EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING OF TEXAS, INC., licensee of full-power digital television station KNMT-DT, Channel 32 in Portland, Oregon, in support of its request for Special Temporary Authority to use an interim transmitting facility while repairs are being made to the main transmission facility. No change in site location is proposed herein.

It is proposed to utilize an RFS broadband directional, horizontally-polarized antenna which is mounted at the 122-meter level of the existing 301.7-meter KNMT-DT tower. The proposed effective radiated power for the facility is 235 kW in the horizontal plane. Exhibit B is a map upon which the predicted service contours are plotted. As shown, the community of Portland is completely encompassed by the proposed STA 48 dBu city-grade service contour. In Exhibit C, we have plotted the service contours of the main licensed KNMT-DT facility and that from proposed STA interim operation. As shown, the service contour of the STA facility is completely contained within that licensed to KNMT-DT in LMS-0000075180.

Elevation and azimuth pattern information for the proposed antenna are provided in Exhibit D. Since the STA facility proposed herein has a service contour contained completely within that licensed to KNMT-DT, no interference study is included herein. A power density calculation appears as Exhibit E.

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

EXHIBIT A

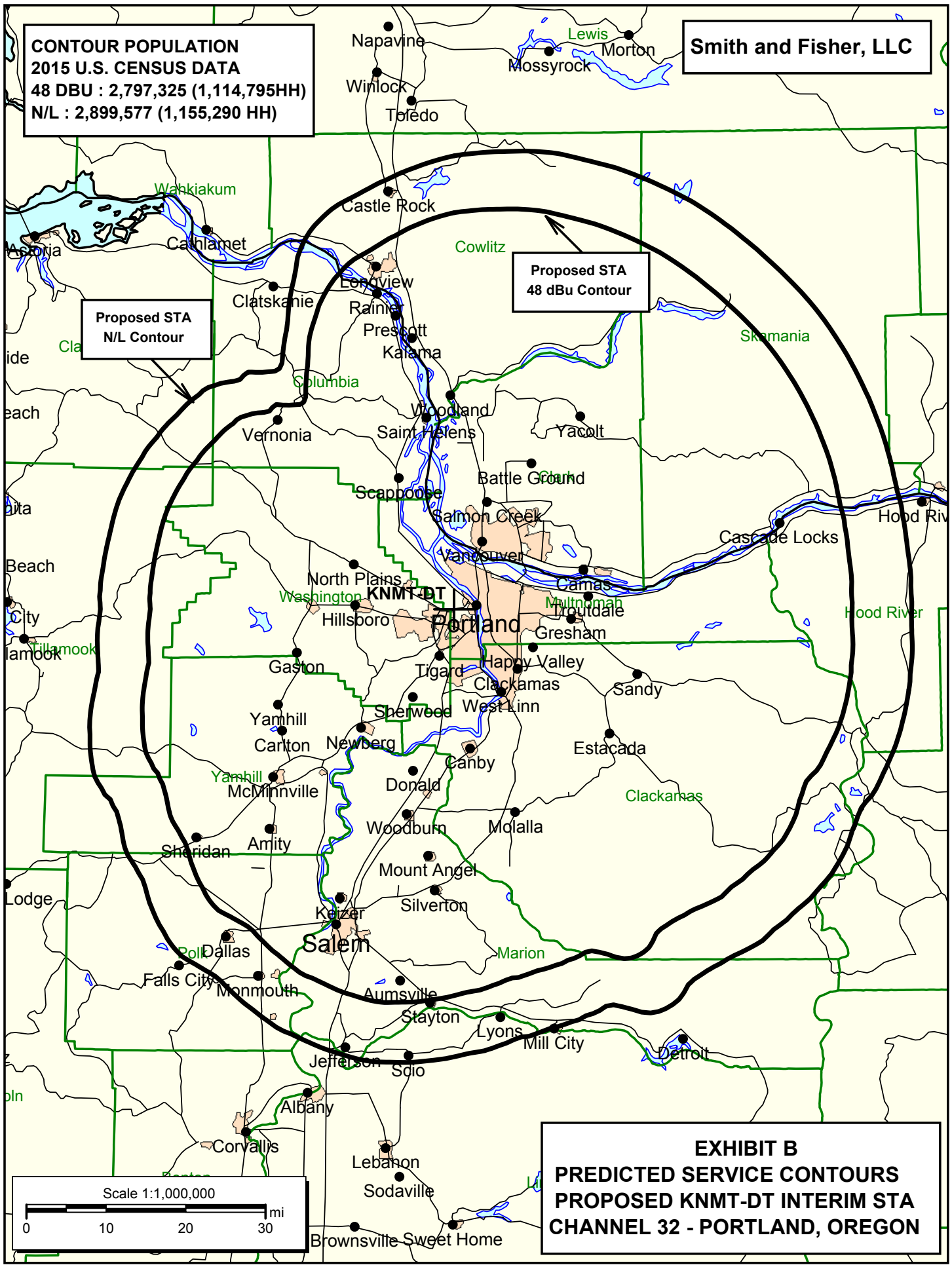
In addition, the Federal Communications Commission issued Antenna Structure Registration Number 1207367 to this tower.

