

EXHIBIT 2

TECHNICAL CERTIFICATIONS & EXHIBITS

BROADCAST FACILITY

Proposed New NCE Station at Brookings, OR
Curry Coast Community Radio

OVERVIEW

The applicant proposes a new NCE Reserved-Band station at an existing tower, to serve Brookings, OR. Attached **Exhibit 2A** shows required contour coverage to the Community of License. **Exhibits 2B to 2C** show interference protection to all other reserved band authorizations and applications. **Exhibit 2D** shows environmental compliance.

LACK OF OVERLAP WITH OTHER PROPOSALS FILED BY APPLICANT

The applicant has filed a second application in this Window, at Gold Beach, OR, first adjacent to this proposal; FID: 765267. In compliance with 47 CFR §73.3518, attached **Exhibit 2E** shows that there is no overlap between this proposal, and the Gold Beach proposal, over land areas. There is small area of overlap entirely over the Pacific Ocean, as permitted by §73.509(e).

METHODOLOGY

All contour calculations were made using the methods and procedures described in 47 CFR §73.313©. Contours were plotted and areas were calculated using linear interpolation in one-degree increments. FMOver calculations were done using V-Soft FM Commander software, using “HAAT method 0 (zero)”, 51 data points per radial, and the FCC 30 second terrain database.

