



ENGINEERING STUDY

WSCL(FM)

Application for License Modification
for a Minor Modification to
License BMLED- 20110705ACD

Channel 208B (89.5MHz)

Salisbury, MD

Facility ID 58660

April 2020

WSCL (FM)

Application for a Minor License Modification

TECHNICAL STATEMENT

This technical statement and attached exhibits were prepared on behalf of Salisbury University, licensee of radio station WSCL (FM), Channel 208B, Salisbury, MD. WSCL seeks to relocate their facility to another existing tower 2.8km from the currently licensed site.

ALLOCATION

The proposed operation will utilize a non-directional antenna and will meet all contour protection requirements toward other stations. The allocation study attached as Exhibit A indicates that four facilities are close enough to warrant close examination, WNJB (207A), WYPA (208A), WPFW, (207B) and WXMD (209A). The map demonstrating compliance is attached as Exhibit B. It is noted that all contours to and from each facility noted have been computed using FCC 30 second terrain data.

The proposed facility is not within 320km of any common border between the US and Mexico or Canada.

Exhibit C demonstrates that the proposed 60dBu noncommercial station's contour will completely encompass the Salisbury, MD Community of License.

Proposed Facility Specifications

Coordinates (NAD83)	38°-40'-00" N Latitude, 75°-34'-59" W Longitude
Tower Overall AGL	159m
Site AMSL	8.8m
Antenna COR AGL	137m
Antenna COR AMSL	145.8m
Antenna HAAT	135.8m
Antenna Pattern	NON-Directional
Proposed Antenna	ERI SHPX-4AE
ERP	36kW

TV CHANNEL 6 PROTECTION

The proposed facility will have no impact on any full power TV channel 6 facility.

ENVIRONMENTAL CONSIDERATIONS

The proposed WSCL antenna will operate at a maximum power level of 36kW H+V and will operate at 137m AGL. WSCL proposes to operate with a 4-bay, full-wave spaced non-directional antenna. Based upon the FCC online calculator "FM Model"¹ Power Density vs. Distance calculator using an EPA Type 3 Opposed U Dipole antenna, the maximum power density at 2m AGL is expected to be 11.5 μ W/cm² at 55 meters from the tower base, or 6% of the permitted 200 μ W/cm² limit for uncontrolled exposure. There are no tall buildings within 500m of the proposed tower and there are no other non-excluded facilities operating on the tower. Based upon the preceding, it is believed that the modified WSCL-FM facility will be in compliance with environmental requirements.

¹ <https://www.fcc.gov/general/fm-model>

Radio station WSCL (FM) along with other users at the site will maintain an occupational safety policy and agrees to reduce power or cease operation during periods of maintenance to avoid potentially harmful exposure of personnel to non-ionizing RF radiation.

Respectfully Submitted

A handwritten signature in black ink, appearing to read "Bert Goldman", with a long, sweeping horizontal flourish extending to the right.

Bert Goldman
Technical Consultant

EXHIBIT A- Allocation Study

ComStudy 2.2 search of channel 208 (89.5 MHz Class B) at 38-40-00 N, 75-34-59 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE	
WNJB-FM	BRIDGETON	NJ 207 A	95.47	113.00	22.5	0.97 dB	Exhibit B
WYPA	CHERRY HILL	NJ 208 A	147.48	178.00	20.1	1.67 dB	Exhibit B
WPFW LIC	WASHINGTON	DC 207 B	134.44	169.00	283.4	1.96 dB	Exhibit B
WXMD	CALIFORNIA	MD 209 B1	97.55	145.00	249.1	2.51 dB	Exhibit B
WPFW CP	WASHINGTON	DC 207 B	134.45	169.00	283.4	2.46 dB	Exhibit B
WTMD	TOWSON	MD 209 B1	120.32	145.00	313.2	3.20 dB	
WLJV CP	SPOTSYLVANIA	VA 208 B1	173.91	211.00	255.2	4.32 dB	
WLJV LIC	SPOTSYLVANIA	VA 208 A	180.49	178.00	253.8	5.38 dB	
WITF-FM	HARRISBURG	PA 208 B	216.72	241.00	329.8	6.11 dB	
WHRV	NORFOLK	VA 208 B	221.54	241.00	201.7	6.41 dB	
WITF-FM	HARRISBURG	PA 208 B	216.72	241.00	329.8	6.41 dB	
WGLS-FM	GLASSBORO	NJ 209 A	116.78	113.00	12.0	7.44 dB	
WNJN-FM	ATLANTIC CITY	NJ 209 A	117.62	113.00	41.0	9.64 dB	
WWCJ	CAPE MAY	NJ 206 B1	87.30	71.00	54.0	15.96 dB	
WRTJ	COATESVILLE	PA 207 A	152.00	113.00	352.6	15.37 dB	
W262BF	GEORGETOWN	DE 262 D	16.17	0.00	73.6	16.2	
WJPH CP	WOODBINE	NJ 210 A	90.02	69.00	42.6	18.07 dB	
WSOU	SOUTH ORANGE	NJ 208 A	257.37	178.00	26.0	18.42 dB	
WWPJ	PEN ARGYL	PA 208 A	244.68	178.00	5.6	18.82 dB	
WJPH LIC	WOODBINE	NJ 210 A	93.07	69.00	42.5	19.48 dB	
WRDV	WARMINSTER	PA 207 A	175.69	113.00	13.3	20.17 dB	
WRIQ	CHARLES CITY	VA 209 B	202.00	169.00	231.7	22.42 dB	