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.



KEVIN T. FISHER

October 14, 2019


CONTOUR POPULATION
2015 U.S. CENSUS DATA
48 DBU : 2,797,325 (1,114,795HH)
N/L : 2,899,577 (1,155,290 HH)
Smith and Fisher, LLC
Proposed STA
48 dBu Contour
Proposed STA
N/L Contour
KNMT-DT
Portland
Vancouver
Salem
Eugene
Napavine
Winlock
Toledo
Lewis
Morton
Mossyrock
Wahkiakum
Castle Rock
Cathlamet
Cowlitz
Longview
Rainier
Clatskanie
Prescott
Kalama
Skamania
Columbia
Woodland
Saint Helens
Yacolt
Vernonia
Battle Ground
Clark
Scappoose
Salmon Creek
Cascade Locks
Hood River
North Plains
Washington
Camas
Multnomah
Troutdale
Hillsboro
Gresham
Tillamook
Gaston
Tigard
Happy Valley
Clackamas
Sandy
Sherwood
West Linn
Yamhill
Carlton
Newberg
Estacada
Canby
McMinnville
Donald
Woodburn
Molalla
Sheridan
Amity
Mount Angel
Silverton
Keizer
Dallas
Marion
Falls City
Monmouth
Aumsville
Stayton
Lyons
Mill City
Detroit
Jefferson
Scio
Albany
Corvallis
Lebanon
Sodaville
Brownsville
Sweet Home
Scale 1:1,000,000
mi
0
10
20
30
EXHIBIT B
PREDICTED SERVICE CONTOURS
PROPOSED KNMT-DT INTERIM STA
CHANNEL 32 - PORTLAND, OREGON

