

EXHIBIT A

ENGINEERING STATEMENT

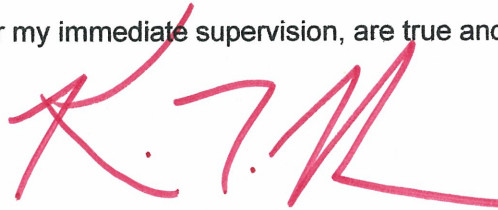
The engineering data contained herein have been prepared on behalf of SAN ANTONIO COMMUNITY EDUCATIONAL TV, INC., licensee of non-commercial digital television station KHCE-DT, Channel 16 in San Antonio, Texas, in support of its Request for Special Temporary Authority (STA) to operate a temporary facility at the site of the present KHCE-DT facility during such time as it takes to reposition the main antenna to its newly authorized location on the tower.

For the purposes of this STA, it is proposed to mount an ERI directional antenna at the 274-meter level of the existing 336-meter tower on which the presently licensed KHCE-DT antenna is mounted. Exhibit B provides azimuth and elevation pattern data for the proposed antenna. Exhibit C-1 is a map upon which the predicted service contours of the STA facility are plotted. In Exhibit C-2, we have plotted the 41 dBu service contour of the presently licensed KHCE-DT contour as well as that of the STA facility proposed herein. As shown, the STA facility's predicted service contour is completely contained within that of the licensed main facility. As a result, and since this proposal is for a temporary facility, no interference study is provided herein. A power density calculation appears in Exhibit D.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the KHCE-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1228187 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in red ink, appearing to read 'K. T. Fisher', is written over the printed name.

KEVIN T. FISHER

January 28, 2011

# EXHIBIT B-1

## ANTENNA ELEVATION PATTERN

PROPOSED KHCE-DT STA FACILITY  
CHANNEL 16 – SAN ANTONIO, TEXAS

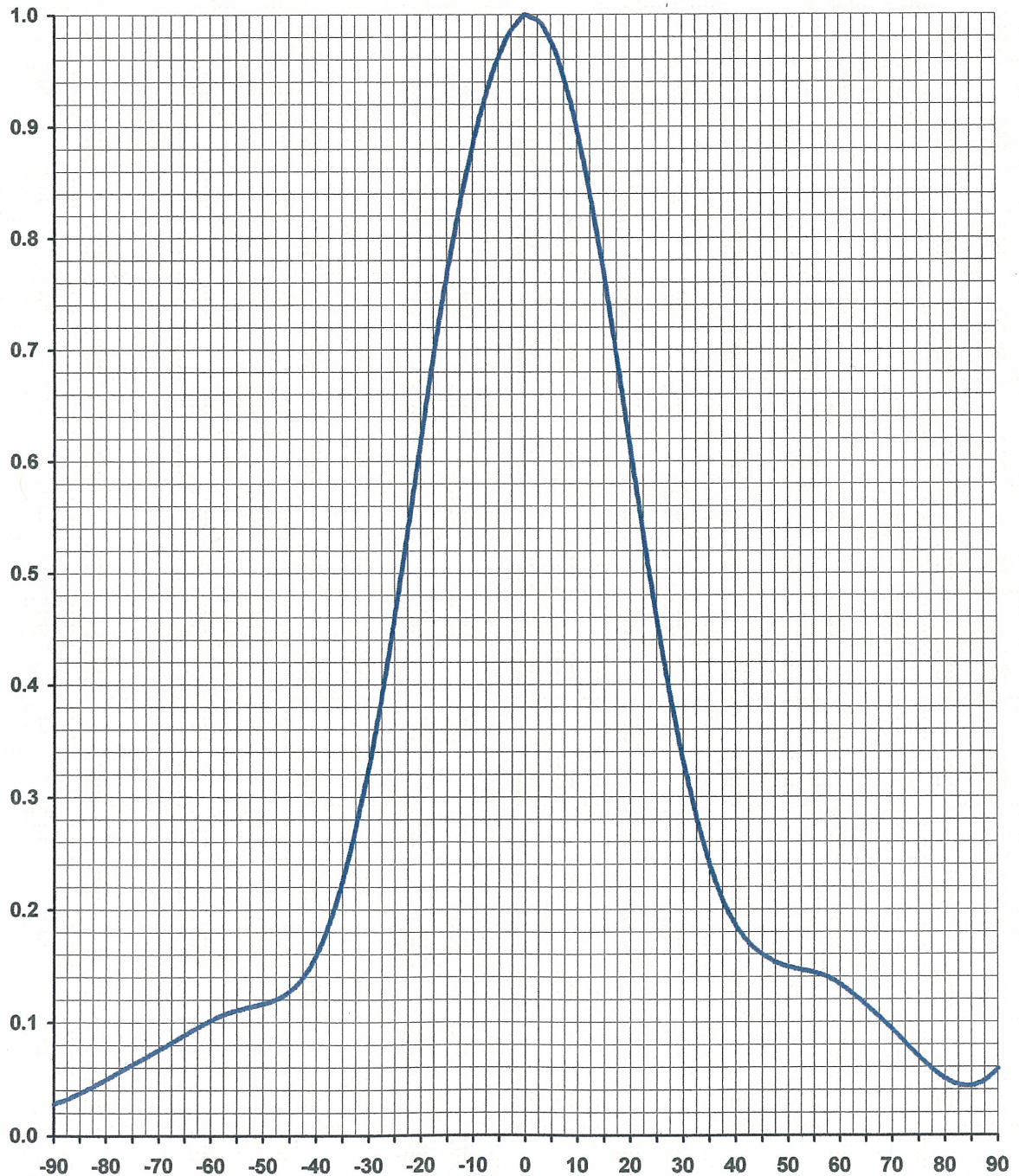
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UHF Panel Standby Page 4

