

TECHNICAL EXHIBIT  
APPLICATION FOR INITIAL CONSTRUCTION PERMIT  
INGLIS, FLORIDA

DECEMBER 29, 2004

CH 257A    4.6 KW    114 M

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Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for a new FM radio station assigned to Inglis, Florida.

Proposed Transmitter Location

A map showing the transmitter site location is provided in Figure 1. A sketch showing the proposed antenna and supporting structure is shown on Figure 2.

Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station would extend radially 0.6 kilometer from the transmitting site. No interference is expected as the proposed transmitter site is located in a rural area. However, the applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-induced interference as required by Sections 73.315(b), 73.316(e) and 73.318.

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Coverage Contours

The predicted coverage contours for the proposed operation were calculated in accordance with the provisions of Section 73.313. In accordance with current FCC practice, the distances to the contours were calculated without consideration given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers along eight radials evenly spaced at 45-degree intervals were obtained from a N.G.D.C. 30-second terrain database. The terrain elevations were then used in combination with the effective radiated power for determining the distances to coverage contours.

As can be calculated using the map, the FCC predicted 70 dBu coverage contour encompasses all of Inglis, Florida.

Allocation Study

Figure 4 is an allocation study for channel 257A at the proposed site. The figure contains a tabulation of actual and required separation distances from other pertinent stations and allotments. The proposed site meets the FCC's minimum separation requirements, specified in Section 73.207(b) of the Commission's Rules, to all assignments and stations.

Radiofrequency Electromagnetic Field Exposure Analysis

The proposed facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, *Evaluating Compliance with FCC Specified Guidelines for*

*Human Exposure to Radiofrequency Electromagnetic Fields.*<sup>1</sup>

The power density at the base of the tower was calculated using the appropriate procedure contained in Section 2, Supplement A, *Additional Information for Radio and Television Broadcast Stations*, of the Bulletin.

For the calculation, a combined horizontal and vertical polarized ERP of 9.2 kilowatts is employed with a radiation center of 117 meters above ground level. A downward relative field value of 1.0 was assumed. It is calculated that the power density will not exceed 0.023 mW/cm<sup>2</sup> at ground level. This is 12 percent of the Commission's guideline value for an uncontrolled environment for a FM radio station.<sup>2</sup> There are no other known high-powered emitters in the nearby vicinity.

Access to the transmitting site is restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

