

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of VENTURE TECHNOLOGIES GROUP, LLC, licensee of Class A digital television station WEPT-CD, Channel 22 in Newburgh, New York, in support of its Application for Construction Permit to specify operation on its post-repack channel, Channel 28. No change in site location, antenna azimuth pattern or antenna height is proposed herein.

It is proposed to mount a Dielectric TLP-4B directional elliptically-polarized antenna at the 87-meter level of the existing 91-meter tower on which the present WEPT-CD antenna is located. The proposed effective radiated power for the facility is 15.0 kW in the horizontal plane, which is the allotted repack power level for WEPT-CD. Exhibit B is a map upon which the predicted 51 dBu service contour is plotted.

Elevation and azimuth pattern information for the proposed Dielectric antenna appear in Exhibit C. Since the facility proposed herein specifies the exact repack allotment facility assigned to WEPT-CD, no interference study is included herein. A detailed power density calculation is provided in Exhibit D.

Since no change in the overall height or location of the existing WEPT-DT tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, the Federal Communications Commission issued Antenna Structure Registration Number 1018749 to this tower.

EXHIBIT A

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 blue ink, appearing to read "K. T. Fisher", with a stylized, elongated final letter.

KEVIN T. FISHER

July 7, 2017

**CONTOUR POPULATION
2015 U.S. CENSUS DATA
811,949 (371,908 HH)**



**FCC 51 DBU
SERVICE CONTOUR**

WEPT-CD

**EXHIBIT B
PREDICTED SERVICE CONTOUR
PROPOSED WEPT-CD
CH. 28 - NEWBURGH, NEW YORK**

Scale 1:750,000

0 6 12 18 mi

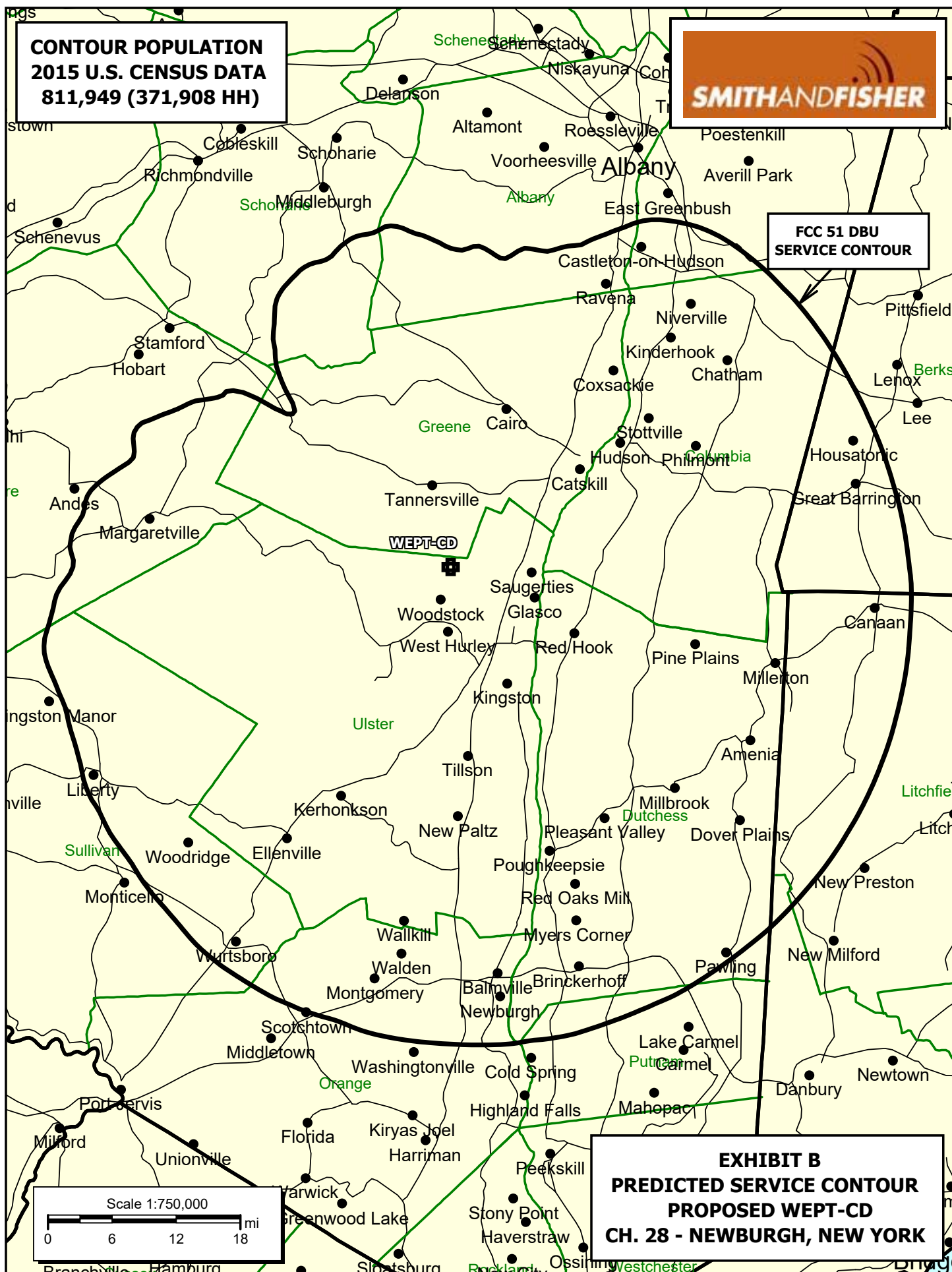
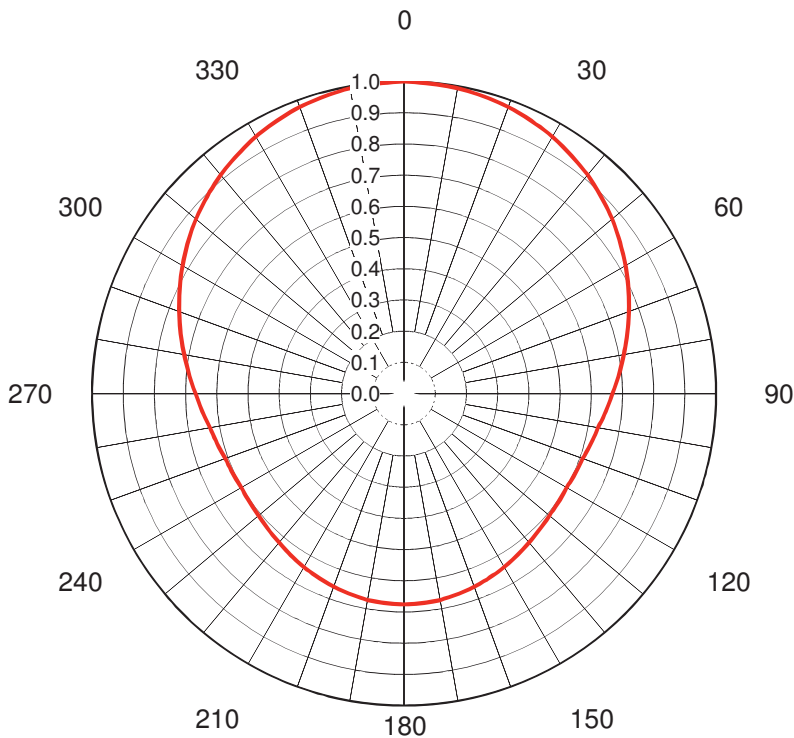


