

**EXHIBIT A**

**ENGINEERING STATEMENT**

The engineering data contained herein have been prepared on behalf of COMMUNITY TELEVISION, INC., licensee of digital Low Power Television Station WHDS-LD, Channel 41 in Savannah, Georgia, in support of this request for Special Temporary Authority to operate the station with a reduced facility on its recently authorized displacement channel, Channel 20. The Channel 20 facility was authorized in LMS-00000067538. No change in site location, antenna height or antenna pattern is proposed herein.

It is proposed to mount a 12-bay slotted-cylinder horizontally-polarized directional antenna at the 102.1-meter level of an existing 152.1-meter communications tower. The proposed effective radiated power for the facility is 1.02 kW in the horizontal plane. Exhibit B is a map upon which the STA's predicted 51 dBu service contour is plotted. Antenna elevation and azimuth pattern data for the proposed antenna are provided in Exhibit C.

Included, as Exhibit D, is a summary report from a TVStudy interference analysis for the proposed facility. Our study employed a cell size of 1.0 kilometer and an increment spacing of 1.0 kilometer. Further the applicant proposes use of a full-service mask filter. The results indicate that the proposed WHDS-LD STA facility meets the Commission's interference requirements to all full-power and low-power co-channel and adjacent-channel television facilities.

A detailed power density calculation is attached hereto as Exhibit E.

Since no change in the overall height or location of the existing tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition,

**SMITH AND FISHER**

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**EXHIBIT A**

the Federal Communications Commission assigned Antenna Structure Registration Number 1030963 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 blue ink, appearing to read "K. T. FISHER".

KEVIN T. FISHER

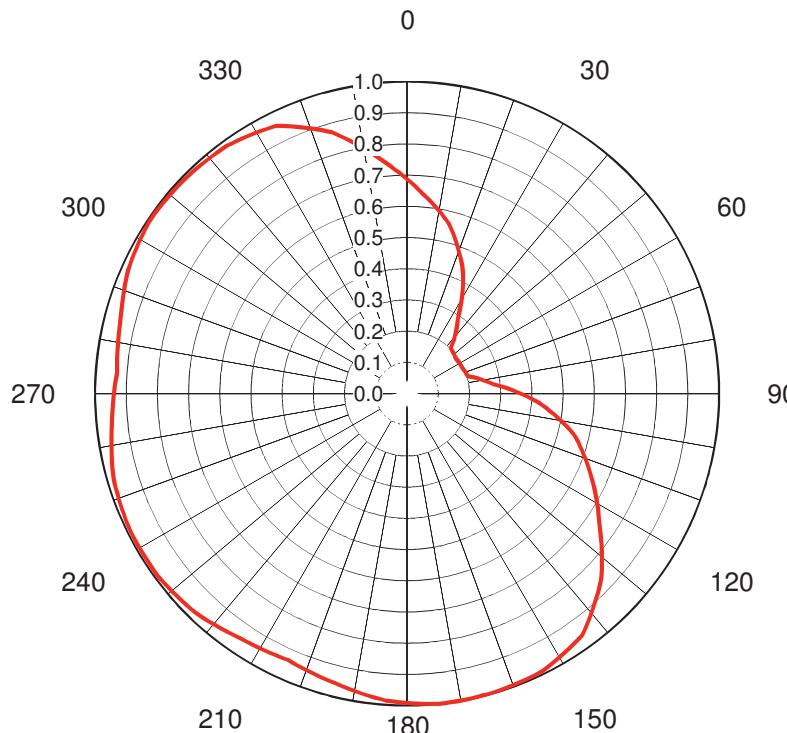
April 30, 2019

**CONTOUR POPULATION  
2015 U.S. CENSUS DATA  
321,403 (134,101 HH)**

**Smith and Fisher, LLC**



**EXHIBIT B  
PREDICTED SERVICE CONTOUR  
PROPOSED WHDS-LD STA  
CHANNEL 20 - SAVANNAH, GEORGIA**



## AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No.	<b>0</b>
Date	<b>12-Oct-18</b>
Call Letters	<b>WHDS</b>
Channel	<b>20</b>
Frequency	<b>509 MHz</b>
Antenna Type	<b>ANT DLP12W</b>
Gain	<b>1.52 (1.83dB)</b>
Calculated	

