

**ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
FM STATION WPZS
FACILITY ID 52553
INDIAN TRAIL, NC.
RADIO ONE OF NORTH CAROLINA, INC**

This engineering statement is prepared by Radio One of North Carolina, Inc (Radio One), licensee of FM broadcast station WPZS Facility ID 52553. WPZS is currently operating under program test authority at the facilities authorized by construction permit BPH-20020116AAG.

It is proposed to increase antenna height at the presently authorized location and remove Section 73.215 status from the allotment. Specifically, an authorized modification of station WROQ will permit WPZS to employ a non-directional antenna in compliance with Section 73.207, and Section 73.213(a).

Allotment and Interference:

As shown in Figure 1 the proposed facility is fully spaced under Section 73.207 except with respect to:

1. WZTK, Burlington NC. Facility ID 9080

WZTK and WPZS have been continuously short spaced since before November 16, 1964. In compliance with Section 73.213(a) the proposed facility does not increase interference beyond what is currently authorized, as shown in Figure 2. In fact, the authorized and proposed facilities do not create interference to the licensed facility of WZTK as set forth in Section 73.213(a) (1).

2. WROQ, Anderson SC. Facility ID 318.

The present licensed site of WROQ does not meet Section 73.207 or Section 73.215 spacing from the proposed facility. It is noted WROQ has been granted construction permit BPH-20071101AAF for a facility that is fully spaced from the proposed facility under Section 73.207.

The WROQ construction permit is for a voluntary class downgrade at the licensed site and is not contingent on other applications or FCC actions.

Processing of the instant application is respectfully requested with consideration of final action on a license to cover application by WROQ for the facilities authorized in construction permit BPH-20071101AAF

Additionally the proposed facility was examined with respect to LPFM station WWGT-LP, Charlotte NC. Facility ID 29264. As shown in Figure 4, the proposed facility will not increase interference to WWGT-LP.

The proposed facility provides 70 dBu coverage of the community of license, as shown in Figure 3. A sketch of the existing tower and proposed antenna is shown in Figure 6.

Calculations:

A 3 second terrain data base was used for the interference exhibits. FCC FM HAAT, FM Power and FM Model programs were used to determine Tech Box specifications and evaluate RFR compliance. FCC ASR Search and CDBS data were used for additional information.

Environmental:

The proposed facility is seven meters higher than the authorized facility on an existing tower, which was constructed in 1998. The overall height of the existing structure will not change.

The proposed facility was examined for radio frequency (RF) exposure at ground level using the FCC FM Model program. Using a very conservative one bay antenna, the calculated power density two meters above ground will not exceed $9.544 \mu\text{W}/\text{cm}^2$ as shown in Figure 5. This value is less than five percent of the $200 \mu\text{W}/\text{cm}^2$ FCC guideline value for general population/uncontrolled situations.

Radio One will reduce power or cease operation as necessary to prevent persons having access to the site tower or antenna from radiofrequency fields in excess of FCC guidelines.

The proposed operation supersedes the authorized facility at an existing tower located at a well established communications site. It is believed the proposal will not have a significant impact on the human environment and is in compliance with Section 1.1307(b).



