

August 20, 1947

Mr. John Barron  
Radio Consulting Engineer  
Marle Building  
Washington D C

Re: Troy Record

Dear Mr. Barron:

Mr. York has already conveyed to you that we have finally made a decision on the La Grange tract for our transmitter site - your second choice.

As near as can be determined the distance from the Pinnacle Road to the farthest corner on the ridge is approximately 800 feet. The distance to General Electric's FM and Television station is about the same. Hence, we will be almost midway between WBCA's transmitter station off the Pinnacle Road and GE's station - all three being on the same general ridge.

There is a nice level spot right on the edge of the ridge which we can develop for a transmitter and antenna site. It will be almost in the very corner of our plot in the direction of GE. Your memory on the location is perhaps fresh enough and I am sure you will have no difficulty locating almost the exact spot on your geodetic map.

I presume you will now proceed with filing an amended application on the basis of this changed site. I further assume you will recalculate your propagation data, power requirements, antenna height and ERP on the basis of this new location. I believe that the FM grant was made on the basis of a class B station of 3 KW power with an ERP of 15 KW and 6-bay antenna. Do you believe that you will continue with the same power and antenna radiation? The reason I ask is in the interest of changing our client's equipment contract with General Electric in event it is necessary to modify the original requirements. Because of the November 18th FCC completion date, shipment of equipment may be critical if we had to change transmitter power and antenna height.

Title of the La Grange property will be conveyed as soon as search has been completed by client's attorneys which we hope will be early in the week of August 31st. A road will have to be constructed from the County Road (Camp Pinnacle) to our proposed site and we are already preparing to engineer it and start construction immediately title is in the clear.

You will be interested to know that the New York Telephone Company has assured us of a 50-15,000 cycle hi-fidelity wire-line for a programming link between the studios and the transmitter. The matter of distance was carefully discussed with their engineers who have assured me that they definitely will guarantee wide swing audio frequencies and through the use of three intermediate boosters located between the mountain and Troy will be able to maintain a constant and suitable signal-to-noise ratio and frequency response. The new hi-fidelity line will be constructed this fall. As a matter of fact preliminary work has already commenced. The furnishing of this wire-line will solve our ST link problem, at least for the time being. Later when ST equipment becomes available it may be advisable to install an inexpensive ST link as emergency "stand-by" equipment in event of line failure.

The suggestion you made to Mr. York in your letter of June 18th has been investigated carefully by GE engineers and for various technical reasons - principally for lack of ideal power line conditions, the Carrier Current System would, in their opinion, be impractical due to inability to maintain suitable signal-to-noise ratio and frequency response. Due to power switching on and off of branch circuits the circuit constants and electrical length of the main power line will be changed, thus changing the audio frequency response of the system. Because there are precious few ideal power circuits which would be adaptable to the use of the carrier system suggested, General Electric offers little encouragement that such can be used for broadcast applications. If you wish to pursue this matter further and will write me, I will be glad to put you in direct contact with the proper General Electric engineers.

I will appreciate hearing from you as soon as convenient in the matter of power, new contours, ERP and antenna height.

CC- FLYork ✓  
Troy Record Co.  
EAB/MW

Cordially yours,

Ernest A. Barbeau  
Radio Consultant