

ENGINEERING STATEMENT
RE DTV BROADCAST ENGINEERING DATA
APPLICATION FOR CONSTRUCTION PERMIT
TO CHANGE SITE ON BEHALF OF
PERMIAN BASIN PUBLIC TELECOMMUNICATIONS, INC.
KPBT-TV, ODESSA, TEXAS
CHANNEL 38 500 KW ND ERP 85.1 METERS HAAT
FACILITY ID NO. 50044

OCTOBER 2009

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

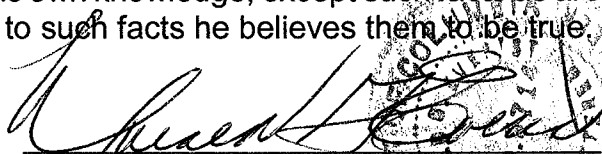
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

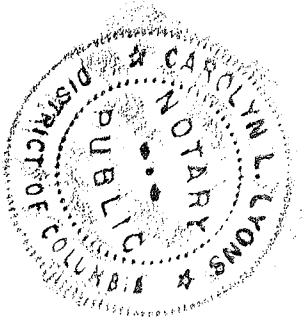
That his qualifications are a matter of record in the Federal Communications Commission;

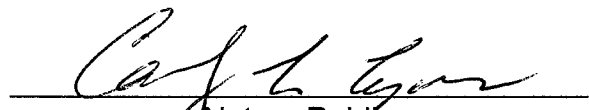
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true


Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 30th day of October, 2009.




Notary Public

My Commission Expires: 2/28/2013

This engineering statement has been prepared on behalf of Permian Basin Public Telecommunications, Inc. ("Permian Basin"), licensee of KPBT-TV, Odessa, Texas. The purpose of this engineering statement is to request a slight move to change transmitter site, increase ERP of the currently licensed post-transition digital television ("DTV") facilities.

KPBT-TV was licensed to operate on NTSC Television Channel 36 with a maximum visual effective radiated power ("ERP") of 513 kW (horizontal polarization) and height above average terrain ("HAAT") of 88 meters. KPBT-TV has been allocated DTV Channel 38 with facilities of 500 kW non-directional ERP at an HAAT of 82 meters in the final DTV Table of Allotments.¹ KPBT-TV is licensed to operate with 220 kW at an HAAT of 80 meters. KPBT-TV now requests to construct its Channel 38 DTV facilities of 500 kW non-directional (horizontal polarization) at an HAAT of 85.1 meters from an existing antenna structure located to the northeast approximately 5.32 km at azimuth of N 49.4° E. The predicted 41 dBu by the proposed move to the northeast is totally encompassed by the predicted 41 dBu contour authorized in the Memorandum Opinion and Order towards any land area along the common border with Mexico. This arc encompasses N 154° E through N 268° E.

The DTV antenna will be side-mounted on an existing tower structure. The existing tower from which it is proposed to operate has an overall structure height above ground of 112.1 meters (367.7 feet). Exhibit E-1 shows a vertical sketch and the arrangement of the antennas on the tower. The existing transmitter site is located at 4101 East 42nd Street, Odessa, Texas.

¹"In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket 87-268, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order (FCC 08-72) Released March 6, 2008.

The geographic coordinates of the site are:

North Latitude: 31° 53' 49.9"

West Longitude: 102° 20' 14"

NAD-27

Tower Registration No. 1215312

Equipment Data

Antenna:	Dielectric	TFU-16DSC O3
	Beam Tilt	1.0° electrical
	Power Gain	13

Antenna information per Section 73.625 of the FCC Rules is provided in Exhibit E-2.

Power Data

Transmitter output	41.9 kW	16.22 dBk
Total Transmission line efficiency/loss Dielectric, 6-1/8", 75 ohm rigid or equivalent, length: 91 meters (300 feet)	91.9 %	0.37 dB
Input Power to the antenna	38.5 kW	15.85 dBk
Antenna power gain	13	11.14 dB
Effective Radiated Power	500 kW	26.99 dBk

Elevation Data

Vertical dimension of Channel 38 side-mounted antenna	9.45 meters 31 feet
Overall height above ground of existing antenna structure (including appurtenances)	112.1 meters 367.7 feet
Center of radiation of Channel 38 antenna above ground	82.3 meters 270 feet
Elevation of site above mean sea level	889.3 meters 2917.6 feet
Center of radiation of Channel 38 antenna above mean sea level	971.6 meters 3187.7 feet
Overall height above mean sea level of modified tower (including appurtenances)	1001.4 meters 3285.4 feet
Antenna height above average terrain	85.1 meters

Coverage

The average elevation data for 3.2 to 16.1 km along the eight cardinal radials has been determined from the NGDC 3-second database. The F(50,90) DTV coverage contours have been computed from reference to the propagation data for Channel 38 as published by the FCC in Figure 10b and 10c, Section 73.699 of the FCC Rules and Regulations. Utilizing the formula in Section 73.625(b)(2) of the rules for the effective heights, it is found that the depression angle, A_h , varies from 0.227 to 0.284 degrees. Since the relative vertical field is greater than 90% of the maximum at these depression angles, the maximum power was used in determining the distance to the DTV contour.

Exhibit E-3 shows the proposed KPBT-TV, 48 dBu and 41 dBu F(50,90) coverage contours on a map and includes the legal boundaries of Odessa, Texas.