## PATTERN

Directivity:	Numeric	dBd
Main Lobe:	<u>2.23</u>	<u>3.48</u>
Horizontal:	<u>2.23</u>	<u>3.48</u>

Frequency:	<u>16 (DTV)</u>
Location:	<u>San Antonio, TX</u>
Beam Tilt:	<u>0.00</u>
Polarization:	<u>Horizontal</u>

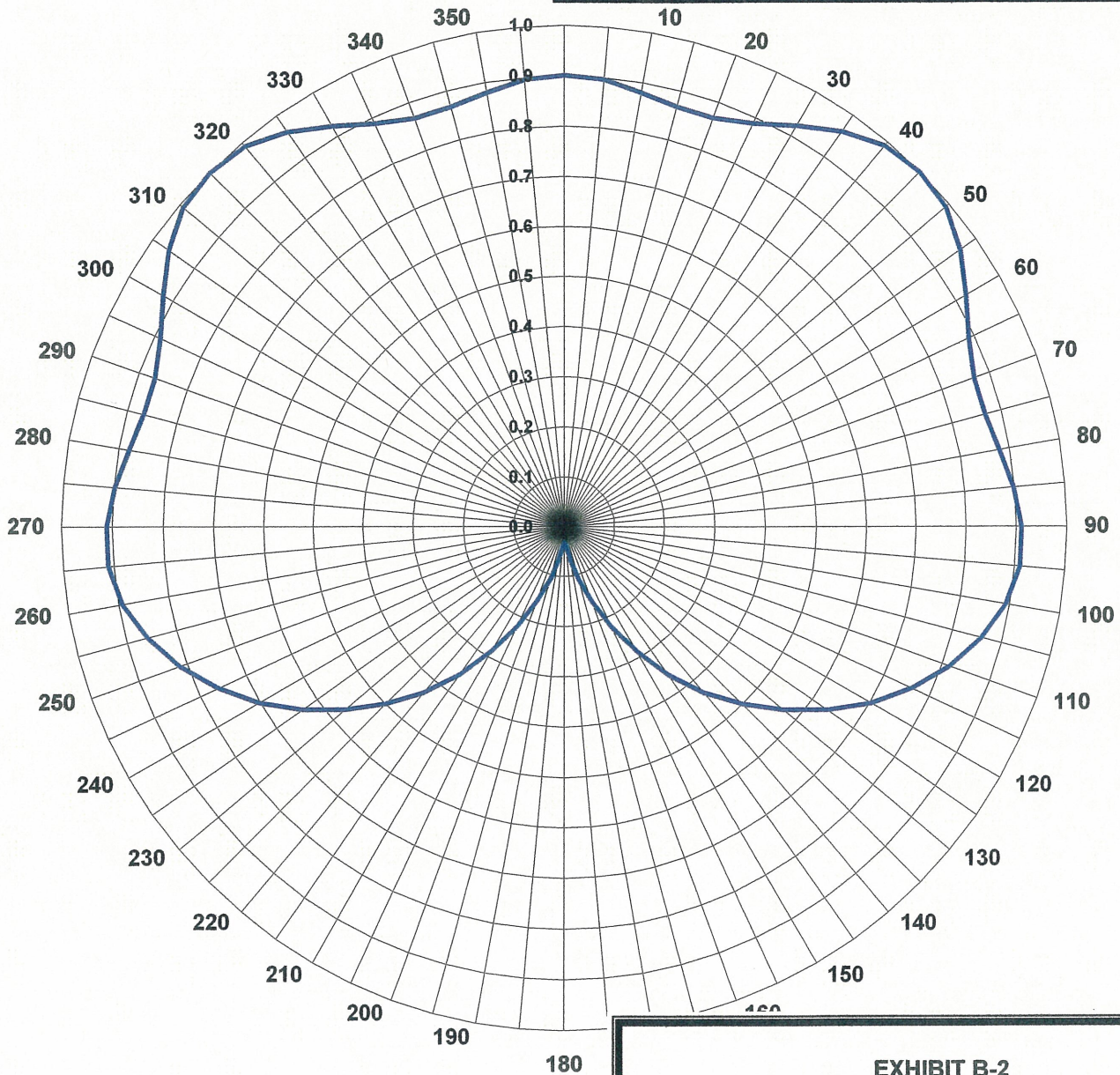




**AZIMUTH PATTERN****TYPE:****ETU-PC2****Frequency:****16 (DTV)****Directivity:****Numeric****dB****Location:****San Antonio, TX****Peak(s) at:****1.71****2.33****Polarization:****Horizontal**

Note: Pattern shape and directivity may vary with channel and mounting configuration.

Note : Antenna will be mounted such that 0 degrees on graph will be oriented at 305 degrees true.

**ELECTRONICS RESEARCH, INC. ERI****EXHIBIT B-2****ANTENNA AZIMUTH PATTERN****PROPOSED KHCE-DT STA FACILITY  
CHANNEL 16 – SAN ANTONIO, TEXAS****SMITH AND FISHER**



**EXHIBIT B-3****ANTENNA RELATIVE FIELD VALUES****PROPOSED KHCE-DT STA FACILITY  
CHANNEL 16 – SAN ANTONIO, TEXAS**

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**TABULATED DATA FOR AZIMUTH****TYPE: ETU-PC2**

