

ENGINEERING STATEMENT

The proposed location for WXXI-FM is at the site of the FM permittee's educational television station WXXI, Channel 21, and the same tower would be used. This tower also supports the antennas of other stations, as shown by Exhibit No. E-2. Adjacent to this site is the tower of television station WOKR, Channel 13, whose coordinates are $43^{\circ} 08' 07''$, $77^{\circ} 35' 03''$. The area surrounding this site is generally residential.

The terrain information used in this application is the same as that previously submitted to the Commission by WXXI, as in television applications BMPET-398 and BMPET-406 filed in 1966. Accordingly, photographs and terrain profiles are not submitted herewith. Since no change is proposed in the height of the antenna structure, Section V-G of Form 340 concerning aeronautical matters is unnecessary and has been omitted.

Station WCNV-FM, Channel 217, 91.3 MHz, 18.6 kw, Syracuse, New York, is 80.0 miles away in the direction 100° true. The WXXI-FM proposed antenna height above average terrain at 100° , interpolated linearly between the 90° and 135° radials, is 417'. The WCNV-FM antenna height above average terrain at 280° , also interpolated linearly, is 876'. Based on the procedure specified by Section 1.573 of the Commission's Rules, no objectionable interference will result to either station.

Station WIRQ, Channel 215, 90.9 MHz, 10 watts, Rochester, is 5.63 miles away in the direction 352° true. The WXXI-FM proposed

antenna height above average terrain at 352° is 520', interpolated linearly. Again, no objectionable interference is predicted. (Because of the extremely short distance to the 100 mv/m contour of WIRQ, it was determined by the free-space field.)

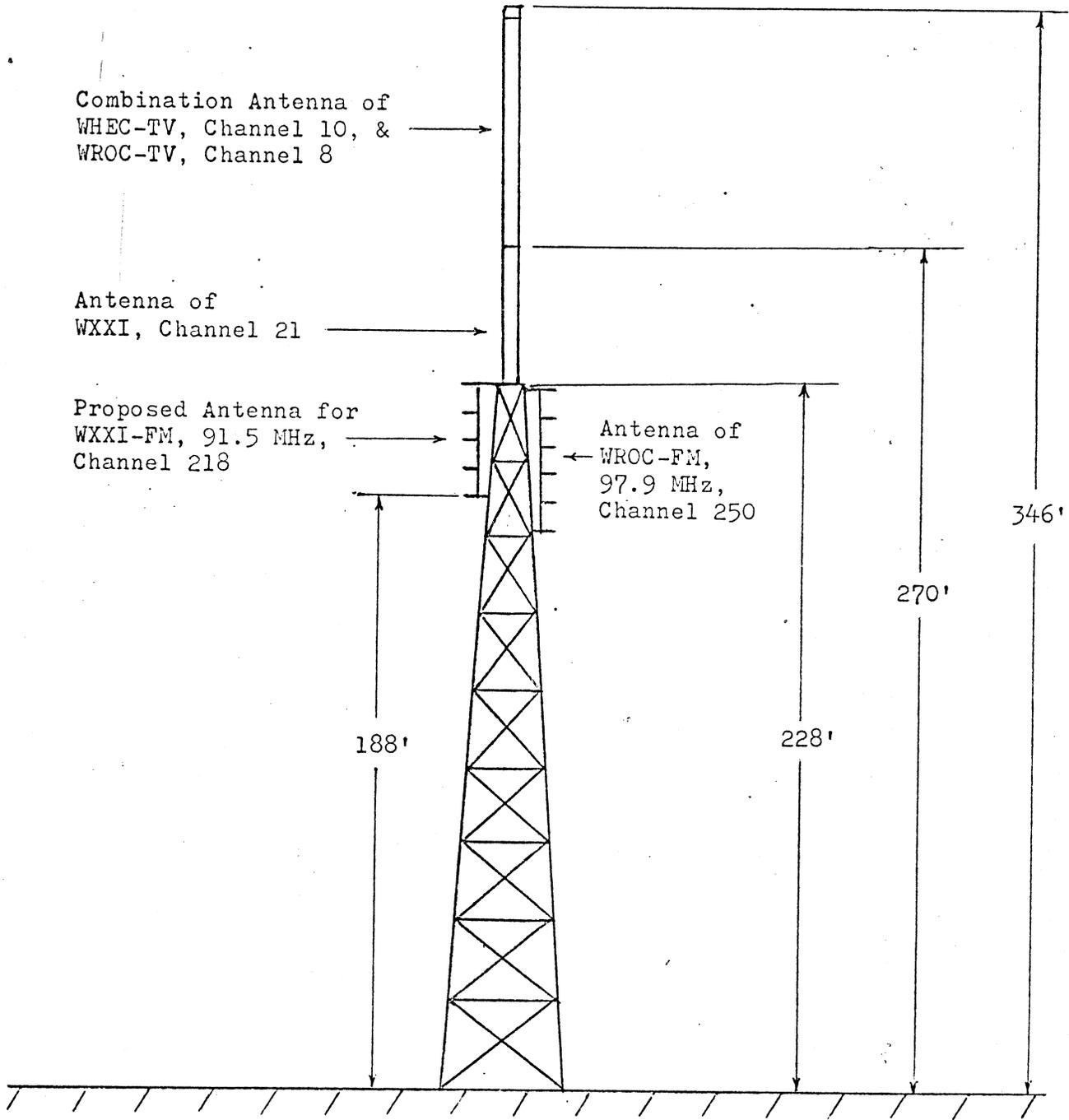
Channel 219, 91.7 MHz, is assigned but unused at St. Catherines, Ontario, 84 miles at 272° true from the proposed site of WXXI-FM. The Canadian assignment has been made on the basis of 50 kw effective radiated power with an antenna height of 500' above average terrain (or equivalent) in the direction of Rochester. The WXXI-FM proposed antenna height above average terrain at 272° true is 335'. The WXXI-FM proposal of 36 kw at 335' in that direction is, therefore, considerably weaker than the Canadian assignment. Also, since St. Catherines is only 10 miles from the U. S. border in the direction of Rochester, any interference that might occur would not be in Canada but, instead, would be well within the United States. Further, while Section 1.573 does not apply in this case, should this procedure be followed there would be no interference within the 1 mv/m contours of either station. Accordingly, it would appear that Canadian approval of the WXXI-FM proposal can be expected.


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PROPOSED ANTENNA FOR WXXI-FM

ROCHESTER, NEW YORK

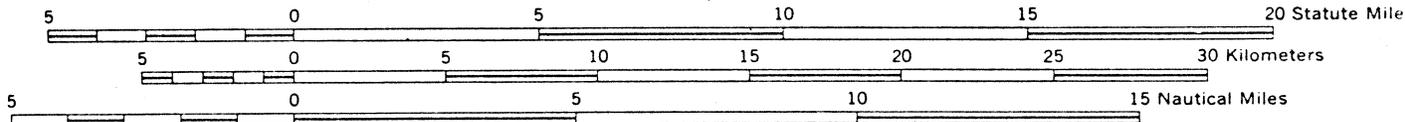


Ground elevation:	680	feet	above	mean	sea	level
Overall structure height:	1026	"	"	"	"	"
Antenna radiation center:	888	"	"	"	"	"

PROPOSED
TRANSMITTER
LOCATION



Scale 1:250,000



CONTOUR INTERVAL 100 FEET
WITH SUPPLEMENTARY CONTOURS AT 50 FOOT INTERVALS