

TECHNICAL EXHIBIT
MINOR MODIFICATION OF CONSTRUCTION PERMIT
STATION KFVS-DT (FACILITY ID 592)
CAPE GIRARDEAU, MISSOURI

MARCH 5, 2002

CH 57 246 KW 564 M

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Technical Narrative

This Technical Exhibit was prepared on behalf of digital television station KFVS-DT at Cape Girardeau, Missouri, in support of an application for minor modification of construction permit. Station KFVS-DT is authorized to operate on channel 57 with a non-directional antenna effective radiated power (ERP) of 1000 kW and an antenna height above average terrain (HAAT) of 590 meters (BPCDT-19991025ADG). This application proposes to reduce ERP, change the antenna make/model and 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 KFVS-DT, as shown in Figure 2C.

Proposed Facilities

The transmitter site coordinates remain: 37-25-46 N, 89-30-14 W (NAD 27). The antenna radiation center will be reduced by 23.1 meters to 700.8 meters (AMSL). The proposed ERP is 246 kilowatts with an antenna HAAT of 546 meters. The FCC antenna structure registration number is 1003017.

There are no AM broadcast stations located within 3.2 kilometers of the KFVS-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 700 kilometers to the east. The closest point of the Table Mountain Radio Quiet Zone (CO) is more than 1,300 kilometers to the west-northwest. The closest radio astronomy site operating on TV channel 37 is at North Liberty, Iowa, more than 500 kilometers to the north-northwest. These separations are sufficient to not be a concern for coordination purposes.

Environmental Considerations

The proposed KFVS-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 454 meters above ground level. The proposed ERP is 246 kW. A conservative relative field value of 0.15 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 mW/cm^2 . This is 0.2% of the FCC's recommended limit of 0.49 mW/cm^2 for channel 57 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

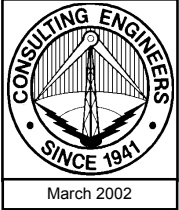
power or shut down. The proposed KFVS-DT operation appears to be otherwise categorically excluded from environmental processing.



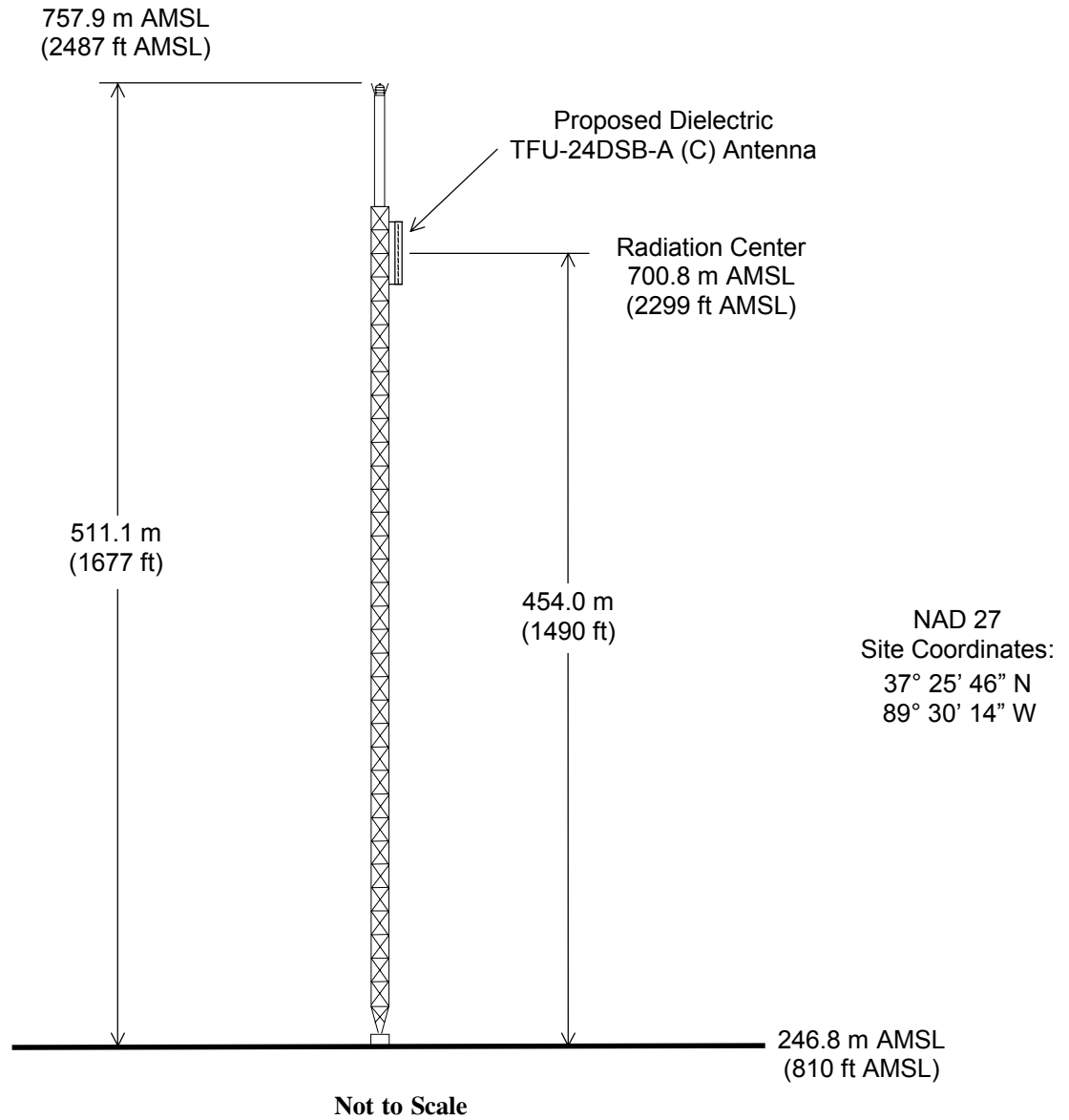
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March 5, 2002