Deg	Value																						
0	0.688	36	0.274	72	0.201	108	0.590	144	0.956	180	0.992	216	0.954	252	0.981	288	0.959	324	0.982				
1	0.678	37	0.265	73	0.201	109	0.599	145	0.959	181	0.990	217	0.956	253	0.980	289	0.962	325	0.979				
2	0.668	38	0.256	74	0.202	110	0.608	146	0.963	182	0.989	218	0.959	254	0.979	290	0.966	326	0.977				
3	0.657	39	0.247	75	0.210	111	0.617	147	0.966	183	0.987	219	0.962	255	0.976	291	0.969	327	0.974				
4	0.647	40	0.238	76	0.217	112	0.627	148	0.970	184	0.986	220	0.965	256	0.973	292	0.972	328	0.971				
5	0.638	41	0.229	77	0.225	113	0.636	149	0.973	185	0.983	221	0.968	257	0.971	293	0.975	329	0.969				
6	0.629	42	0.220	78	0.233	114	0.645	150	0.976	186	0.980	222	0.970	258	0.968	294	0.978	330	0.966				
7	0.621	43	0.211	79	0.241	115	0.655	151	0.980	187	0.977	223	0.973	259	0.965	295	0.980	331	0.963				
8	0.612	44	0.202	80	0.248	116	0.665	152	0.983	188	0.974	224	0.976	260	0.962	296	0.981	332	0.960				
9	0.603	45	0.201	81	0.256	117	0.674	153	0.987	189	0.971	225	0.977	261	0.959	297	0.983	333	0.958				
10	0.594	46	0.200	82	0.264	118	0.684	154	0.990	190	0.968	226	0.979	262	0.957	298	0.984	334	0.955				
11	0.585	47	0.199	83	0.271	119	0.694	155	0.991	191	0.965	227	0.980	263	0.954	299	0.986	335	0.947				
12	0.577	48	0.198	84	0.279	120	0.704	156	0.991	192	0.962	228	0.982	264	0.951	300	0.988	336	0.938				
13	0.568	49	0.197	85	0.293	121	0.714	157	0.992	193	0.959	229	0.983	265	0.949	301	0.989	337	0.930				
14	0.559	50	0.196	86	0.308	122	0.723	158	0.993	194	0.956	230	0.984	266	0.947	302	0.991	338	0.921				
15	0.547	51	0.195	87	0.322	123	0.733	159	0.993	195	0.954	231	0.986	267	0.945	303	0.992	339	0.913				
16	0.535	52	0.194	88	0.337	124	0.743	160	0.994	196	0.952	232	0.987	268	0.943	304	0.994	340	0.905				
17	0.523	53	0.193	89	0.351	125	0.755	161	0.995	197	0.950	233	0.989	269	0.942	305	0.994	341	0.896				
18	0.511	54	0.192	90	0.365	126	0.767	162	0.996	198	0.948	234	0.990	270	0.940	306	0.993	342	0.888				
19	0.498	55	0.192	91	0.380	127	0.779	163	0.996	199	0.946	235	0.990	271	0.938	307	0.993	343	0.879				
20	0.486	56	0.193	92	0.394	128	0.791	164	0.997	200	0.943	236	0.990	272	0.936	308	0.992	344	0.871				
21	0.474	57	0.193	93	0.409	129	0.803	165	0.997	201	0.941	237	0.990	273	0.934	309	0.992	345	0.859				
22	0.462	58	0.193	94	0.423	130	0.816	166	0.998	202	0.939	238	0.990	274	0.932	310	0.992	346	0.847				
23	0.450	59	0.193	95	0.436	131	0.828	167	0.998	203	0.937	239	0.990	275	0.933	311	0.991	347	0.835				
24	0.438	60	0.194	96	0.449	132	0.840	168	0.998	204	0.935	240	0.990	276	0.935	312	0.991	348	0.823				
25	0.423	61	0.194	97	0.462	133	0.852	169	0.998	205	0.936	241	0.990	277	0.937	313	0.990	349	0.811				
26	0.409	62	0.194	98	0.475	134	0.864	170	0.999	206	0.938	242	0.990	278	0.938	314	0.990	350	0.798				
27	0.394	63	0.195	99	0.488	135	0.873	171	0.999	207	0.939	243	0.990	279	0.939	315	0.989	351	0.786				
28	0.380	64	0.195	100	0.501	136	0.882	172	0.999	208	0.940	244	0.990	280	0.941	316	0.988	352	0.774				
29	0.365	65	0.196	101	0.514	137	0.892	173	1.000	209	0.942	245	0.989	281	0.942	317	0.988	353	0.762				
30	0.350	66	0.196	102	0.527	138	0.901	174	1.000	210	0.943	246	0.988	282	0.944	318	0.987	354	0.750				
31	0.336	67	0.197	103	0.540	139	0.910	175	0.999	211	0.944	247	0.987	283	0.946	319	0.986	355	0.740				
32	0.321	68	0.198	104	0.553	140	0.919	176	0.997	212	0.945	248	0.986	284	0.947	320	0.985	356	0.729				
33	0.307	69	0.199	105	0.562	141	0.928	177	0.996	213	0.947	249	0.984	285	0.950	321	0.984	357	0.719				
34	0.292	70	0.199	106	0.571	142	0.938	178	0.994	214	0.948	250	0.983	286	0.953	322	0.984	358	0.709				
35	0.283	71	0.200	107	0.581	143	0.947	179	0.993	215	0.951	251	0.982	287	0.956	323	0.983	359	0.698				

