

[Exhibit 12]

## **Non-Interference Compliance**

Regarding Facility id 150415

Channel 286

### **Description of Exhibit 12 Contents**

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

**Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.**

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

*[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.*

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dB $\mu$  F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 5 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

**Note: The quadrangle and aerial photo indicate the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

### Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
584316	BLH20011012AAX	WCOO	70.8	70.8
986030	BLH20040330BDW	WRFQ	84.7	83.9
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>70.8</b>

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **70.8 dBμ**, this makes the proposed translator's worst-case interfering contour **110.8 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **218.8 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population"). Hence, in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

**Note: The quadrangle and aerial photo indicate the presence of a county road in the area of interference. It is apparent that this is not a major road, e.g. interstate highway, as described in the Living Way decision and therefore "lack of population" is demonstrated.**

**Antenna Manufacturer: SWR**  
**Antenna Model: FM1**  
**CORAGL: 31 m**  
**Maximum ERP: 0.117 kW**  
**Interfering Contour: 110.8 dBμ**  
**Max Int. Contour Distance: 218.8 m**

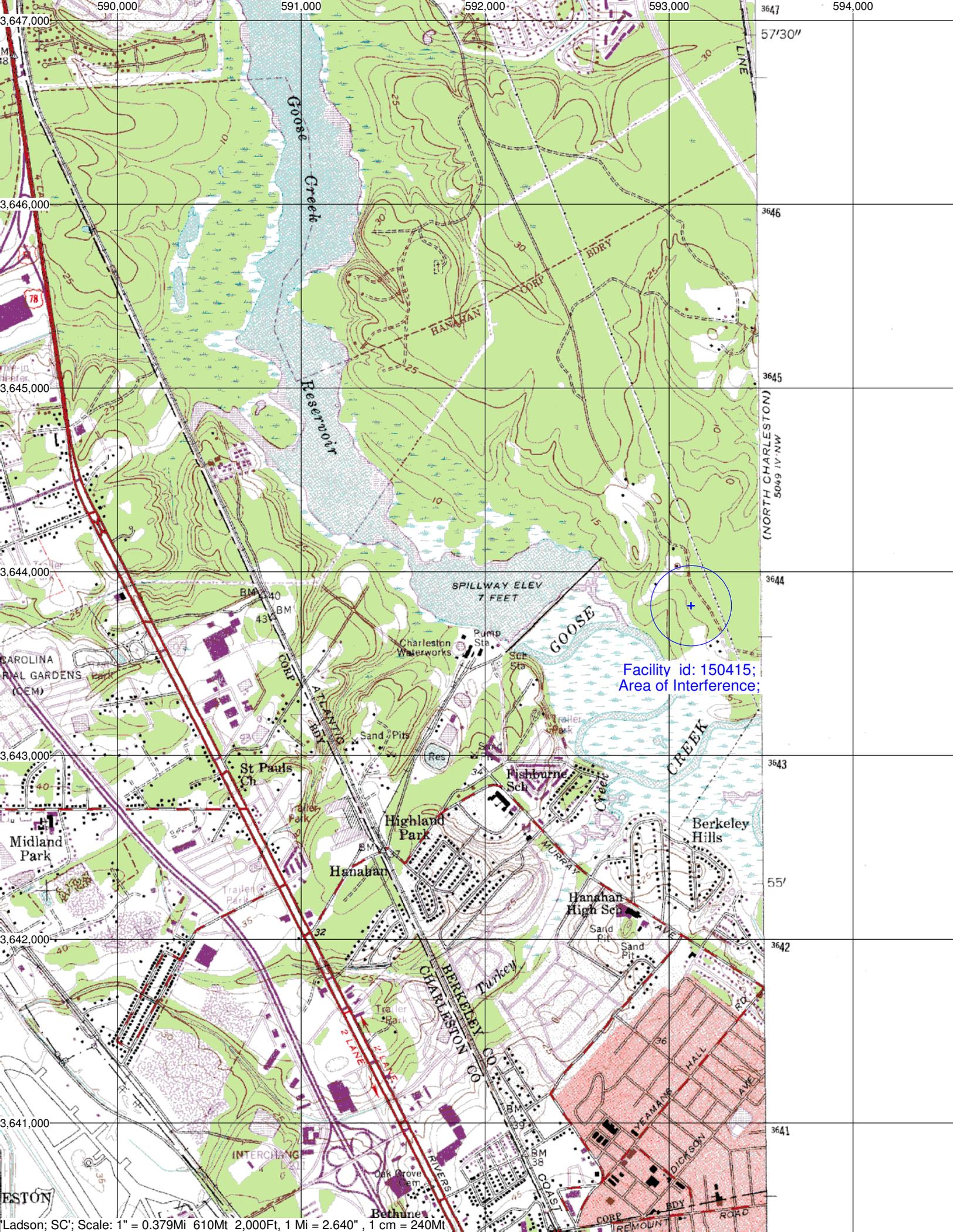
**Adjacent Channel Study  
For Station W286AY, Facility\_id: 150415**