Exhibit E-4 shows the proposed KPBT-TV operation does not extend beyond the authorized KPBT Appendix B area towards Mexico.

Interference Analysis

A study of predicted interference caused by the proposed KPBT-TV operation has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (February 6, 2004) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a WindowsXP platform. Comparison of service/interference areas and population indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculation identical to the FCC's program. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 2 sq. km. Using 3-second terrain data sampled approximately every 1.0 km at one-degree azimuth intervals with 2000 census centroids, all studies are based upon data in the current CDBS database update of the FCC's engineering database and the final DTV Table of Allotments. A Longley-Rice study was performed with the proposed KPBT-DT facilities and all relevant stations listed in the FCC database as of October 13, 2009. The study results and the included stations are listed in Table I. No potentially affected station is predicted to receive more than 0.5% interference.

Other Licensed and Broadcast Facilities

There are no AM stations located within 3.22 kilometer of the proposed site. According to CDBS, the proposed operation of KPBT-TV will be the only full-service post-transition television station aside from KOSA-TV STA located on this self-supporting tower. No other currently authorized broadcast stations are anticipated to be operating within one kilometer of the proposed site after the DTV transition. No adverse technical effect is anticipated by the DTV operation to any other FCC licensed facility, however, if any problems occur, the licensee will take the necessary steps to resolve them.

Radio Frequency Field Level ("RFF" Level)

<u>Station</u>	<u>ERP</u> (kW)	<u>Frequency</u> (MHz)	<u>Ch</u>	<u>RCAGL*</u> * (m)	<u>F*</u>	<u>S (μW/cm²)</u>	Uncontrolled <u>RFF</u> (%)	Controlled <u>RFF</u> (%)
KOSA-TV STA	13.3	572-578	31	101.4	0.2	1.7	<1%	<1
KPBT-TV Proposed	500	614-620	38	80.3	0.2	58.3	14.2	<3.0

*F = assumed value

** RCAGL - 2 meters

The proposed KPBT-DT facilities are predicted to contribute less than approximately $58.3 \mu\text{W}/\text{cm}^2$ or less than 15% of the FCC guidelines for an uncontrolled environment which is less than 3% of the FCC guidelines for a controlled environment. The total predicted post-transition RFF is less than 16% of the FCC guidelines for an uncontrolled environment which is less than 4% of the FCC guidelines for a controlled environment.

Authorized personnel and rigging contractors will be alerted to the potential zone of high field levels on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

Environmental Assessment

An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the licensee indicates:

- (a)(1) The existing tower is not located in an officially designated wilderness area.
- (a)(2) The existing tower is not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing tower is not located near any known Indian religious sites.
- (a)(6) The existing tower is not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing tower will not involve a significant change in surface features of the ground in the vicinity of the tower.

- (a)(8) It is not proposed to equip the tower with high intensity white lights unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A.

ABOVE MEAN SEA LEVEL

ABOVE GROUND

1001.4 m (3285.4')

112.1 m (367.7')

C/R 971.6 m (3187.7')

82.3 m (270') C/R

ASR: 1215312

EXISTING
SEFT-SUPPORTING TOWER

NOT TO SCALE

889.3 m (2917.6')

0.0 m (0')

EXHIBIT E - 1
ANTENNA SKETCH
FOR THE PROPOSED DTV OPERATION OF
KPBT-DT, ODESSA, TEXAS
OCTOBER 2009

EXHIBIT E-2

ANTENNA MANUFACTURER DATA
FOR THE PROPOSED OPERATION OF
KPBT-DT, ODESSA, TEXAS



SYSTEM SUMMARY

Antenna:

Type:	TFU-16DSC O3	ERP:	500.0 kW	H Pol (26.99 dBk)
Channel:	38	RMS Gain*:	13.0	(11.14 dB)
Location:	Odessa, TX	Input Power:	38.46 kW	(15.85 dBk)

Transmission Line:

Type:	EIA Style Rigid TL	Attenuation:	0.37 dB
Size:	6-1/8" 75 ohm	Efficiency:	91.9%
Length	300 ft	91 m	

Transmitter:

Average Power Required: 41.85 kW (16.22 dBk)

* Gain is with respect to half wave dipole.