Charles A. Cooper

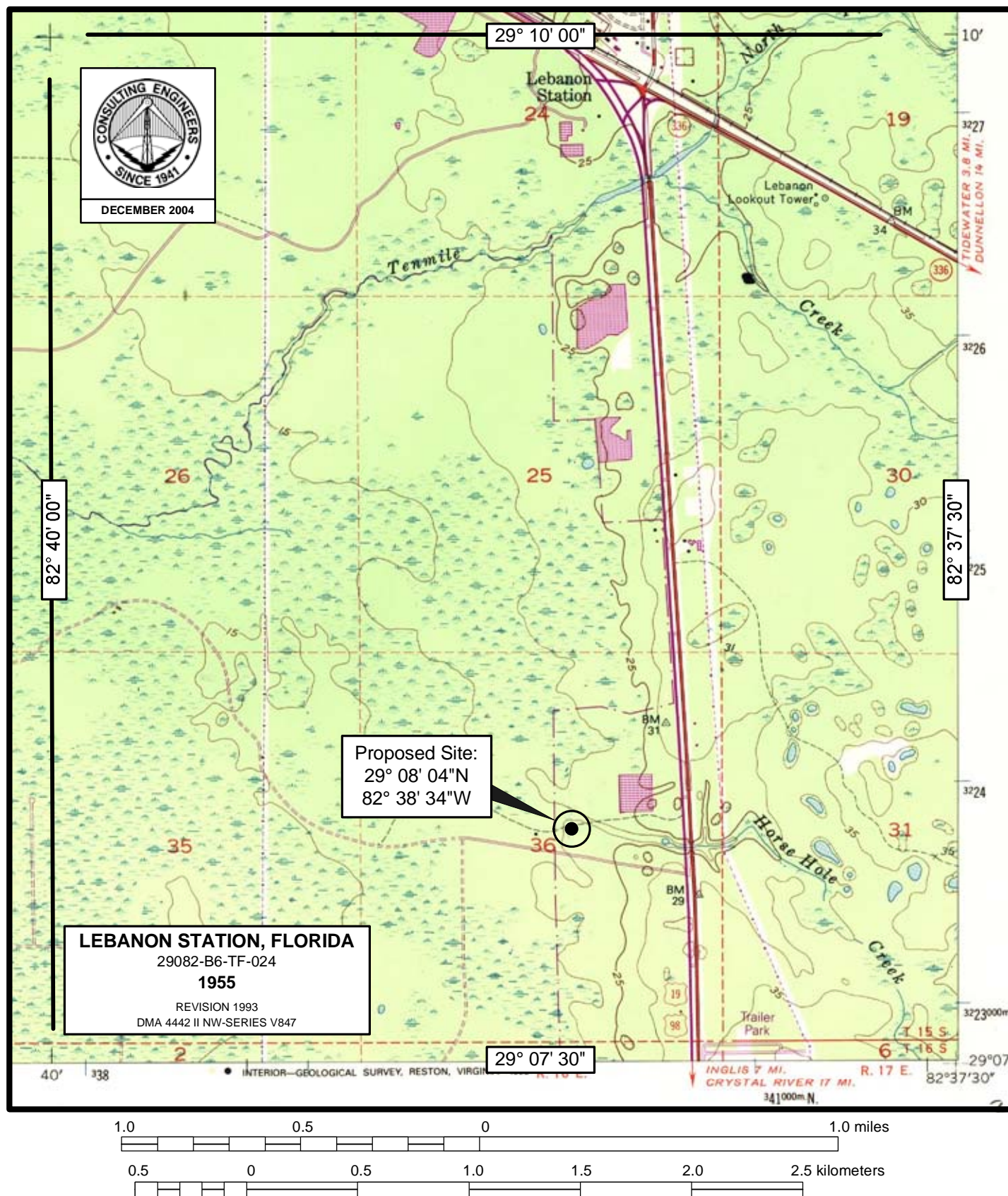
du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
941.329.6000

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<sup>1</sup> OET Bulletin 65, Second Edition 97-01, August, 1997.

<sup>2</sup> The FCC maximum guideline for a FM broadcast station in an uncontrolled environment is 0.2 mW/cm<sup>2</sup>.