BROWN BROADCAST SERVICES
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

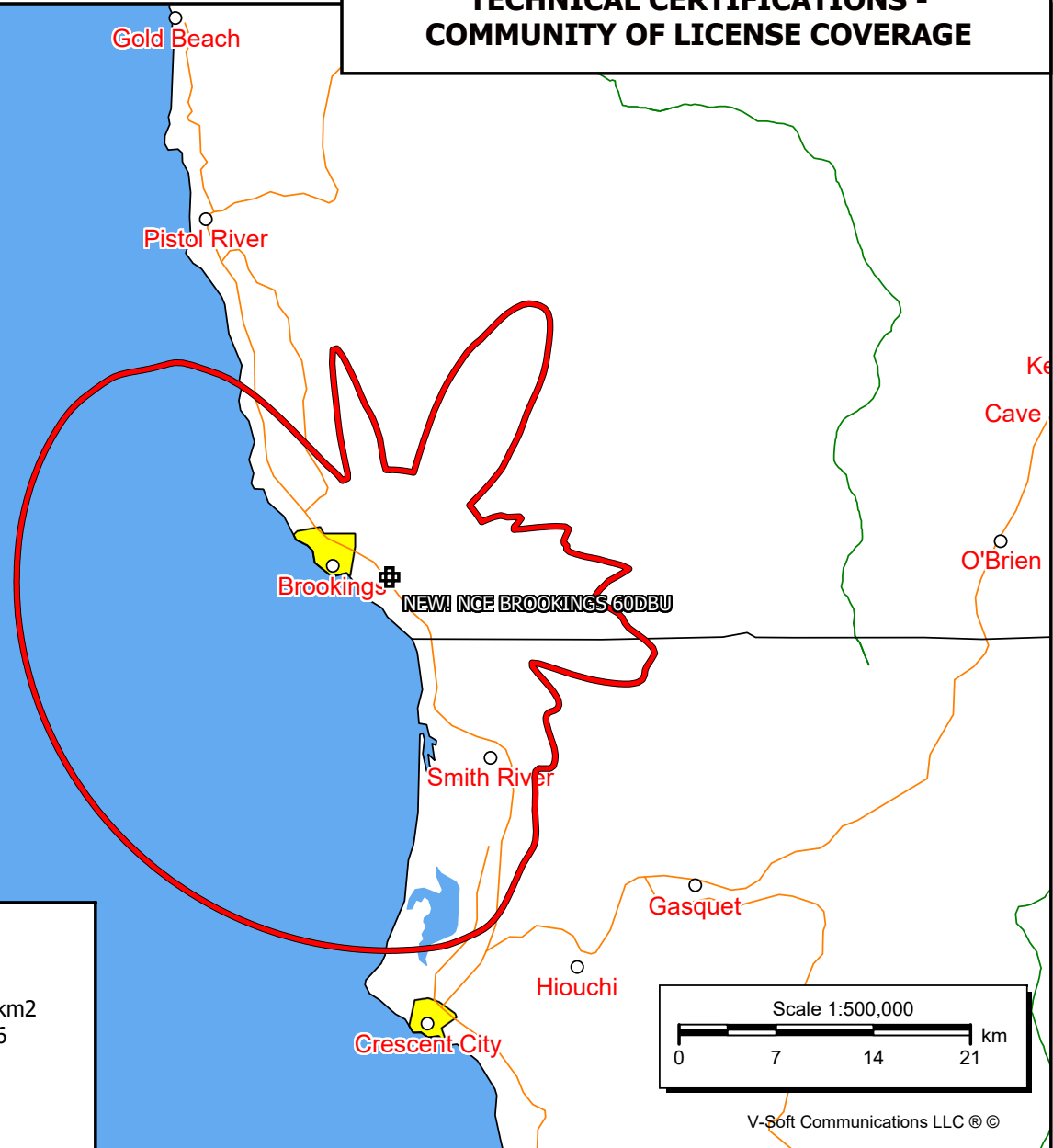
EXHIBIT 2A TECHNICAL CERTIFICATIONS - COMMUNITY OF LICENSE COVERAGE

NEW! NCE BROOKINGS 60DBU

Latitude: 42-02-43 N
Longitude: 124-14-04.70 W
ERP: 0.35 kW
Channel: 208
Frequency: 89.5 MHz
AMSL Height: 365.0 m
Horiz. Pattern: Omni

BROOKINGS - % OF POPULATION WITHIN 60DBU:	100%
BROOKINGS - % OF AREA WITHIN 60DBU:	100%
TOTAL 60DBU AREA:	526.1km ²
TOTAL 60DBU POPULATION	22,226

Population Database: 2010 Census
Population computed by Block Centroid Method



BROWN BROADCAST SERVICES
INCORPORATED
Portland, Oregon

EXHIBIT 2B

TECHNICAL CERTIFICATIONS

INTERFERENCE PROTECTION

This proposal meets the contour overlap requirements of §73.509 with respect to all other reserved-band stations. There are no I.F. stations within range.

CHANNEL STUDY

<div> <div>NEW NCE BROOKINGS</div> <div>Curry Coast Community Radio</div> <div>CH# 208A - 89.5 MHz, Pwr= 0.35 kW, HAAT= 204.4 M, COR= 365 M</div> <div>Average Protected F(50-50)= 20.4 km</div> <div>Omni-directional</div> </div> <div> <div>DISPLAY DATES</div> <div>DATA 11-01-21</div> <div>SEARCH 11-01-21</div> </div>											
REFERENCE	CH#	208A	-	89.5	MHz,	Pwr=	0.35	kW,	HAAT=	204.4	M,
42 02 43.0 N.						Average Protected F(50-50)=	20.4	km			
124 14 04.7 W.						Omni-directional					
CH	CALL	TYPE	ANT	AZI.	DIST	LAT.	Pwr(kw)	INT(km)	PRO(km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG.	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
208C2	KSKQ	LIC DCN		82.7	144.66	42 11 52.40	0.560	119.9	49.4	6.8	42.1
Ashland		OR		263.8	BLED20140404ABL	122 29 33.00	596	1882	Multicultural Association		
211C	KSOR	LIC DCN		48.6	109.41	42 41 29.40	38.000	10.9	90.4	77.6	17.1
Ashland		OR		229.3	BMLD20010926ABP	123 13 48.20	810	1636	Southern Oregon University		
207C3	KNDZ	LIC DVN		171.8	136.99	40 49 31.50	1.200	62.0	40.4	48.3	55.5
Mckinleyville		CA		352.0	BLED20150423ABG	124 00 09.20	304	555	Pacific Cascade Communicat		

Terrain database is FCC NGDC 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM

In & Out distances between contours are shown at closest points. Reference Zone= - Zone 2, Co to 3rd adjacent.

All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)

"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

« = Station meets FCC minimum distance spacing for its class.

Reference station has protected zone issue: AM tower

PROTECTED ZONES

Closest AM Facility is KURY, BROOKINGS, OR, L, ND1 at 251.6° at a distance of 0.8 km

Facility is okay with respect to FCC monitoring stations.

BROWN BROADCAST SERVICES
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

PROXIMITY TO KURY (AM)

This proposal is in compliance with §1.30002, with regards to proximity to an AM radio station. KURY (AM) operates at 910kHz, non-directional. Specifically:

1. The applicant is not proposing a new tower, or a major modification of an existing tower.
2. This proposal is 880m from KURY, far beyond one-wavelength at the AM frequency (329.4m).