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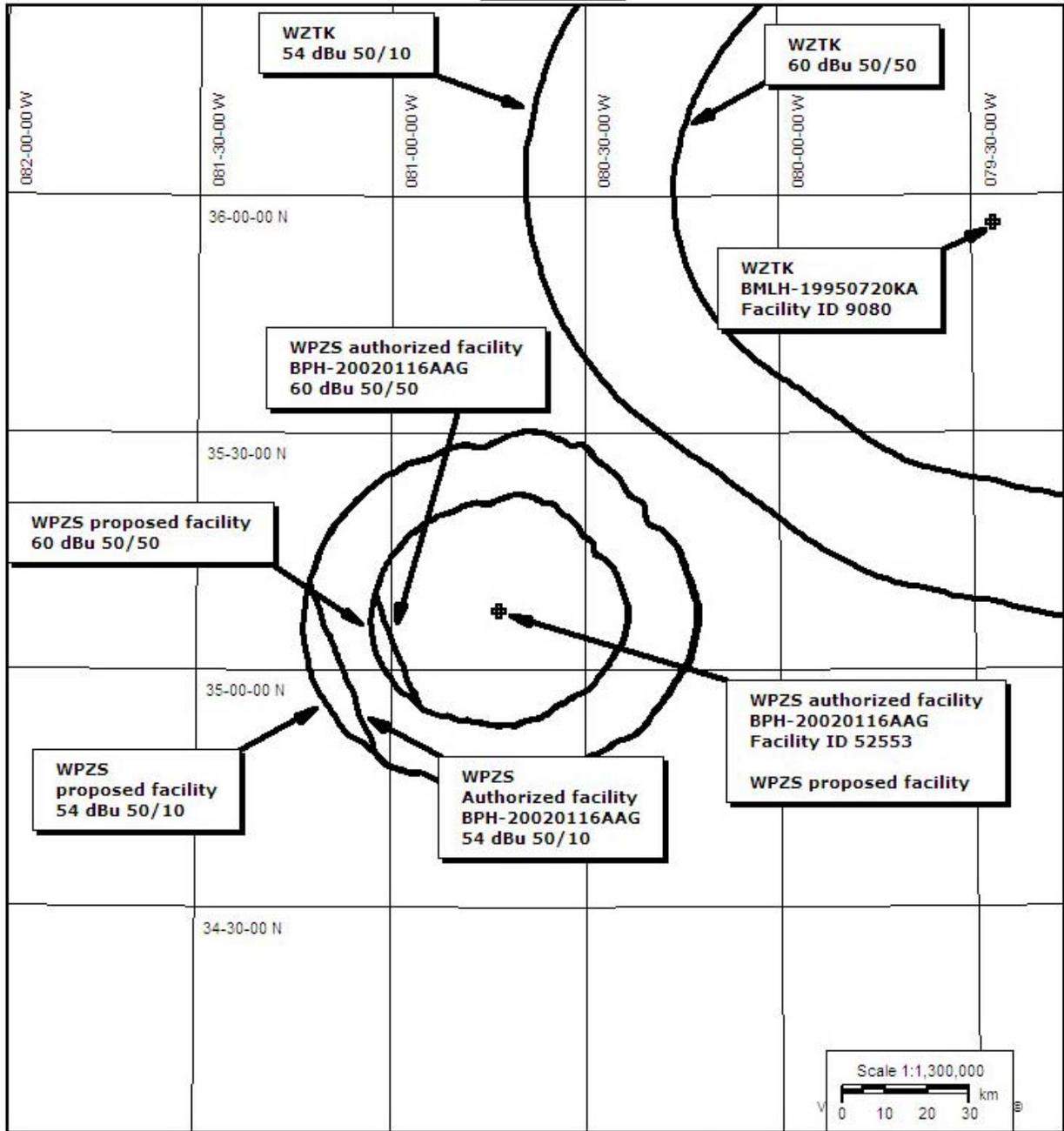
<u>Call</u>	<u>Type</u>	<u>Ch</u>	<u>Location</u>		<u>Azi</u>	<u>Dist</u>	<u>FCC</u>	<u>Margin</u>
WPZS	CP-Z	265A	Indian Trail	NC	0.0	0.00	115.0	-115.00
AL9710	RSV	265A	Indian Trail	NC	94.2	14.87	115.0	-100.13
WPZS	LIC	265A	Albemarle	NC	59.6	55.89	115.0	-59.11
<u>WZTK</u>	LIC-D	266C	Burlington	NC	51.6	147.47	165.0	-17.53
W262BM	LIC-D	262D	Charlotte	NC	311.2	8.72	26.0	-17.28
AP9557	APP	268D	Charlotte	NC	13.9	14.47	26.0	-11.53
AP9890	APP	267D	Charlotte	NC	13.9	14.47	26.0	-11.53
WWGT-LP	LIC	265L1	Lincolnton	NC	307.2	62.58	67.0	-4.42
WROQ	LIC-D	266C0	Anderson	SC	249.8	150.85	152.0	-1.15
AP1518	APP	265D	Hickory	NC	326.2	86.34	85.0	1.34
WIFM-FM	LIC-N	265A	Elkin	NC	355.2	119.42	115.0	4.42
AP0588	APP	265D	Hickory	NC	320.1	89.65	85.0	4.65
AL7878	RSV	266C1	Anderson	SC	249.8	150.85	133.0	17.85
WROQ	CP-D	266C1	Anderson	SC	249.8	150.85	133.0	17.85
WSTS	LIC	265C2	Fairmont	NC	119.7	188.96	166.0	22.96
<u>WWDM</u>	LIC-D	267C	Sumter	SC	178.1	119.16	95.0	24.16
AP4615	APP	268D	Mooreville	NC	350.1	54.46	26.0	28.46

