

COMPREHENSIVE TECHNICAL EXHIBIT

FM TRANSLATOR K262DG, GEORGETOWN, TX; FCC ID # 202369

DISCUSSION

With the instant Application, American Broadcasting of Texas, Inc. seeks relief from interference with a same band minor modification channel change as permitted in FCC Docket/RM: 18-119 (DA/FCC#: FCC-19-40; FCC Record Citation: 34 FCC Rcd 3457(4), adopted May 9,2019)¹.

Since the inception of broadcasting on Channel 262, FM Translator K262DG has experienced significant , consistent interference from full service co-channel stations KILT-FM Houston, TX, FID# 25439; KJKK, Dallas, TX, FID# 63779 and KCYY, San Antonio, TX, FID# 48718.

As revealed in the Channel Preclusion Study (**Figure 1**), there are no channels available that would qualify for a standard minor modification (+ or – three channels), thus Applicant is seeking to move to channel 232 as permitted under FCC Docket/RM; 18-119.

Applicant is also seeking a 2nd adjacent waiver relative to KAMX, Luling, TX, and a 3rd adjacent waiver relative to KLBJ-FM, Austin, TX (see waiver discussion below).

CHANNEL STUDY

A channel study (**Figure 2**) reveals the lack of any contour overlap with 1st, 2nd, 3rd adjacent and I.F. related facilities, excepting Full Service KAMX, Facility ID # 48651, Luling, TX, for which a 2nd adjacent waiver is being sought, and Full Service KLBJ-FM, Facility ID # 65792, Austin, TX, for which a 3rd adjacent waiver is being sought. The close relationship with 1st adjacent KOAU-LP, Facility ID # 194806, Round Rock, TX is explored in **Figures 3&4**, revealing the absence of any contour overlap.

(NOTE: Terrain Database is NED 03 SEC)

¹ Excerpt from FCC Docket/RM: 18-119

III. DISCUSSION

A. Channel Changes

5. As discussed in more detail below, we adopt the NPRM's proposal to allow FM translator stations to remediate interference either caused to or received from another broadcast station by changing channels to any available same-band frequency as a minor change.

CHANNEL PRECLUSION STUDY
K262DG Interference Minor Modification
American Broadcasting Of Texas

REFERENCE
30 35 30.70 N
97 40 45.00 W.

Class= D , Pwr=0.057 kw DA, HAAT= 94.5 M, COR= 335 M
Average Protected F(50-50)= 8.72 km