Figure 1



## PROPOSED TRANSMITTER SITE

NEW FM RADIO STATION

INGLIS, FLORIDA

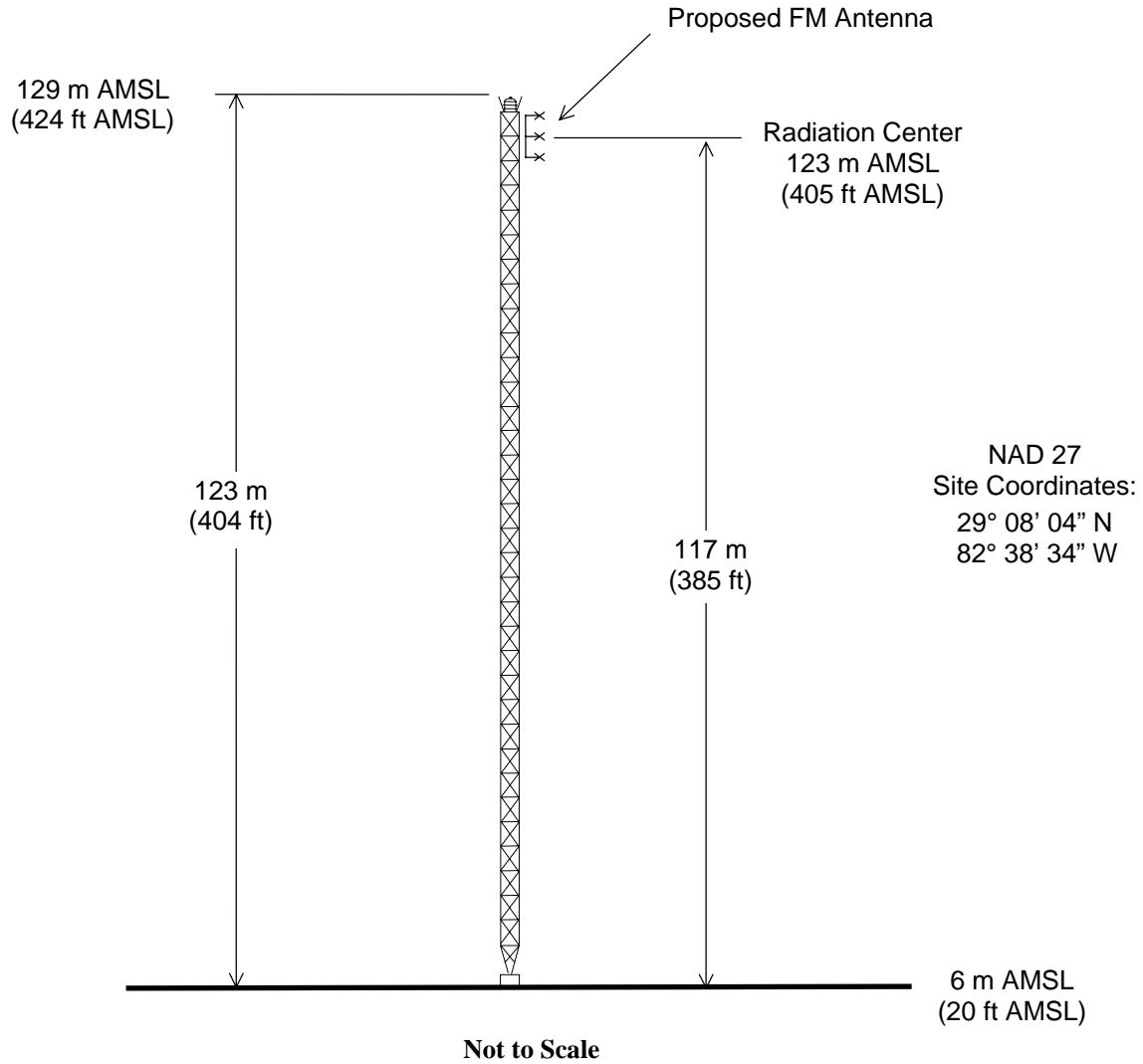
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Figure 2