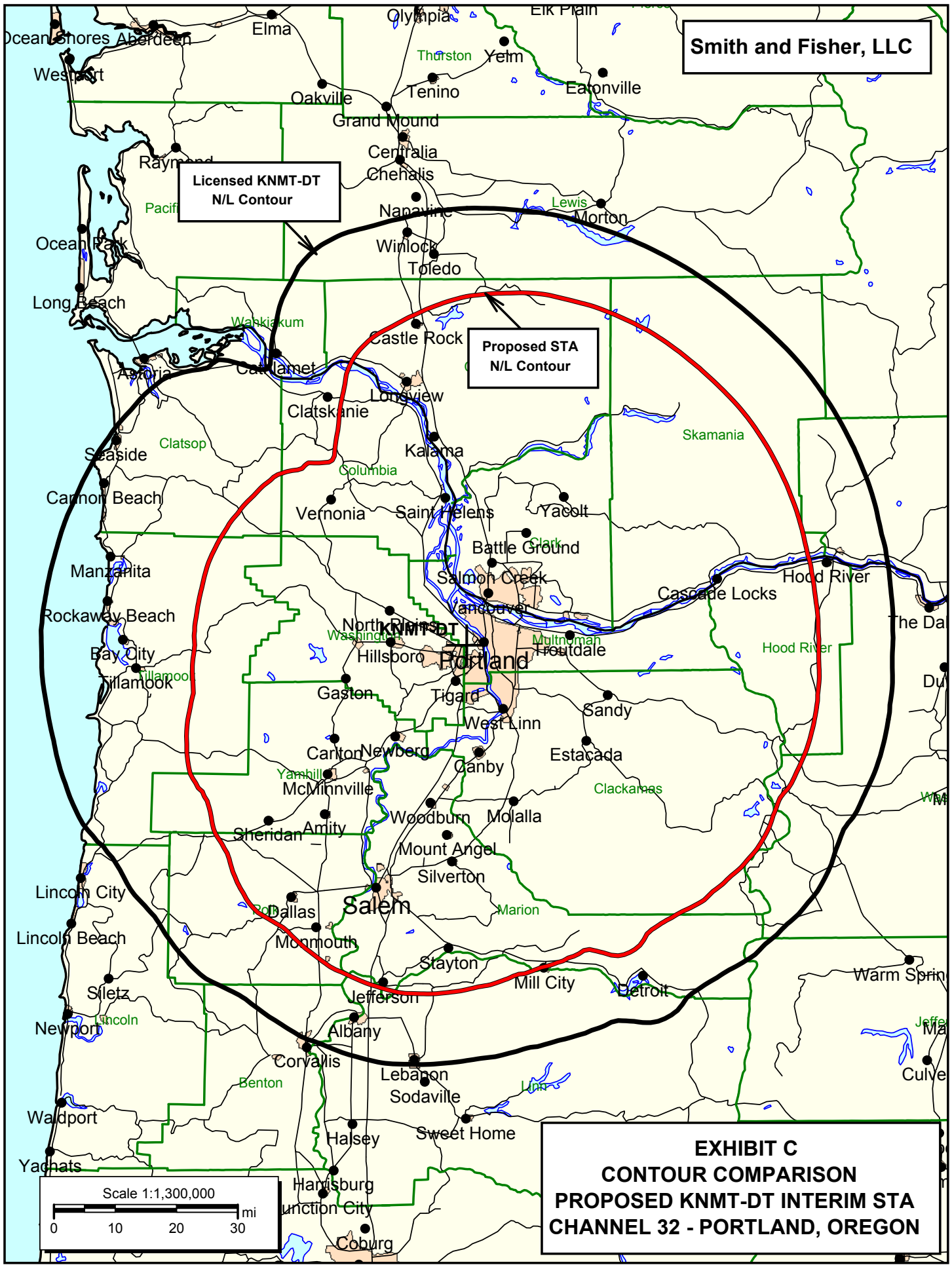
