

TECHNICAL EXHIBIT
MINOR MODIFICATION OF CONSTRUCTION PERMIT
STATION KASA-DT (FACILITY ID 32311)
SANTA FE, NEW MEXICO

MARCH 11, 2002

CH 27 390 KW 1278 M

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Technical Narrative

This Technical Exhibit was prepared on behalf of digital television station KASA-DT at Santa Fe, New Mexico, in support of an application for minor modification of construction permit. Station KASA-DT is authorized to operate on channel 27 with a non-directional antenna effective radiated power (ERP) of 1000 kW and an antenna height above average terrain (HAAT) of 1313 meters (BPCDT-19990222KF). The proposed KASA-DT facility will operate with a non-directional ERP of 390 kW and an antenna HAAT of 1278 meters.

Proposed Facilities

This application proposes to reduce the non-directional ERP, decrease antenna HAAT, change non-directional antenna and change transmitter site. The proposed transmitter site coordinates are (NAD 27) 35-12-50 N, 106-27-01 W. The FCC antenna structure registration number is 1225205. The proposed facilities (390 kW, 1278 m) are less than that currently authorized for KASA-DT and therefore comply with Section 73.622(f)(5) of the FCC rules concerning maximum allowable ERP and antenna height for DTV stations.

There are no AM broadcast stations located within 3.2 kilometers of the proposed transmitter site. The proposed antenna will be located in an antenna farm where various other FM and TV broadcast stations operate. No adverse impact is expected to any

other surrounding station; however, the applicant recognizes its responsibility to correct problems that may result from its proposed operation.

The transmitter site is beyond the coordination zones with Canada (400 km) and Mexico (275 km). The closest FCC monitoring station is at Douglas, Arizona, more than 500 kilometers to the southwest. The closest point of the National Radio Quiet Zone (VA/WV) is more than 2,300 kilometers to the east-northeast. The closest point of the Table Mountain Radio Quiet Zone (CO) is more than 500 kilometers to the north. The closest radio astronomy site operating on TV channel 37 is at Los Alamos, New Mexico, approximately 65 kilometers to the north. These separations are sufficient to not be a concern for coordination purposes.

Allocation Considerations

Interference calculations have been made using the procedures outlined in the FCC's OET-69 bulletin, using a 2 kilometer grid spacing. The proposed KASA-DT operation does not cause excessive (greater than 2%, up to 10% total) calculated interference to any analog or DTV assignment. Below is the list of stations considered in the OET-69 analysis.

Stations Potentially Affected by Proposed KASA-DT						
Chan	Call	City/State	Bear (°T)	Dist (km)	Status	App. Ref. No.
19	KWBQ	SANTA FE NM	312	33.3	LIC	BLCT-19990317KG
19	KWBQ	SANTA FE NM	158	0.1	CP	BPCT-20010322ABL
23	KNAT-TV	ALBUQUERQUE NM	348	0.1	LIC	BLCT-19830401KG
26	KOB-DT	ALBUQUERQUE NM	158	0.3	CP	BPCDT-19991027ACB
26	KOB-DT	ALBUQUERQUE NM	158	0.3	PLN	DTVPLN-DTVP0607
26	KOB-DT	ALBUQUERQUE NM	158	0.3	STA	BDSTA-20020211ABN
27	KRPV	ROSWELL NM	139	264.3	LIC	BLCT-19860915KG

From the above list of stations considered, the table below shows the calculated interference caused to each station. Only stations that are predicted to receive interference from the proposed KASA-DT operation are shown in the interference table.

Study Station	Baseline	Net Population Change/Interference
26 KOB-DT ALBUQUERQUE NM (CP)	779,478	-1,573 (0.2%) <i>Less Interference</i>
26 KOB-DT ALBUQUERQUE NM (PLN)	779,478	215 (0.0%) <i>New Interference</i>

The proposed KASA-DT operation does not cause calculated interference to any other analog or DTV station. Therefore, it is believed the proposal complies with the FCC's "de minimis" interference policy.

With respect to Class A TV station protection, the proposal has been evaluated according to the requirements of Section 73.613 of the FCC Rules. The analysis reveals predicted overlap caused to station KYNM-LP on channel 30 at Albuquerque. OET-69 studies indicate that no interference is predicted to be caused to KYNM-LP by the proposed KASA-DT operation. No other Class A stations are potentially affected.