LMS DATA AS OF 4/7/2020

EXHIBIT B Allocation Contours

WSCL, 208B Salisbury, MD Allocation Contours (36kW @ 136m HAAT)

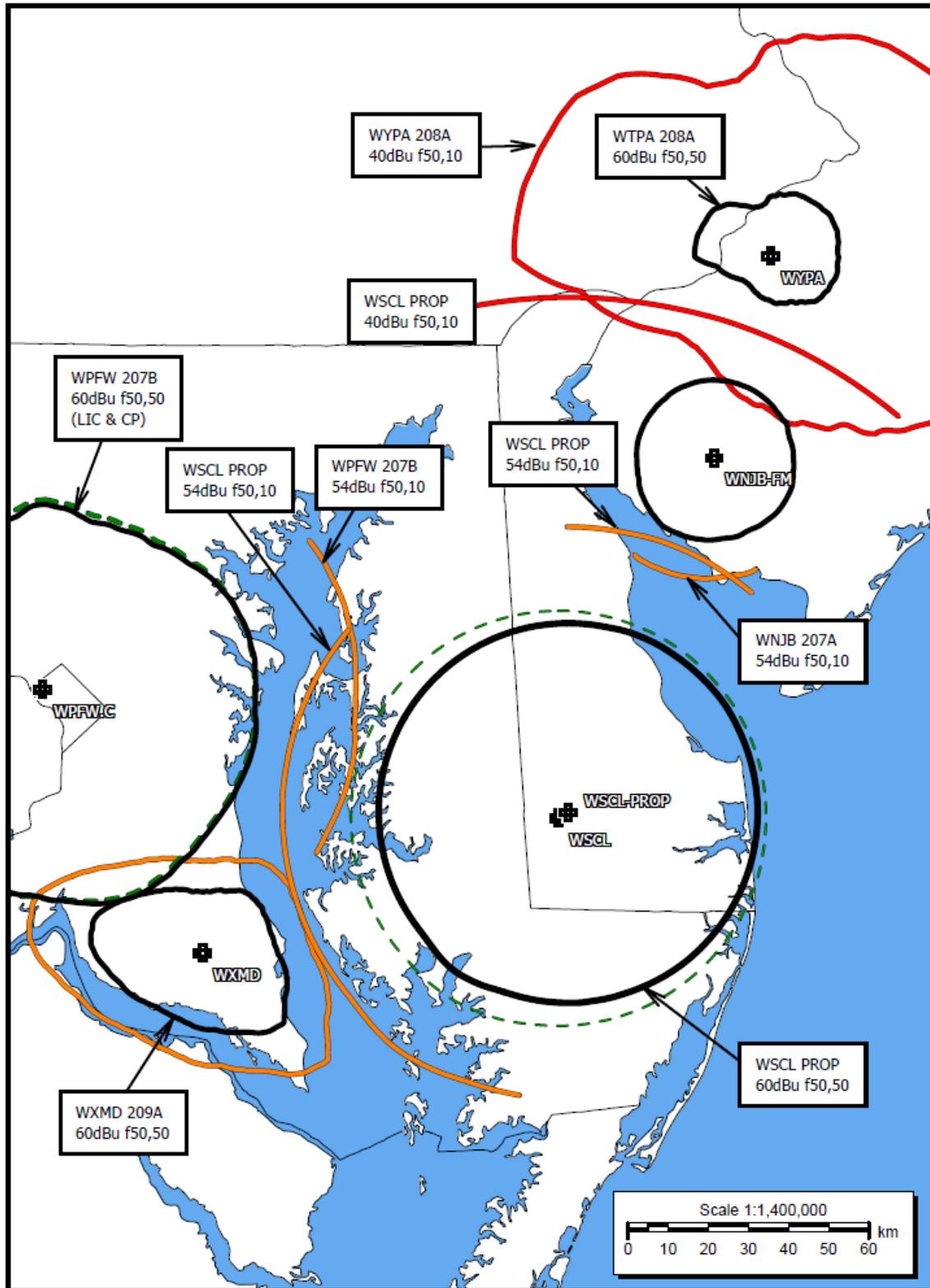


EXHIBIT C Community Coverage, Salisbury, MD

Proposed WSCL Community Coverage (36kW @ 136m HAAT)