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.901	-0.91	92	0.912	-0.80	184	0.036	-28.87	276	0.894	-0.97
2	0.900	-0.91	94	0.912	-0.80	186	0.042	-27.51	278	0.887	-1.04
4	0.898	-0.94	96	0.910	-0.82	188	0.054	-25.38	280	0.880	-1.11
6	0.894	-0.97	98	0.902	-0.90	190	0.067	-23.48	282	0.873	-1.18
8	0.887	-1.04	100	0.892	-0.99	192	0.082	-21.73	284	0.868	-1.23
10	0.880	-1.11	102	0.881	-1.11	194	0.099	-20.13	286	0.866	-1.25
12	0.873	-1.18	104	0.867	-1.24	196	0.117	-18.66	288	0.865	-1.26
14	0.868	-1.23	106	0.851	-1.40	198	0.137	-17.28	290	0.868	-1.23
16	0.866	-1.25	108	0.834	-1.58	200	0.158	-16.01	292	0.874	-1.17
18	0.865	-1.26	110	0.815	-1.77	202	0.182	-14.82	294	0.883	-1.09
20	0.868	-1.23	112	0.795	-1.99	204	0.206	-13.71	296	0.894	-0.97
22	0.874	-1.17	114	0.773	-2.23	206	0.232	-12.68	298	0.908	-0.84
24	0.883	-1.09	116	0.750	-2.50	208	0.259	-11.72	300	0.924	-0.69
26	0.894	-0.97	118	0.726	-2.78	210	0.288	-10.82	302	0.940	-0.54
28	0.908	-0.84	120	0.701	-3.08	212	0.317	-9.99	304	0.955	-0.40
30	0.924	-0.69	122	0.676	-3.40	214	0.346	-9.23	306	0.970	-0.27
32	0.940	-0.54	124	0.649	-3.75	216	0.375	-8.52	308	0.982	-0.16
34	0.955	-0.40	126	0.623	-4.12	218	0.404	-7.87	310	0.992	-0.07
36	0.970	-0.27	128	0.596	-4.50	220	0.433	-7.28	312	0.997	-0.02
38	0.982	-0.16	130	0.568	-4.91	222	0.460	-6.75	314	1.000	0.00
40	0.992	-0.07	132	0.541	-5.34	224	0.487	-6.26	316	1.000	0.00
42	0.997	-0.02	134	0.514	-5.79	226	0.514	-5.79	318	0.997	-0.02
44	1.000	0.00	136	0.487	-6.26	228	0.541	-5.34	320	0.992	-0.07
46	1.000	0.00	138	0.460	-6.75	230	0.568	-4.91	322	0.982	-0.16
48	0.997	-0.02	140	0.433	-7.28	232	0.596	-4.50	324	0.970	-0.27
50	0.992	-0.07	142	0.404	-7.87	234	0.623	-4.12	326	0.955	-0.40
52	0.982	-0.16	144	0.375	-8.52	236	0.649	-3.75	328	0.940	-0.54
54	0.970	-0.27	146	0.346	-9.23	238	0.676	-3.40	330	0.924	-0.69
56	0.955	-0.40	148	0.317	-9.99	240	0.701	-3.08	332	0.908	-0.84
58	0.940	-0.54	150	0.288	-10.82	242	0.726	-2.78	334	0.894	-0.97
60	0.924	-0.69	152	0.259	-11.72	244	0.750	-2.50	336	0.883	-1.09
62	0.908	-0.84	154	0.232	-12.68	246	0.773	-2.23	338	0.874	-1.17
64	0.894	-0.97	156	0.206	-13.71	248	0.795	-1.99	340	0.868	-1.23
66	0.883	-1.09	158	0.182	-14.82	250	0.815	-1.77	342	0.865	-1.26
68	0.874	-1.17	160	0.158	-16.01	252	0.834	-1.58	344	0.866	-1.25
70	0.868	-1.23	162	0.137	-17.28	254	0.851	-1.40	346	0.868	-1.23
72	0.865	-1.26	164	0.117	-18.66	256	0.867	-1.24	348	0.873	-1.18
74	0.866	-1.25	166	0.099	-20.13	258	0.881	-1.11	350	0.880	-1.11
76	0.868	-1.23	168	0.082	-21.73	260	0.892	-0.99	352	0.887	-1.04
78	0.873	-1.18	170	0.067	-23.48	262	0.902	-0.90	354	0.894	-0.97
80	0.880	-1.11	172	0.054	-25.38	264	0.910	-0.82	356	0.898	-0.94
82	0.887	-1.04	174	0.042	-27.51	266	0.912	-0.80	358	0.900	-0.91
84	0.894	-0.97	176	0.036	-28.87	268	0.912	-0.80	360	0.901	-0.91
86	0.901	-0.91	178	0.033	-29.76	270	0.910	-0.82			
88	0.906	-0.86	180	0.031	-30.06	272	0.906	-0.86			
90	0.910	-0.82	182	0.033	-29.76	274	0.901	-0.91			

