

[Exhibit 12]

## **Non-Interference Compliance**

Regarding Facility id 40852

Channel 278

### **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.

## 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 dB $\mu$  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.

<u>Application_id</u>	<u>File Number</u>	<u>Callsign</u>	<u>Contour at Tower</u>	<u>Min. Contour</u>
1092277	BMPH20050630ACG	KURR	93.3	93
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>93</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 **93 dB $\mu$** , this makes the proposed translator's worst-case interfering contour **133 dB $\mu$** . By the free-space equation, this contour is calculated to extend a maximum of **16.8 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.

**Antenna Manufacturer:** NIC  
**Antenna Model:** BKG77  
**CORAGL:** 15 m  
**Maximum ERP:** 0.115 kW  
**Interfering Contour:** 133 dB $\mu$   
**Max Int. Contour Distance:** 16.8 m

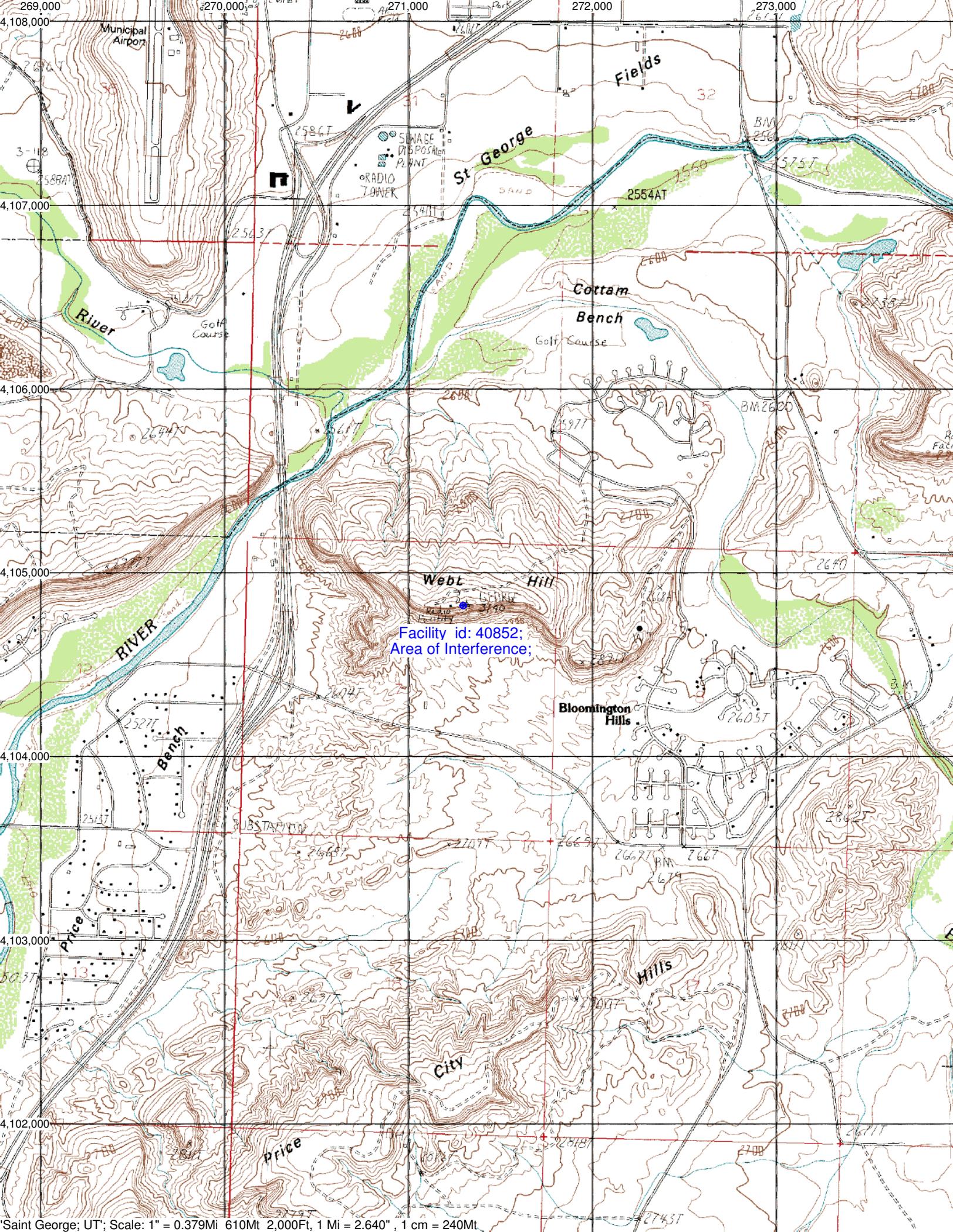
**Adjacent Channel Study  
For Station K276DJ, Facility\_id: 40852**

**Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1190712	164147	BMPH	20070508ABX	KURR	WESTERN BROADCASTING, LS, LLC	C	HURRICANE	UT	CP MOD	100	1960	276	2	25.1	0.6862
677529	143400	BNPFT	20030818AEX	K276EZ	POWELL MEREDITH COMMUNICATIONS COMPAN	D	MESQUITE	NV	CP	0.25	530	276	2	54.8	0
647128	153910	BNPFT	20030317GVT	NEW	EDGEWATER BROADCASTING, INC.	D	CEDAR CITY	UT	APP	0.062	1876.8	279	1	79.8	0
641898	149060	BNPFT	20030317MQZ	NEW	RADIO ASSIST MINISTRY, INC.	D	CEDAR CITY	UT	APP	0.062	1876.8	275	3	79.8	0
647132	153914	BNPFT	20030317GVV	NEW	EDGEWATER BROADCASTING, INC.	D	CEDAR CITY	UT	APP	0.062	1876.8	280	2	79.8	0
647136	153918	BNPFT	20030317GWD	NEW	EDGEWATER BROADCASTING, INC.	D	CEDAR CITY	UT	APP	0.062	1876.8	281	3	79.8	0
642520	149675	BNPFT	20030317KRC	NEW	RADIO ASSIST MINISTRY, INC.	D	CEDAR CITY	UT	APP	0.062	1876.8	277	1	79.8	0
633449	141778	BNPFT	20030314CAF	NEW	BRIGHAM YOUNG UNIVERSITY	D	CEDAR CITY	UT	APP	0.25	1773	277	1	84	0
633461	141789	BNPFT	20030314CAN	NEW	BRIGHAM YOUNG UNIVERSITY	D	CEDAR CITY	UT	APP	0.25	1773	279	1	84	0
633446	141775	BNPFT	20030314BZZ	NEW	BRIGHAM YOUNG UNIVERSITY	D	CEDAR CITY	UT	APP	0.25	1773	275	3	84	0
633466	141794	BNPFT	20030314CAT	NEW	BRIGHAM YOUNG UNIVERSITY	D	CEDAR CITY	UT	APP	0.25	1773	280	2	84	0
633471	141798	BNPFT	20030314CBA	NEW	BRIGHAM YOUNG UNIVERSITY	D	CEDAR CITY	UT	APP	0.25	1773	281	3	84	0
633457	141786	BNPFT	20030314CAL	NEW	BRIGHAM YOUNG UNIVERSITY	D	CEDAR CITY	UT	APP	0.25	1773	278	0	84	0
671437	144580	BNPFT	20030828AJH	K276EY	BROADCAST TOWERS, INC.	D	MOAPA	NV	CP	0.01	880	276	2	94.9	0
632074	140665	BNPFT	20030314ABO	NEW	IRON COUNTY	D	PAROWAN	UT	APP	0.015	2063	277	1	101.6	0
125459	28893	BLH	19890310KD	KISF	HBC LICENSE CORPORATION	C	LAS VEGAS	NV	LIC	100	1042	278	0	173.7	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
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Facility id: 40852;  
Area of Interference;