Environmental Considerations

The proposed KASA-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 55 meters above ground level. The proposed non-directional ERP is 390 kW. A worst-case relative field value of 0.082 was assumed for the calculation at a downward angle of 79 degrees (see Figure 2B). Therefore, the "worst-case" calculated power density at a point 2 meters above ground level will be 0.0300 mW/cm^2 . This is just over 8% of the FCC's recommended limit of 0.37 mW/cm^2 for channel 27 for an "uncontrolled" environment. If necessary, RF measurements will be taken to ensure compliance.

Access to the transmitting site will be restricted and appropriately marked with warning signs. As this will be a multi-user site, an agreement will control site access. 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 KASA-DT operation appears to be otherwise categorically excluded from environmental processing.

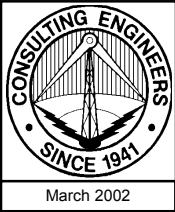


Jonathan N. Edwards

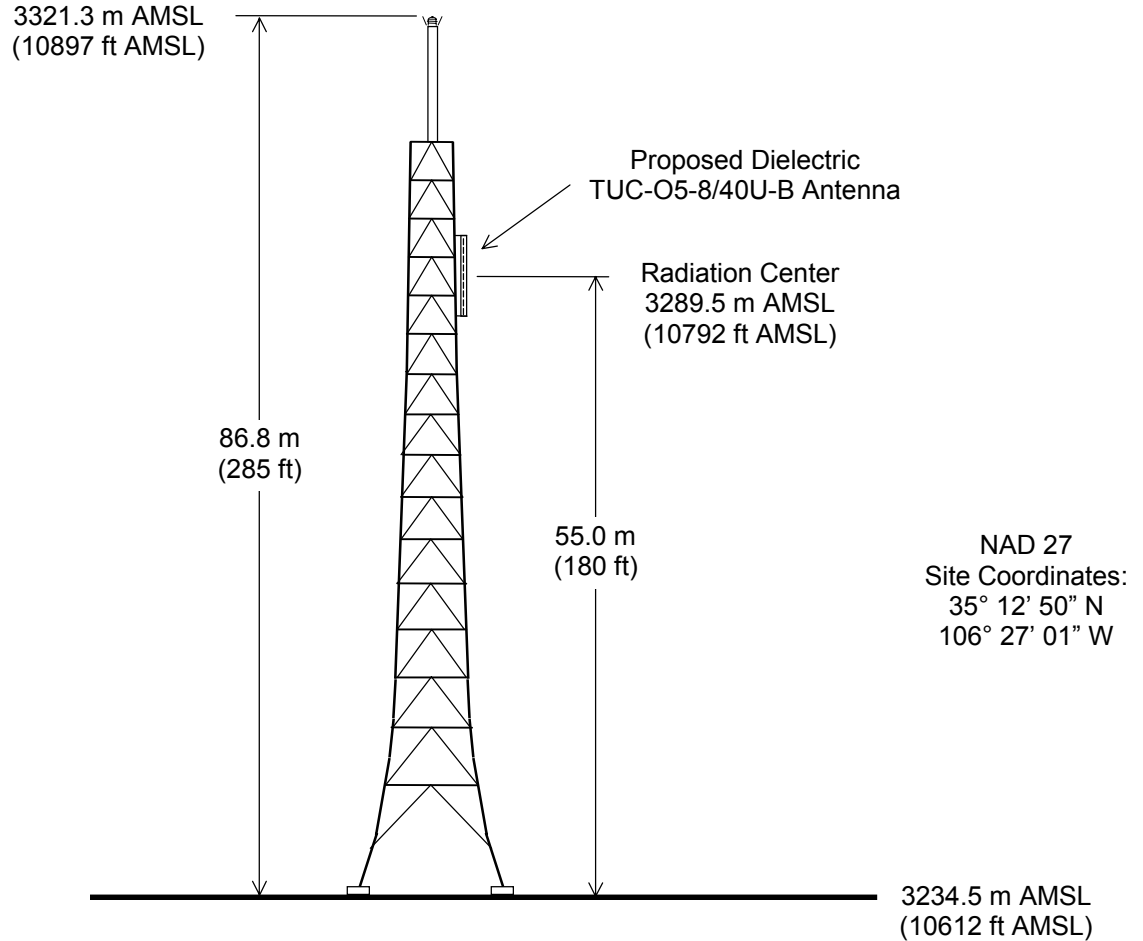
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000