Date

09 Oct 2009

Call Letters

KPBT

Channel

38

Location

Odessa, TX

Customer

Antenna Type

TFU-16DSC O3

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #

TFU-O3

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	1.000	45	0.928	90	0.955	135	0.986	180	0.918	225	0.986	270	0.955	315	0.928
1	1.000	46	0.927	91	0.958	136	0.985	181	0.918	226	0.988	271	0.953	316	0.929
2	1.000	47	0.925	92	0.960	137	0.983	182	0.918	227	0.990	272	0.951	317	0.931
3	0.999	48	0.924	93	0.962	138	0.981	183	0.918	228	0.991	273	0.949	318	0.932
4	0.999	49	0.923	94	0.964	139	0.979	184	0.918	229	0.992	274	0.947	319	0.934
5	0.998	50	0.922	95	0.966	140	0.977	185	0.919	230	0.994	275	0.945	320	0.936
6	0.998	51	0.921	96	0.969	141	0.975	186	0.919	231	0.995	276	0.943	321	0.937
7	0.997	52	0.921	97	0.971	142	0.973	187	0.920	232	0.996	277	0.941	322	0.939
8	0.996	53	0.920	98	0.973	143	0.971	188	0.921	233	0.997	278	0.939	323	0.941
9	0.995	54	0.919	99	0.975	144	0.969	189	0.921	234	0.998	279	0.937	324	0.943
10	0.994	55	0.919	100	0.977	145	0.966	190	0.922	235	0.998	280	0.936	325	0.945
11	0.992	56	0.918	101	0.979	146	0.964	191	0.923	236	0.999	281	0.934	326	0.947
12	0.991	57	0.918	102	0.981	147	0.962	192	0.924	237	0.999	282	0.932	327	0.949
13	0.990	58	0.918	103	0.983	148	0.960	193	0.925	238	1.000	283	0.931	328	0.951
14	0.988	59	0.918	104	0.985	149	0.958	194	0.927	239	1.000	284	0.929	329	0.953
15	0.986	60	0.918	105	0.986	150	0.955	195	0.928	240	1.000	285	0.928	330	0.955
16	0.985	61	0.918	106	0.988	151	0.953	196	0.929	241	1.000	286	0.927	331	0.958
17	0.983	62	0.918	107	0.990	152	0.951	197	0.931	242	1.000	287	0.925	332	0.960
18	0.981	63	0.918	108	0.991	153	0.949	198	0.932	243	0.999	288	0.924	333	0.962
19	0.979	64	0.918	109	0.992	154	0.947	199	0.934	244	0.999	289	0.923	334	0.964
20	0.977	65	0.919	110	0.994	155	0.945	200	0.936	245	0.998	290	0.922	335	0.966
21	0.975	66	0.919	111	0.995	156	0.943	201	0.937	246	0.998	291	0.921	336	0.969
22	0.973	67	0.920	112	0.996	157	0.941	202	0.939	247	0.997	292	0.921	337	0.971
23	0.971	68	0.921	113	0.997	158	0.939	203	0.941	248	0.996	293	0.920	338	0.973
24	0.969	69	0.921	114	0.998	159	0.937	204	0.943	249	0.995	294	0.919	339	0.975
25	0.966	70	0.922	115	0.998	160	0.936	205	0.945	250	0.994	295	0.919	340	0.977
26	0.964	71	0.923	116	0.999	161	0.934	206	0.947	251	0.992	296	0.918	341	0.979
27	0.962	72	0.924	117	0.999	162	0.932	207	0.949	252	0.991	297	0.918	342	0.981
28	0.960	73	0.925	118	1.000	163	0.931	208	0.951	253	0.990	298	0.918	343	0.983
29	0.958	74	0.927	119	1.000	164	0.929	209	0.953	254	0.988	299	0.918	344	0.985
30	0.955	75	0.928	120	1.000	165	0.928	210	0.955	255	0.986	300	0.918	345	0.986
31	0.953	76	0.929	121	1.000	166	0.927	211	0.958	256	0.985	301	0.918	346	0.988
32	0.951	77	0.931	122	1.000	167	0.925	212	0.960	257	0.983	302	0.918	347	0.990
33	0.949	78	0.932	123	0.999	168	0.924	213	0.962	258	0.981	303	0.918	348	0.991
34	0.947	79	0.934	124	0.999	169	0.923	214	0.964	259	0.979	304	0.918	349	0.992
35	0.945	80	0.936	125	0.998	170	0.922	215	0.966	260	0.977	305	0.919	350	0.994
36	0.943	81	0.937	126	0.998	171	0.921	216	0.969	261	0.975	306	0.919	351	0.995
37	0.941	82	0.939	127	0.997	172	0.921	217	0.971	262	0.973	307	0.920	352	0.996
38	0.939	83	0.941	128	0.996	173	0.920	218	0.973	263	0.971	308	0.921	353	0.997
39	0.937	84	0.943	129	0.995	174	0.919	219	0.975	264	0.969	309	0.921	354	0.998
40	0.936	85	0.945	130	0.994	175	0.919	220	0.977	265	0.966	310	0.922	355	0.998
41	0.934	86	0.947	131	0.992	176	0.918	221	0.979	266	0.964	311	0.923	356	0.999
42	0.932	87	0.949	132	0.991	177	0.918	222	0.981	267	0.962	312	0.924	357	0.999
43	0.931	88	0.951	133	0.990	178	0.918	223	0.983	268	0.960	313	0.925	358	1.000
44	0.929	89	0.953	134	0.988	179	0.918	224	0.985	269	0.958	314	0.927	359	1.000

Remarks:



Exhibit No.

3

Date

09 Oct 2009

Call Letters

KPBT

Channel

38

Location

Odessa, TX

Customer

Antenna Type

TFU-16DSC O3

ELEVATION PATTERN

RMS Gain at Main Lobe

13.0 (11.14 dB)

Beam Tilt

1.00 Degrees

RMS Gain at Horizontal

10.6 (10.25 dB)