EXHIBIT 2C

TECHNICAL CERTIFICATIONS

Contour Protection vs KSKQ

NEW NCE BROOKINGS
Curry Coast Community Radio

FMCommander Single Allocation Study - 11-01-2021 - FCC NGDC 30 Sec
NEW!'s Overlaps (In= 6.81 km, Out= 42.1 km)

NEW! CH 208 A
Lat= 42 02 43.00, Lng= 124 14 04.70
0.35 kW 204.4 m HAAT, 365 m COR
Prot.= 60 dBu, Intef.= 40 dBu

KSKQ CH 208 C2 DA BLED20140404ABL
Lat= 42 11 52.40, Lng= 122 29 33.00
0.56 kW 596 m HAAT, 1882 m COR
Prot.= 60 dBu, Intef.= 40 dBu

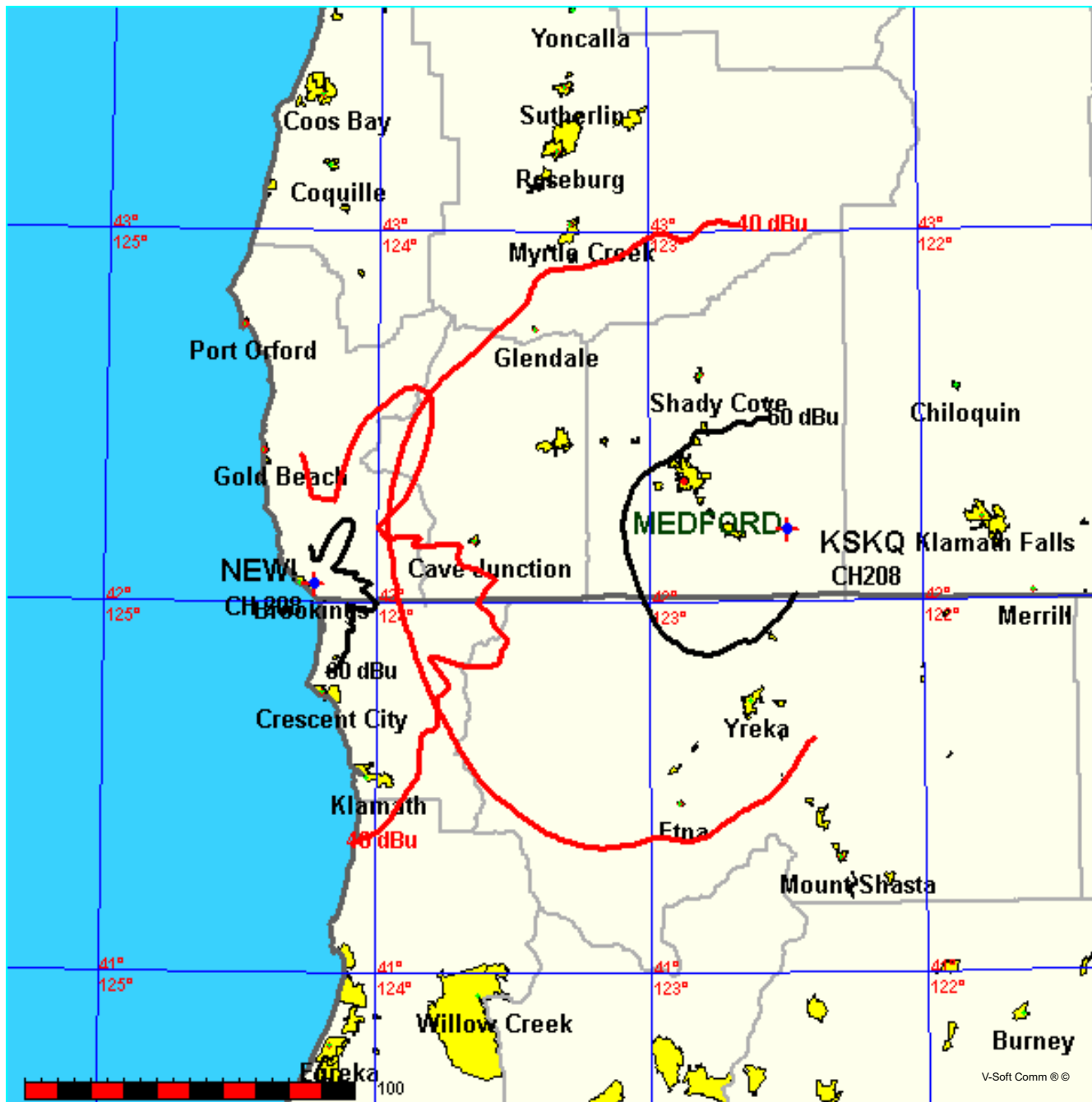


EXHIBIT 2D

TECHNICAL CERTIFICATIONS

ENVIRONMENTAL EFFECTS

This proposal would not have a significant environmental impact, under 47 CFR §1.1307. The applicant proposes a 2-bay 0.75 wave-spaced “Type 2” double V antenna at 15m AGL, at a defacto “tower farm” at Harbor Hills, near Harbor, OR. The proposed ERP is 350W. FM Model predicted a peak exposure of $8.2\mu\text{W}/\text{cm}^2$ at 5.2m from the tower. This represents 4.1% of the Maximum Permissible Exposure (MPE) of $200\mu\text{W}/\text{cm}^2$ for uncontrolled environments. This is below the threshold of 5%, at which the applicant would bear joint responsibility for mitigating RF exposure issues at the site.