Figure 1

Section 73.207 spacing study of proposed facility

WPZS
Facility ID 52553
Indian Trail, NC

Figure 2



Compliance with 73.213(a)
WPZS
Facility ID 52553
Indian Trail, NC

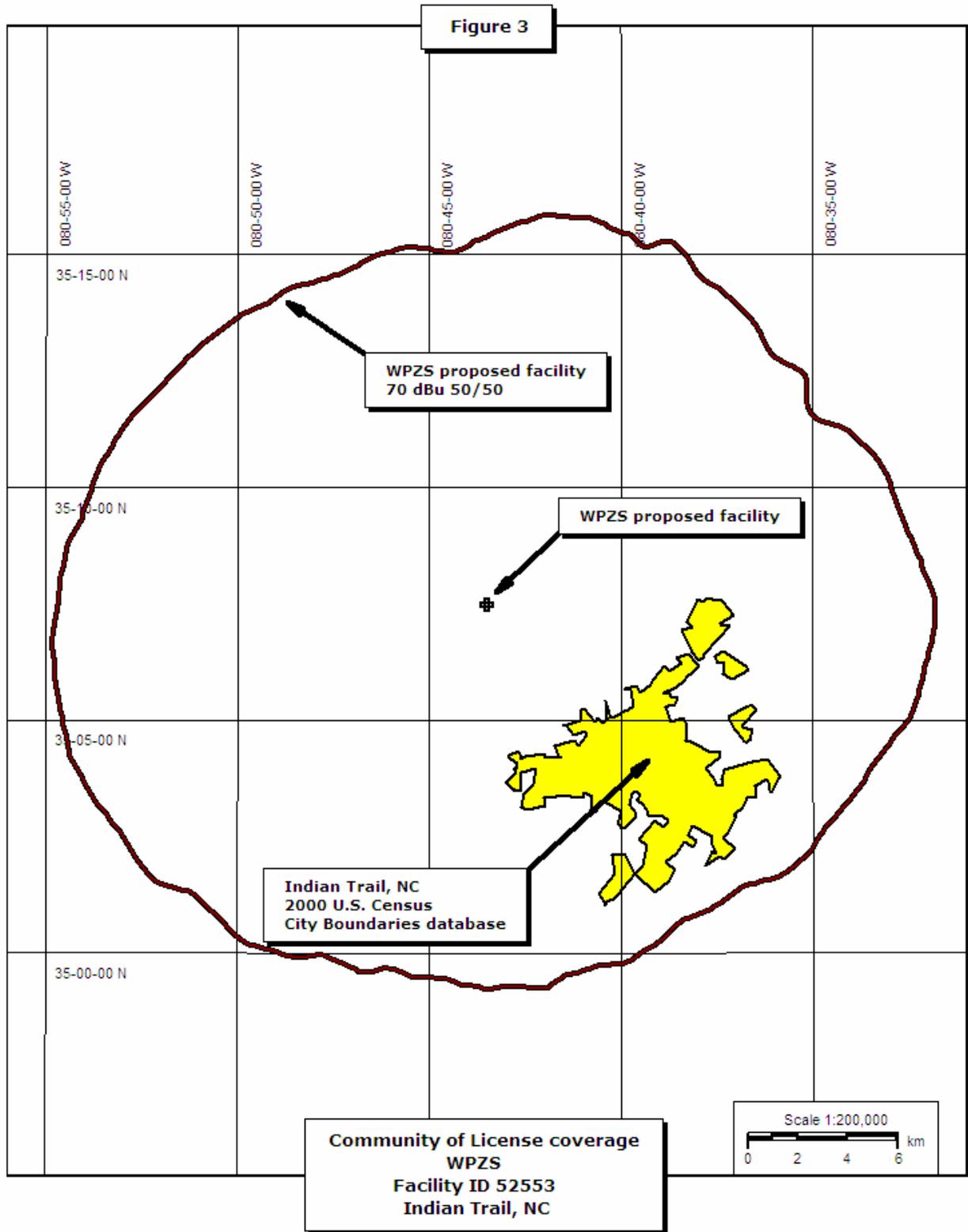
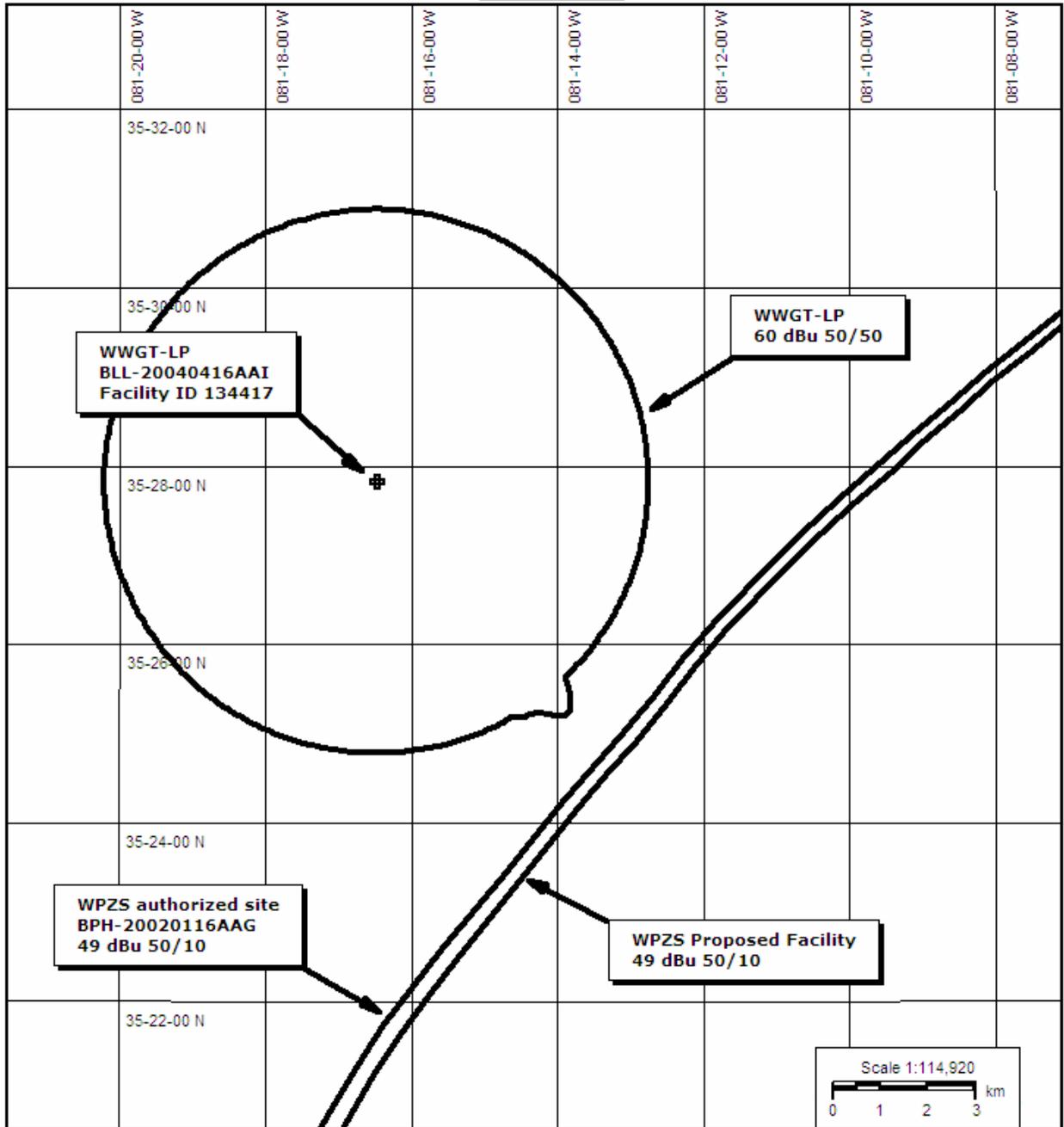


