

TECHNICAL EXHIBIT  
MINOR MODIFICATION OF CONSTRUCTION PERMIT  
STATION KSLA-DT (FACILITY ID 70482)  
SHREVEPORT, LOUISIANA

FEBRUARY 28, 2002

CH 17 175 KW 518 M

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Technical Narrative

This Technical Exhibit was prepared on behalf of digital television station KSLA-DT at Shreveport, Louisiana, in support of an application for minor modification of construction permit. Station KSLA-DT is authorized to operate on channel 17 with a directional antenna maximum effective radiated power (ERP) of 545.7 kW and an antenna height above average terrain (HAAT) of 523 meters (BPCDT-19991025AER). This application proposes to reduce ERP, change to a non-directional antenna and slightly reduce the antenna HAAT

This application is considered “checklist” as it meets the criteria specified in Section III-D, DTV Engineering of the FCC form 301. Therefore, no allocation studies considering NTSC, DTV or Class A stations are required. The proposed directional antenna pattern (dBk) does not exceed the allotment reference pattern for KSLA-DT, as shown in Figure 2C.

Proposed Facilities

The transmitter site coordinates remain: 32-40-28 N, 93-56-00 W (NAD 27). The antenna radiation center will be reduced by 3.4 meters to 580.6 meters (RCAMSL). The proposed ERP is 175 kilowatts with an antenna HAAT of 518 meters. The FCC antenna structure registration number is 1019627.

There are no AM broadcast stations located within 3.2 kilometers of the KSLA-DT transmitter site. No adverse affect from this proposed checklist application is expected to any nearby broadcast station. However, the applicant recognizes its responsibility to correct problems that may result from its proposed operation.

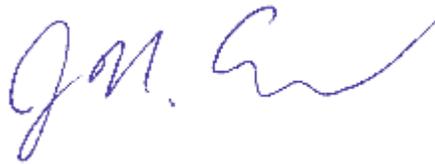
The transmitter site is beyond the 400 km coordination zones with Canada and Mexico. The closest FCC monitoring station is at Kingsville, Texas, more than 600 kilometers to the southwest. The closest point of the National Radio Quiet Zone (VA/WV) is more than 1,300 kilometers to the east-northeast. The closest point of the Table Mountain Radio Quiet Zone (CO) is more than 1,300 kilometers to the northwest. The closest radio astronomy site operating on TV channel 37 is at Fort Davis, Texas, more than 900 kilometers to the west-southwest. These separations are sufficient to not be a concern for coordination purposes.

### Environmental Considerations

The proposed KSLA-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 502.9 meters above ground level. The proposed directional ERP is 175 kW. A conservative relative field value of 0.2 was assumed for the calculation (see Figure 2B). Therefore, the “worst-case” calculated power density at a point 2 meters above ground level will be  $0.0009 \text{ mW/cm}^2$ . This is 0.3% of the FCC's recommended limit of  $0.33 \text{ mW/cm}^2$  for channel 17 for an “uncontrolled” environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective

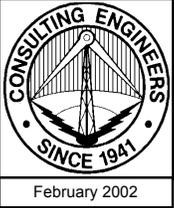
clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. The proposed KSLA-DT operation appears to be otherwise categorically excluded from environmental processing.