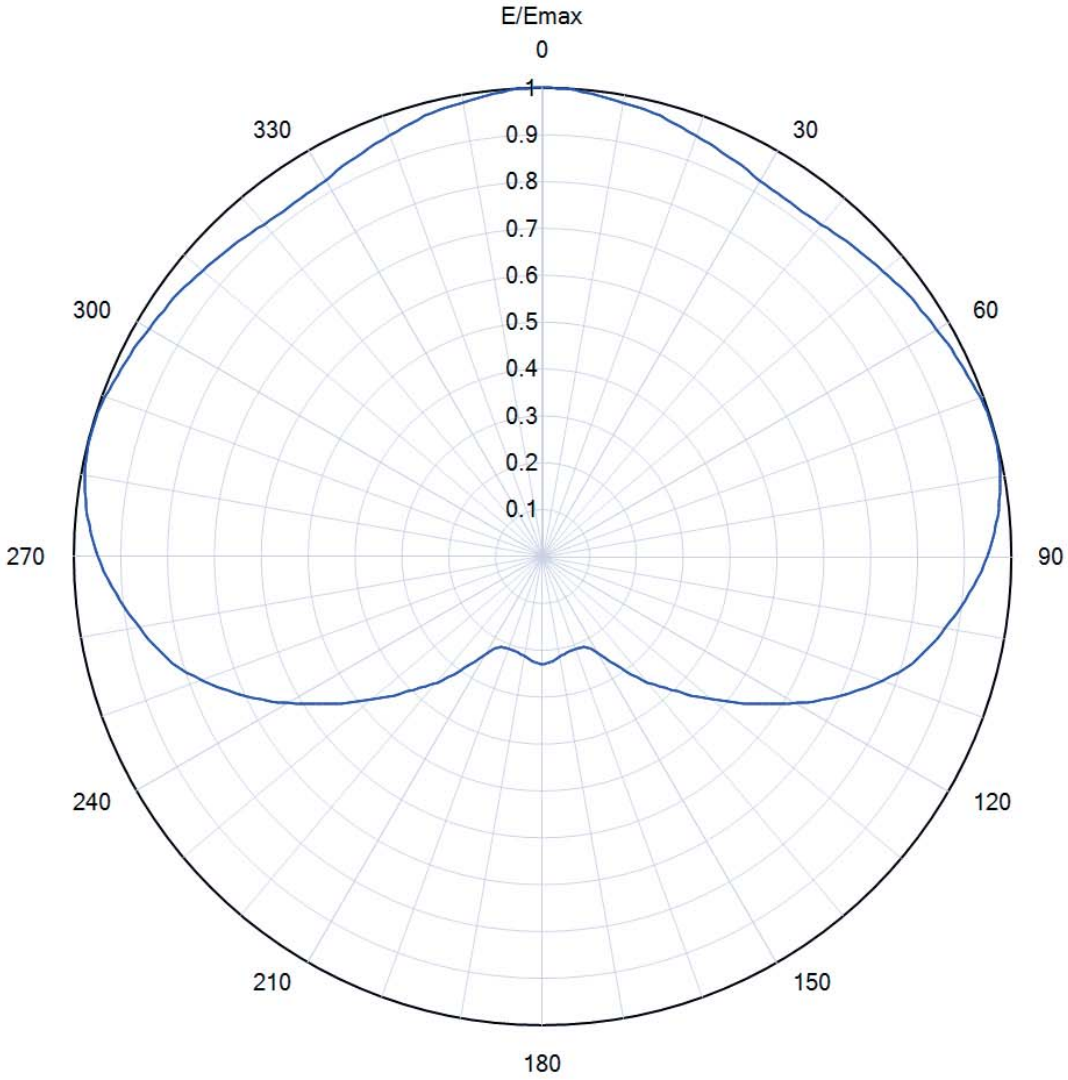