Frequency

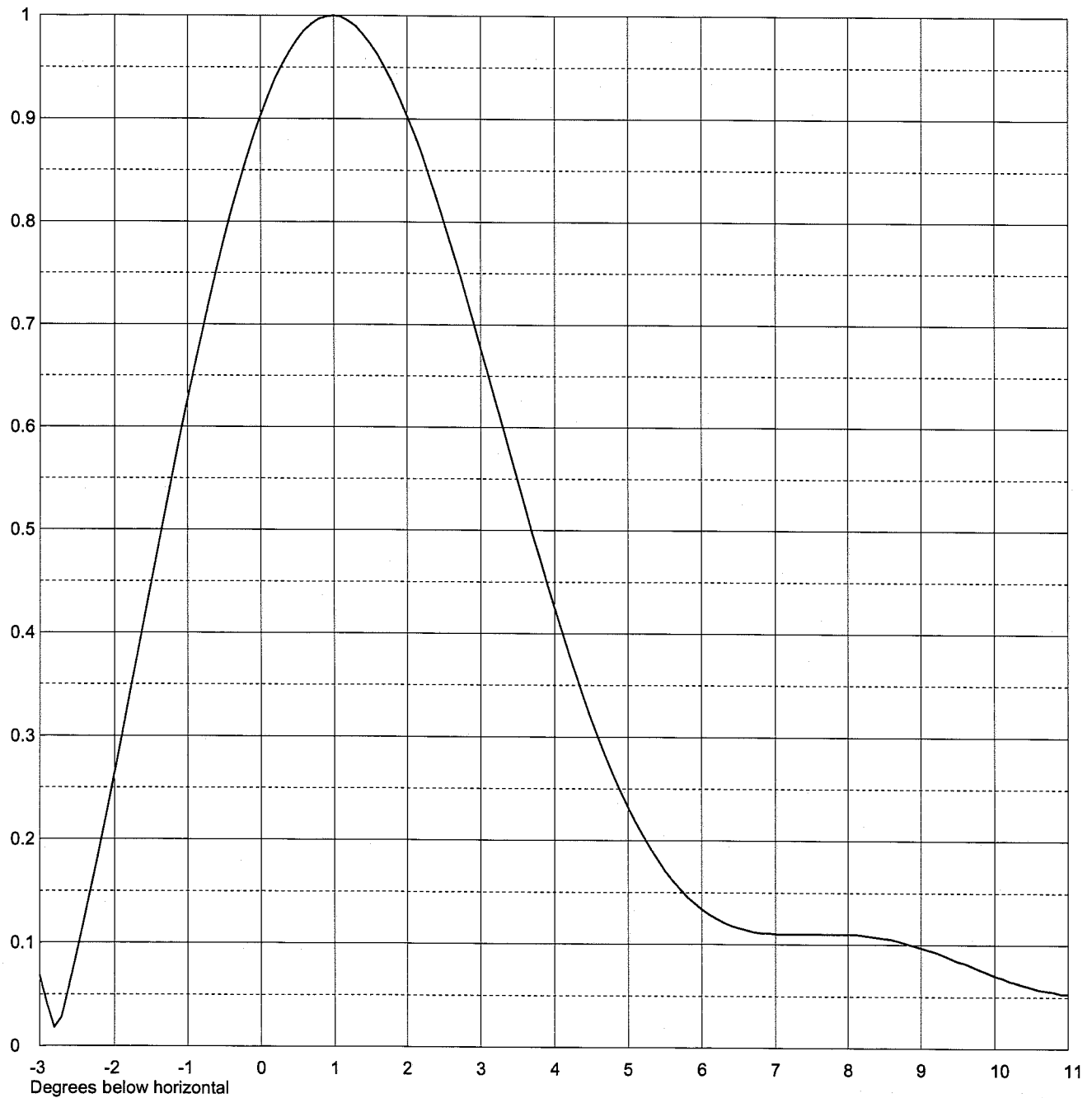
617.00 MHz

Calculated / Measured

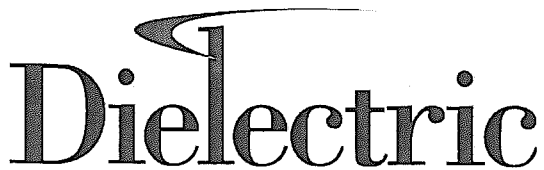
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Drawing #

16Q130100



Remarks:



Date

09 Oct 2009

Call Letters

KPBT

Channel

38

Location

Odessa, TX

Customer

Antenna Type

TFU-16DSC 03

ELEVATION PATTERN

RMS Gain at Main Lobe

13.0 (11.14 dB)

Beam Tilt

1.00 Degrees

RMS Gain at Horizontal

10.6 (10.25 dB)