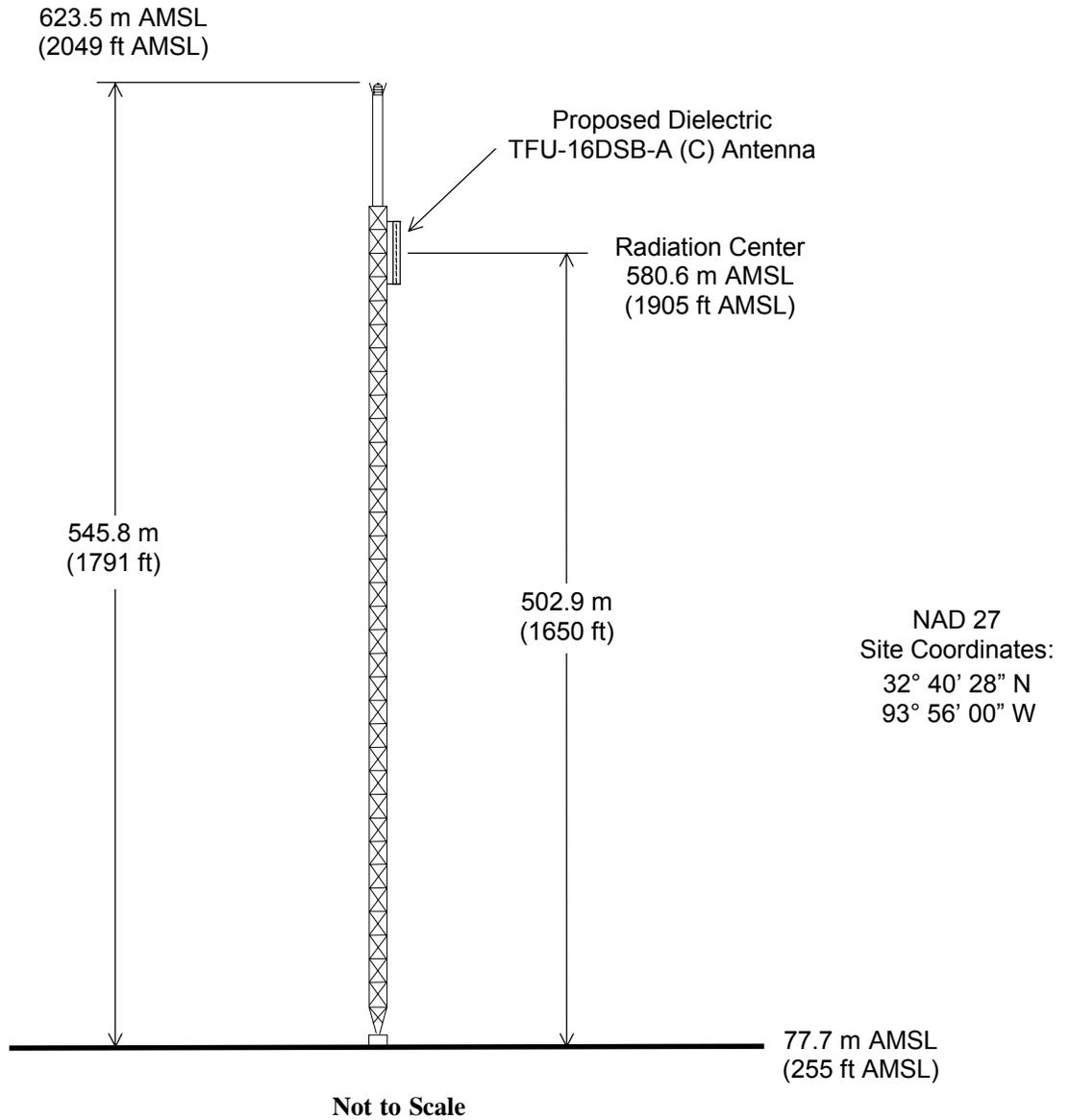
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201 Fletcher Avenue  
Sarasota, Florida 34237  
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February 28, 2002