Access to the tower is controlled by secure fencing and locked gates surrounding the compound. The applicant will ensure that proper RF warning signs are posted at appropriate locations. When tower climbing by authorized personnel becomes necessary, the permittee/licensee in coordination with other users at the site, will reduce power or cease operations so that persons are not subjected to RF exposures in excess of the FCC guidelines.

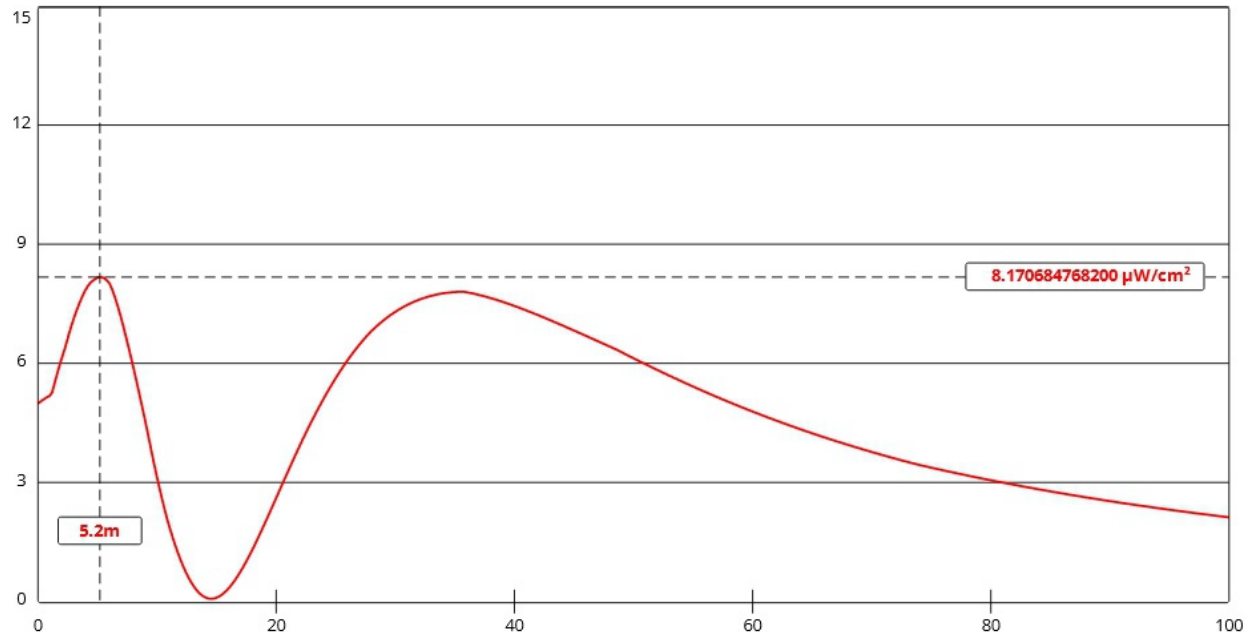
BROWN BROADCAST SERVICES
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065


[View Tabular Results +](#)

Channel Selection	Channel 208 (89.5 MHz) ▼		
Antenna Type +	EPA Type 2: Opposed V Dipole ▼		
Height (m)	15	Distance (m)	100
ERP-H (W)	350	ERP-V (W)	350
Num of Elements	2	Element Spacing (λ)	.75
Num of Points	500	Apply	

BROWN BROADCAST SERVICES INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

EXHIBIT 2E

TECHNICAL CERTIFICATIONS

LACK OF OVERLAP WITH OTHER PROPOSALS

This proposal does not overlap with the other application filed in this Window by the applicant, over land areas: Gold Beach, OR, first adjacent to this proposal; FID 765267. This application is in full compliance with §73.3518, in that it is not a “conflicting application”.