EXHIBIT C

AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No. **C-70921**
Date **26-Jun-17**
Call Letters **WEPT**
Channel **28**
Frequency **557 MHz**
Antenna Type **TLP-4B**
Gain **1.7 (2.31dB)**
Calculated



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.929	72	0.757	108	0.613	144	0.631	180	0.676	216	0.631	252	0.613	288	0.757
1	0.999	37	0.926	73	0.751	109	0.611	145	0.632	181	0.676	217	0.629	253	0.616	289	0.762
2	0.999	38	0.922	74	0.746	110	0.609	146	0.634	182	0.675	218	0.627	254	0.618	290	0.767
3	0.998	39	0.919	75	0.741	111	0.608	147	0.636	183	0.675	219	0.625	255	0.620	291	0.772
4	0.998	40	0.915	76	0.736	112	0.608	148	0.638	184	0.674	220	0.623	256	0.622	292	0.778
5	0.997	41	0.911	77	0.731	113	0.607	149	0.640	185	0.674	221	0.622	257	0.624	293	0.783
6	0.996	42	0.906	78	0.725	114	0.606	150	0.642	186	0.674	222	0.620	258	0.627	294	0.788
7	0.996	43	0.902	79	0.720	115	0.605	151	0.644	187	0.673	223	0.618	259	0.629	295	0.794
8	0.995	44	0.897	80	0.715	116	0.605	152	0.645	188	0.673	224	0.617	260	0.631	296	0.799
9	0.995	45	0.893	81	0.710	117	0.604	153	0.647	189	0.672	225	0.615	261	0.635	297	0.804
10	0.994	46	0.889	82	0.706	118	0.603	154	0.649	190	0.672	226	0.614	262	0.638	298	0.809
11	0.992	47	0.884	83	0.701	119	0.603	155	0.650	191	0.671	227	0.613	263	0.642	299	0.815
12	0.991	48	0.880	84	0.696	120	0.602	156	0.652	192	0.669	228	0.611	264	0.646	300	0.820
13	0.989	49	0.875	85	0.692	121	0.603	157	0.654	193	0.668	229	0.609	265	0.650	301	0.825
14	0.988	50	0.871	86	0.687	122	0.603	158	0.656	194	0.667	230	0.608	266	0.653	302	0.830
15	0.986	51	0.866	87	0.682	123	0.604	159	0.657	195	0.665	231	0.607	267	0.657	303	0.835
16	0.984	52	0.861	88	0.677	124	0.604	160	0.659	196	0.664	232	0.607	268	0.661	304	0.840
17	0.983	53	0.856	89	0.673	125	0.605	161	0.660	197	0.663	233	0.606	269	0.664	305	0.845
18	0.981	54	0.851	90	0.668	126	0.606	162	0.662	198	0.662	234	0.606	270	0.668	306	0.851
19	0.980	55	0.845	91	0.664	127	0.606	163	0.663	199	0.660	235	0.605	271	0.673	307	0.856
20	0.978	56	0.840	92	0.661	128	0.607	164	0.664	200	0.659	236	0.604	272	0.677	308	0.861
21	0.975	57	0.835	93	0.657	129	0.607	165	0.665	201	0.657	237	0.604	273	0.682	309	0.866
22	0.973	58	0.830	94	0.653	130	0.608	166	0.667	202	0.656	238	0.603	274	0.687	310	0.871
23	0.970	59	0.825	95	0.650	131	0.609	167	0.668	203	0.654	239	0.603	275	0.692	311	0.875
24	0.967	60	0.820	96	0.646	132	0.611	168	0.669	204	0.652	240	0.602	276	0.696	312	0.880
25	0.965	61	0.815	97	0.642	133	0.613	169	0.671	205	0.650	241	0.603	277	0.701	313	0.884
26	0.962	62	0.809	98	0.638	134	0.614	170	0.672	206	0.649	242	0.603	278	0.706	314	0.889
27	0.959	63	0.804	99	0.635	135	0.615	171	0.672	207	0.647	243	0.604	279	0.710	315	0.893
28	0.956	64	0.799	100	0.631	136	0.617	172	0.673	208	0.645	244	0.605	280	0.715	316	0.897
29	0.954	65	0.794	101	0.629	137	0.618	173	0.673	209	0.644	245	0.605	281	0.720	317	0.902
30	0.951	66	0.788	102	0.627	138	0.620	174	0.674	210	0.642	246	0.606	282	0.725	318	0.906
31	0.947	67	0.783	103	0.624	139	0.622	175	0.674	211	0.640	247	0.607	283	0.731	319	0.911
32	0.944	68	0.778	104	0.622	140	0.623	176	0.674	212	0.638	248	0.608	284	0.736	320	0.915
33	0.940	69	0.772	105	0.620	141	0.625	177	0.675	213	0.636	249	0.608	285	0.741	321	0.919
34	0.937	70	0.767	106	0.618	142	0.627	178	0.675	214	0.634	250	0.609	286	0.746	322	0.922
35	0.933	71	0.762	107	0.616	143	0.629	179	0.676	215	0.632	251	0.611	287	0.751	323	0.926