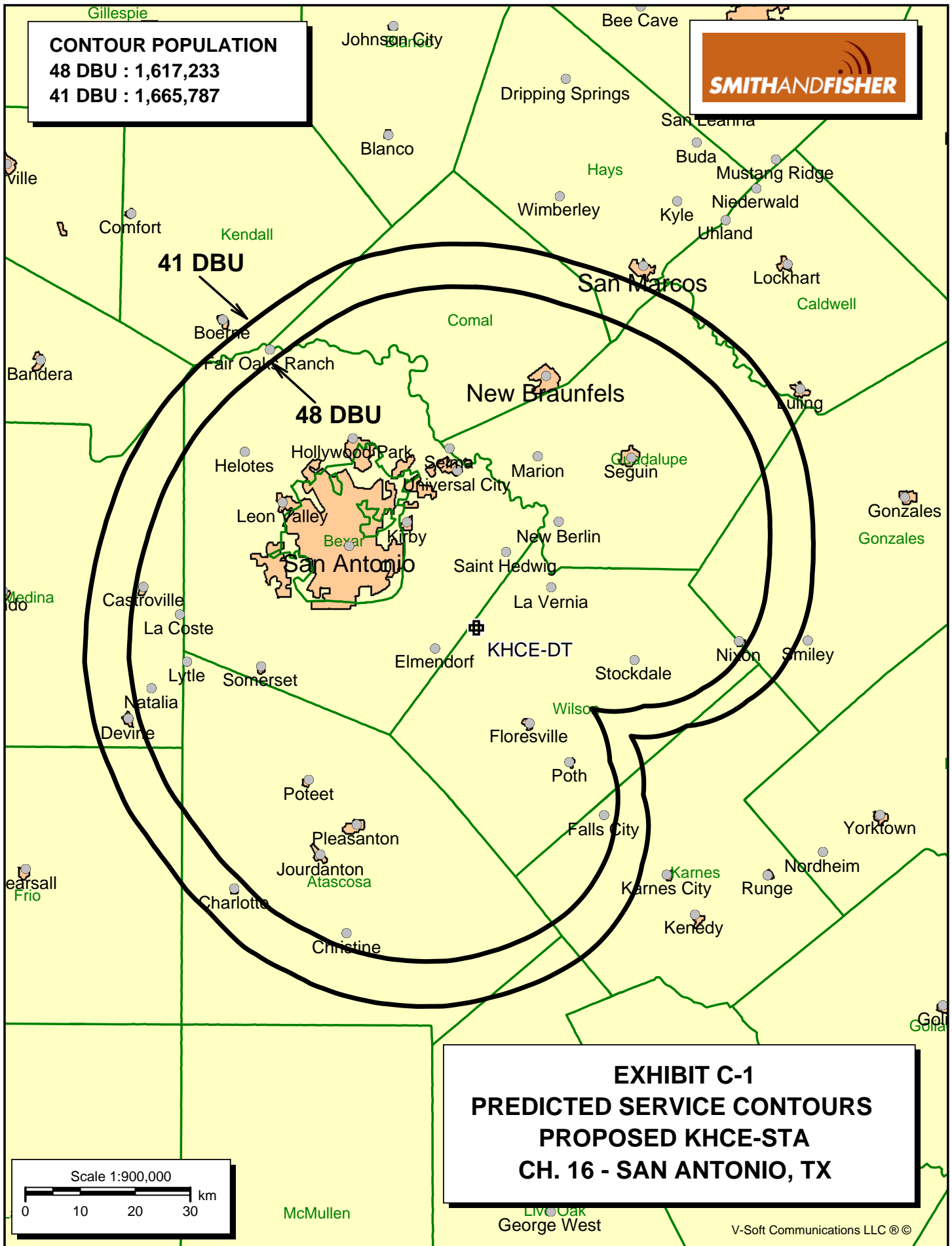
Note : Antenna will be mounted such that 0 degrees in tabulation will be oriented at 305 degrees true.