March 11, 2002

Figure 1



Antenna Reg. No. 1225205



ANTENNA AND SUPPORTING STRUCTURE

STATION KASA-DT

SANTA FE, NEW MEXICO

CH 27 390 KW 1278 M

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

Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

DCA-9056

16-Jan-01

Albuquerque, NM

TUC-O5-8/40U-B

Figure 2A

Channel

27

ELEVATION PATTERN

RMS Gain at Main Lobe

15.20

(11.82 dB)

RMS Gain at Horizontal

1.20

(0.79 dB)

Calculated / Measured

Calculated

Beam Tilt

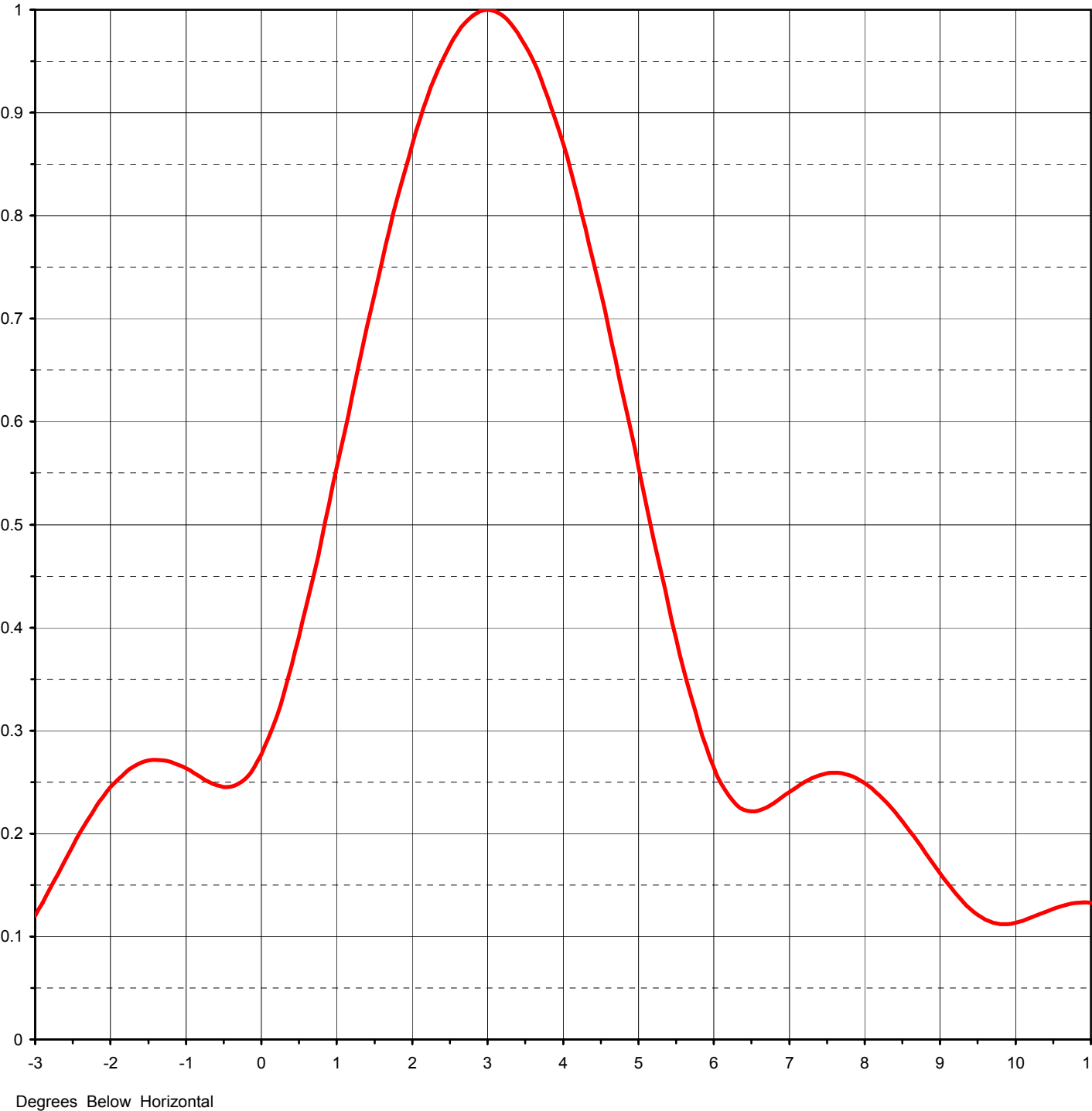
3.00 deg

Frequency

551.00 MHz

Drawing #

08U152300



Proposal Number	DCA-9056	Figure 2B
Date	16-Jan-01	
Call Letters		Channel 27
Location	Albuquerque, NM	
Customer		
Antenna Type	TUC-O5-8/40U-B	