Smith and Fisher, LLC
Licensed KNMT-DT
N/L Contour
Proposed STA
N/L Contour
KNMT-DT
Portland
Salem
Scale 1:1,300,000
0 10 20 30 mi
EXHIBIT C
CONTOUR COMPARISON
PROPOSED KNMT-DT INTERIM STA
CHANNEL 32 - PORTLAND, OREGON

EXHIBIT D

Azimuth Pattern



Model:	RD-12RFS(A)-500626-SH	Polarisation:	Horizontal
Location:	Portland, OR.	Frequency:	581.00 MHz
Customer:	Trinity Broadcasting Network	Directivity:	1.6 (2.10 dB)
Date:	August 7, 2017	Elevation Angle:	0.75 degrees
Rotation Angle:	0 degrees	Horizontal Unit Pattern:	
Note: Pattern Tolerance +/-5% of Emax		File = RD_perfect_RFS(A)_560.pat	

RADIO FREQUENCY SYSTEMS
The Clear Choice®

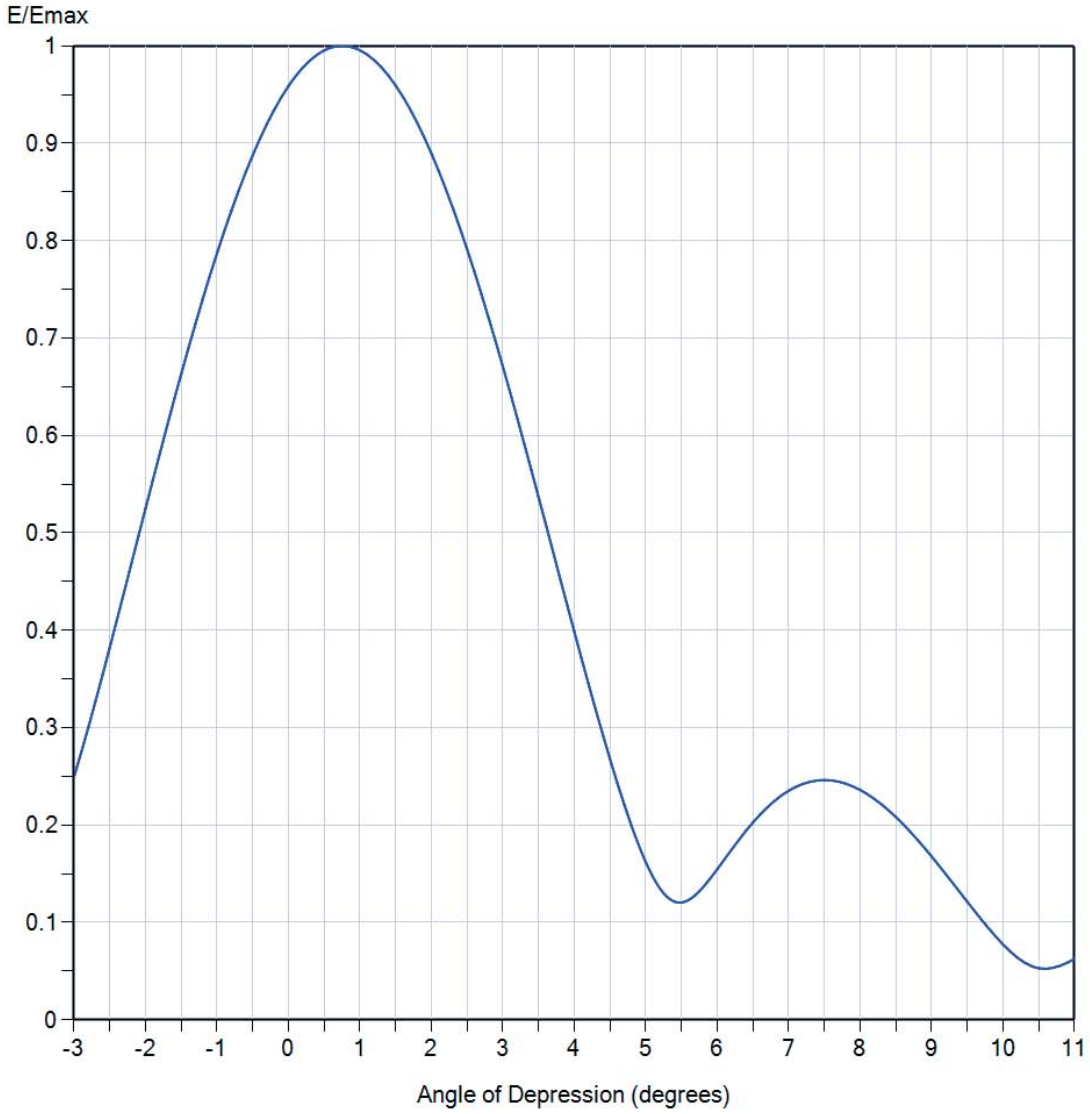
Model:	**RD-12RFS(A)-500626-SH**	Polarization:	**Horizontal**
Location:	**Portland, OR.**	Frequency (MHz):	**581.00**
Customer:	**Trinity Broadcasting Network**	Directivity:	**1.6 (2.10 dB)**
Date:	**August 7, 2017**	Elevation Angle:	**0.75 degrees**
		Rotation Angle:	**0 degrees**