The *IN* entry, below, refers to the relationship between the proposed Gold Beach 60dBu protected contour, and the Brookings 54dBu interfering contour, which occurs over land. There is no overlap. The *IN* entry, which shows some overlap, refers to the Brookings 60dBu protected contour, vs the proposed Gold Beach 54dBu interfering contour. This overlap occurs over the open Pacific Ocean, and is therefore permitted by §73.509(e). See map on Page 4 of this Exhibit.

NEW NCE BROOKINGS Curry Coast Community Radio											
REFERENCE		CH# 208A - 89.5 MHz, Pwr= 0.35 kW, HAAT= 203.7 M, COR= 365 M								DISPLAY DATES	
42 02 43.0 N.		Average Protected F(50-50)= 20.3 km								DATA 11-01-21	
124 14 04.7 W.		Omni-directional								SEARCH 11-01-21	
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
209C3 NEW! Gold Beach		NEW D		344.7 164.6	40.43	42 23 46.30 124 21 52.70	0.680 448	25.7 732	14.7 User	-1.7	0.1

Terrain database is FCC NGDC 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference Zone= - Zone 2, Co to 3^d adjacent.
All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
« = Station meets FCC minimum distance spacing for its class.
Reference station has protected zone issue: AM tower

BROWN BROADCAST SERVICES
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

10-26-2021 Terrain Data: FCC NGDC 30 Sec FMOVer Analysis

NEW Gold Beach

Channel = 209C3
 Max ERP = 0.68 kw
 RCAMSL = 732 m
 N. Lat. 42 23 46.30
 W. Lng. 124 21 52.70
 Protected
 60 dBu

NEW Brookings (Harbor Hills)

Channel = 208A
 Max ERP = 0.35 kw
 RCAMSL = 365 m
 N. Lat. 42 02 43.00
 W. Lng. 124 14 04.70
 Interfering
 54 dBu