**CONTOUR POPULATION**

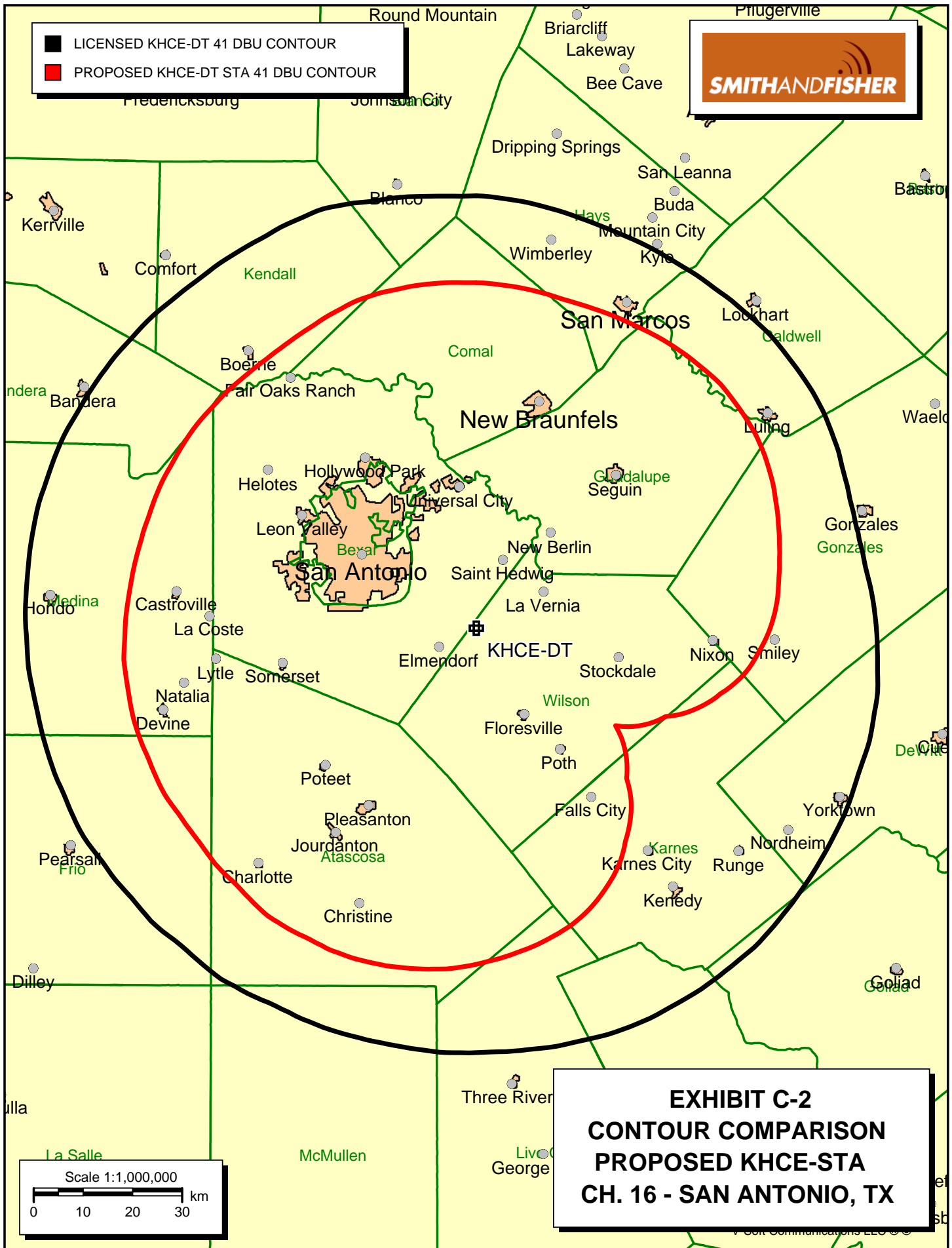
**48 DBU : 1,617,233**

**41 DBU : 1,665,787**

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## POWER DENSITY CALCULATION

PROPOSED KHCE-DT STA FACILITY  
CHANNEL 16 – SAN ANTONIO, TEXAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this San Antonio facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 40 kW, an antenna radiation center 274 meters above ground, and the elevation pattern of the ERI antenna, maximum power density two meters above ground of  $0.00045 \text{ mw/cm}^2$  is calculated to occur 471 meters northwest of the base of the tower. Since this is only 0.1 percent of the  $0.32 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 16 (482-488 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.