ASRN: To Be Filed



## ANTENNA AND SUPPORTING STRUCTURE

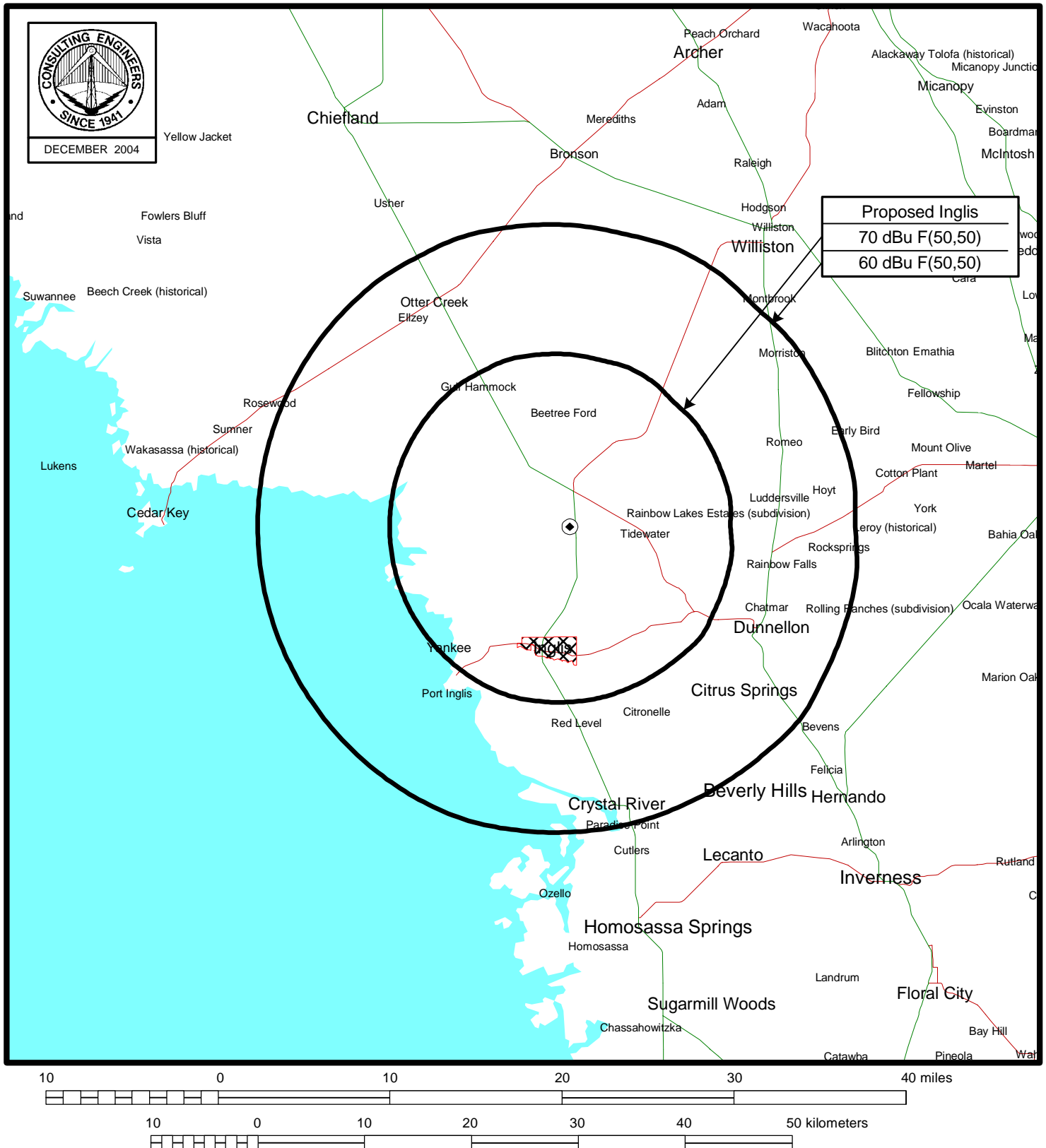
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**Figure 3**



## **PREDICTED COVERAGE CONTOURS**

**NEW FM RADIO STATION**

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Channel 257A Allocation Study

29° 08' 04" North Latitude  
 82° 38' 34" West Longitude

Call Id	City St	File Status	Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km)
WQIK-F 29728	JACKSONVILL FL	BLH LIC C	20030328ALN	256C0 99.1	100 302	N	30-16-51 081-34-12	N	38.8	164.08	152.0
WBXY 76433	LA CROSSE FL	BLH LIC C	19990311KB	258A 99.5	2.200 144	N	29-44-22 082-23-09	Y	20.2	71.54	72.0
<i>(Separation distance rounds to 72 kilometers. No short-spacing.)</i>											
WQYK-F 28619	ST. PETERSB FL	BMLH LIC C	20010220AAI	258C1 99.5	100.000 168	N	27-56-51 082-27-33	N	172.2	132.76	133.0
<i>(Separation distance rounds to 133 kilometers. No short-spacing.)</i>											