ELEVATION PATTERN

RMS Gain at Main Lobe	15.20 (11.82 dB)
RMS Gain at Horizontal	1.20 (0.79 dB)
Calculated / Measured	Calculated

Beam Tilt	3.00 deg
Frequency	551.00 MHz
Drawing #	08U152300-90

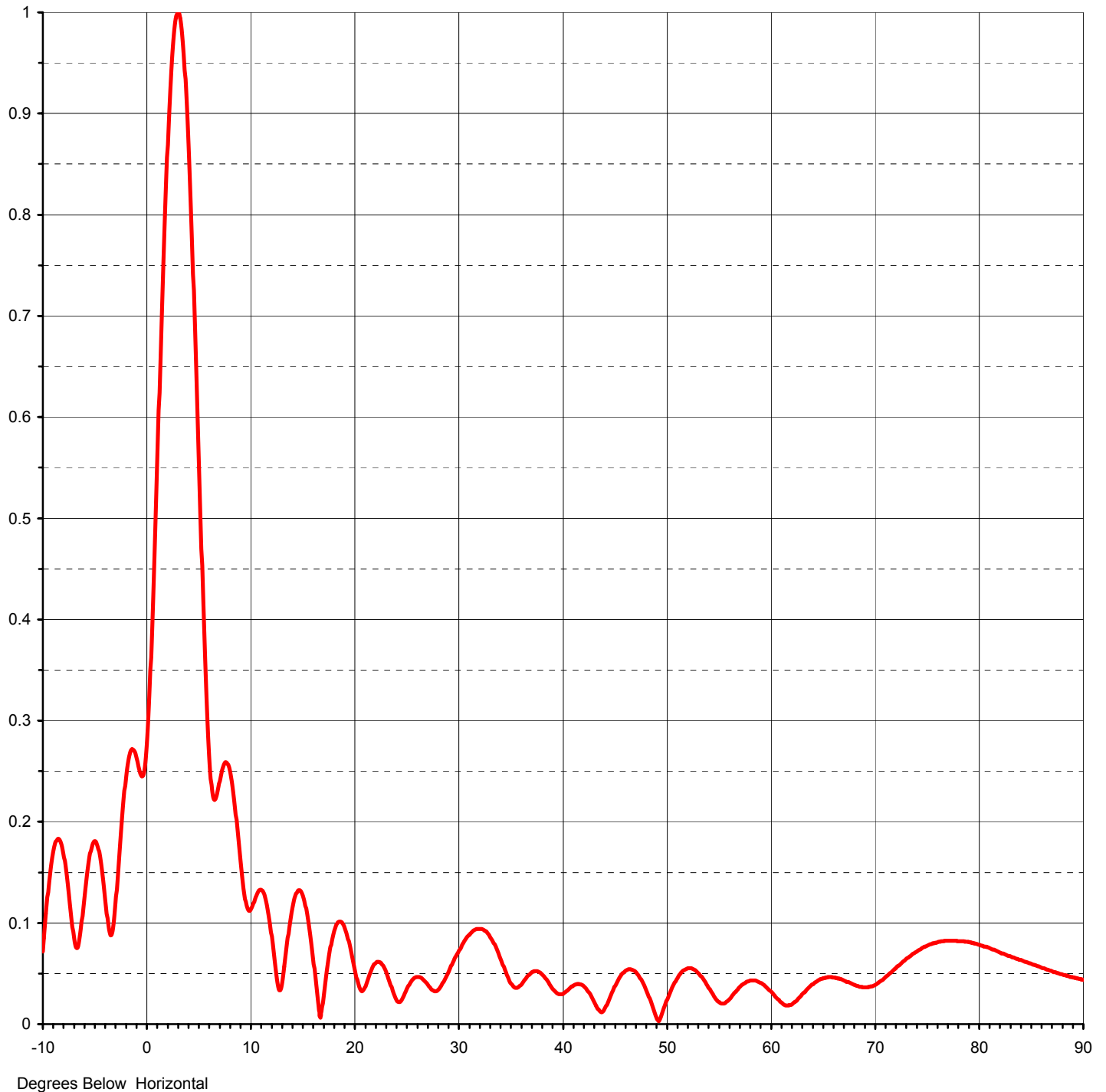
