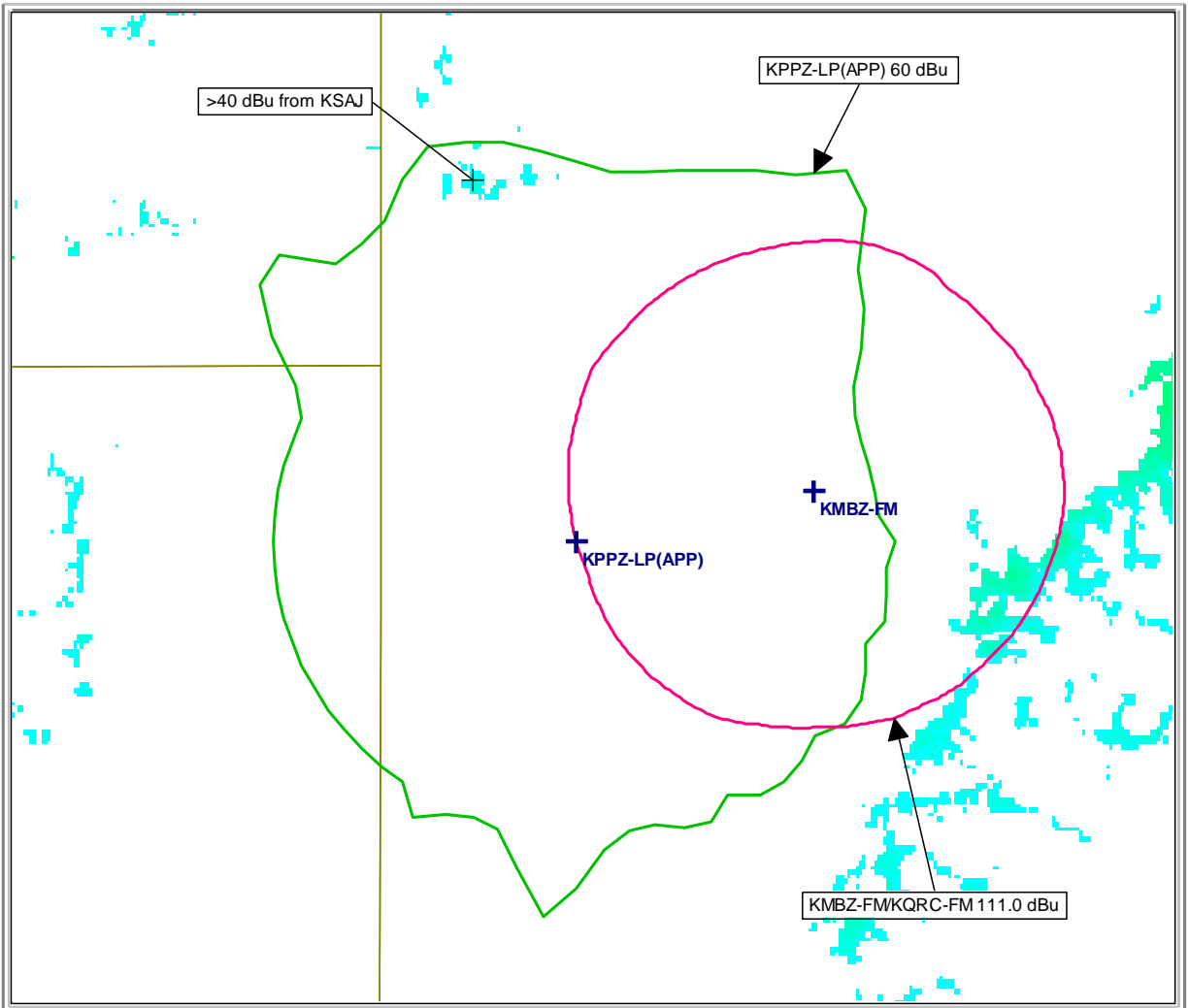
The applicant requests a waiver of §73.807(a) of the Commission's Rules in respect to KMBZ-FM, Kansas City, Kansas and KQRC-FM, Leavenworth, Kansas.²

