

**TECHNICAL EXHIBIT  
APPLICATION FOR NON-COMMERCIAL BROADCAST STATION  
FORM 340  
NEW FM CHANNEL 203 C1  
45 kW H&V  
181.5m HAAT  
Hamlin, TX**

**PURPOSE OF APPLICATION**

Brazos TV, Inc. ("Brazos") is filing this application for a new station in this non commercial filing window.

**ANTENNA COORDINATES PROPOSED FACILITY**

Brazos proposes antenna coordinates of N 32°-56'-16" W 99°-57'-21" which correspond to ASR 1050910. This is an existing 195.1 meter tower.

**ENVIRONMENTAL**

The proposed facility will be located on this existing tower. The center of radiation will be at 164.9 meters above ground level and 680 meters above mean sea level. No other alteration of this tower is proposed other than adding an antenna and transmission line. The proposed antenna is a 6 element full wave spaced EPA type 2 "double-vee". The OET FM model program was used to evaluate non-ionizing electromagnetic radiation at two meters above ground level at the 45 kilowatts H&V at 164.9 meters above ground level specified in this application. The maximum level was found to be 11.2 microwatts/cm<sup>2</sup> or 5.6 % of the maximum level for general population, uncontrolled exposure level. This level occurs at 48 meters from the base of the support structure.

**INTERFERENCE CITY - GRADE COVERAGE**

The proposed facility antenna coordinates are fully spaced to all existing licenses and applications in compliance with 47 CFR 73.509. The facility is in full compliance with 73.515 as it covers the entire community with the FCC 60 dBu 50-50 city grade contour. See the following pages for depictions of the facts stated herein.

New Hamlin 203

REFERENCE CH# 203C1 - 88.5 MHz, Pwr= 45 kw DA, HAAT= 181.5 M, COR= 680 M DISPLAY DATES  
 32 56 16.00 N. Average Protected F(50-50)= 54.79 km DATA 11-05-21  
 99 57 21.00 W. Standard Directional SEARCH 11-08-21

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
202C Big Spring	980826MM	VAC TX	_N	239.8 59.0	164.39	32 11 06.45 101 27 57.44	100.000 600	137.5 1383	92.5	-26.6	-7.5*
203A Vernon	KVED	LIC TX	_VN	15.9 196.1	152.46 BLED20100520ACH	34 15 21.30 99 30 06.30	3.000 99	72.0 523	21.8	26.8	0.1 Top O Texas Educational Br
203C3 Weatherford	KMQX	LIC TX	_CN	92.7 273.7	172.67 BLED20030919AAR	32 51 05.50 98 06 32.20	3.500 158	88.2 455	31.2	29.5	1.9 Cssi Non-Profit Educatio
203C3 San Angelo	KLRW	LIC TX	_CN	198.3 18.0	177.44 BLED20180104AAA	31 25 16.60 100 32 37.30	2.500 210	90.2 808	33.2	33.5	6.0 Educational Media Foundati
201C1 Abilene	KGZ	LIC TX	_CN	158.6 338.8	84.46 BLED20050627ACK	32 13 47.50 99 37 43.30	91.000 252	9.3 859	68.7	20.5	9.4 Christian Broadcasting Co.

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= - Zone 2, 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)  
 « = Station meets FCC minimum distance spacing for its class.

\*BPED-199800826MM dismissed 11-15-2002

**1050910**  
Latitude: 32-56-16 N  
Longitude: 099-57-21 W  
ERP: 45.00 kW  
Channel: 203  
Frequency: 88.5 MHz  
AMSL Height: 680.0 m  
Elevation: 515.1 m  
Horiz. Pattern: Directional

**FCC 60 dBu 50-50 Contour**