**Co-channel through third adjacent:**

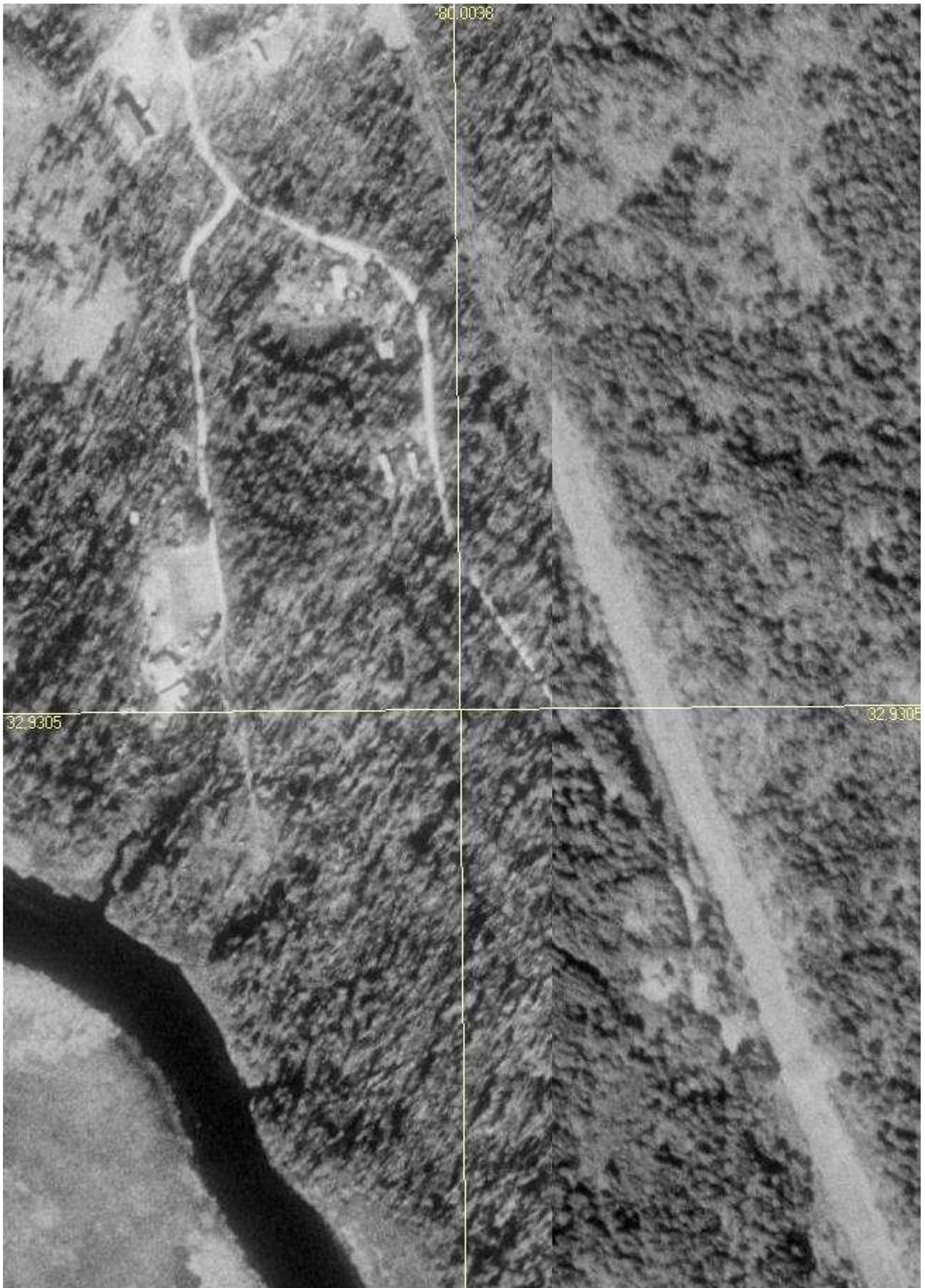
Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1132048	38901	BXLH	20060606AFU	WRFQ	CITICASTERS LICENSES, L.P.	C1	MOUNT PLEASANT	SC	LIC	25	161	283	3	20.1	0.6982
986030	38901	BLH	20040330BDW	WRFQ	CITICASTERS LICENSES, L.P.	C1	MOUNT PLEASANT	SC	LIC	100	202	283	3	20.1	0.6982
584316	50729	BLH	20011012AAX	WCOO	L.M. COMMUNICATIONS II OF SOUTH CAROLINA,	C2	KIAWAH ISLAND	SC	LIC	50	135	288	2	29.8	0.6982
1048606	153420	BMPFT	20050228ACM	W285DV	EDGEWATER BROADCASTING, INC.	D	MOUNT PLEASANT	SC	CP MOD	0.027	93	285	1	21.4	0
1132318	6485	BLH	20060602AAK	WGFG	MILLER COMMUNICATIONS, INC.	A	BRANCHVILLE	SC	LIC	2.9	198.1	286	0	93.8	0
200700	40705	BLH	19940705KC	WWJN	ADVENTURE COMMUNICATIONS, INC.	C3	RIDGELAND	SC	LIC	16	128	285	1	102.1	0

**Intermediate Frequencies (53 and 54 channels difference):**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
592290	31939	BLH	20020118AAA	WSCC-FM	CONCORD MEDIA GROUP, INC.	C3	GOOSE CREEK	SC	LIC	25	105	232	54	20.1	8.1
1007927	54503	BLH	20040818AAI	WSPX	GLORY COMMUNICATIONS, INC.	A	BOWMAN	SC	LIC	3.5	172	233	53	80.4	70.4



Facility id: 150415;  
Area of Interference;



80.0038

32.9305

32.9305