TABULATED AZIMUTH PATTERN

Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field	Angl	Field
0	1.000	45	0.936	90	0.949	135	0.407	180	0.229	225	0.407	270	0.949	315	0.936
1	1.000	46	0.938	91	0.943	136	0.395	181	0.229	226	0.420	271	0.955	316	0.934
2	0.999	47	0.940	92	0.936	137	0.383	182	0.229	227	0.434	272	0.960	317	0.932
3	0.998	48	0.943	93	0.929	138	0.372	183	0.228	228	0.448	273	0.965	318	0.929
4	0.997	49	0.945	94	0.921	139	0.362	184	0.227	229	0.461	274	0.970	319	0.927
5	0.995	50	0.948	95	0.914	140	0.351	185	0.225	230	0.475	275	0.974	320	0.925
6	0.993	51	0.951	96	0.906	141	0.339	186	0.223	231	0.490	276	0.978	321	0.924
7	0.991	52	0.953	97	0.898	142	0.327	187	0.222	232	0.504	277	0.982	322	0.923
8	0.989	53	0.956	98	0.890	143	0.315	188	0.220	233	0.519	278	0.985	323	0.922
9	0.986	54	0.958	99	0.882	144	0.302	189	0.219	234	0.534	279	0.989	324	0.921
10	0.984	55	0.960	100	0.874	145	0.290	190	0.217	235	0.549	280	0.991	325	0.921
11	0.982	56	0.962	101	0.866	146	0.278	191	0.215	236	0.564	281	0.994	326	0.922
12	0.980	57	0.964	102	0.858	147	0.267	192	0.214	237	0.579	282	0.996	327	0.923
13	0.978	58	0.967	103	0.850	148	0.257	193	0.213	238	0.595	283	0.998	328	0.924
14	0.976	59	0.969	104	0.841	149	0.247	194	0.212	239	0.611	284	0.999	329	0.925
15	0.973	60	0.971	105	0.832	150	0.239	195	0.211	240	0.626	285	0.999	330	0.927
16	0.970	61	0.973	106	0.821	151	0.232	196	0.211	241	0.642	286	0.999	331	0.930
17	0.966	62	0.975	107	0.810	152	0.225	197	0.210	242	0.657	287	0.998	332	0.932
18	0.963	63	0.977	108	0.799	153	0.220	198	0.210	243	0.672	288	0.997	333	0.935
19	0.960	64	0.980	109	0.786	154	0.217	199	0.210	244	0.687	289	0.995	334	0.938
20	0.956	65	0.982	110	0.773	155	0.214	200	0.210	245	0.702	290	0.993	335	0.941
21	0.953	66	0.984	111	0.760	156	0.212	201	0.210	246	0.717	291	0.991	336	0.944
22	0.950	67	0.986	112	0.746	157	0.211	202	0.211	247	0.732	292	0.988	337	0.947
23	0.947	68	0.988	113	0.732	158	0.211	203	0.211	248	0.746	293	0.986	338	0.950
24	0.944	69	0.991	114	0.717	159	0.210	204	0.212	249	0.760	294	0.984	339	0.953
25	0.941	70	0.993	115	0.702	160	0.210	205	0.214	250	0.773	295	0.982	340	0.956
26	0.938	71	0.995	116	0.687	161	0.210	206	0.217	251	0.786	296	0.980	341	0.960
27	0.935	72	0.997	117	0.672	162	0.210	207	0.220	252	0.799	297	0.977	342	0.963
28	0.932	73	0.998	118	0.657	163	0.210	208	0.225	253	0.810	298	0.975	343	0.966
29	0.930	74	0.999	119	0.642	164	0.211	209	0.232	254	0.821	299	0.973	344	0.970
30	0.927	75	0.999	120	0.626	165	0.211	210	0.239	255	0.832	300	0.971	345	0.973
31	0.925	76	0.999	121	0.611	166	0.212	211	0.247	256	0.841	301	0.969	346	0.976
32	0.924	77	0.998	122	0.595	167	0.213	212	0.257	257	0.850	302	0.967	347	0.978
33	0.923	78	0.996	123	0.579	168	0.214	213	0.267	258	0.858	303	0.964	348	0.980
34	0.922	79	0.994	124	0.564	169	0.215	214	0.278	259	0.866	304	0.962	349	0.982
35	0.921	80	0.991	125	0.549	170	0.217	215	0.290	260	0.874	305	0.960	350	0.984
36	0.921	81	0.989	126	0.534	171	0.219	216	0.302	261	0.882	306	0.958	351	0.986
37	0.922	82	0.985	127	0.519	172	0.220	217	0.315	262	0.890	307	0.956	352	0.989
38	0.923	83	0.982	128	0.504	173	0.222	218	0.327	263	0.898	308	0.953	353	0.991
39	0.924	84	0.978	129	0.490	174	0.223	219	0.339	264	0.906	309	0.951	354	0.993
40	0.925	85	0.974	130	0.475	175	0.225	220	0.351	265	0.914	310	0.948	355	0.995
41	0.927	86	0.970	131	0.461	176	0.227	221	0.362	266	0.921	311	0.945	356	0.997
42	0.929	87	0.965	132	0.448	177	0.228	222	0.372	267	0.929	312	0.943	357	0.998
43	0.932	88	0.960	133	0.434	178	0.229	223	0.383	268	0.936	313	0.940	358	0.999
44	0.934	89	0.955	134	0.420	179	0.229	224	0.395	269	0.943	314	0.938	359	1.000