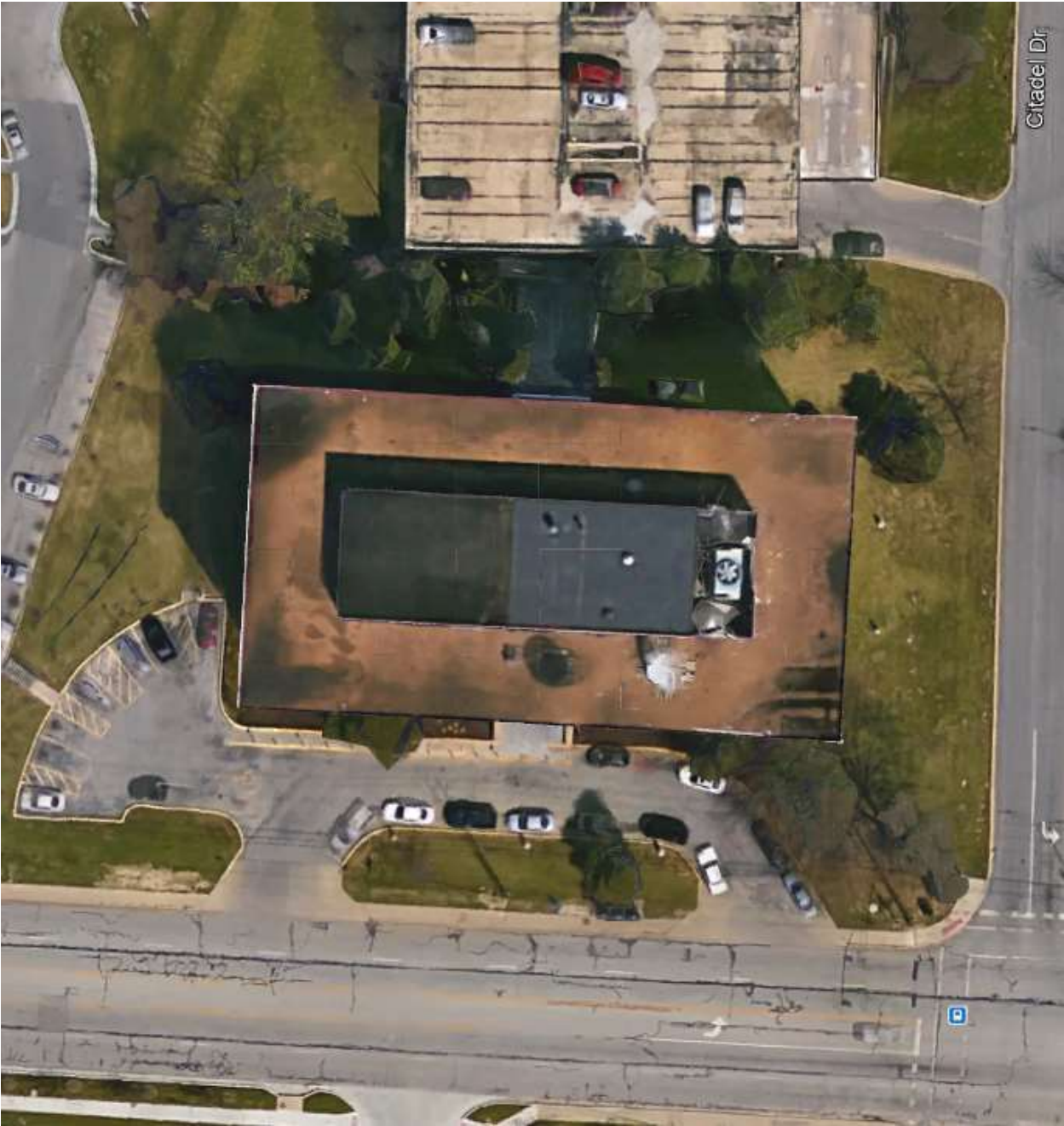
Report completed by
Michelle Bradley
Founder, REC Networks
September 21, 2018

¹ - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).