Frequency

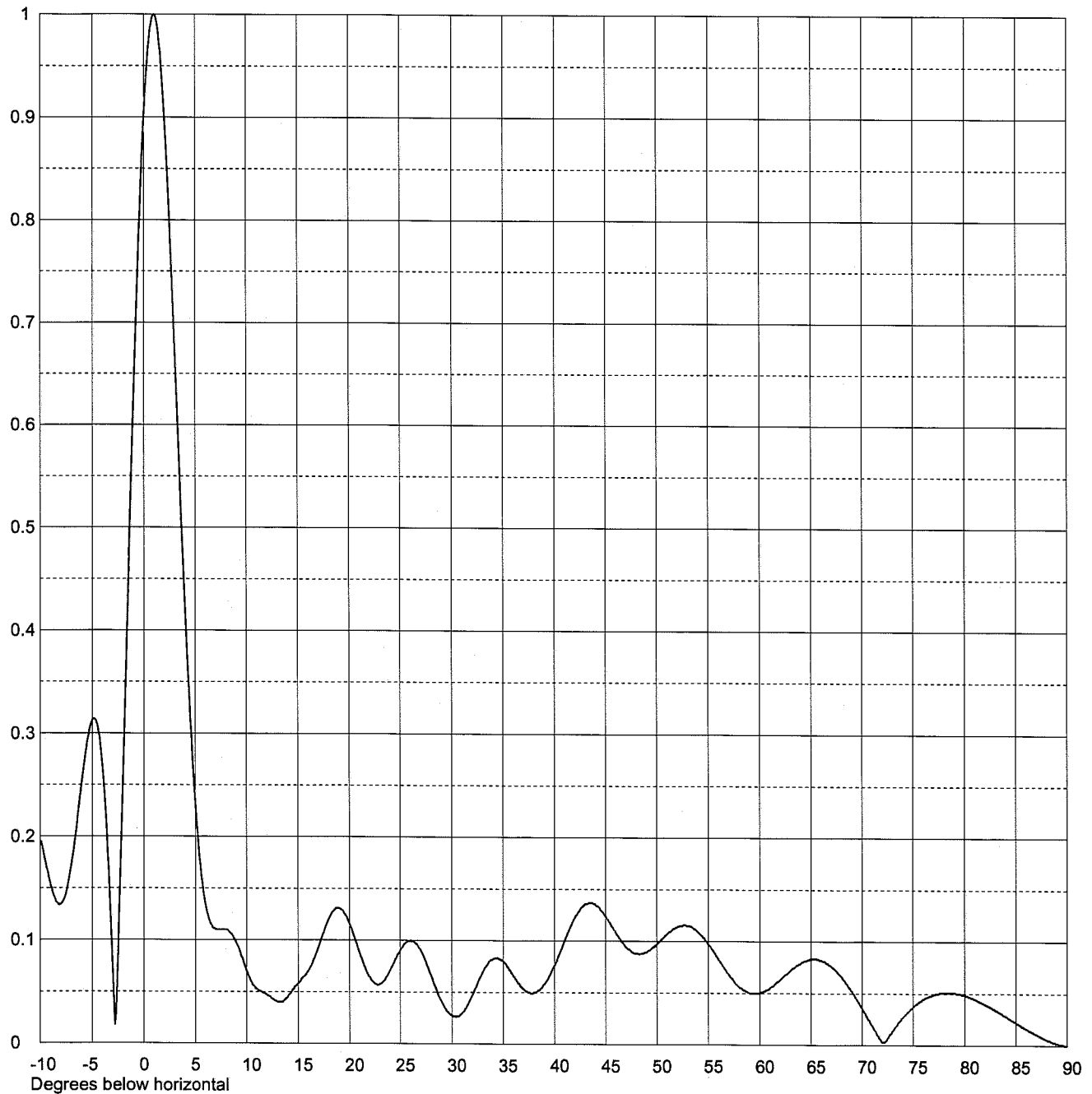
617.00 MHz

Calculated / Measured

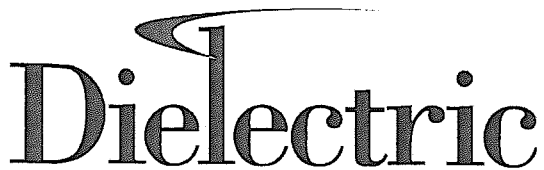
Calculated

Drawing #

16Q130100-90



Remarks:



