

TECHNICAL EXHIBIT
APPLICATION FOR LICENSE
AUXILIARY FACILITY
RADIO STATION WBAB(FM)
BABYLON, NEW YORK
CH 272A 6 KW 62 M

Technical Statement

This Technical Exhibit, of which this statement is part, was prepared on behalf of radio station WBAB(FM) on Channel 272A at Babylon, New York. The purpose of this license application is to simply increase the effective radiated power of the existing WBAB(FM) auxiliary facility to 6 kilowatts.¹ No change in radiation center or transmitter radiation center is requested. By this instant application, station licensure is requested.

Figure 1 is a tabulation of the RF transmission system.

Coverage Contours

The predicted 60 dBu coverage contours for the auxiliary operation and the existing main operation were calculated in accordance with the provisions of Section 73.313. In accordance with current FCC practice, the distances to the contours were calculated without consideration given to terrain roughness correction factors.

¹ See FCC License BXLH-20040623ABL.

The average terrain elevations from 3 to 16 kilometers along eight radials evenly spaced at 45 degree intervals were obtained from the National Geophysical Data Center's (NGDC) 30-second terrain database. The terrain elevations were then used in combination with the effective radiated power for determining the distances to coverage contours.

Figure 2 is a map showing the predicted 60 dBu coverage contours for the licensed and proposed operations. As the map illustrates, the predicted auxiliary's 60-dBu contour is entirely encompassed by the primary station's 60-dBu contour.

Radiofrequency Electromagnetic Field Exposure

The proposed WBAB(FM) auxiliary facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the ERI LPX-2E "rototiller" type 2 bay auxiliary antenna is located 38 meters (125 feet) above ground level. The effective radiated power is 12 kilowatts (combined horizontal and vertical polarizations). Using the FCC's FM Model program, the worst-case ground level power density is approximately $45 \mu\text{W}/\text{cm}^2$. This is less than 25% of the Commission's guideline in an uncontrolled environment for an FM radio station.² Besides the co-located primary station, there are no other known nearby high-powered

² The FCC maximum guideline for a FM broadcast station in an uncontrolled environment is $0.2 \text{ mW}/\text{cm}^2$.

emitters. Since both the auxiliary and primary facilities will not be operating simultaneously during normal operations, the maximum ground level exposure will not be exceeded at ground level during operation of the WBAB(FM) auxiliary facility.

Access to the transmitting site is restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower or any nearby adjacent towers, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be provided to the FCC by the tower owner as part of the tower registration process.

Charles A. Cooper

October 31, 2006

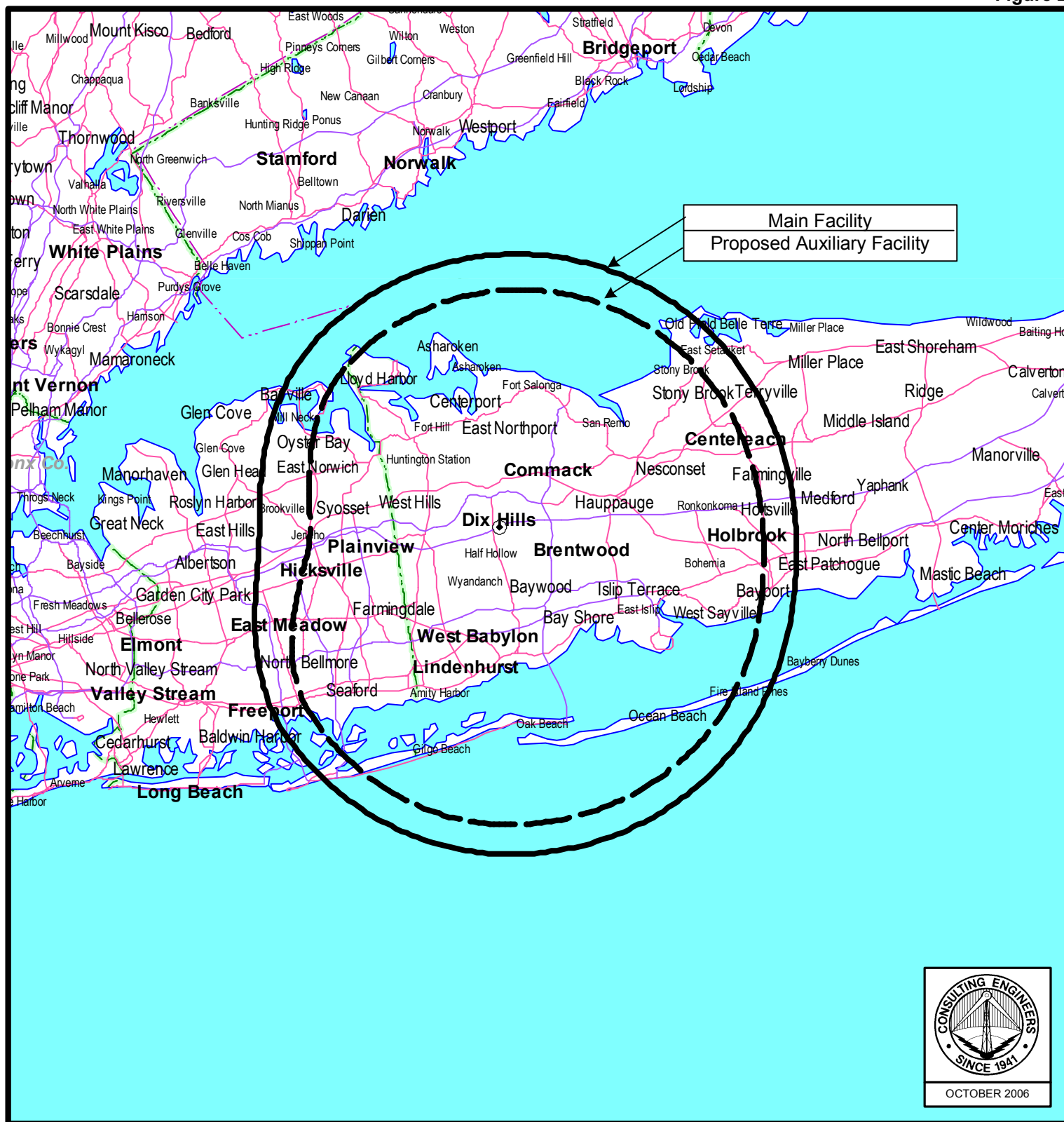
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WBAB(FM) RF Transmission System Specifications

Description	System
Transmitter Power Output (6.8 kW):	8.3 dBk
<i>Andrew</i> Transmission Line Loss (1-5/8" Heliax) 200 feet:	0.5 dB
<i>ERI LPX-2E</i> Antenna Gain (0.9971 Power Gain):	0.0 dB
Effective Radiated Power (6 kW):	7.8 dBk

Figure 2



PREDICTED 60 DBU COVERAGE CONTOURS

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