Azimuth (degrees)	ERP (kw)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kw)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
130.0	000.0215	0212.7	010.3	355.1	000.3500	0055.5	032.5	41.56	
131.0	000.0215	0215.9	010.4	355.0	000.3500	0056.4	032.3	41.77	
132.0	000.0215	0222.3	010.6	354.9	000.3500	0056.8	032.1	41.93	
133.0	000.0215	0229.7	010.7	354.9	000.3500	0057.1	031.8	42.09	
134.0	000.0215	0236.2	010.9	354.8	000.3500	0057.9	031.6	42.30	
135.0	000.0215	0243.4	011.0	354.7	000.3500	0058.6	031.3	42.52	
136.0	000.0215	0252.6	011.2	354.7	000.3500	0059.1	031.1	42.72	
137.0	000.0215	0262.6	011.5	354.6	000.3500	0059.5	030.8	42.92	
138.0	000.0215	0271.8	011.7	354.6	000.3500	0060.2	030.5	43.16	
139.0	000.0215	0279.3	011.8	354.4	000.3500	0061.5	030.2	43.46	
140.0	000.0215	0285.9	012.0	354.3	000.3500	0063.1	030.0	43.79	
141.0	000.0215	0293.5	012.1	354.1	000.3500	0064.6	029.7	44.10	
142.0	000.0215	0302.3	012.3	353.9	000.3500	0065.9	029.5	44.42	
143.0	000.0215	0312.6	012.5	353.8	000.3500	0067.2	029.2	44.74	
144.0	000.0215	0322.9	012.7	353.6	000.3500	0068.5	028.9	45.06	
145.0	000.0215	0333.3	012.9	353.4	000.3500	0069.9	028.6	45.40	
146.0	000.0215	0341.8	013.1	353.1	000.3500	0071.7	028.4	45.75	
147.0	000.0215	0348.0	013.2	352.8	000.3500	0073.7	028.2	46.12	
148.0	000.0215	0353.7	013.3	352.5	000.3500	0075.9	028.0	46.50	
149.0	000.0215	0358.9	013.4	352.1	000.3500	0078.3	027.8	46.89	
150.0	000.0215	0365.1	013.5	351.8	000.3500	0081.5	027.6	47.37	
151.0	000.0215	0371.6	013.6	351.4	000.3500	0085.9	027.4	47.97	
152.0	000.0215	0374.8	013.6	351.0	000.3500	0091.4	027.3	48.64	
153.0	000.0215	0375.3	013.6	350.5	000.3500	0097.9	027.2	49.34	
154.0	000.0215	0380.6	013.7	350.1	000.3500	0104.6	027.1	50.05	
155.0	000.0215	0395.6	014.0	349.7	000.3500	0109.7	026.8	50.67	
156.0	000.0215	0414.6	014.3	349.3	000.3500	0114.3	026.4	51.27	
157.0	000.0215	0431.2	014.5	348.9	000.3500	0119.9	026.1	51.88	
158.0	000.0215	0444.3	014.7	348.5	000.3500	0126.7	025.9	52.50	
159.0	000.0215	0455.8	014.9	348.0	000.3500	0133.3	025.7	53.09	
160.0	000.0215	0467.4	015.1	347.4	000.3500	0138.4	025.5	53.56	
161.0	000.0215	0474.5	015.2	346.9	000.3500	0142.3	025.3	53.91	
162.0	000.0215	0473.0	015.1	346.3	000.3500	0142.7	025.3	53.94	
163.0	000.0215	0462.0	015.0	345.7	000.3500	0138.0	025.5	53.53	
164.0	000.0215	0451.0	014.8	345.1	000.3500	0129.1	025.6	52.84	
165.0	000.0215	0443.1	014.7	344.5	000.3500	0118.0	025.8	52.01	
166.0	000.0215	0438.8	014.6	343.9	000.3500	0106.3	025.8	51.04	
167.0	000.0215	0434.6	014.6	343.4	000.3500	0095.3	025.9	49.97	
168.0	000.0215	0436.8	014.6	342.8	000.3500	0085.6	025.9	48.97	
169.0	000.0215	0442.3	014.7	342.2	000.3500	0077.1	025.8	48.05	
170.0	000.0215	0447.3	014.8	341.6	000.3500	0069.3	025.8	47.14	
171.0	000.0215	0445.8	014.7	341.1	000.3500	0061.9	025.9	46.17	
172.0	000.0215	0438.9	014.6	340.6	000.3500	0055.4	026.0	45.16	
173.0	000.0215	0429.9	014.5	340.1	000.3500	0050.1	026.2	44.14	
174.0	000.0215	0429.4	014.5	339.5	000.3500	0044.9	026.3	43.09	
175.0	000.0215	0433.1	014.5	339.0	000.3500	0040.0	026.3	42.08	
176.0	000.0215	0436.2	014.6	338.4	000.3500	0035.8	026.3	41.13	
177.0	000.0215	0444.8	014.7	337.8	000.3500	0031.1	026.3	40.05	
178.0	000.0215	0454.7	014.9	337.2	000.3500	0026.0	026.2	39.82	
179.0	000.0215	0464.6	015.0	336.5	000.3500	0021.8	026.2	39.84	
180.0	000.0215	0473.5	015.2	335.9	000.3500	0020.4	026.2	39.85	
181.0	000.0215	0482.5	015.3	335.2	000.3500	0021.7	026.2	39.85	