Date

09 Oct 2009

Call Letters

KPBT

Channel

38

Location

Odessa, TX

Customer

Antenna Type

TFU-16DSC 03

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #

16Q130100-90

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.200	2.4	0.823	10.6	0.057	30.5	0.027	51.0	0.107	71.5	0.010
-9.5	0.175	2.6	0.777	10.8	0.055	31.0	0.030	51.5	0.111	72.0	0.003
-9.0	0.152	2.8	0.728	11.0	0.053	31.5	0.037	52.0	0.114	72.5	0.007
-8.5	0.137	3.0	0.677	11.5	0.050	32.0	0.047	52.5	0.115	73.0	0.014
-8.0	0.135	3.2	0.626	12.0	0.047	32.5	0.059	53.0	0.115	73.5	0.021
-7.5	0.147	3.4	0.574	12.5	0.043	33.0	0.069	53.5	0.113	74.0	0.027
-7.0	0.174	3.6	0.522	13.0	0.040	33.5	0.077	54.0	0.109	74.5	0.032
-6.5	0.212	3.8	0.473	13.5	0.040	34.0	0.082	54.5	0.104	75.0	0.037
-6.0	0.255	4.0	0.425	14.0	0.045	34.5	0.083	55.0	0.097	75.5	0.041
-5.5	0.292	4.2	0.379	14.5	0.052	35.0	0.080	55.5	0.090	76.0	0.045
-5.0	0.313	4.4	0.337	15.0	0.058	35.5	0.074	56.0	0.082	76.5	0.047
-4.5	0.307	4.6	0.298	15.5	0.064	36.0	0.066	56.5	0.075	77.0	0.049
-4.0	0.266	4.8	0.263	16.0	0.070	36.5	0.059	57.0	0.068	77.5	0.050
-3.5	0.186	5.0	0.232	16.5	0.081	37.0	0.053	57.5	0.061	78.0	0.051
-3.0	0.068	5.2	0.205	17.0	0.094	37.5	0.050	58.0	0.056	78.5	0.051
-2.8	0.018	5.4	0.182	17.5	0.108	38.0	0.050	58.5	0.053	79.0	0.051
-2.6	0.057	5.6	0.162	18.0	0.121	38.5	0.052	59.0	0.050	79.5	0.050
-2.4	0.122	5.8	0.146	18.5	0.129	39.0	0.058	59.5	0.050	80.0	0.049
-2.2	0.191	6.0	0.134	19.0	0.131	39.5	0.066	60.0	0.050	80.5	0.047
-2.0	0.264	6.2	0.125	19.5	0.126	40.0	0.076	60.5	0.052	81.0	0.045
-1.8	0.338	6.4	0.118	20.0	0.116	40.5	0.088	61.0	0.055	81.5	0.042
-1.6	0.412	6.6	0.114	20.5	0.102	41.0	0.100	61.5	0.059	82.0	0.040
-1.4	0.486	6.8	0.111	21.0	0.087	41.5	0.112	62.0	0.063	82.5	0.037
-1.2	0.558	7.0	0.110	21.5	0.074	42.0	0.123	62.5	0.068	83.0	0.034
-1.0	0.627	7.2	0.110	22.0	0.064	42.5	0.131	63.0	0.072	83.5	0.031
-0.8	0.693	7.4	0.110	22.5	0.058	43.0	0.136	63.5	0.076	84.0	0.028
-0.6	0.755	7.6	0.110	23.0	0.058	43.5	0.137	64.0	0.079	84.5	0.025
-0.4	0.811	7.8	0.110	23.5	0.062	44.0	0.135	64.5	0.081	85.0	0.022
-0.2	0.860	8.0	0.110	24.0	0.071	44.5	0.130	65.0	0.083	85.5	0.019
0.0	0.903	8.2	0.109	24.5	0.081	45.0	0.124	65.5	0.083	86.0	0.016
0.2	0.939	8.4	0.107	25.0	0.090	45.5	0.116	66.0	0.082	86.5	0.013
0.4	0.966	8.6	0.105	25.5	0.097	46.0	0.108	66.5	0.079	87.0	0.011
0.6	0.986	8.8	0.101	26.0	0.100	46.5	0.100	67.0	0.076	87.5	0.008
0.8	0.997	9.0	0.097	26.5	0.097	47.0	0.094	67.5	0.071	88.0	0.006
1.0	1.000	9.2	0.093	27.0	0.090	47.5	0.090	68.0	0.066	88.5	0.004
1.2	0.995	9.4	0.087	27.5	0.079	48.0	0.088	68.5	0.059	89.0	0.002
1.4	0.982	9.6	0.082	28.0	0.066	48.5	0.088	69.0	0.052	89.5	0.001
1.6	0.963	9.8	0.076	28.5	0.052	49.0	0.089	69.5	0.044	90.0	0.000
1.8	0.936	10.0	0.070	29.0	0.041	49.5	0.093	70.0	0.036		
2.0	0.903	10.2	0.065	29.5	0.032	50.0	0.097	70.5	0.027		
2.2	0.866	10.4	0.061	30.0	0.028	50.5	0.102	71.0	0.019		

Remarks:

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I
TABULATION OF
LONGLEY-RICE ANALYSIS
FOR THE OPERATION OF
KPBT-DT, ODESSA, TEXAS
CHANNEL 38 500 KW ND ERP 85.1 METERS HAAT
OCTOBER 2009

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>FCC File No.</u>	<u>Result</u>
39	KTXT-TV	LUBBOCK TX	191.9	CP	BPEDT-20080619AFE	No interference
39	KTXT-TV	LUBBOCK TX	191.9	PLN	DTVPLN-DTVPLN65355	No interference
39	KTXT-TV	LUBBOCK TX	191.9	LIC	BLEDT-20031124AOZ	No interference
40	K40FJ	MIDLAND TX	37.6	LIC	BLTTA-20011121ABB	No interference

COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
KPBT-DT, ODESSA, TEXAS
CHANNEL 38 500 KW ERP 85.1 METERS HAAT
OCTOBER 2009