DISPLAY DATES
DATA 12-15-22
SEARCH 12-15-22

CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
--- Channel 259 99.7 MHz. ---										
260C Waco	WACO-FM	LIC NCN TX	22.9 203.1	90.05 BLH19901116KD	31 20 15.60 97 18 38.00	90.000 506	125.7 710	84.6 Ihm Licenses, LLC	-44.9*	-7.7
262D Georgetown	K262DG!	LIC CN TX	0.0 72.0	0.00 BLFT20180608ABA	30 35 30.70 97 40 45.00	0.057	335	---Reference---		
--- Channel 260 99.9 MHz. ---										
260C Waco	WACO-FM	LIC NCN TX	22.9 203.1	90.05 BLH19901116KD	31 20 15.60 97 18 38.00	90.000 506	186.9 710	84.6 Ihm Licenses, LLC	-106.1*	-26.4
262D Georgetown	K262DG!	LIC CN TX	0.0 72.0	0.00 BLFT20180608ABA	30 35 30.70 97 40 45.00	0.057	335	---Reference---		
--- Channel 261 100.1 MHz. ---										
260C Waco	WACO-FM	LIC NCN TX	22.9 203.1	90.05 BLH19901116KD	31 20 15.60 97 18 38.00	90.000 506	125.7 710	84.6 Ihm Licenses, LLC	-44.9*	-7.7
264C0 Austin	KASE-FM	LIC CN TX	201.3 21.2	32.47 BLH19820628AN	30 19 10.70 97 48 07.00	100.000 363	10.9 584	76.1 Ihm Licenses, LLC	20.0	-43.6*
262D Georgetown	K262DG!	LIC CN TX	0.0 72.0	0.00 BLFT20180608ABA	30 35 30.70 97 40 45.00	0.057	335	---Reference---		
--- Channel 262 100.3 MHz. ---										
264C0 Austin	KASE-FM	LIC CN TX	201.3 21.2	32.47 BLH19820628AN	30 19 10.70 97 48 07.00	100.000 363	10.9 584	76.1 Ihm Licenses, LLC	20.0	-43.6*
262D Georgetown	K262DG!	LIC CN TX	0.0 72.0	0.00 BLFT20180608ABA	30 35 30.70 97 40 45.00	0.057	335	---Reference---		
--- Channel 263 100.5 MHz. ---										
264C0 Austin	KASE-FM	LIC CN TX	201.3 21.2	32.47 BLH19820628AN	30 19 10.70 97 48 07.00	100.000 363	111.5 584	76.1 Ihm Licenses, LLC	-81.2*	-45.6*
262D Georgetown	K262DG!	LIC CN TX	0.0 72.0	0.00 BLFT20180608ABA	30 35 30.70 97 40 45.00	0.057	335	---Reference---		
--- Channel 264 100.7 MHz. ---										
264C0 Austin	KASE-FM	LIC CN TX	201.3 21.2	32.47 BLH19820628AN	30 19 10.70 97 48 07.00	100.000 363	178.0 584	76.1 Ihm Licenses, LLC	-147.4*	-48.3*
262D Georgetown	K262DG!	LIC CN TX	0.0 72.0	0.00 BLFT20180608ABA	30 35 30.70 97 40 45.00	0.057	335	---Reference---		
--- Channel 265 100.9 MHz. ---										
264C0 Austin	KASE-FM	LIC CN TX	201.3 21.2	32.47 BLH19820628AN	30 19 10.70 97 48 07.00	100.000 363	111.5 584	76.1 Ihm Licenses, LLC	-81.2*	-45.6*
268C2 Buda	KROX-FM	LIC NCN TX	201.3 21.3	32.15 0000129844	30 19 20.70 97 48 04.00	12.500 253	4.9 476	47.9 Waterloo Media Group, L.P.	25.6	-15.7*
262D Georgetown	K262DG!	LIC CN TX	0.0 72.0	0.00 BLFT20180608ABA	30 35 30.70 97 40 45.00	0.057	335	---Reference---		

Terrain database is NED 03 SEG, 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
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.

All separation margins (if shown) include rounding

FIGURE 1

CHANNEL STUDY

K262DG Interference Minor Modification

American Broadcasting Of Texas

REFERENCE CH# 232D - 94.3 MHz, Pwr= 0.057 kw DA, HAAT= 94.5 M, COR= 335 M DISPLAY DATES
30 35 30.7 N. DATA 12-15-22
97 40 45.0 W. SEARCH 12-15-22
Average Protected F(50-50)= 8.7 km
Standard Directional

