

ENGINEERING EXHIBIT 29
FCC Form 301 Section III-B
In Support of
APPLICATION FOR CONSTRUCTION PERMIT
AUXILIARY SITE / ANTENNA
WGRL CHANNEL 230A
Facility ID 71438
Fishers, Indiana

0.5 Kilowatts E.R.P. – 133 Meters H.A.A.T.

This Engineering Statement and attached exhibits have been prepared on behalf of Indy Lico, Inc., Licensee of the above referenced FM Facility.

This instant application seeks authority to construct an auxiliary facility for FM station WGRL. The site chosen is an existing tower which is utilized for two other FM auxiliary antennae¹ and one main antenna for FM station WYJZ, facility number 6420 licensed to Speedway Indiana.

Figure 1 attached is a map showing the 60dbu contours of both the main and proposed auxiliary sites for WGRL. It can be seen that this proposal meets the requirements of auxiliary facilities as specified in §73.1675(a) (1) (ii) of the Commissions rules.

Figure 2 is a vertical sketch of the subject tower and shows existing FM antennae as well as the proposed antenna.

Figure 3 is the vertical plane relative field pattern for the proposed antenna.

¹ WFMS, FCC facility ID#54622 (BMLH-20020814AAW) and WGLD, FCC facility #28609 (BLH-19950927KC)

Environmental Considerations

Calculations were conducted in accordance with OET Bulletin 65 Edition 97-01. These calculations were made utilizing the FCC's software program entitled "FM Model for Windows". The study was made assuming all antennae were energized with their authorized power.

At the base of the tower and 2 meters above ground level, the following power density levels for the stations involved were found to be.

$$\text{WFMS} = 1.43 \mu\text{w}/\text{cm}^2$$

$$\text{WGLD} = 1.41 \mu\text{w}/\text{cm}^2$$

$$\text{WYJZ} = 1.57 \mu\text{w}/\text{cm}^2$$

$$\text{WGRL} = 0.008 \mu\text{w}/\text{cm}^2$$

The total power density (RFR) at 2 meters above ground is calculated to be (worst case) $4.42 \mu\text{w}/\text{cm}^2$ or just 0.44 percent of the MPE for the Occupational Controlled Exposure limit of $1.0 \text{mw}/\text{cm}^2$.

A further analysis was conducted to show compliance with the General Population/Uncontrolled Exposure limits. This was done by finding the maximum power density and distance from the tower for each antenna and then adding the power density of the other antennae at the same distance. The highest power density level was found to be located 352 meters from the base of the tower with contributions from each antenna as follows;

$$\text{WFMS} = 0.231 \mu\text{w}/\text{cm}^2$$

$$\text{WGLD} = 0.109 \mu\text{w}/\text{cm}^2$$

$$\text{WYJZ} = 1.460 \mu\text{w}/\text{cm}^2$$

$$\text{WGRL} = 0.099 \mu\text{w}/\text{cm}^2$$

The highest power density level in the vicinity of the tower was found to be 1.90 $\mu\text{w}/\text{cm}^2$ or 0.95 percent of the MPE of 0.2 mw/cm^2 for uncontrolled areas.

The licensee and other tenants have an agreement that they will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radio frequency electromagnetic fields in excess of FCC guidelines.

The site is fully protected from unauthorized entry and approved signage has been posted warning of potential RFR hazards.

