



May 21, 2018

**RE: LAND SURVEYING SERVICES FOR FEDERAL COMMUNICATIONS COMMISSION
FM BROADCAST STATION CONSTRUCTION AS-BUILT DOCUMENTATION**

Facility ID: 66316
Call Sign: WCBN-FM
Permit File Number: BPED-20151116ADW

Fulfillment of Special operating conditions or restrictions:

Item 3. BEFORE PROGRAM TESTS ARE AUTHORIZED . . .

The published azimuth for the new antenna is 255 degrees based on true, or geodetic, north. The azimuths for the perpendicular panels at the rear of the antenna are 165 degree, true north. These panels provided a clearer reference platform than the antenna.

A ground base point was created during the placement of the antenna. The installation workers obtained a real time distance of 25 3/8" from the desired perpendicular panels to the west face of the support leg of the existing tower. That distance was recreated on the ground, directly below the antenna and a measured position was obtained by a Leica GS14 GNSS Global Positioning unit (N 42 deg 17' 47.5", W 83 deg 41' 53.8"). A Leica TS15 Robotic Total Survey Station was then set up approximately 822 feet from the antenna on an azimuth of 165 degrees, as established by Global Positioning.

By sighting through the survey instrument at the panels on the upper antenna, and then the lower antenna, both were manually turned by directions thru radio communications until the desired perpendicular panels were parallel to the 165 degree azimuth. The estimated accuracy of utilizing this method is believed to be 15' of arc.

Respectfully,

Paul V. Schwimmer, R.L.S.
License Number 24618, State of Michigan
President
Arbor Land Consultants, Inc.