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## ELEVATION PATTERN

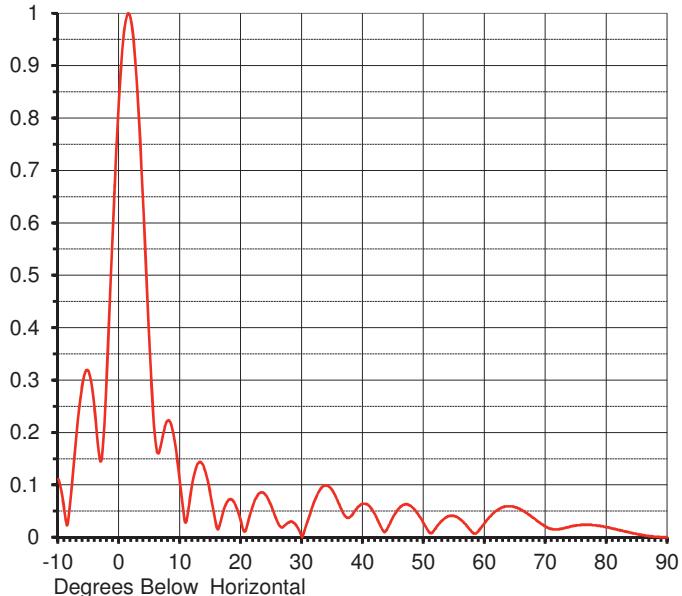
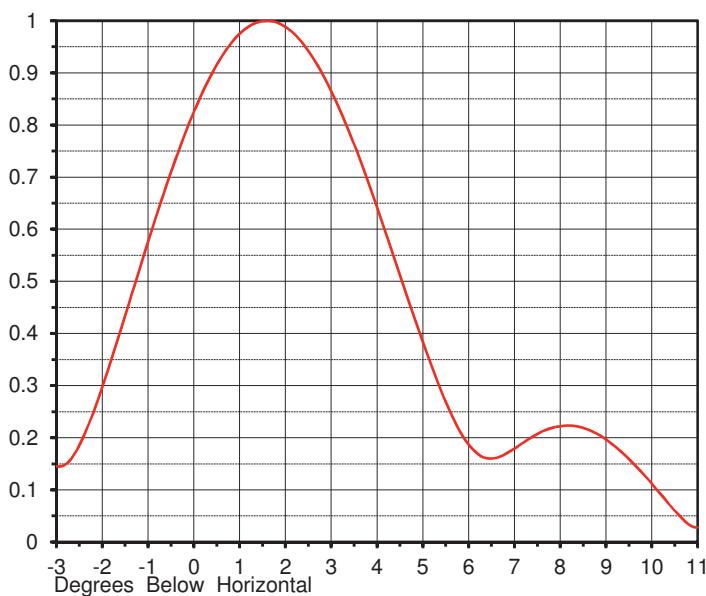
Proposal No. 0  
 Date 12-Oct-18  
 Call Letters WHDS  
 Channel 20  
 Frequency 509 MHz  
 Antenna Type ANT DLP12W