EXHIBIT D

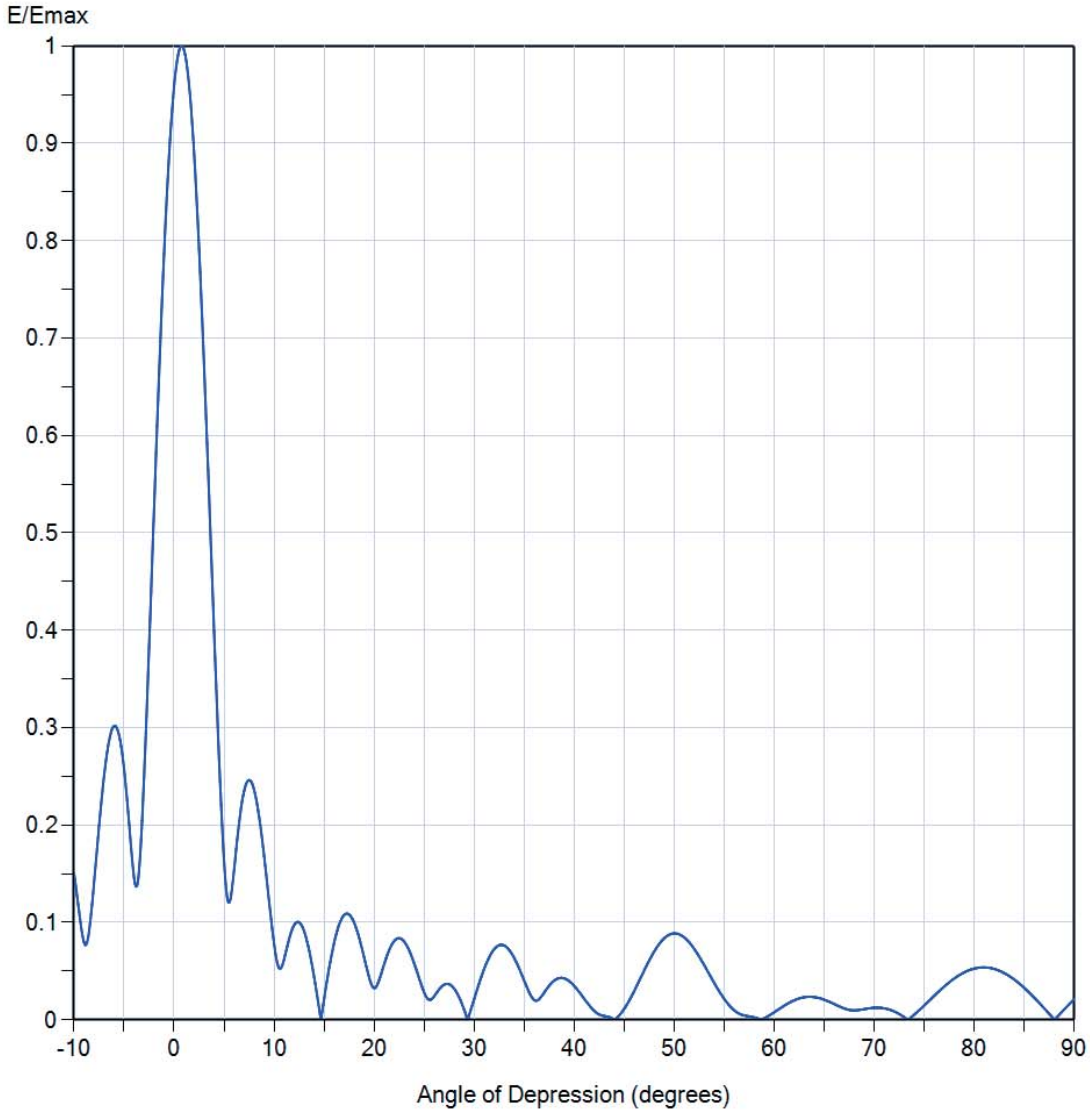
Elevation Pattern



Model:	RD-12RFS(A)-500626-SH	Frequency:	5810 MHz
Polarisation:	Horizontal	Directivity (Main Lobe):	13.9 (11.42 dBd)
Location:	Portland, OR.	Directivity (At Horizon):	12.7 (11.05 dBd)
Customer:	Trinity Broadcasting Network	Beam Tilt:	0.75 degrees
Date:	August 7, 2017	Azimuth Angle:	0 degrees

EXHIBIT D

Elevation Pattern



Model:	RD-12RFS(A)-500626-SH	Frequency:	581.00 MHz
Polarisation:	Horizontal	Directivity (Main Lobe):	13.9 (11.42 dBd)
Location:	Portland, OR.	Directivity (At Horizon):	12.7 (11.05 dBd)
Customer:	Trinity Broadcasting Network	Beam Tilt:	0.75 degrees
Date:	August 7, 2017	Azimuth Angle:	0 degrees

RADIO FREQUENCY SYSTEMS
The Clear Choice®

Model:	**RD-12RFS(A)-500626-SH**	Polarization:	**Horizontal**
Location:	**Portland, OR.**	Frequency (MHz):	**581.00**
Customer:	**Trinity Broadcasting Network**	Directivity (Main Lobe):	**13.9 (11.42 dB)**
Date:	**August 7, 2017**	Directivity (At Horizon):	**12.7 (11.05 dB)**
		Beam Tilt:	**0.75 degrees**