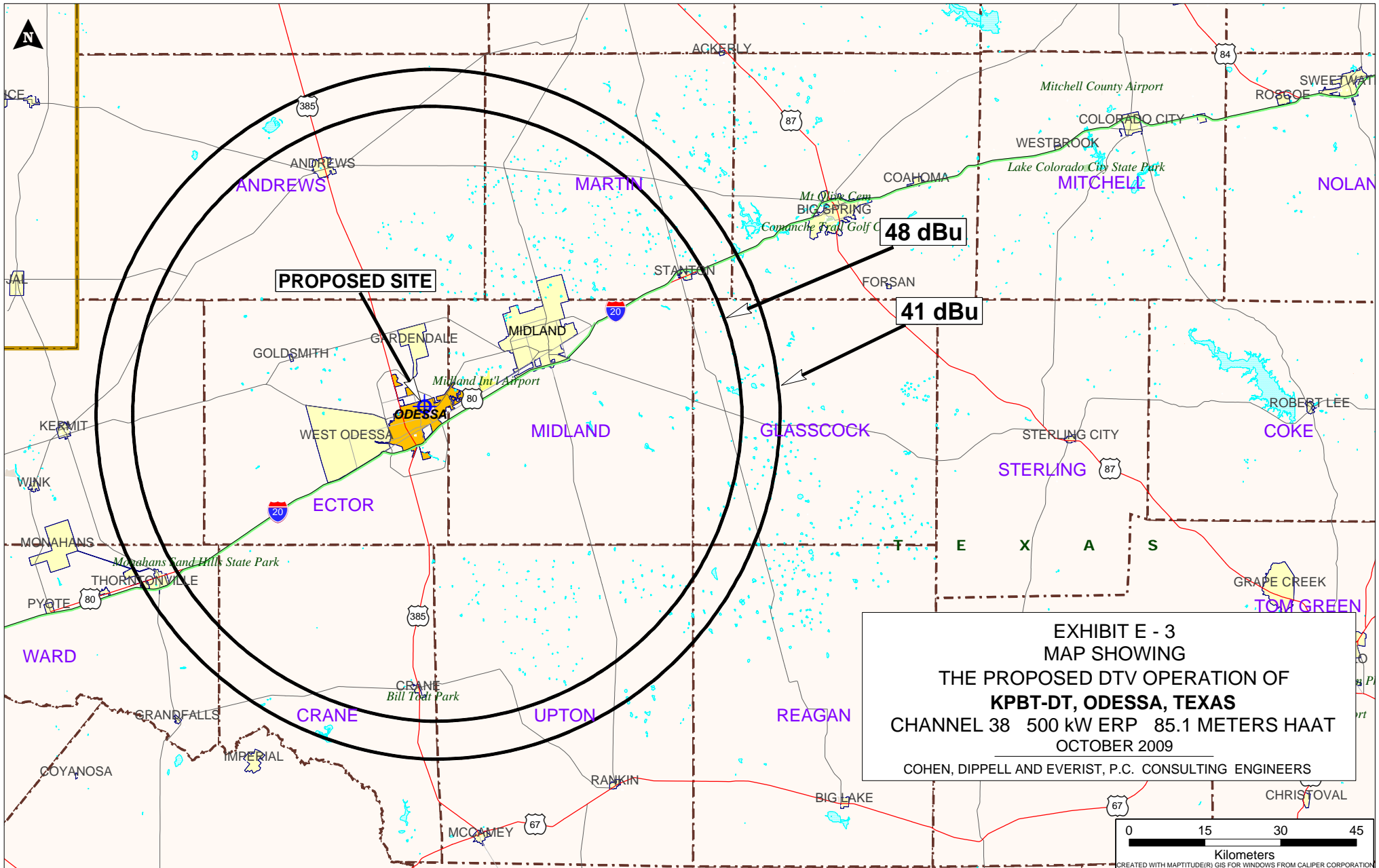
Radial Bearing N ° E, T	Average* Elevation 3.2 to 16.1 km meters	Effective Height meters	Depression Angle	ERP At Radio Horizon kW	Distance to Contour F(50,90)	
					48 dBu City Grade km	41 dBu Noise-Limited km
0	894.8	76.8	0.243	500	59.1	66.4
45	887.1	84.5	0.255	500	60.3	67.6
90	868.6	103.0	0.281	500	62.7	70.3
135	866.7	104.9	0.284	500	62.9	70.5
180	874.8	96.8	0.273	500	62.0	69.5
225	893.3	78.3	0.245	500	59.3	66.6
270	902.8	68.8	0.230	500	57.7	65.0
315	904.2	67.4	0.227	500	57.5	64.8
Average	886.5	85.1				

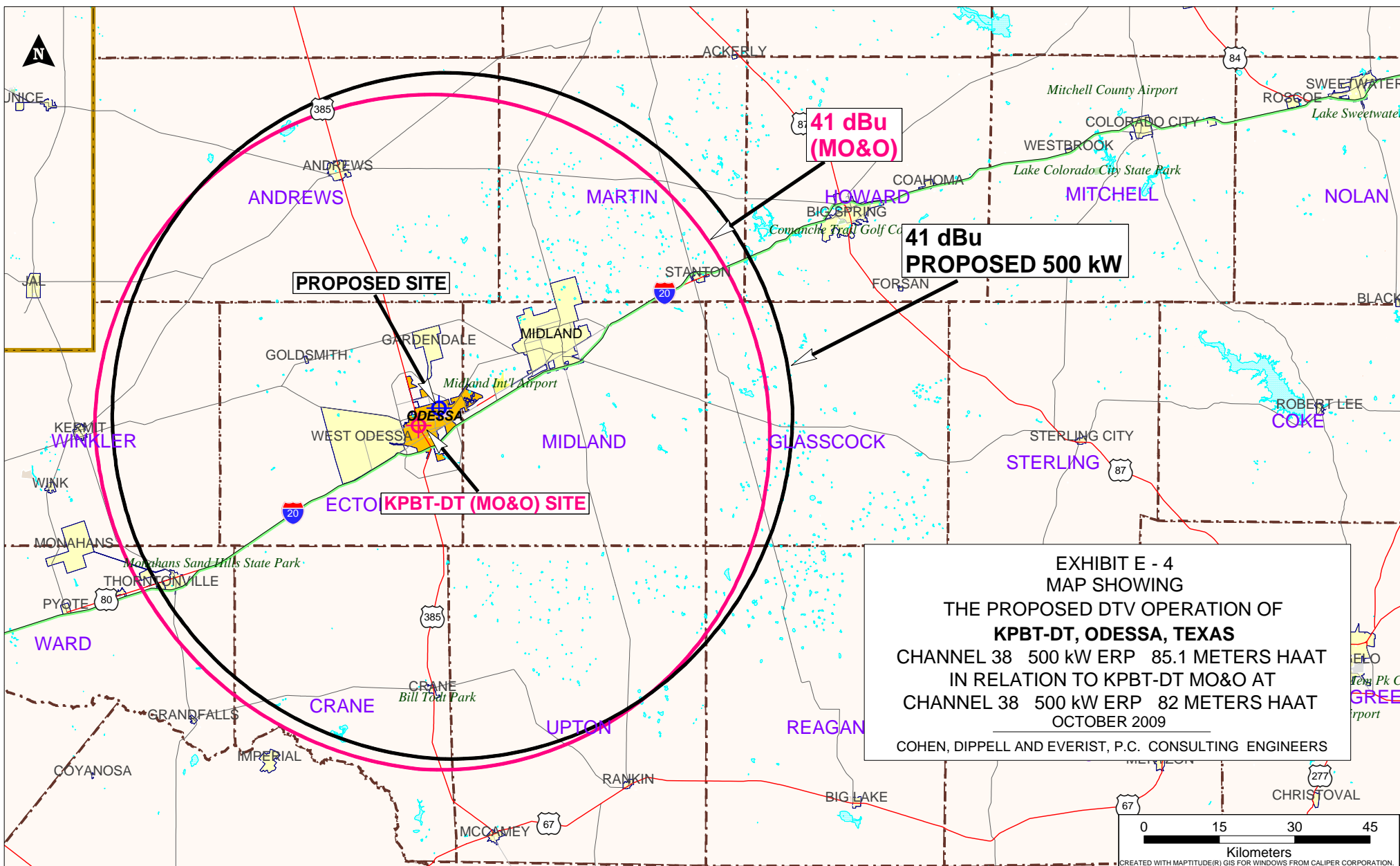
*Based on data from FCC 3-second data base