Registration No. 1003017



ANTENNA AND SUPPORTING STRUCTURE

STATION KFVS-DT

CAPE GIRARDEAU, MISSOURI

CH 57 246 KW 564 M

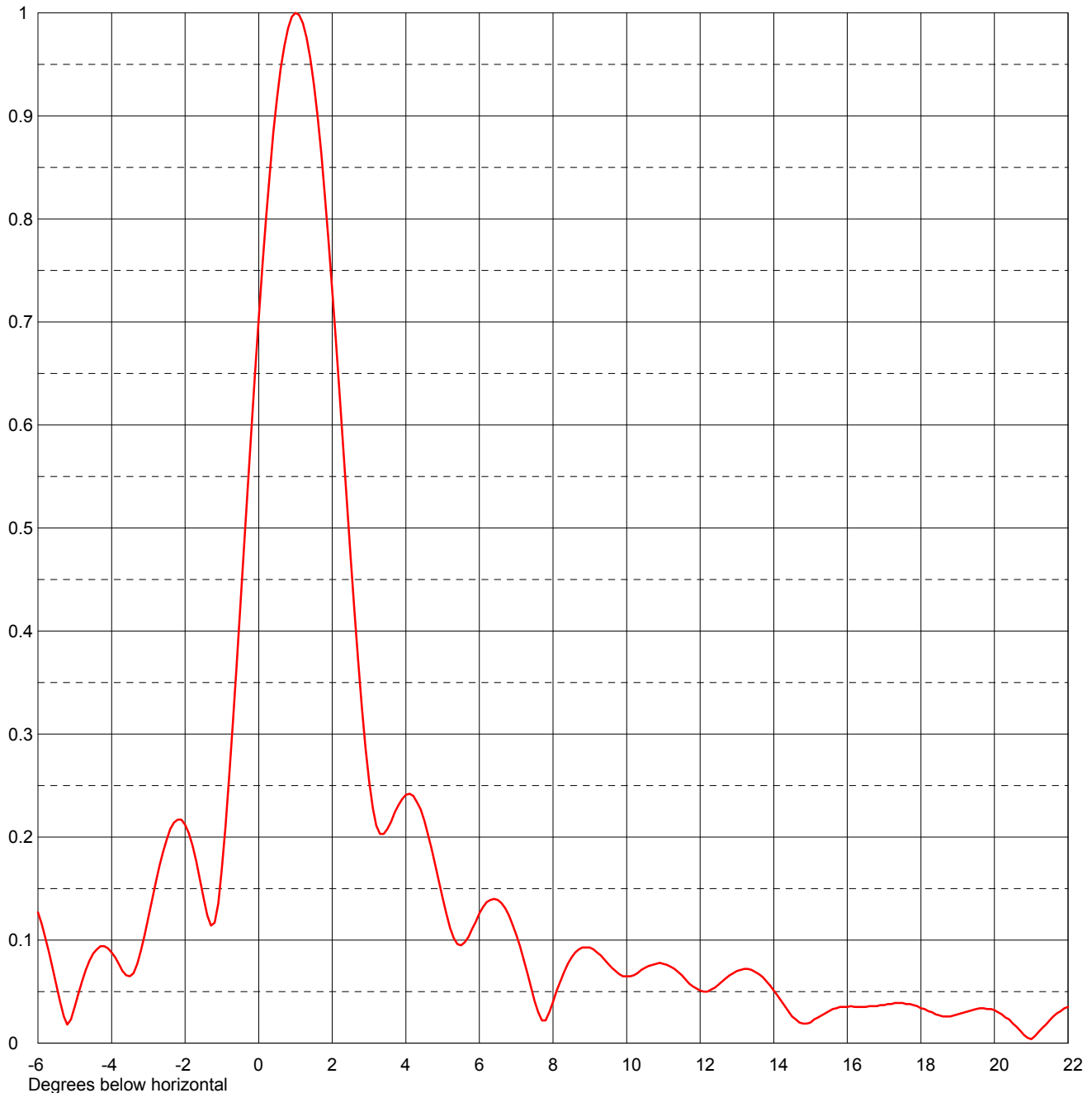
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