Figure 4



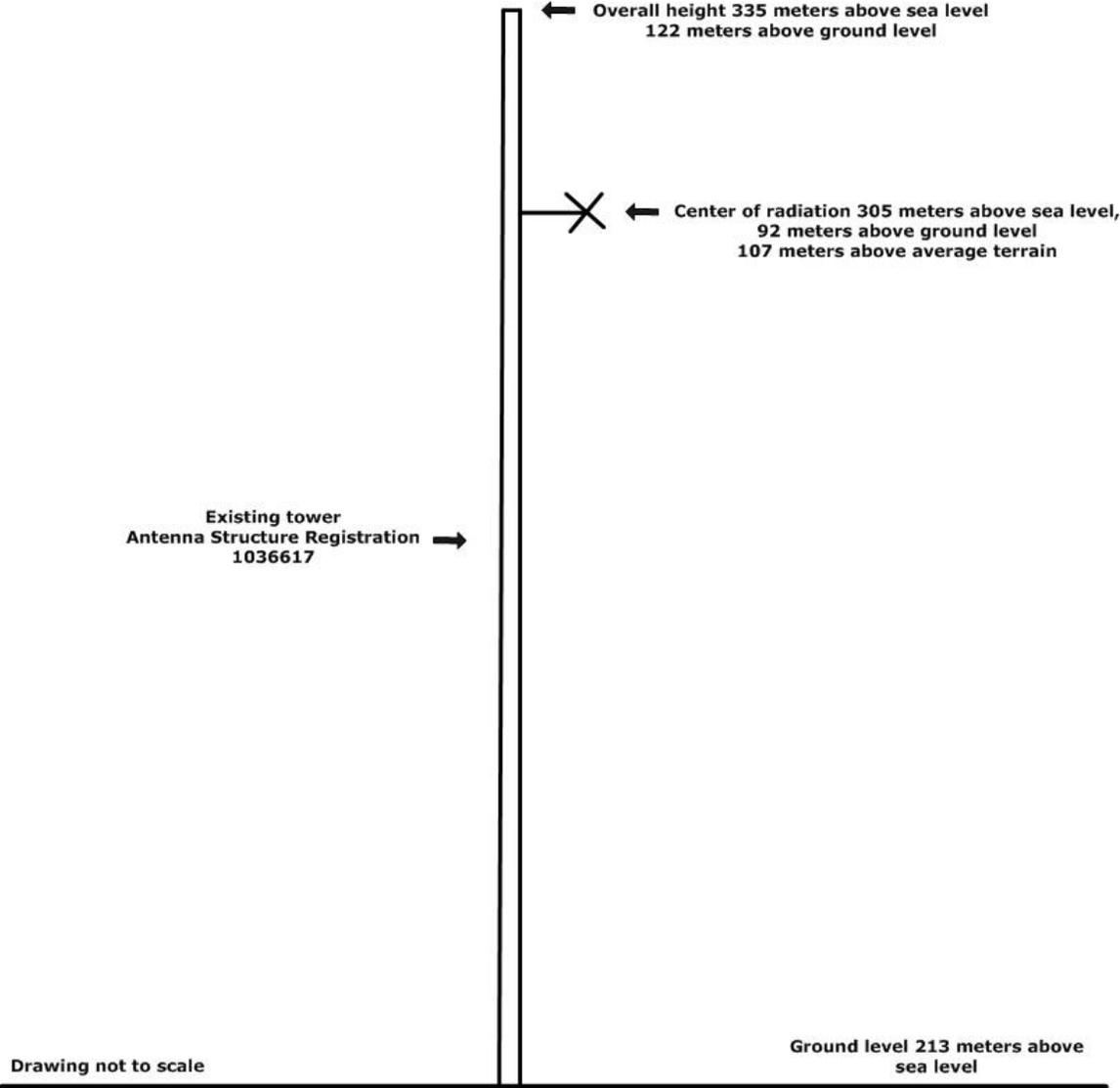
**Supplemental showing of no increased interference to LPFM station
WPZS
Facility ID 52553
Indian Trail, NC**



Figure 5

FM Model program showing maximum predicted RF power density of 9.544 $\mu\text{W}/\text{cm}^2$ two meters above ground level.

Figure 6



Drawing not to scale

**Drawing of existing tower
and proposed antenna
WPZS
Facility ID 52553
Indian Trail, NC**