

CITY OF LICENSE  
FACILITY ID  
PREPARED FOR  
VERSION  
JOB

Coos Bay, OR  
196932  
Coos Community Radio  
1.0  
116059

# **CONSOLIDATED**

# **ENGINEERING EXHIBIT**

FCC Form 318 - Section VI - LPFM Engineering, Tech Box

**BROWN BROADCAST SERVICES**  
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

**ENGINEERING STATEMENT**  
**PROPOSED MINOR MODIFICATION OF CONSTRUCTION PERMIT**  
**BNPL-201131113BSA**  
**KJAJ-LP, COOS BAY, OR**  
**Coos Community Radio**

**SUMMARY:**

The applicant seeks a minor modification to the CP for KJAJ-LP, to move to to the studio location, 4.35km from the current CP site.

This proposal is fully spaced to all co-channel, first-adjacent stations, and second-adjacent stations. No second-adjacent spacing waiver is required.

**EXPEDITED PROCESSING REQUESTED:**

The applicant hereby requests expedited processing. The CP expires on 2/7/17. The applicant will build promptly upon FCC approval.

**PERTINENT SPECIFICATIONS NOT INCLUDED IN SECTION VI - TECH BOX:**

HAAT:	-6 meters
ERP:	100 watts
DATA SOURCE:	V-Soft FMCommander with HAAT Method 0(zero); FCC 30 Second Terrain
SUPPORT STRUCTURE:	Pole

# EXHIBIT 11 INTERFERENCE

KJAJ-LP to Studio Loc  
Coos Community Radio

REFERENCE		DISPLAY DATES
43 23 07.0 N.	CLASS = L1	DATA 01-07-17
124 16 27.0 W.	Current Spacings to 2nd Adj.	SEARCH 01-27-17
----- Channel 251 - 98.1 MHz -----		

Call		Channel	Location		Azi	Dist	FCC	Margin
KJAJ-LP	CP	251L1	Coos Bay	OR	143.2	4.35	24.0	-19.7
NEW	CP	250L1	Bandon	OR	199.0	31.39	14.0	17.4
K250BK	LIC	250D	Roseburg	OR	105.4	75.23	28.0	47.2
K252CP	LIC-D	252D	Roseburg	OR	105.4	75.25	21.0	54.3
KLDR	LIC	252C2	Harbeck-fruitdale	OR	143.5	138.14	80.0	58.1
K252DL	LIC	252D	Walton	OR	34.2	91.86	21.0	70.9
KEQB	LIC-N	249C3	Coburg	OR	53.3	116.00	40.0	76.0
K243BG	CP -D	251D	Eugene	OR	53.4	115.98	39.0	77.0

## PROTECTED ZONES REPORT:

Protected zones report for KJAJ-LP on channel 251L1 01-27-2017

Lat. 43 23 07.0 Lng. 124 16 27.0, ERP= 0.1 kw, HAAT= -5.5 m

Facility is okay with respect to AM station towers.

Closest AM Facility is KMHS, COOS BAY, OR, L, ND1 at 107.8° at a distance of 6.0 km

Facility is okay with respect to FCC monitoring stations.

Closest FCC Monitoring Station is 633.3 km= Ferndale, WA

Facility is okay toward West Virginia Quiet Zone. Distance to center = 3814.8 km

Facility is okay toward Table Mountain. Distance to Center = 1623.6 km, Azimuth = 96.4 Degrees True

## BROWN BROADCAST SERVICES

Michael D. Brown 3740 S.W. Comus St. INCORPORATED Portland, Oregon 97219-7418 503-245-6065

## **EXHIBIT 14**

### **ENVIRONMENTAL PROTECTION ACT / NIER ANALYSIS**

The applicant proposes mounting a two-bay,  $\frac{1}{2}$  wave ring stub antenna at 10m AGL. Nearby buildings are not more than 2 stories tall. The antenna center of radiation will be 7.5m above the highest populated surface. Using FM Model for Windows (online version), with the "Type 1" setting, FM Model predicts a peak exposure of  $26.4\mu\text{W}/\text{cm}^2$  at 8.6m meters from the tower base, dropping rapidly at greater distances. This represents 13.2% of the Maximum Permissible Exposure (MPE) of  $200\mu\text{W}/\text{cm}^2$  for uncontrolled environments.

There are no other RF sources of any kind in the vicinity.

The applicant will ensure that appropriate RF warning signs are posted, and that access to the structure is effectively limited. If climbing by authorized personnel is required, the transmitter power will be reduced or operation will cease, as necessary, so as to not exceed the RF exposure limits.