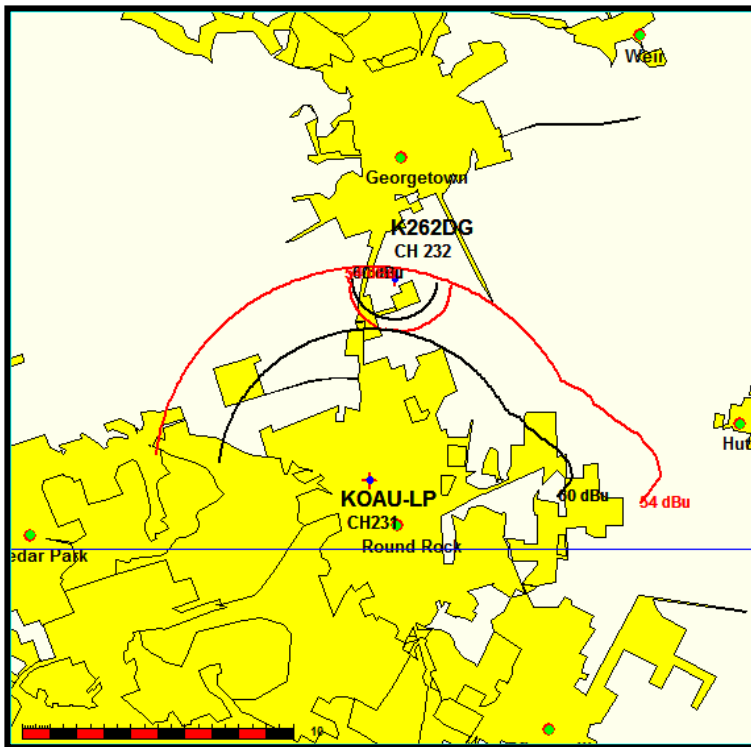
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
234C0 Luling	KAMX	LIC	NCN TX	201.2 21.1	32.02 BLH19980225KD	30 19 23.70 97 47 59.00	100.000 398	11.3 615	78.2 Audacy License, LLC	19.1	-46.2*
229C Austin	KLBJ-FM	LIC	CN TX	199.2 19.1	33.15 0000147638	30 18 36.70 97 47 34.00	97.000 320	10.0 539	71.8 Waterloo Media Group, L.P.	21.6	-38.6*
231L1 Round Rock	KOAU-LP	LIC	CN TX	186.8 6.8	7.65 BLL20190730ABB	30 31 24.70 97 41 19.00	0.100 14	249	Dios Habla Hoy	-1.9*	0.0
232D Temple	K232FU	LIC	CN TX	26.7 206.9	59.20 0000165001	31 04 01.60 97 23 58.00	0.250	48.0 282	14.2 Townsquare Media Killeen-T	2.0	15.0
232L1 Austin	KBPH-LP	LIC	CN TX	183.5 3.4	35.85 BLL20180313AAX	30 16 11.70 97 42 06.00	0.100 -11	164	Austin Cathedral, Inc.	15.7	25.5
232L1 Austin	KCDR-LP	LIC	CN TX	183.5 3.4	35.85 BLL20180313AAY	30 16 11.70 97 42 06.00	0.100 -11	164	Camino Del Rey	15.7	25.5
231D Austin	K231CZ	LIC	DVN TX	201.2 21.2	32.01 0000201940	30 19 24.00 97 47 59.70	0.250	4.2 447	2.7 94.1 Partnership	26.2	27.4
231D Killeen	K231DF	LIC	DCN TX	352.7 172.7	56.78 0000160067	31 05 54.60 97 45 16.10	0.250	19.4 370	12.8 Martin Broadcasting, Inc.	28.2	31.4
232C2 Comanche	KYOX	LIC	ZCN TX	326.9 146.4	175.99 BLH19990402KD	31 54 51.50 98 41 49.20	32.000 189	131.8 649	51.5 Villecom LLC	36.2	99.7
232C3 Kerrville	KRVL	LIC	DCN TX	247.6 66.9	151.78 0000087922	30 03 51.80 99 08 17.10	12.500 142	98.7 700	32.9 Jam Broadcasting, LLC	50.4	114.0
230D Temple	K230CH	LIC	DVN TX	32.1 212.3	68.34 BLFT20181220AAS	31 06 42.60 97 17 50.00	0.250	0.8 289	11.5 M&M Broadcasters, Ltd.	58.5	55.6
231C2 Hempstead	KLTR	CP	NCN TX	118.7 299.3	136.26 0000124930	29 59 52.80 96 26 14.80	23.500 205	73.8 298	50.2	59.3	83.6
232L1 Wimberley	KWVH-LP	LIC	CN TX	209.5 29.3	81.28 0000107338	29 57 16.70 98 05 39.00	0.020 67	377	Wimberley Valley Radio	61.0	70.4
232A Yoakum	KYKM	LIC	CN TX	161.1 341.4	145.69 BLH20130823ACN	29 21 03.90 97 11 33.00	6.000 97	77.5 194	21.4 Kremling Enterprises, Inc.	66.6	116.0
233A Waco	KWBT	LIC	CY TX	25.4 205.7	112.98 0000087506	31 30 31.60 97 10 04.00	3.100 138	36.8 290	24.3 Kennelwood Radio, LLC	67.0	76.0
231C2 Floresville	KTFM	LIC	CN TX	205.0 24.7	154.91 0000088184	29 19 38.90 98 21 18.00	19.000 245	75.6 418	51.2 Alpha Media Licensee LLC	77.7	101.7
231C3 Brenham	KLTR	LIC	CN TX	112.1 292.8	130.99 BLH20001218AAD	30 08 31.80 96 25 00.90	6.400 100	41.0 198	26.8	86.2	101.4
233D College Station	K233DU	LIC	CN TX	84.6 265.2	120.38 BLFT20190801AAQ	30 41 16.20 96 25 32.40	0.250	24.7 240	16.5 Bryan Broadcasting License	89.9	101.4
233C Houston	KTBS-FM	LIC	CN TX	117.9 299.0	237.24 BMLH20090424AAB	29 34 34.80 95 30 36.80	100.000 585	135.6 605	91.1 Ihm Licenses, LLC	98.4	144.0
231C Fort Worth	KLNO	LIC	CN TX	16.6 197.0	232.04 BMLH20101015ACJ	32 35 22.50 96 58 11.00	100.000 485	123.6 674	83.1 Univision Radio Stations G	99.0	135.2

Terrain database is NED 03 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 restricted contour.