Registration No. 1019627



## ANTENNA AND SUPPORTING STRUCTURE

STATION KSLA-DT  
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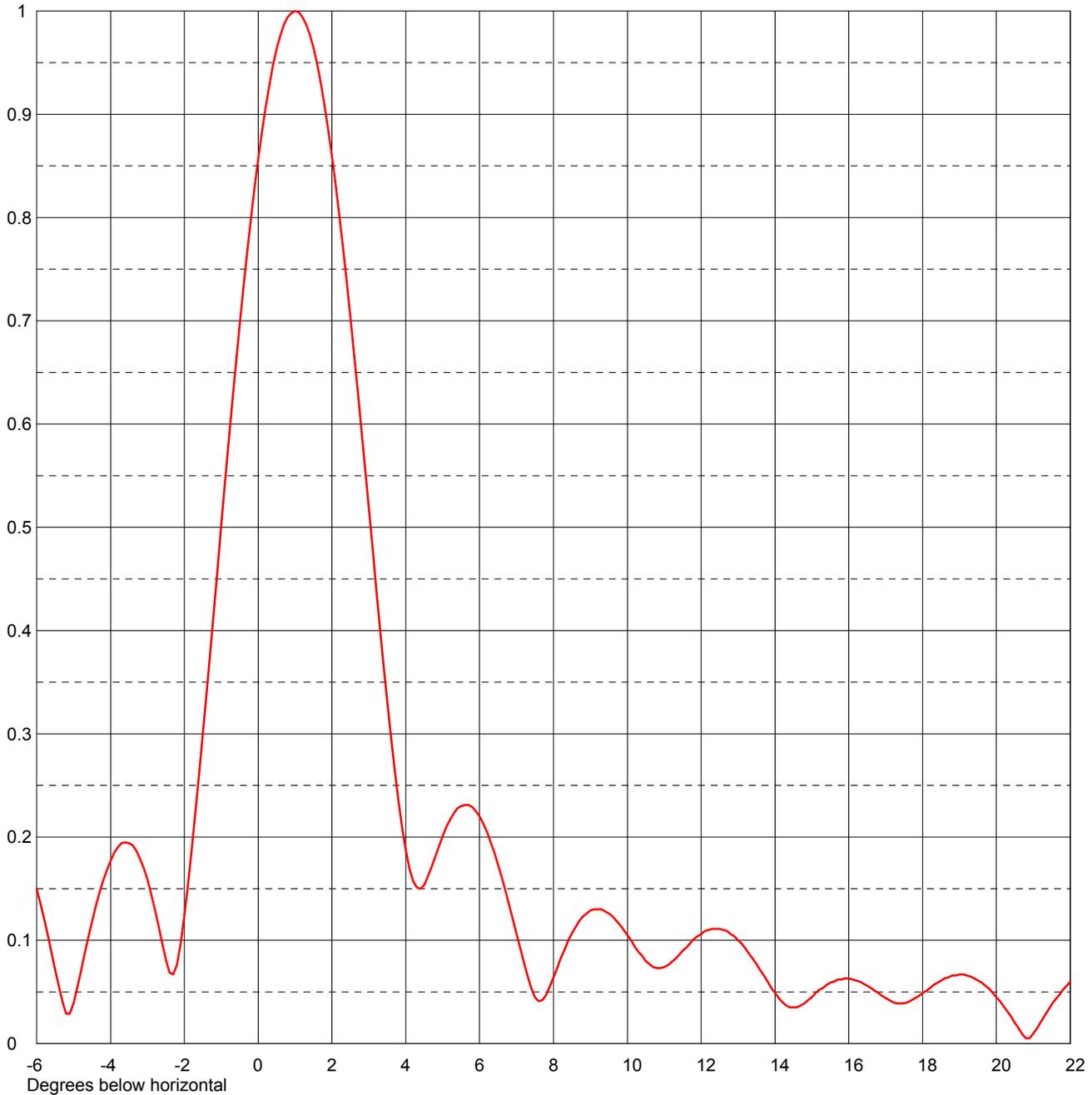
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



Date **28 Feb 2002**  
Call Letters **KSLA-DT** Channel **17**  
Location **Shreveport, LA**  
Customer  
Antenna Type **TFU-16DSB-A (C)**

### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>16.0 (12.04 dB)</b>	Beam Tilt	<b>1.00 Degrees</b>
RMS Gain at Horizontal	<b>11.8 (10.72 dB)</b>	Frequency	<b>491.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>16B160100</b>