TABULATED ELEVATION PATTERN

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.150	2.4	0.813	10.6	0.052	30.5	0.038	51.0	0.085	71.5	0.010
-9.5	0.111	2.6	0.769	10.8	0.056	31.0	0.052	51.5	0.079	72.0	0.008
-9.0	0.079	2.8	0.721	11.0	0.062	31.5	0.064	52.0	0.073	72.5	0.006
-8.5	0.091	3.0	0.671	11.5	0.083	32.0	0.073	52.5	0.065	73.0	0.003
-8.0	0.141	3.2	0.618	12.0	0.097	32.5	0.077	53.0	0.056	73.5	0.001
-7.5	0.199	3.4	0.564	12.5	0.100	33.0	0.076	53.5	0.047	74.0	0.005
-7.0	0.251	3.6	0.509	13.0	0.091	33.5	0.072	54.0	0.038	74.5	0.010
-6.5	0.287	3.8	0.454	13.5	0.071	34.0	0.063	54.5	0.029	75.0	0.015
-6.0	0.302	4.0	0.399	14.0	0.044	34.5	0.052	55.0	0.021	75.5	0.020
-5.5	0.292	4.2	0.345	14.5	0.011	35.0	0.040	55.5	0.015	76.0	0.025
-5.0	0.257	4.4	0.293	15.0	0.022	35.5	0.028	56.0	0.010	76.5	0.030
-4.5	0.201	4.6	0.244	15.5	0.053	36.0	0.020	56.5	0.006	77.0	0.034
-4.0	0.146	4.8	0.199	16.0	0.079	36.5	0.021	57.0	0.004	77.5	0.039
-3.5	0.154	5.0	0.162	16.5	0.098	37.0	0.028	57.5	0.003	78.0	0.043
-3.0	0.250	5.2	0.135	17.0	0.108	37.5	0.035	58.0	0.002	78.5	0.046
-2.8	0.300	5.4	0.121	17.5	0.108	38.0	0.040	58.5	0.001	79.0	0.049
-2.6	0.355	5.6	0.123	18.0	0.100	38.5	0.043	59.0	0.002	79.5	0.051
-2.4	0.411	5.8	0.136	18.5	0.084	39.0	0.043	59.5	0.005	80.0	0.053
-2.2	0.468	6.0	0.154	19.0	0.064	39.5	0.040	60.0	0.008	80.5	0.054
-2.0	0.525	6.2	0.175	19.5	0.043	40.0	0.035	60.5	0.011	81.0	0.054
-1.8	0.582	6.4	0.194	20.0	0.033	40.5	0.028	61.0	0.015	81.5	0.053
-1.6	0.637	6.6	0.211	20.5	0.041	41.0	0.022	61.5	0.018	82.0	0.052
-1.4	0.690	6.8	0.225	21.0	0.057	41.5	0.015	62.0	0.020	82.5	0.050
-1.2	0.740	7.0	0.235	21.5	0.072	42.0	0.009	62.5	0.022	83.0	0.048
-1.0	0.787	7.2	0.242	22.0	0.081	42.5	0.005	63.0	0.023	83.5	0.045
-0.8	0.831	7.4	0.246	22.5	0.084	43.0	0.004	63.5	0.024	84.0	0.041
-0.6	0.870	7.6	0.246	23.0	0.080	43.5	0.003	64.0	0.023	84.5	0.037
-0.4	0.905	7.8	0.242	23.5	0.071	44.0	0.000	64.5	0.022	85.0	0.033
-0.2	0.934	8.0	0.236	24.0	0.058	44.5	0.005	65.0	0.021	85.5	0.028
0.0	0.959	8.2	0.227	24.5	0.042	45.0	0.011	65.5	0.019	86.0	0.023
0.2	0.978	8.4	0.215	25.0	0.028	45.5	0.020	66.0	0.016	86.5	0.017
0.4	0.991	8.6	0.201	25.5	0.021	46.0	0.030	66.5	0.014	87.0	0.012
0.6	0.998	8.8	0.185	26.0	0.024	46.5	0.040	67.0	0.012	87.5	0.006
0.8	1.000	9.0	0.168	26.5	0.031	47.0	0.051	67.5	0.010	88.0	0.000
1.0	0.996	9.2	0.149	27.0	0.036	47.5	0.061	68.0	0.010	88.5	0.005
1.2	0.985	9.4	0.131	27.5	0.036	48.0	0.070	68.5	0.010	89.0	0.011
1.4	0.970	9.6	0.112	28.0	0.032	48.5	0.078	69.0	0.011	89.5	0.016
1.6	0.948	9.8	0.094	28.5	0.023	49.0	0.084	69.5	0.012	90.0	0.000
1.8	0.921	10.0	0.077	29.0	0.010	49.5	0.087	70.0	0.012		
2.0	0.890	10.2	0.064	29.5	0.005	50.0	0.089	70.5	0.012		
2.2	0.853	10.4	0.055	30.0	0.022	50.5	0.088	71.0	0.012		

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED KNMT-DT STA REQUEST FOR INTERIM FACILITY
CHANNEL 32 – PORTLAND, OREGON

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Portland facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 235 kW, an antenna radiation center 122 meters above ground, and the specific elevation pattern of the proposed RFS antenna, maximum power density two meters above ground of 0.0025 mW/cm^2 is calculated to occur 101 meters east-southeast of the base of the tower. Since this is only 0.6 percent of the 0.39 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 32 (578-584 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.