DTV Channel 38 (614-620 MHz)
Average Elevation 3.2 to 16.1 km 886.5 meters AMSL
Center of Radiation 971.6 meters AMSL
Antenna Height Above Average Terrain 85.1 meters
Effective Radiated Power 500 kW (26.99 dBk) Max.

North Latitude: 31° 53' 49.9"
West Longitude: 102° 20' 14"

(NAD-27)





SECTION VII - DTV Engineering

Complete Questions 1-5, and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.

Pre-Transition Certification Checklist. An application concerning a pre-transition channel must complete questions 1(a)-(c), and 2-5. A correct answer of "Yes" to all of these questions will ensure an expeditious grant of a construction permit application to change pre-transition facilities. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

Post-Transition Expedited Processing. An application concerning a post-transition channel must complete questions 1(a), (d)-(e), and 2-5. A station applying for a construction permit to build its post-transition channel will receive expedited processing if its application (1) does not seek to expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"); (2) specifies facilities that match or closely approximate those defined in the new DTV Table Appendix B facilities; and (3) is filed on or before March 17, 2008 (45 days of the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91).

1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

- (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
- (b) It will operate a pre-transition facility from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
- It will operate a pre-transition facility with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
- (d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"). ☐ ☐ No
☐ N/A
- (e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B. ☐ Yes ☐ No
☐ N/A
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RIF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. ☐ Yes ☐ No

Applicant must **submit the Exhibit** called for in Item 13.

3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. ☐ Yes ☐ No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable. ☐ Yes ☐ No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. ☐ Yes ☐ No

SECTION VII - DTV Engineering

TECHNICAL SPECIFICATIONS Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel Number: DTV _____ Analog TV, if any _____
2. Zone: ☐ I ☐ II ☐ III
3. Antenna Location Coordinates: (NAD 27)
- | | | |
|-------------------------|----------------------------|--------------------------------------|
| _____ ° _____ ' _____ " | <input type="checkbox"/> N | <input type="checkbox"/> S Latitude |
| _____ ° _____ ' _____ " | <input type="checkbox"/> E | <input type="checkbox"/> W Longitude |
4. Antenna Structure Registration Number: _____
- ☐ Not applicable ☐ FAA Notification Filed with FAA
5. Antenna Location Site Elevation Above Mean Sea Level: _____ meters
6. Overall Tower Height Above Ground Level: _____ meters
7. Height of Radiation Center Above Ground Level: _____ meters
8. Height of Radiation Center Above Average Terrain: _____ meters
9. Maximum Effective Radiated Power (average power): _____ kW
10. Antenna Specifications:
- | | | |
|----|--------------|-------|
| a. | Manufacturer | Model |
|----|--------------|-------|
- b. Electrical Beam Tilt: _____ degrees ☐ Not Applicable
- c. Mechanical Beam Tilt: _____ degrees toward azimuth _____ degrees True ☐ Not Applicable
- Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).
- | |
|-------------|
| Exhibit No. |
|-------------|
- d. Polarization: ☐ Horizontal ☐ Circular ☐ Elliptical

TECH BOX

e. Directional Antenna Relative Field Values:

☐

Not applicable (Nondirectional)

Rotation: _____ °

☐

No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.

11. Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616?

☐

Yes

☐

No

If "No," attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.

Exhibit No.

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Exhibit No.

13. **Environmental Protection Act. Submit in an Exhibit** the following:

Exhibit No.

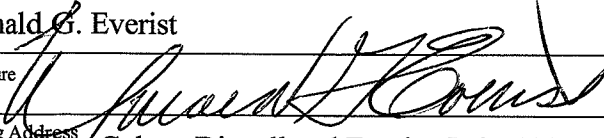
- a. If **Certification Checklist** Item 2 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist** Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radio frequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

Section VII – Preparer's Certification

I certify that I have prepared Section VII (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief

Name Donald G. Everist		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date October 30, 2009	
Mailing Address Cohen, Dippell and Everist, P.C., 1300 L Street, NW, Suite 1100			
City Washington		State or Country (if foreign address) DC	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111		E-Mail Address (if available) cde@attglobal.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).