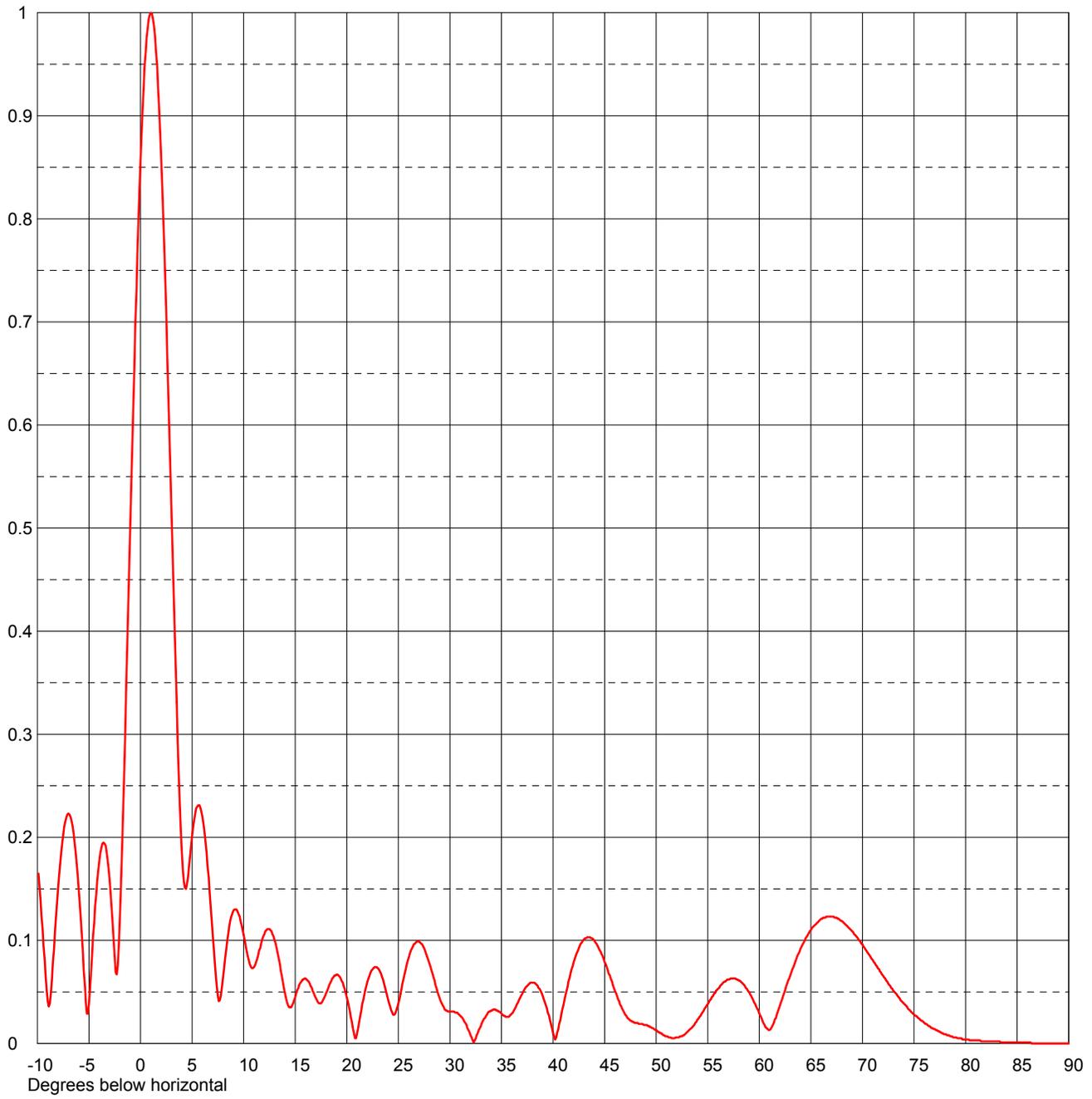
Remarks:



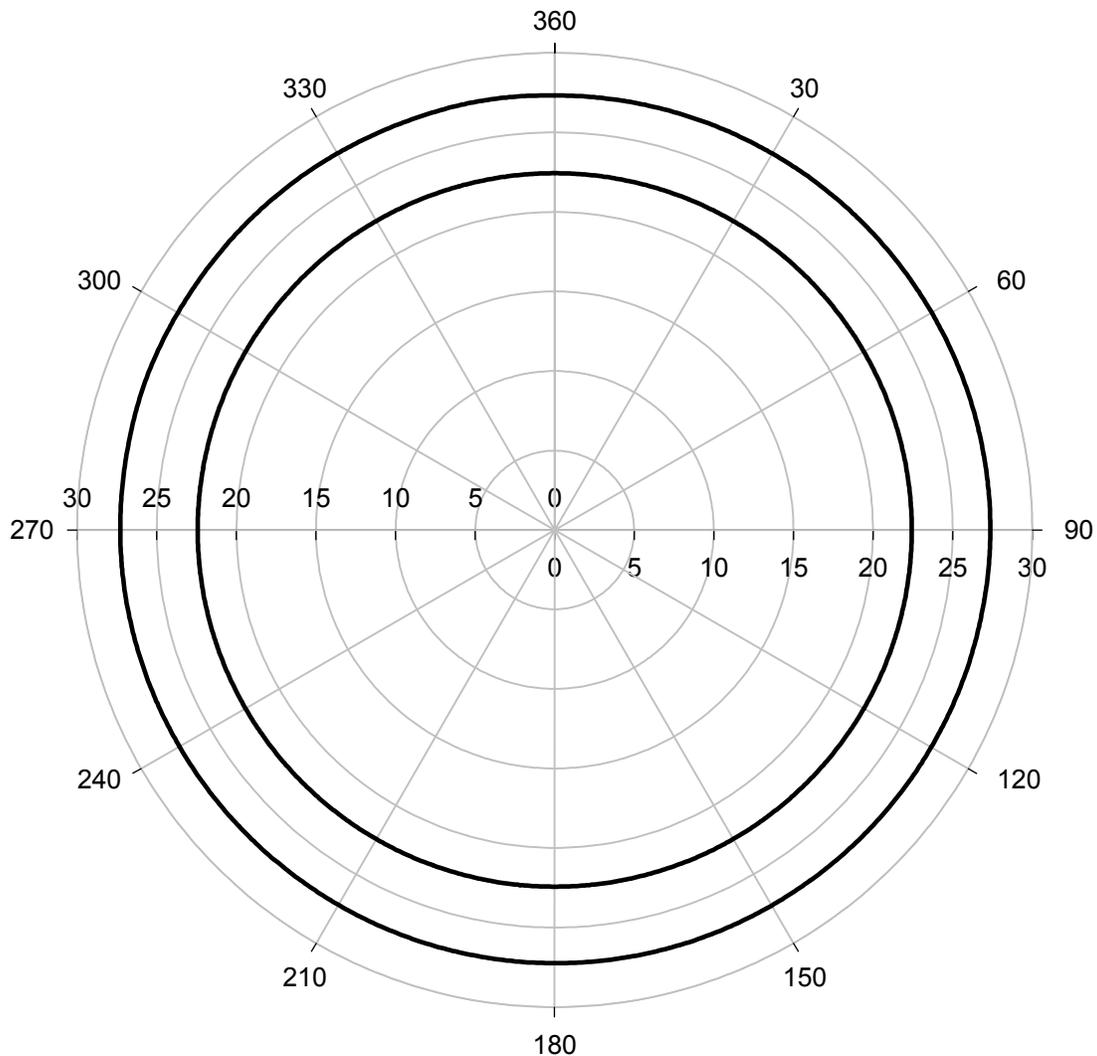
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Calculated / Measured	<b>Calculated</b>	Drawing #	<b>16B160100-90</b>



Remarks:



Inner Contour: Proposed KSLA-DT

Outer Contour: KSLA-DT Allotment

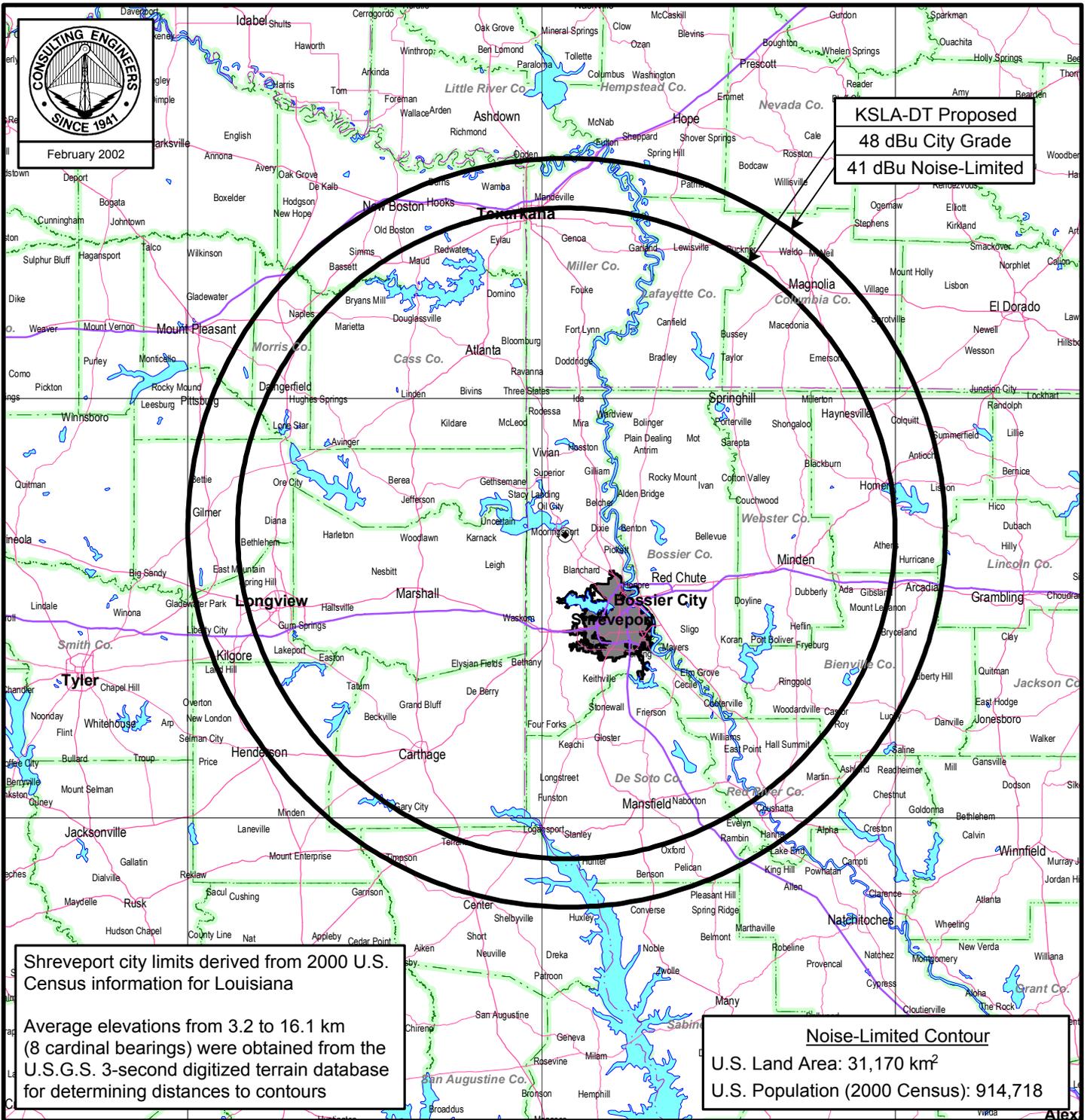
Note: Section 73.622(f)(3) ERP Adjustment formula not used

## AZIMUTHAL PLANE PATTERNS (dBk)

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**Figure 3**



**PREDICTED F(50,90) COVERAGE CONTOURS**

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