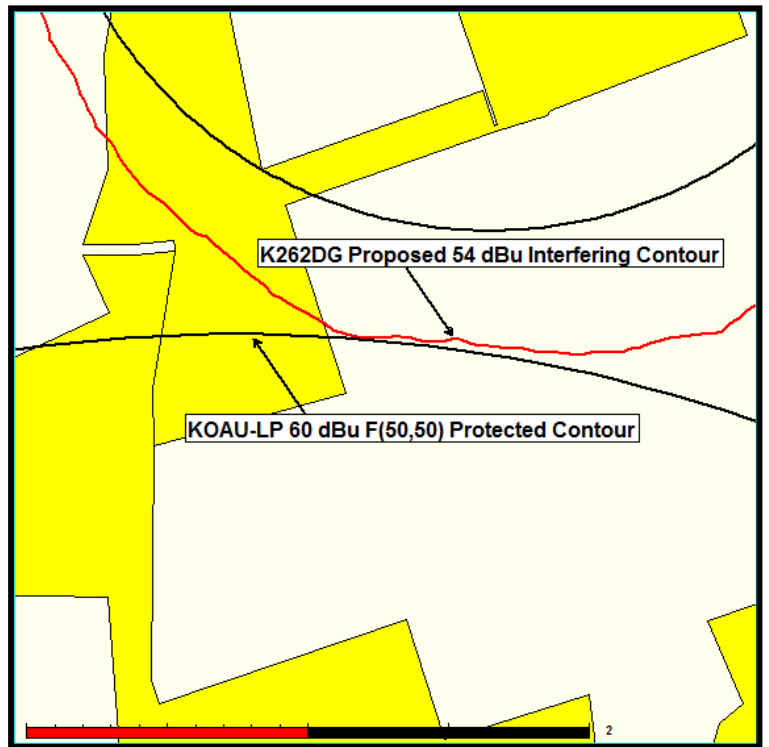
2nd Adjacent waiver requested

3rd Adjacent waiver requested

FIGURE 2



Proposed vs KOAU-LP
FIGURE 3



Proposed vs KOAU-LP Expanded
FIGURE 4

OVERLAPPING 60 dBu CONTOUR MODIFICATION QUALIFICATION

Figure 5 below demonstrates the overlapping 60 dBu contours of the licensed and proposed facilities.

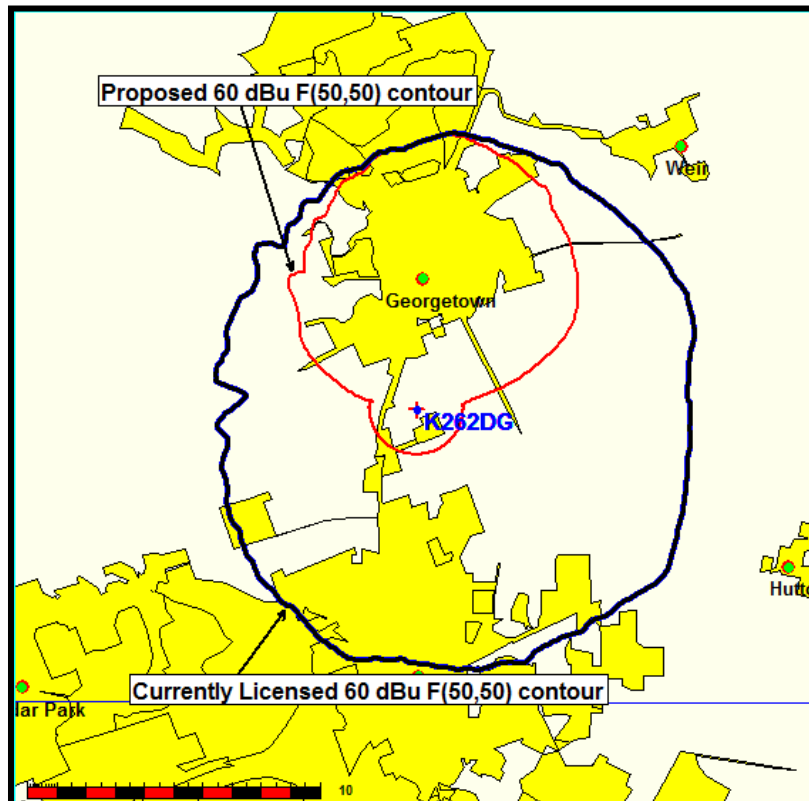


FIGURE 5

Waiver Request of Section 74.1204 and Showing of Compliance

With respect to KAMX:

The proposed FM translator is located within the protected 60 dBu F(50,50) contour of 2nd adjacent channel KAMX, Luling, TX (see **Figure 2, CHANNEL STUDY**). The predicted 60 dBu F(50,50) field strength of KDTX at the proposed translator site is 81.74 dBu (free space equation).

Using the Undesired-to-Desired method for calculating proposed interference, the proposed interfering contour with respect to KAMX is 121.74 dBu ($81.74 + 40$) (free space method employed). This interfering signal would, in the worst case, extend 43.35 meters from the proposed antenna.

With respect to KLBJ-FM:

The Proposed FM translator is located within the protected 60 dBu F(50,50) contour of 3rd adjacent channel KLBJ-FM, Austin, TX (see **Figure 2, CHANNEL STUDY**). The predicted 60 dBu F(50,50) field strength of KLBJ-FM at the proposed translator site is 78.67 dBu (free space equation).

Using the Undesired-to-Desired method for calculating proposed interference, the proposed interfering contour with respect to KLBJ-FM is 118.67 dBu ($78.67 + 40$) (free space method employed). This interfering signal would, in the worst case, extend 61.72 meters from the proposed antenna.

Since KLBJ-FM is the most restrictive related facility, the following discussion will focus on it:

The proposed CLFM Yagi antenna will be mounted 60 meters above ground level. The closest occupied structure is located 64 meters from the base of the tower (see **Figure 6**), making it 87.7 meters from the antenna at ground level. With the proposed interfering contour extending 61.72 meters from the proposed antenna, this signal will not reach any occupied building space.

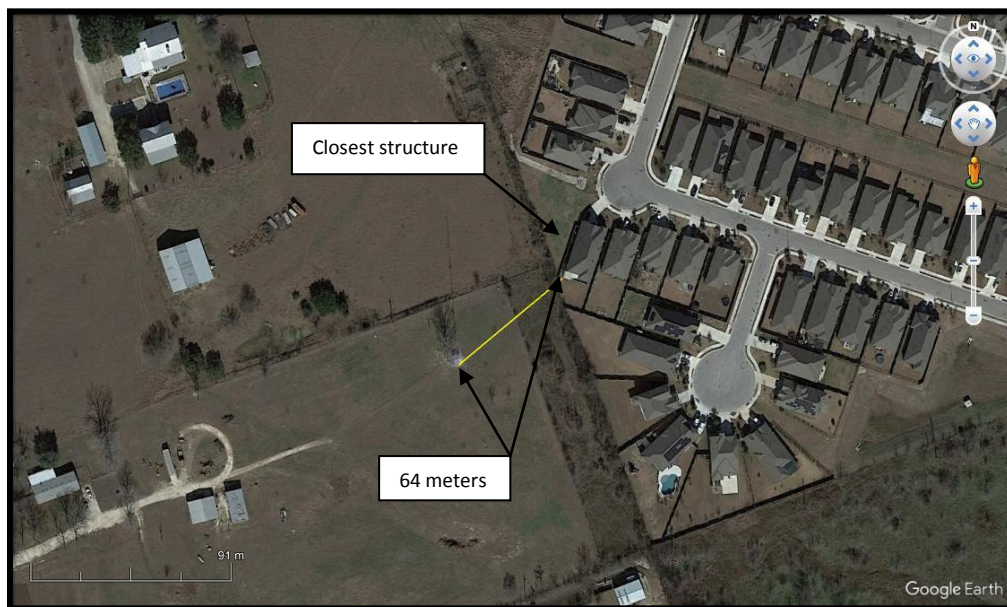


FIGURE 6

Since no population inhabits the interference area, the Applicant respectfully requests waiver of the FM translator contour overlap requirements with respect to 2nd adjacent station KAMX, and 3rd adjacent station KLBJ-FM, as permitted in CFR Section 74.1204.

“FILL-IN QUALIFICATION”

The 60 dBu F(50,50) contour of the proposed facility lies entirely within the 2.0 mV/m daytime contour of the primary station (KBBW-AM)(see **FIGURE 7**).