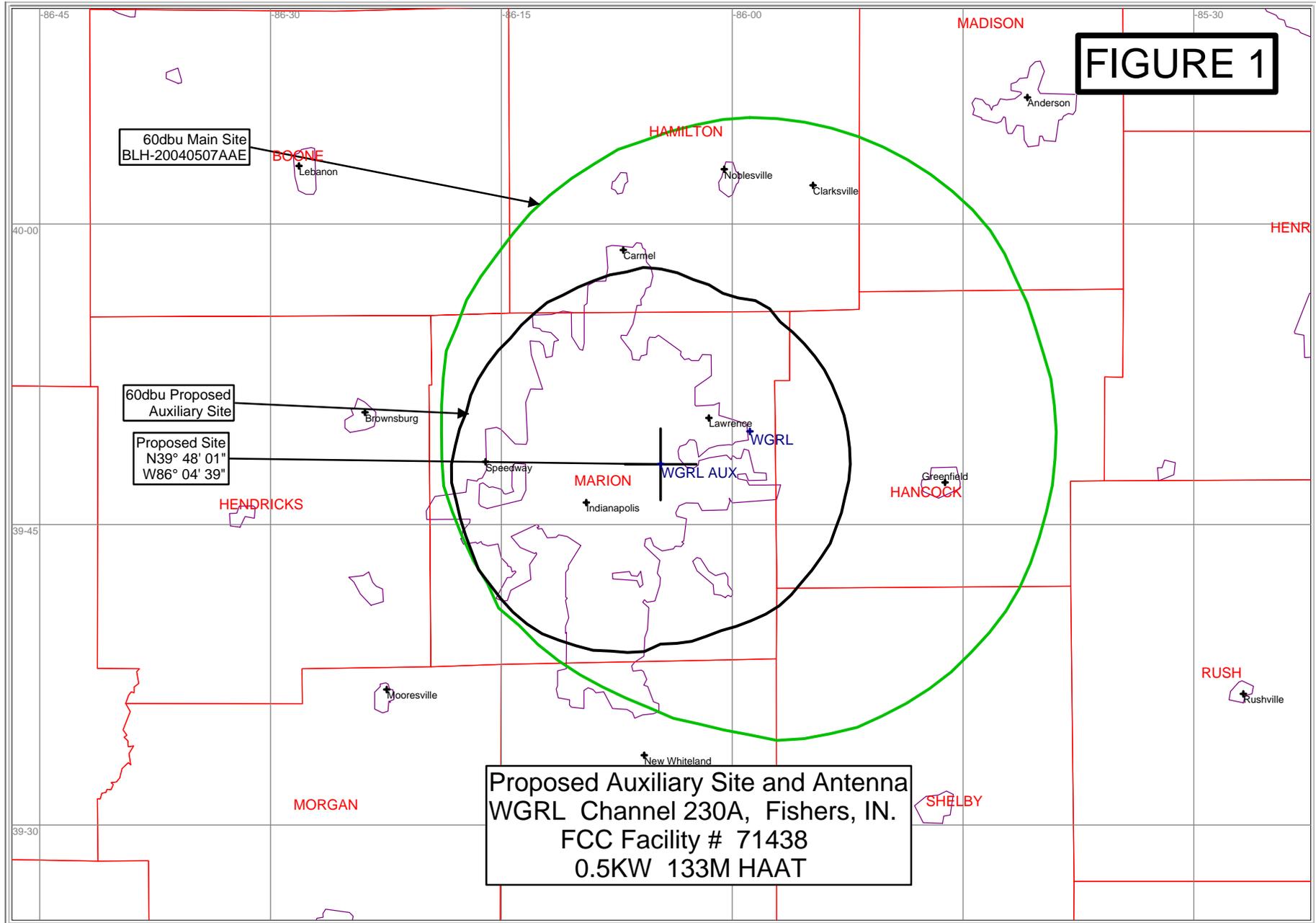
The Antenna Structure Registration number² is posted in accordance with FCC policies and procedures.



Date: 8/17/04

Fred W. Greaves Jr.
Director of Engineering
Susquehanna Radio Corp.