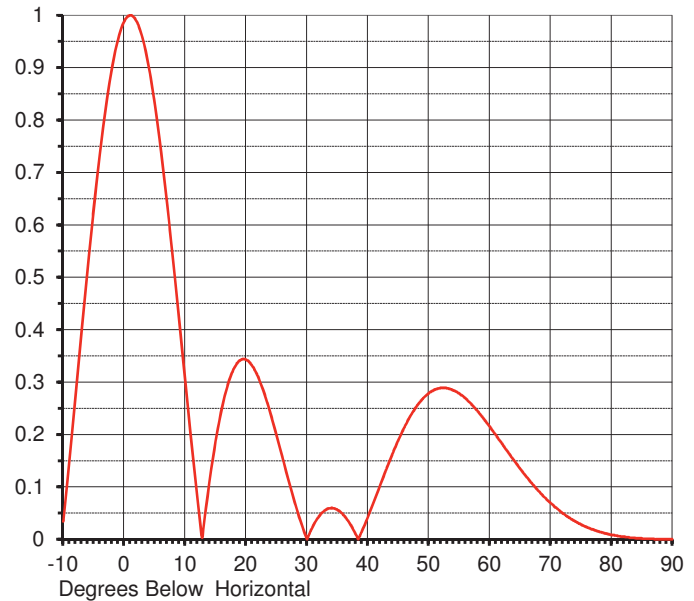
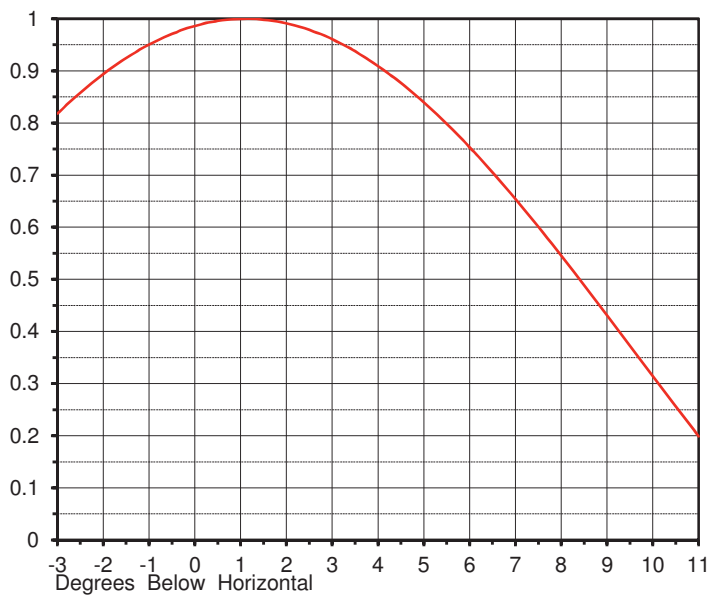
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ELEVATION PATTERN

Proposal No. **C-70921**
 Date **26-Jun-17**
 Call Letters **WEPT**
 Channel **28**
 Frequency **557 MHz**
 Antenna Type **TLP-4B**

RMS Directivity at Main Lobe **4.0 (6.02 dB)**
 RMS Directivity at Horizontal **3.9 (5.91 dB)**
Calculated

Beam Tilt **1.00 deg**
 Pattern Number **04L040100**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.034	10.0	0.303	30.0	0.000	50.0	0.279	70.0	0.069
-9.0	0.151	11.0	0.188	31.0	0.026	51.0	0.286	71.0	0.059
-8.0	0.273	12.0	0.079	32.0	0.044	52.0	0.289	72.0	0.049
-7.0	0.397	13.0	0.022	33.0	0.056	53.0	0.288	73.0	0.041
-6.0	0.517	14.0	0.111	34.0	0.060	54.0	0.284	74.0	0.034
-5.0	0.632	15.0	0.188	35.0	0.056	55.0	0.278	75.0	0.028
-4.0	0.736	16.0	0.249	36.0	0.046	56.0	0.269	76.0	0.023
-3.0	0.826	17.0	0.295	37.0	0.030	57.0	0.257	77.0	0.018
-2.0	0.900	18.0	0.326	38.0	0.009	58.0	0.244	78.0	0.014
-1.0	0.955	19.0	0.341	39.0	0.015	59.0	0.230	79.0	0.011
0.0	0.988	20.0	0.343	40.0	0.043	60.0	0.215	80.0	0.008
1.0	1.000	21.0	0.331	41.0	0.073	61.0	0.199	81.0	0.006
2.0	0.989	22.0	0.309	42.0	0.103	62.0	0.182	82.0	0.005
3.0	0.956	23.0	0.278	43.0	0.133	63.0	0.166	83.0	0.003
4.0	0.903	24.0	0.240	44.0	0.163	64.0	0.150	84.0	0.002
5.0	0.832	25.0	0.198	45.0	0.190	65.0	0.134	85.0	0.001
6.0	0.744	26.0	0.154	46.0	0.214	66.0	0.119	86.0	0.001
7.0	0.644	27.0	0.111	47.0	0.236	67.0	0.105	87.0	0.000
8.0	0.534	28.0	0.069	48.0	0.254	68.0	0.092	88.0	0.000
9.0	0.419	29.0	0.032	49.0	0.268	69.0	0.080	89.0	0.000
								90.0	0.000

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POWER DENSITY CALCULATION

PROPOSED WEPT-CD
CHANNEL 28 – NEWBURGH, NEW YORK

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Newburgh facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kW (H,V), an antenna radiation center 87 meters above ground, and the specific elevation pattern of the proposed Dielectric TLP-4B CP antenna, maximum power density two meters above ground of 0.0078 mW/cm^2 is calculated to occur 66 meters from the base of the tower. Since this is only 2.0 percent of the 0.37 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 28 (554-600 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing 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 non-ionizing radiation.