Bread of Life, Inc.
Second Adjacent Channel Waiver Request
LPFM Application
Facility #192936

The proposed facility is fully-spaced pursuant to 47 C.F.R. Section 73.807 to all other facilities other than second-adjacent KMJQ (FID #11971) (the "Protected Station"). As more fully discussed below, a waiver of 47 C.F.R. 73.807 is appropriate in this instance.

The Protected Station is authorized to broadcast with 100 kilowatts at 524 meters HAAT from a site that is 22.68 kilometers from the proposed LPFM site. The predicted strength of the Protected Station at the proposed LPFM site is 90.95 dBu. Therefore, 130.95 dBu is the lowest value predicted to cause interference to the Protected Station.

The applicant proposes to mount the antenna for the LPFM station on a new tower mounted on the roof of an existing building at 25 meters AGL.
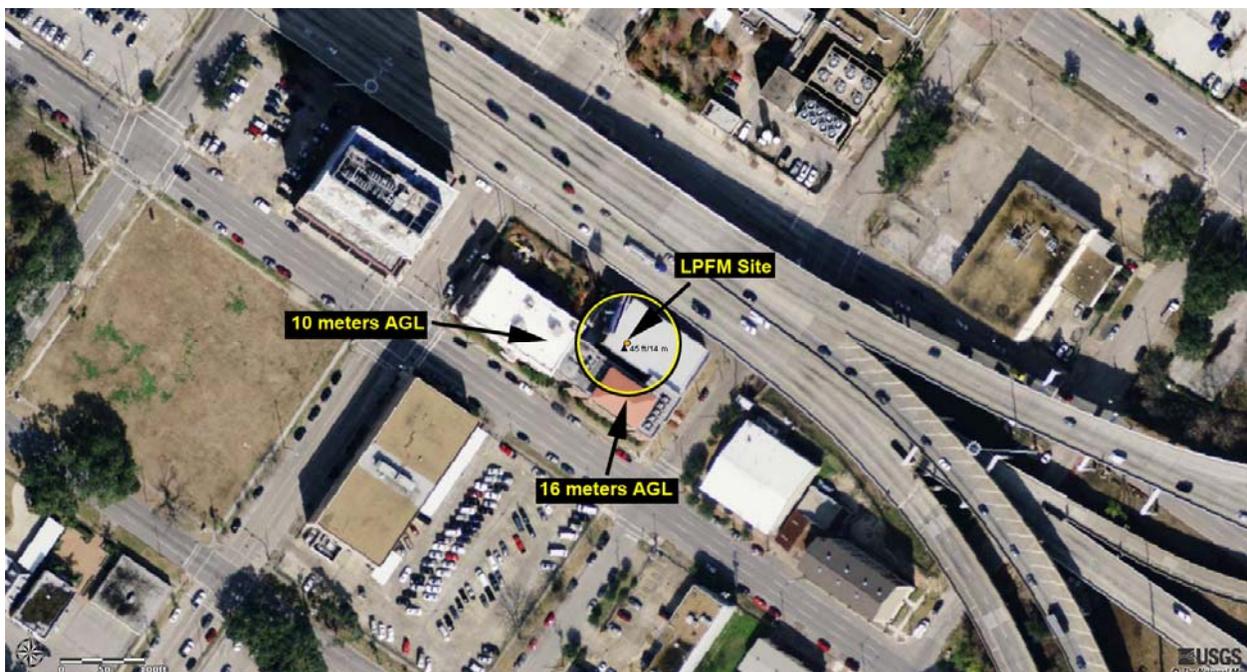
The area of predicted interference without accounting for the elevation pattern of the antenna is only 20 meters. The aerial image on the previous page demonstrates that three buildings exist in this area.   The roof of the tallest building is 16 meters above ground level.

The facility proposed herein will utilize a four-bay Shively 6812b antenna that employs half-wave spacing. The elevation pattern of this antenna configuration as provided by the manufacturer accompanies the instant application.

The table on the following page indicates the predicted signal strength from the proposed LPFM station both at ground level, and at receiving antenna locations up to 16 meters above ground level. The 16 meter "artificial plane" exceeds the height of the nearby structures. Consequentially, all potential listeners within the building are below the artificial plane in the following tables.

Proposed Antenna:			Shively Labs 6812b Half-wave-spaced.					
Proposed Power:		0.1	kW		Fill in "yellow" cells			
Antenna Height AGL:		25	meters					
Interference Contour:		130.95	dBu					
Artificial Rcv Antenna Height:		16	meters					
Distance (Free Space) Equation:			=(10^((106.92-[desired dBu]+[ERP in dBk])/20))*1000					
Field Strength (dBu) Equation			"=106.92-(20*(LOG10[DistMeters]/1000)))+[ERPin dBk]					

Depression Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant. to Interf Contour	Distance from Ant. to Artificial Plane	Field Strength in dBu @ Artificial Plane	Distance from Ant. to Ground Level	Field Strength in dBu @ Ground Level
0°	0.998	0.100	-10.02	19.84 m	infinite		infinite	
-5°	0.963	0.093	-10.33	19.15 m	103.26 m	116.31 dBu	286.84 m	107.44 dBu
-10°	0.858	0.074	-11.33	17.06 m	51.83 m	121.30 dBu	143.97 m	112.42 dBu
-15°	0.703	0.049	-13.06	13.98 m	34.77 m	123.03 dBu	96.59 m	114.16 dBu
-20°	0.519	0.027	-15.70	10.32 m	26.31 m	122.82 dBu	73.10 m	113.95 dBu
-25°	0.331	0.011	-19.60	6.58 m	21.30 m	120.75 dBu	59.16 m	111.88 dBu
-30°	0.162	0.003	-25.81	3.22 m	18.00 m	116.00 dBu	50.00 m	107.13 dBu
-35°	0.026	0.000	-41.70	0.52 m	15.69 m	101.31 dBu	43.59 m	92.43 dBu
-40°	0.071	0.001	-32.97	1.41 m	14.00 m	111.02 dBu	38.89 m	102.15 dBu
-45°	0.130	0.002	-27.72	2.58 m	12.73 m	117.10 dBu	35.36 m	108.23 dBu
-50°	0.155	0.002	-26.19	3.08 m	11.75 m	119.33 dBu	32.64 m	110.45 dBu
-55°	0.155	0.002	-26.19	3.08 m	10.99 m	119.91 dBu	30.52 m	111.04 dBu
-60°	0.140	0.002	-27.08	2.78 m	10.39 m	119.51 dBu	28.87 m	110.63 dBu
-65°	0.116	0.001	-28.71	2.31 m	9.93 m	118.27 dBu	27.58 m	109.40 dBu
-70°	0.090	0.001	-30.92	1.79 m	9.58 m	116.38 dBu	26.60 m	107.51 dBu
-75°	0.065	0.000	-33.74	1.29 m	9.32 m	113.79 dBu	25.88 m	104.92 dBu
-80°	0.041	0.000	-37.74	0.82 m	9.14 m	109.96 dBu	25.39 m	101.08 dBu
-85°	0.021	0.000	-43.56	0.42 m	9.03 m	104.25 dBu	25.10 m	95.37 dBu
-90°	0.001	0.000	-70.00	0.02 m	9.00 m	77.84 dBu	25.00 m	68.96 dBu

As can be determined by the columns colored green, at no location from ground level to 8.2 meters above the ground does the predicted signal of the proposed LPFM station exceed that of the Protected Station by 40 dBu or more.

The Applicant respectfully submits that since a lack of population exists in the area of predicted interference, a waiver of 47 C.F.R § 73.807 is appropriate for the instant application.