² ASR# 1027512

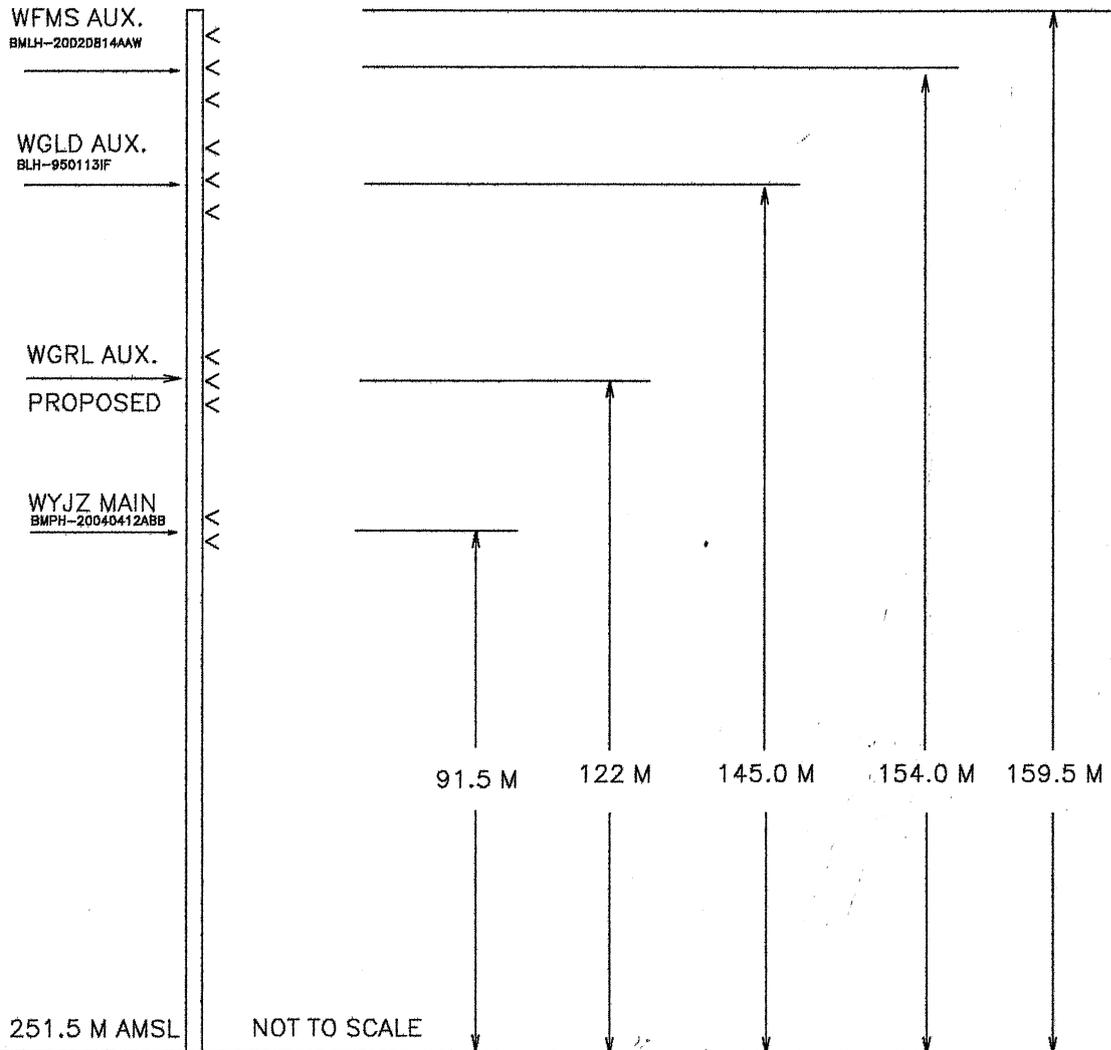


MAY 2004

Figure 2

SUSQUEHANNA RADIO CORP.

YORK, PA.



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

ANTENNA STRUCTURE REGISTRATION 1027512

WGRL CHANNEL 230A – FISHERS, INDIANA

ELECTRONICS RESEARCH, INC.
108 MARKET STREET
NEWBURGH, IN. 47630

-----THEORETICAL-----
VERTICAL PLANE RELATIVE FIELD

MAY 18, 1988

3 ROTOTILLER ELEMENTS WITH 0 DEGREE BEAM TILT
0 PERCENT FIRST NULL FILL
0 PERCENT SECOND NULL FILL

ELEMENT SPACING:
1/2 WAVELENGTH

POWER GAIN IS 1.012 IN THE HORIZONTAL PLANE (1.012 IN THE MAX.)