Date	05 Mar 2002		
Call Letters	KFVS-DT	Channel	57
Location	Cape Girardeau, MI		
Customer			
Antenna Type	TFU-24DSB-A (C)		

ELEVATION PATTERN

RMS Gain at Main Lobe	24.0 (13.80 dB)	Beam Tilt	1.00 Degrees
RMS Gain at Horizontal	11.9 (10.76 dB)	Frequency	731.00 MHz
Calculated / Measured	Calculated	Drawing #	24B240100



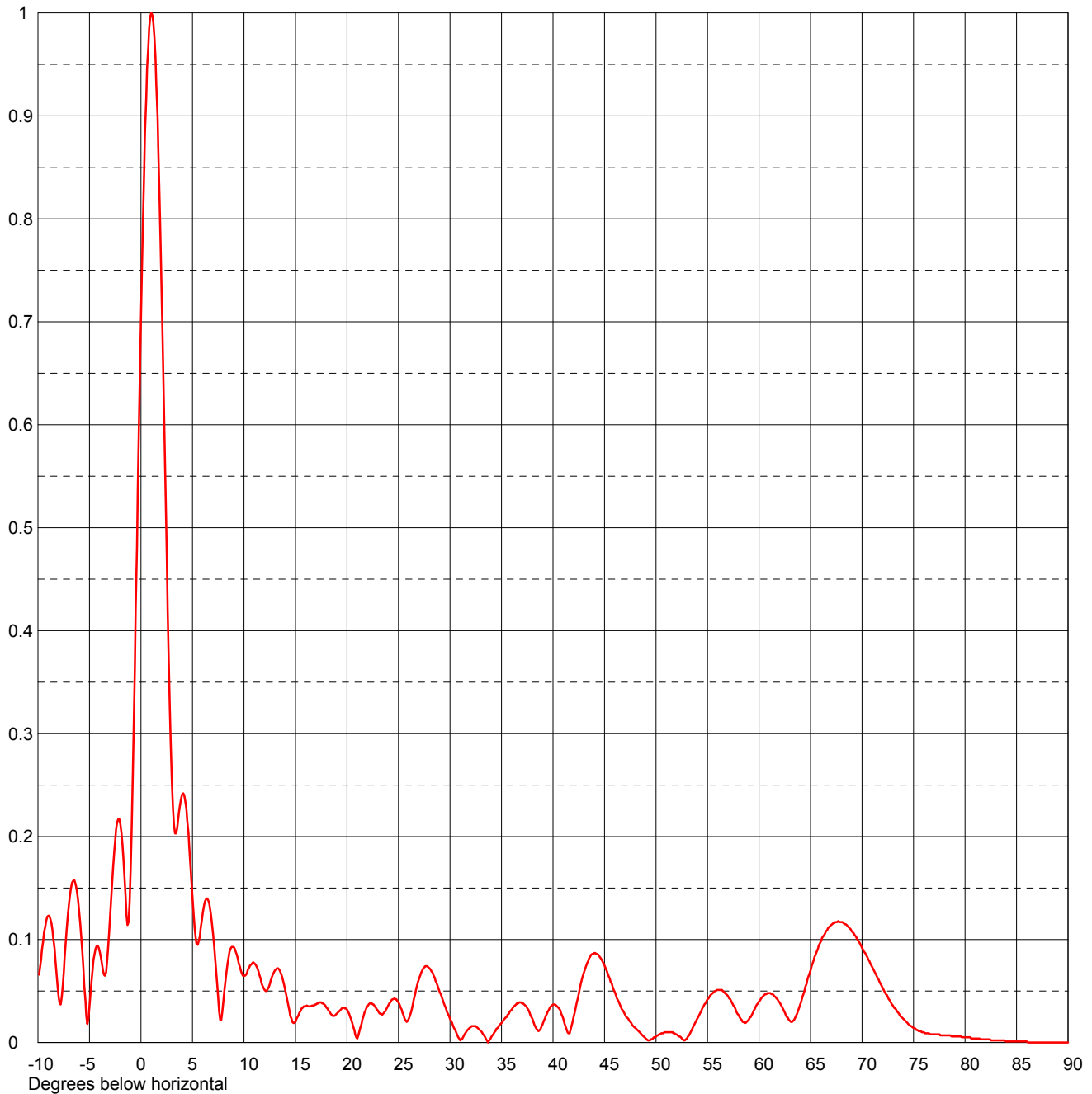
Remarks:



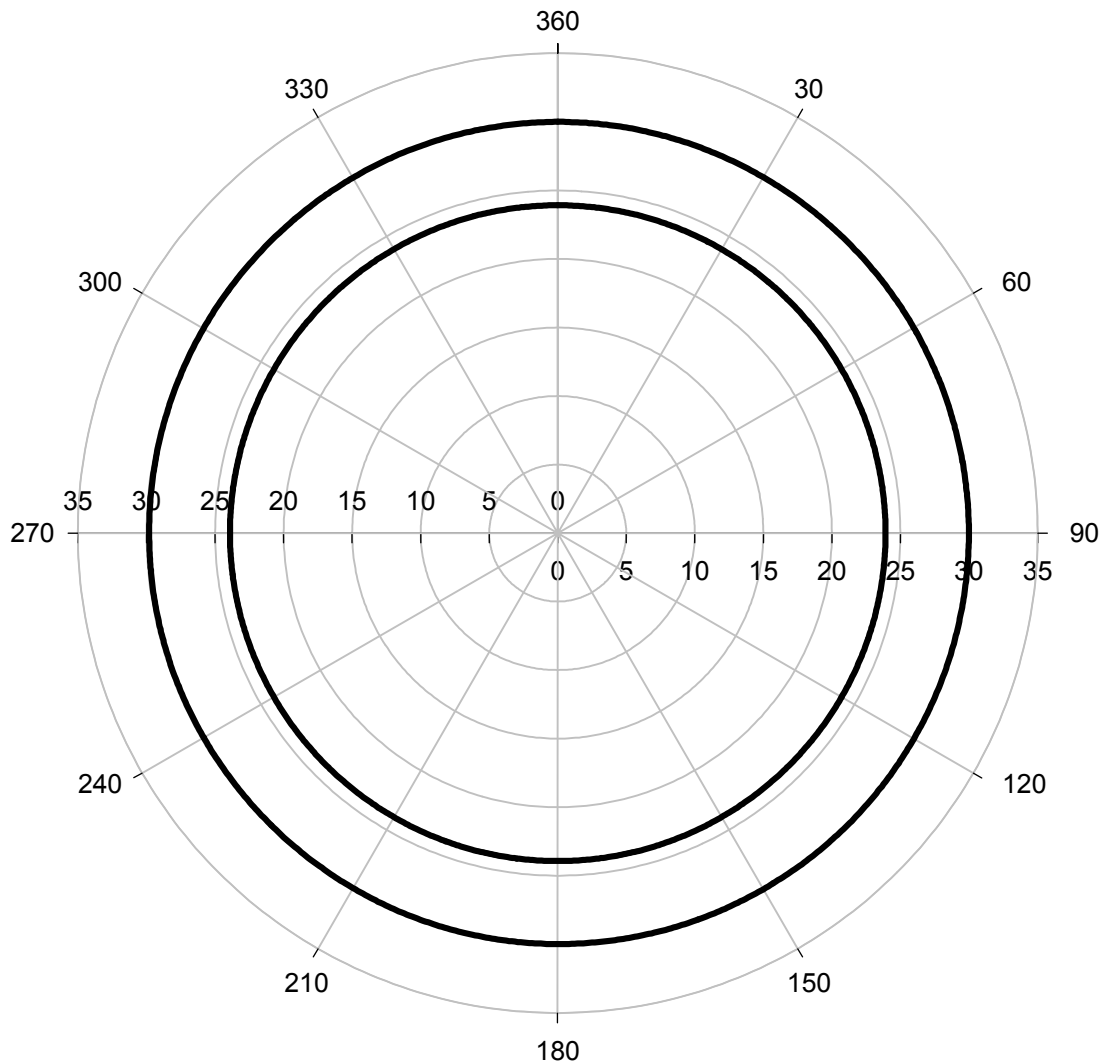
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ELEVATION PATTERN