RMS Directivity at Main Lobe  
 RMS Directivity at Horizontal

**12.7 ( 11.04 dB )**  
**9.1 ( 9.59 dB )**

Calculated

Beam Tilt 1.50 deg  
 Pattern Number 12D127150



Angle	Field								
-10.0	0.111	10.0	0.101	30.0	0.000	50.0	0.026	70.0	0.020
-9.0	0.051	11.0	0.030	31.0	0.034	51.0	0.008	71.0	0.016
-8.0	0.072	12.0	0.103	32.0	0.068	52.0	0.018	72.0	0.015
-7.0	0.198	13.0	0.142	33.0	0.092	53.0	0.032	73.0	0.017
-6.0	0.295	14.0	0.130	34.0	0.099	54.0	0.040	74.0	0.020
-5.0	0.316	15.0	0.080	35.0	0.089	55.0	0.040	75.0	0.023
-4.0	0.239	16.0	0.019	36.0	0.065	56.0	0.034	76.0	0.024
-3.0	0.145	17.0	0.046	37.0	0.041	57.0	0.022	77.0	0.024
-2.0	0.323	18.0	0.072	38.0	0.040	58.0	0.009	78.0	0.023
-1.0	0.603	19.0	0.063	39.0	0.055	59.0	0.013	79.0	0.021
0.0	0.845	20.0	0.029	40.0	0.064	60.0	0.028	80.0	0.019
1.0	0.983	21.0	0.023	41.0	0.060	61.0	0.041	81.0	0.017
2.0	0.982	22.0	0.063	42.0	0.043	62.0	0.051	82.0	0.014
3.0	0.846	23.0	0.084	43.0	0.019	63.0	0.058	83.0	0.011
4.0	0.617	24.0	0.081	44.0	0.017	64.0	0.059	84.0	0.009
5.0	0.359	25.0	0.058	45.0	0.040	65.0	0.057	85.0	0.006
6.0	0.177	26.0	0.029	46.0	0.056	66.0	0.052	86.0	0.004
7.0	0.185	27.0	0.021	47.0	0.063	67.0	0.045	87.0	0.002
8.0	0.223	28.0	0.029	48.0	0.058	68.0	0.037	88.0	0.001
9.0	0.190	29.0	0.023	49.0	0.045	69.0	0.028	89.0	0.000
								90.0	0.000

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EXHIBIT D

TVSTUDY INTERFERENCE ANALYSIS RESULTS  
PROPOSED WHDS-LD STA FACILITY  
CHANNEL 20 – SAVANNAH, GEORGIA

Study created: 2019.04.30 14:25:06

Study build station data: LMS TV 2019-04-16

Proposal: WHDS-LD D20 LD CP Savannah, GA

File number: BLANK0000067538

Facility ID: 167565

Station data: User record

Record ID: 556

Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	200.7 km
No	WBPI-CD	D19	DC	LIC	AUGUSTA, GA	BLANK0000059661	180.4
No	NEW	D19	LD	APP	HOMERVILLE, GA	BNPDTL20090825AGP	199.6
No	WLOW-LP	N19-	TX	LIC	BEAUFORT, SC	BLTT20000302AAU	53.5
No	WLOW-LP	D19	LD	APP	BEAUFORT, SC	BDFCDTL20110725AAO	53.5
No	WCSC-TV	D19	DT	LIC	CHARLESTON, SC	BLANK0000054856	165.4
No	WJJN-LD	D20	LD	CP	DOOTHAN, AL	BLANK0000054496	413.3
No	WCOV-TV	D20	DT	LIC	MONTGOMERY, AL	BLCDT20090312AAO	475.0
No	NEW	D20	LD	APP	DUNNELLON, FL	BNPDTL20090825BFT	345.4
No	NEW	D20	LD	APP	GAINESVILLE, FL	BNPDTL20090825AOQ	322.3
No	WCWJ	D20	DT	CP	JACKSONVILLE, FL	BLANK0000029603	201.1
No	WKBJ-LD	D20	LD	LIC	LIVE OAK, FL	BLANK0000008067	201.0
No	NEW	D20	LD	APP	MADISON, FL	BNPDTL20090825AHV	293.3
No	NEW	D20	LD	APP	OCALA, FL	BNPDTL20090825AMY	320.0
No	WFTV	D20	LD	LIC	ORLANDO, FL	BLCDT20140116ACS	354.9
No	WZXZ-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000034824	384.4
No	NEW	D20	LD	APP	REDDICK, FL	BNPDTL20090825AKM	317.6
No	NEW	D20	LD	APP	TALLAHASSEE, FL	BNPDTL20090825AJC	350.8
No	NEW	D20	LD	APP	WILLISTON, FL	BNPDTL20090825BUO	334.7
No	W20DO-D	D20	LD	CP	ALBANY, GA	BLANK0000011851	289.9
No	WANN-CD	D20	DC	CP	ATLANTA, GA	BLANK0000028242	358.3
No	WPCH-TV	D20	DT	LIC	ATLANTA, GA	BLCDT20050204AAD	358.3