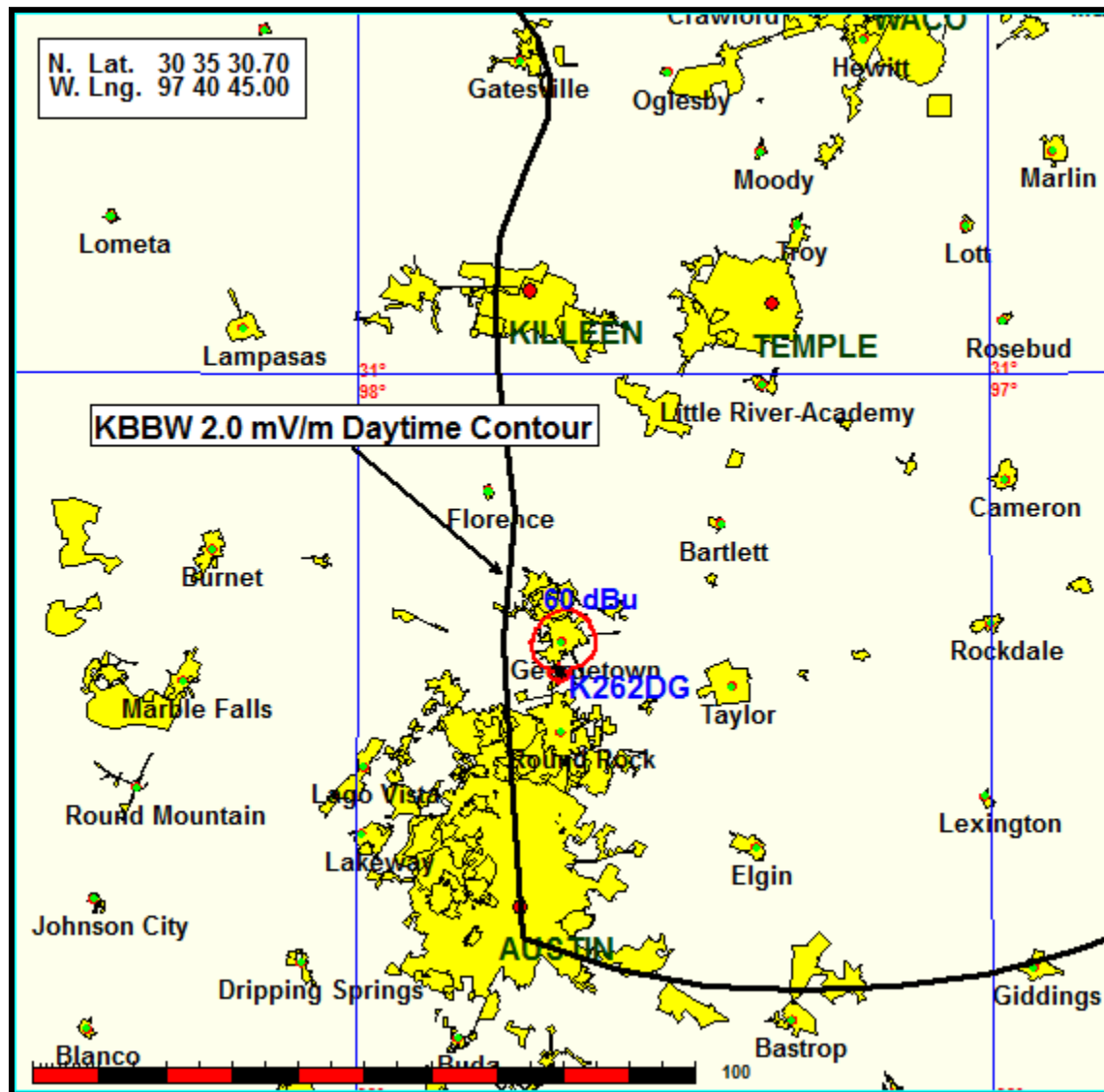


FIGURE 7

ENVIRONMENTAL COMPLIANCE

There will be no new construction. The current antenna will be replaced with a single bay CLFM yagi directional antenna at an identical 60 meter CORAGL.

Ignoring the diminished downward radiation of the proposed yagi antenna, the FCC FMModel software predicts worst case RFR of 0.54 uW/cm^2 at a distance of 13.4 meters from the base of the tower. This is well below the limitation for both controlled and uncontrolled access.

When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power, if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.