

SECTION V-B

FM ENGINEERING DATA

Name of applicant

MARIETTA COLLEGE

FOR COMMISSION USE ONLY

File No.

1. Purpose of authorization applied for: ☐ Construct a new station ☒ Make changes in authorized Radio station

(a) If this is not for a new station, summarize briefly the nature of the changes proposed.

1. Change operating frequency
2. Change location of transmitter & add remote control
3. Install new antenna system

(b) If this is an application (or amendment thereto) to make changes in an existing station or to amend application for a new station is the change being made to one of the following?

(1) Frequency

(2) Station location

(3) Class

☒ Yes ☐ No

(c) If Yes, this constitutes a major change, Question 3(a) on page 1 of Section I of this form should be answered accordingly.

2. Facilities requested

Frequency
98.5Mhz

Transmitter power output
.01kw

5. Transmitter

Make
Gates

Type No.
BFE 10B

Rated power
.01kw

Proposed transmitter location

State
Ohio

County
Washington

City
Marietta

Street address (or other identification)

Dudley Avenue Jr. High School Hill

(If the above-transmitter has not been accepted for licensing by the F.C.C., attach as Exhibit No. a complete showing of transmitter details. Showing should include schematic diagram and full details of frequency control. If changes are to be made in licensed transmitter include schematic diagram and give full details of frequency change.)

4. Proposed location of main studio

State
Ohio

County
Washington

City or town
Marietta

Street address
211 Fifth St.
(Andrews Hall)

6. Transmission line proposed to supply power to the antenna from the transmitter

Make
Andrew

Type No.
LDF4-50

Description
Foam-Heliox

Other studios proposed

Size (nominal transverse dimension)
0.5 inches

Length
120 ft.

Rated efficiency for this length
82 %

7a. Antenna Structure

Is the proposed construction in the immediate vicinity or does it serve to modify the construction of any AM, FM or TV broadcast station or other class of radio station?

If Yes, attach as Exhibit No.

See engineering narrative Exhibit V-B-1
complete engineering data thereon.

☒ Yes ☐ No

Attach as Exhibit No. VB-2 a vertical plan sketch for the proposed total structure (including supporting building if any) giving heights above ground in feet for all significant features.

Overall height above ground
(without obstruction lighting)
200 ft.

Height of antenna radiation center
above mean sea level
Horizontal 871 ft.
Vertical 871 ft.

Geographical coordinates of antenna (to nearest second)

North Latitude 39° 25' 07"

West Longitude 81° 26' 32"

7b. Antenna Data

Make
Phelps-Dodge

Type No. or description
ECFM-1

Antenna power gain
Horizontal
Vertical .43

No. of Sections
Horizontal 1
Vertical 1

Is horizontal polarization proposed?

☐ Yes☒ No

If No, attach as Exhibit No. complete engineering data on the antenna and the effective radiated power proposed.

(Circular polarization)

Is directional antenna proposed?

☐ Yes ☒ No

If Yes, attach as Exhibit No.

complete engineering data thereon.