BROWN BROADCAST SERVICES INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

182.0	000.0215	0497.2	015.5	334.5	000.3500	0026.2	026.1	39.90
183.0	000.0215	0515.6	015.8	333.6	000.3500	0031.7	025.9	40.39
184.0	000.0215	0534.4	016.2	332.7	000.3500	0036.0	025.8	41.50
185.0	000.0215	0547.8	016.4	331.9	000.3500	0038.6	025.7	42.13
186.0	000.0215	0556.9	016.6	331.1	000.3500	0041.2	025.7	42.67
187.0	000.0215	0565.3	016.7	330.4	000.3500	0044.2	025.8	43.27
188.0	000.0215	0572.0	016.9	329.7	000.3500	0048.3	025.9	44.02
189.0	000.0215	0576.4	016.9	329.1	000.3500	0052.8	026.0	44.74
190.0	000.0215	0577.7	017.0	328.6	000.3500	0057.2	026.2	45.33
191.0	000.0215	0579.1	017.0	328.0	000.3500	0062.5	026.3	45.92
192.0	000.0215	0581.7	017.0	327.5	000.3500	0069.0	026.5	46.63
193.0	000.0215	0585.5	017.1	326.9	000.3500	0076.7	026.7	47.44
194.0	000.0215	0590.2	017.2	326.4	000.3500	0085.7	026.8	48.35
195.0	000.0215	0594.9	017.3	325.8	000.3500	0094.3	027.0	49.14
196.0	000.0215	0601.0	017.4	325.2	000.3500	0103.9	027.2	49.94
197.0	000.0215	0609.0	017.5	324.6	000.3500	0114.1	027.3	50.68
198.0	000.0215	0617.2	017.7	324.0	000.3500	0123.9	027.5	51.26
199.0	000.0215	0624.0	017.8	323.4	000.3500	0132.2	027.7	51.69
200.0	000.0215	0628.5	017.9	322.9	000.3500	0139.2	027.9	52.00
201.0	000.0215	0631.0	017.9	322.5	000.3500	0144.6	028.1	52.20
202.0	000.0215	0632.3	017.9	322.2	000.3500	0149.5	028.4	52.35
203.0	000.0215	0633.2	017.9	321.8	000.3500	0154.0	028.7	52.46
204.0	000.0215	0634.1	017.9	321.5	000.3500	0158.1	028.9	52.54
205.0	000.0215	0634.9	018.0	321.2	000.3500	0161.8	029.2	52.58
206.0	000.0215	0635.4	018.0	320.9	000.3500	0165.2	029.5	52.60
207.0	000.0215	0635.9	018.0	320.7	000.3500	0168.4	029.8	52.61
208.0	000.0215	0636.5	018.0	320.4	000.3500	0171.4	030.0	52.59
209.0	000.0215	0637.1	018.0	320.2	000.3500	0174.2	030.3	52.57
210.0	000.0215	0637.5	018.0	320.0	000.3500	0176.8	030.6	52.53
211.0	000.0215	0638.3	018.0	319.8	000.3500	0179.3	030.9	52.48
212.0	000.0215	0639.7	018.0	319.5	000.3500	0181.8	031.2	52.43
213.0	000.0215	0642.0	018.1	319.3	000.3500	0184.6	031.5	52.39
214.0	000.0215	0645.8	018.1	319.1	000.3500	0187.8	031.8	52.37
215.0	000.0215	0650.2	018.2	318.8	000.3500	0191.1	032.1	52.36
216.0	000.0215	0655.2	018.3	318.6	000.3500	0194.3	032.4	52.35
217.0	000.0215	0660.2	018.3	318.3	000.3500	0197.5	032.7	52.33
218.0	000.0215	0665.2	018.4	318.1	000.3500	0200.5	033.0	52.31
219.0	000.0215	0670.1	018.5	317.9	000.3500	0203.3	033.3	52.27
220.0	000.0215	0674.5	018.5	317.7	000.3500	0205.8	033.6	52.22
221.0	000.0215	0679.0	018.6	317.5	000.3500	0208.1	033.9	52.16
222.0	000.0215	0683.3	018.7	317.4	000.3500	0210.3	034.2	52.10
223.0	000.0215	0687.2	018.7	317.2	000.3500	0212.1	034.5	52.02
224.0	000.0215	0690.8	018.8	317.1	000.3500	0213.6	034.9	51.92

BROWN BROADCAST SERVICES
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

EXHIBIT 2E - page 4

TECHNICAL CERTIFICATIONS

Contour Protection vs NEW GOLD BEACH proposal filed by applicant

NEW NCE BROOKINGS - 73.3518 COMPLIANCE
Curry Coast Community Radio

FMCommander Single Allocation Study - 10-26-2021 - FCC NGDC 30 Sec
NEW!'s Overlaps (In= -1.72 km, Out= 0.09 km)

New Brookings (Harbor Hills) ch208
Lat= 42 02 43.00, Lng= 124 14 04.70
0.35 kW 203.7 m HAAT, 365 m COR
Prot.= 60 dBu, Intef.= 54 dBu

NEW NCE Gold Beach ch209
Lat= 42 23 46.30, Lng= 124 21 52.70
0.68 kW 448.1 m HAAT, 732 m COR
Prot.= 60 dBu, Intef.= 54 dBu