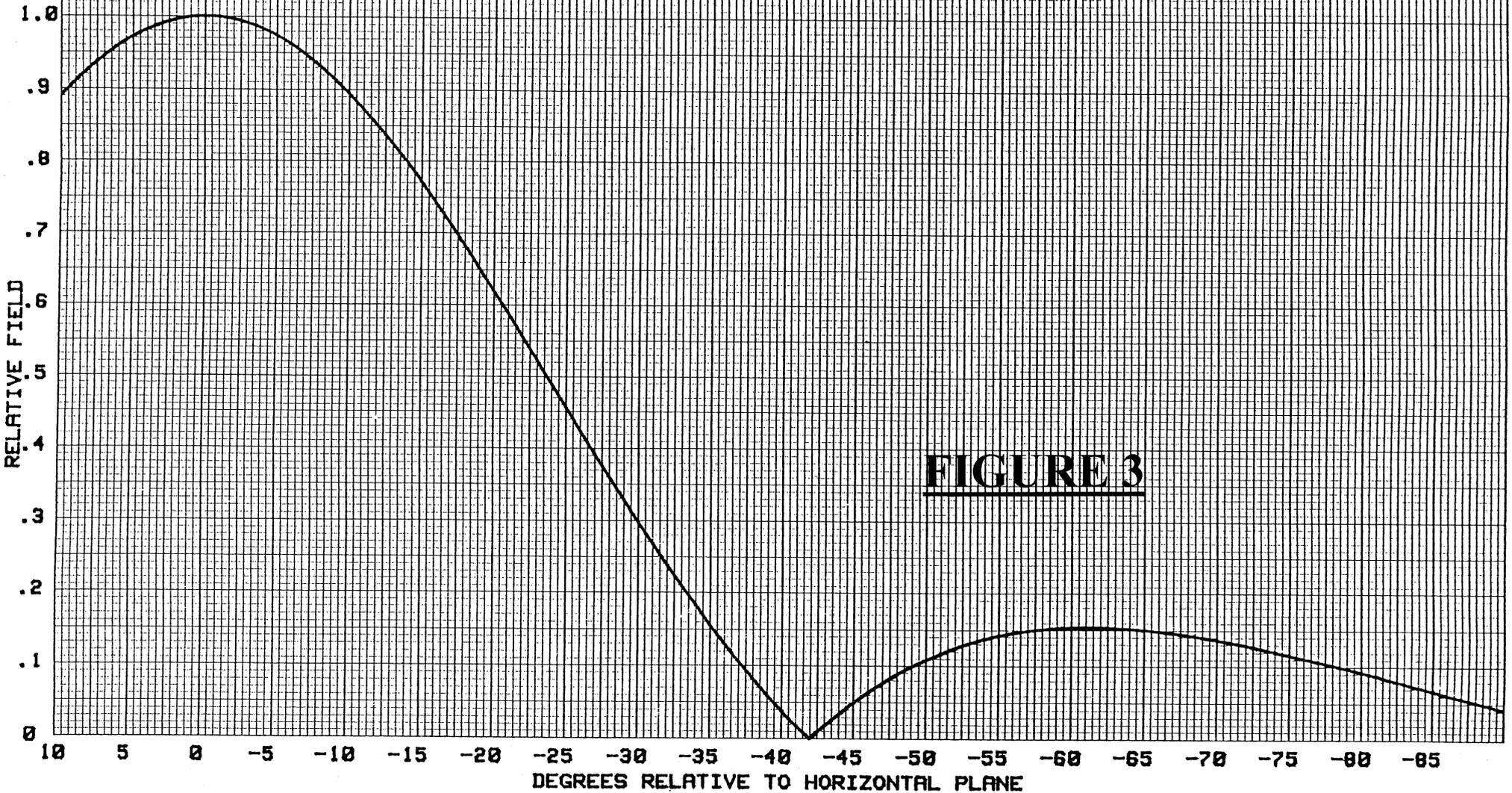


FIGURE 3