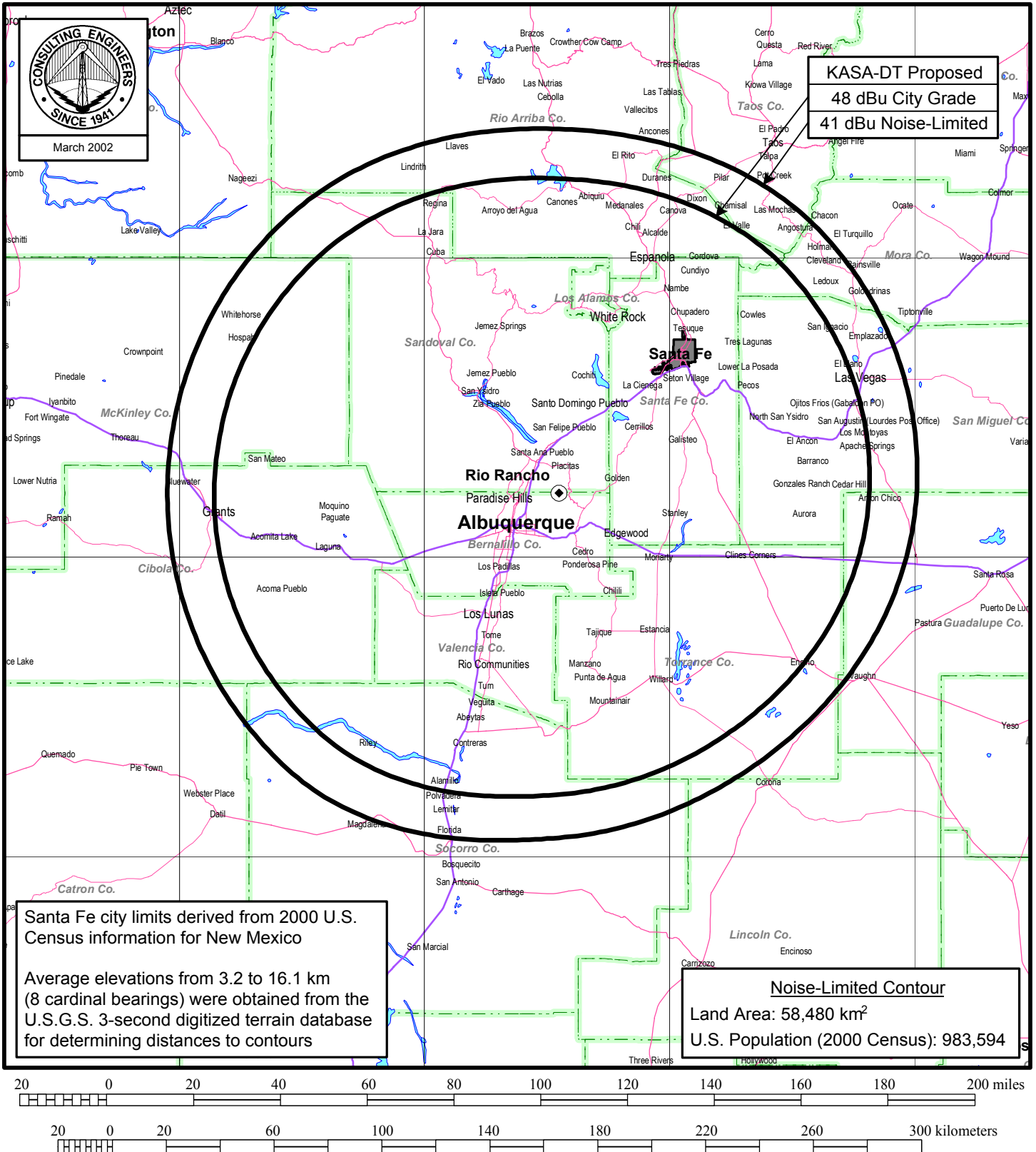


Figure 3



PREDICTED F(50,90) COVERAGE CONTOURS

STATION KASA-DT

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du Treil, Lundin & Rackley, Inc Sarasota, Florida