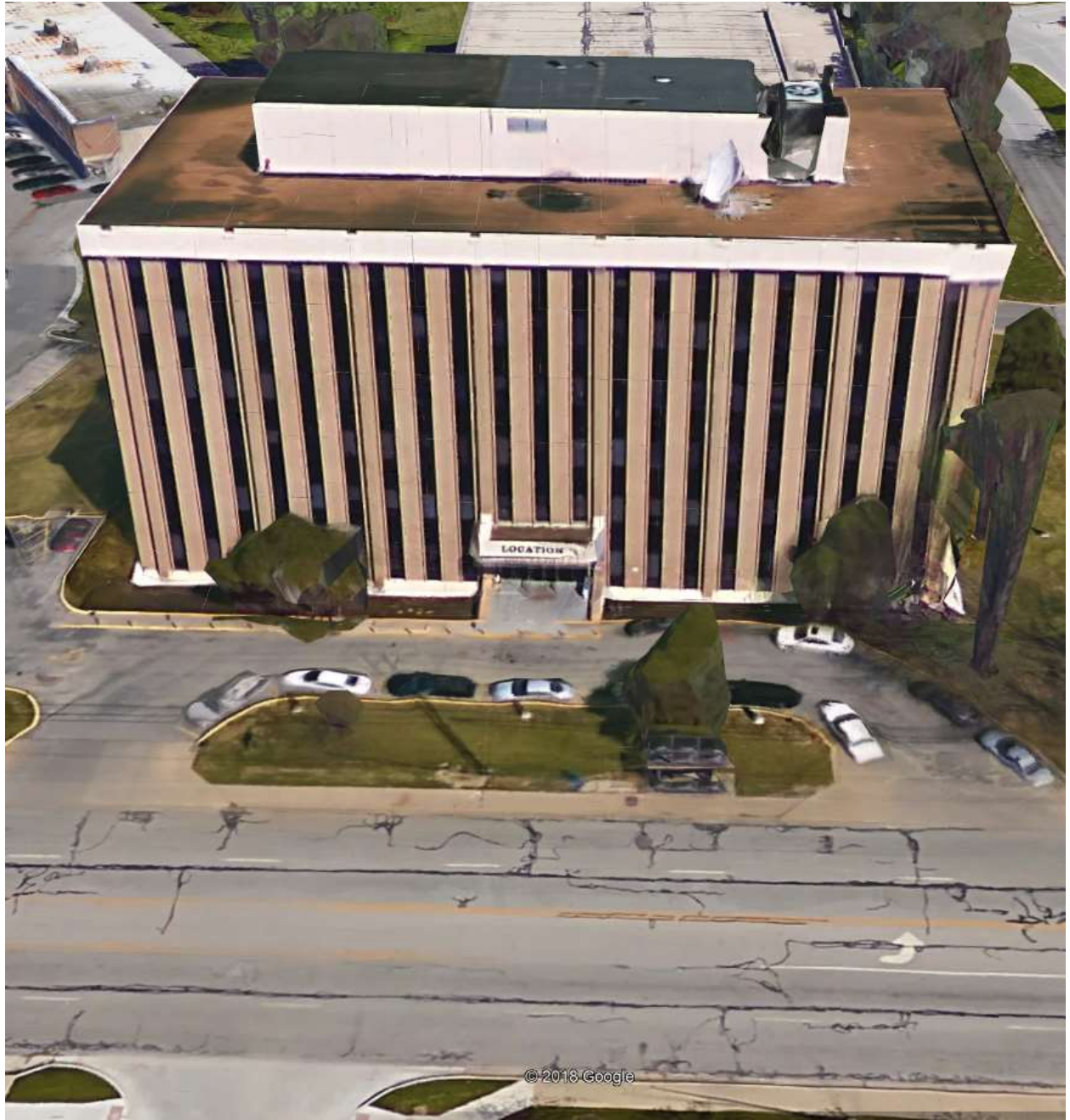
² - In the original Construction Permit application, BPL-20180607ABD, applicant requested handling under §73.870(a) for a non-adjacent channel handling predicated on a reduced interference showing demonstrating that KWKJ would place a Longley/Rice field strength of 40 dBu to 4,383 persons in the authorized service contour for KPPZ-LP and no population from KSAJ. At the new location, a Longley/Rice study shows that KPPZ-LP would receive no 40 dBu incoming interference from KWKJ and a field strength of 40 dBu to 1,626 persons from KSAJ thus further justifying the non-adjacent channel change previously granted for the applicant. If necessary, applicant requests §73.870(a) handling for the instant application.

KPPZ-LP Proposed Site





Citadel Dr



Antenna Height Above Average Terrain Calculations -- Results

Input Data

Latitude 39° 0' 47.8" North

Longitude 94° 33' 53.4" West (NAD 27)

These coordinates convert to NAD 83 coordinates of
39° 00' 47.82", North, 94° 33' 54.24" West (NAD 83).

Height of antenna radiation center above mean sea level: 302 meters AMSL

Number of Evenly Spaced Radials = 8 0° is referenced to True North

Results

Calculated HAAT = 30 meters

Antenna Height Above Average Terrain calculated
using 1 km [GLOBE terrain data](#)

Individual "Radial HAAT" Values, in meters

0°	46.1 m
45°	53.5 m
90°	29.2 m
135°	22.1 m
180°	33.6 m
225°	14.0 m
270°	1.6 m
315°	43.2 m