

**ENGINEERING STATEMENT  
APPLICATION FOR CONSTRUCTION PERMIT  
AUXILIARY FACILITY  
RADIO ONE LICENSES, LLC  
FM STATION WKYS  
WASHINGTON, DC  
FACILITY ID 73200**

This Engineering Statement and the attached Figure 1 was prepared on behalf of Radio One Licenses, LLC, licensee of FM broadcast station WKYS Washington, DC. Station WKYS operates on channel 230B, employing effective radiated power (ERP) of 24.5 kilowatts with antenna height above average terrain (HAAT) of 215 meters. It is proposed to construct an auxiliary facility for WKYS at a new location, employing ERP of 5.8 kilowatts with HAAT of 100 meters. The proposed auxiliary facility 54 dBu contour will be well within the licensed 54 dBu contour as shown on Figure 1.

It is proposed to side mount a two bay Dielectric, type DCRM2BR antenna, on a tower owned by American Towers, Inc. The registration number for the tower is 1227148. The antenna will be mounted with center of radiation 94.5 meters (310 feet) above ground level, 156.4 meters above mean sea level. The gain of the antenna at 93.9 MHz is 0.96. The HAAT has been determined to be 100 meters, based on use of a 3-second terrain database.

The proposed antenna will also be used by the proposed auxiliary operation of co-owned station WMMJ Bethesda, MD.

Employing the Federal Communications Commission, Office of Engineering & Technology, OET Bulletin 65, *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*, the power density at the base of the tower, two meters above ground level, was determined to be 0.0163 mW/cm<sup>2</sup> or 8.2 percent of the guideline value for

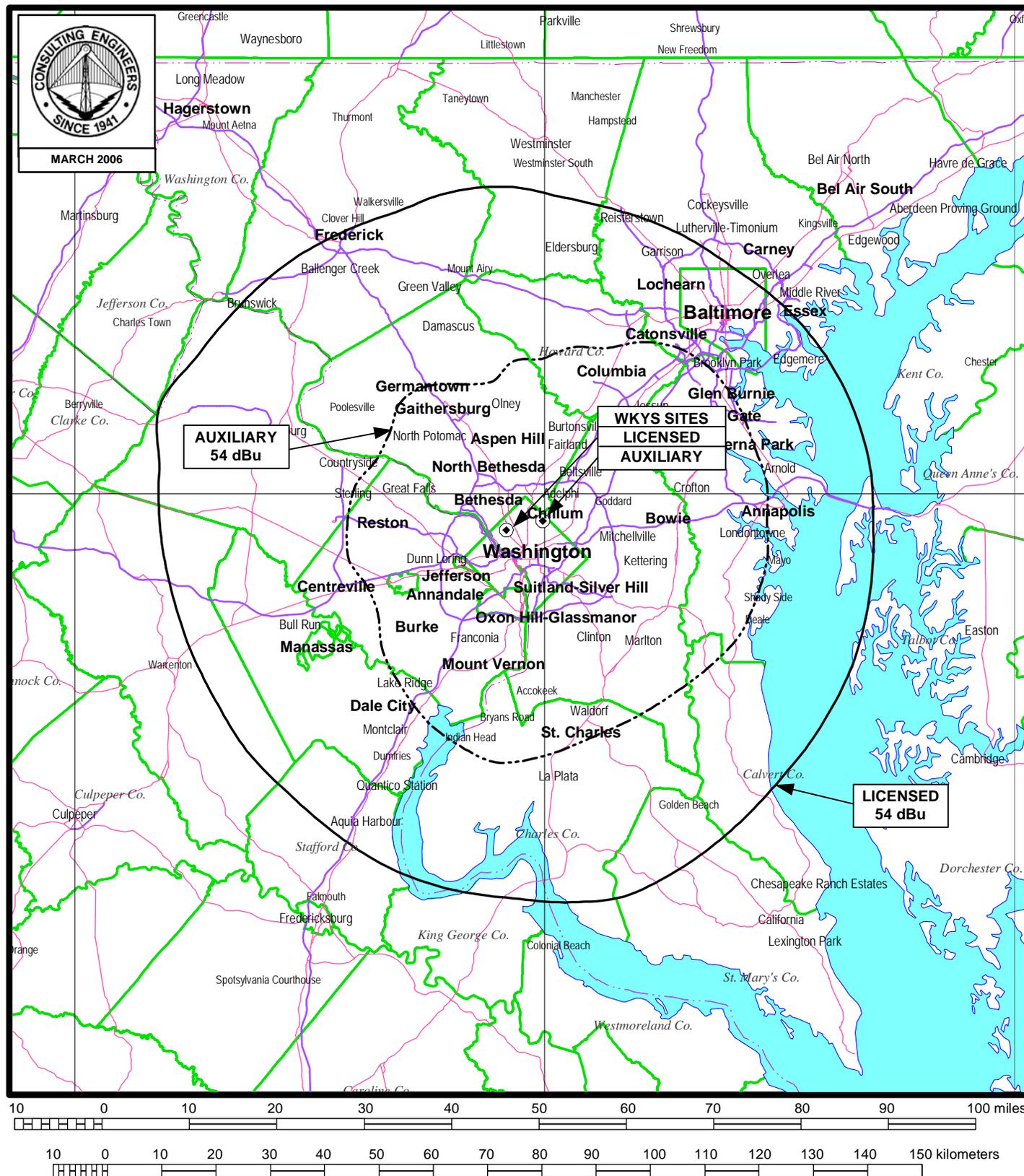
an uncontrolled environment. The simultaneous operation of WMMJ produces a power density at the base of the tower, which is 1.4 percent of the guideline value for an uncontrolled environment. The tower is also the radiator for co-owned AM station WOL (1450 kHz). The input power to be used by WOL will be determined based on field strength measurement, and the power will not exceed 1 kilowatt. The tower area is fenced to a distance of no less than eight feet. Warning signs will be posted on the fence. If it becomes necessary for workers to ascend the tower, the power of the stations will be reduced or the stations turned off as necessary to protect workers from power density in excess of the standard.



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Figure 1



**PREDICTED COVERAGE CONTOURS**  
**(AUXILIARY SITE)**  
**FM STATION WKYS**  
**WASHINGTON, DC**  
**CH 230B 5.8 KW 100 M**

du Treil, Lundin & Rackley, Inc. Sarasota, Florida