RMS Gain at Main Lobe	24.0 (13.80 dB)	Beam Tilt	1.00 Degrees
RMS Gain at Horizontal	11.9 (10.76 dB)	Frequency	731.00 MHz
Calculated / Measured	Calculated	Drawing #	24B240100-90



Remarks:



Inner Contour: Proposed KFVS-DT

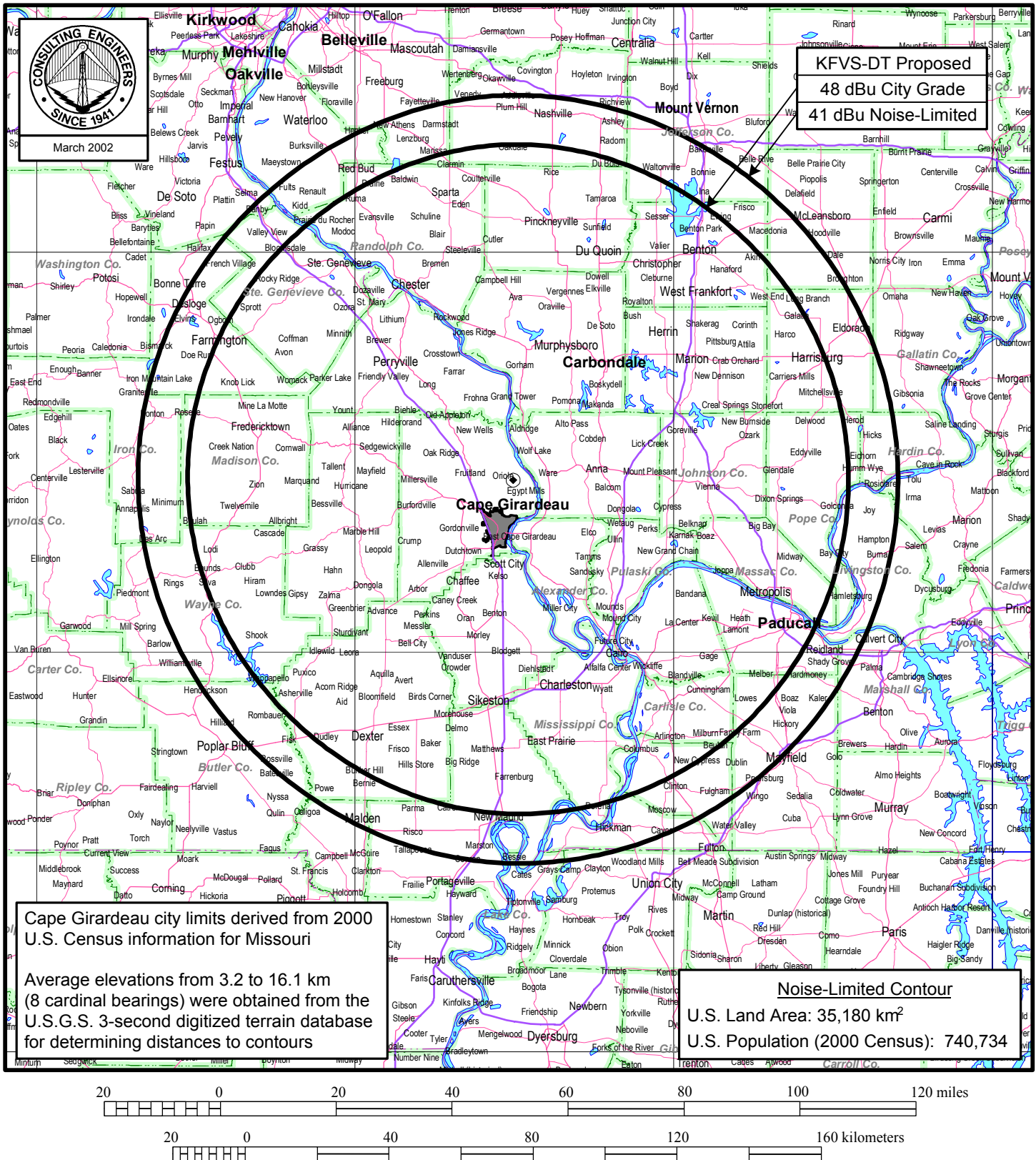
Outer Contour: KFVS-DT Allotment

AZIMUTHAL PLANE PATTERNS (dBk)

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Figure 3



PREDICTED F(50,90) COVERAGE CONTOURS

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