No	WCZC-LD	D20	LD	LIC	AUGUSTA, GA	BLDTL20150112ACR	172.8
No	W20DZ-D	D20	LD	CP	BYRON, GA	BNPDTL20100510AFP	253.9
No	W20DL-D	D20	LD	CP	MACON, GA	BNPDTL20100205ACG	241.6
No	WCTV	D20	DT	CP	THOMASVILLE, GA	BLANK0000033928	308.0
No	W20CY	D20	LD	CP	TIFTON, GA	BDFCDTL20091118AGP	235.2
No	W20CY	N20	TX	LIC	TIFTON, GA	BLTTL20121211ABO	235.2
No	NEW	D20	LD	APP	VALDOSTA, GA	BNPDTL20090825CAG	252.8
No	W20EC-D	D20	LD	CP	VIDALIA, GA	BDCCDTL20121001AGL	108.2
No	WUNF-TV	D20	DD	CP	ASHEVILLE, NC	BLANK0000029742	377.0
No	WUNC-TV	D20	DT	CP	CHAPEL HILL, NC	BLANK0000034414	461.4
No	WDMC-LD	D20	LD	CP	CHARLOTTE, NC	BLANK0000054923	358.7
No	W20DD-D	D20	LD	LIC	MARION, ETC., NC	BLDTT20100209ABG	408.9
No	WDZA-LD	D20	LD	LIC	WILMINGTON, NC	BLDTL20140224AAZ	369.5
No	WBSE-LP	D20	LD	LIC	CHARLESTON, SC	BLANK0000001416	148.1
No	WCBD-TV	D20	DT	CP	CHARLESTON, SC	BLANK0000034805	166.7
No	W20DH-D	D20	LD	CP	FLORENCE, SC	BNPDTL20100409ABW	245.9
No	WJEB-TV	D21	DT	CP	JACKSONVILLE, FL	BLANK0000028163	201.0
No	WDRF-LD	D21	LD	CP	AUGUSTA, GA	BLANK0000067887	212.1
No	WEBA-TV	D21	DT	CP	ALLENDALE, SC	BLANK0000025022	129.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D20

Mask: Full Service

Latitude: 32° 2' 42.90 N (NAD83)

Longitude: 81° 7' 20.50 W

Height AMSL: 107.0 m

HAAT: 0.0 m

Peak ERP: 1.02 kW

Antenna: Dielectric-DLP-12W (ID 1004658) 0.0 deg

Elev Pattn: Generic

Elec Tilt: 1.50

49.4 dBu contour:

Azimuth    ERP    HAAT    Distance

0.0 deg 0.483 kW 105.4 m 27.8 km

45.0    0.048    103.6    15.3

90.0    0.136    104.4    21.0

135.0    0.768    104.3    30.1

180.0    1.00    104.8    31.5

225.0    0.969    104.6    31.3

270.0    0.901    102.1    30.7

315.0 0.997 103.1 31.3

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 104 m

Distance to Canadian border: 1076.5 km

Distance to Mexican border: 1675.3 km

Conditions at FCC monitoring station: Powder Springs GA

Bearing: 302.0 degrees Distance: 391.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 299.4 degrees Distance: 2334.2 km

No land mobile station failures found

Study cell size: 1.00 km

Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

No IX check failures found.

**EXHIBIT E**

**POWER DENSITY CALCULATION**

**PROPOSED WHDS-LD STA FACILITY  
CHANNEL 20 – SAVANNAH, GEORGIA**

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Savannah facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 1.02 kW, an antenna radiation center 102.1 meters above ground, and the specific elevation pattern of the proposed Dielectric DLP-12W antenna, maximum power density two meters above ground of 0.0000095 mW/cm<sup>2</sup> is calculated to occur 49 meters west-southwest of the base of the tower. Since this is less than 0.1 percent of the 0.34 mW/cm<sup>2</sup> reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 20 (506-512 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.