

[Exhibit 13]

## **Non-Interference Compliance**

Regarding Facility id 152811

Channel 256

### **Description of Exhibit 13 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 an aerial photo of the vicinity surrounding the proposed translator's tower site.

**Note: There are no buildings or major roads within the zone of predicted interference so 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.**

## 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>
1308678	BMLH20090415AAX	WFMT	60.7	60.2
666945	BLH20030611AAT	WUSN	58.4	58.4
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>58.4</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 **58.4 dBμ**, this makes the proposed translator's worst-case interfering contour **98.4 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **843.3 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").

**Note: There are no buildings or major roads within the zone of predicted interference so 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:** SCA  
**Antenna Model:** FMV  
**CORAGL:** 10 m  
**Maximum ERP:** 0.1 kW  
**Interfering Contour:** 98.4 dBμ  
**Max Int. Contour Distance:** 843.3 m

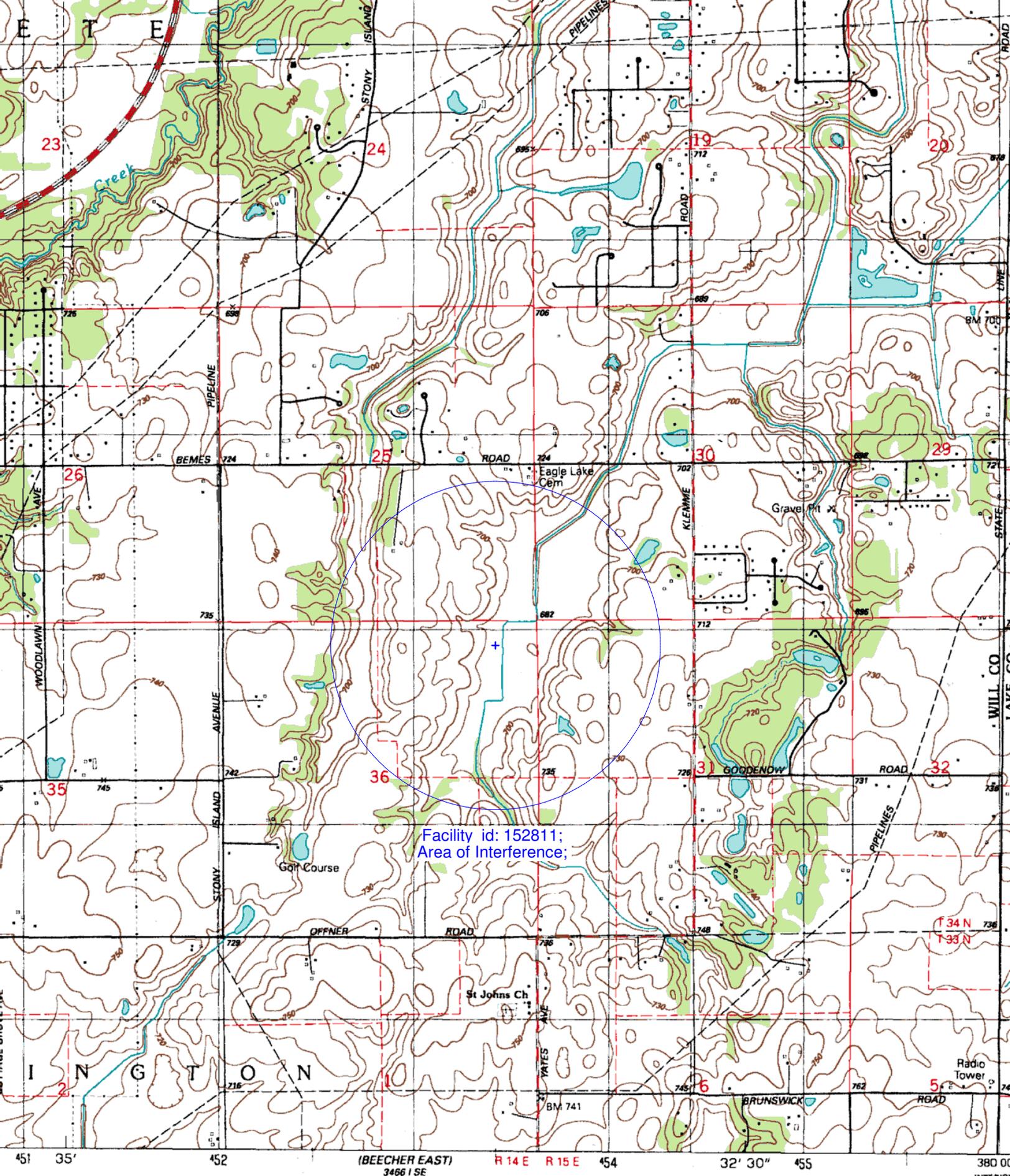
## Adjacent Channel Study For Station W256CL, Facility\_id: 152811

### Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
1308678	10801	BMLH-20090415AAX	WFMT	WINDOW TO THE WORLD COMM	B	CHICAGO	IL	LIC	6	651	254	2	53.8	2.3756
666945	28620	BLH-20030611AAT	WUSN	CBS RADIO OF CHICAGO LLC	B	CHICAGO	IL	LIC	5.7	606	258	2	55.9	2.3756
1565334	145160	BLFT-20130724AEI	W256CA	EDUCATIONAL MEDIA FOUNDAT	D	JOLIET	IL	LIC	0.01	328	256	0	42.9	0
1663718	193259	BNPL-20131114ADR	NEW	URBANMEDIA ONE	L1	CHICAGO	IL	CP	0	234	256	0	47	0
1663860	192949	BNPL-20131114ABC	NEW	MORTON COLLEGE	L1	CICERO	IL	CP	0	224	256	0	50.8	0
1594388	197052	BNPL-20131114ALZ	WJRY-LP	JERSHARE	L1	WHEATON	IL	CP	0	259	256	0	66.7	0
158865	33328	BMLH-19910401KB	WKVI-FM	KANKAKEE VALLEY B/CING. CO.,	A	KNOX	IN	LIC	3.3	306	257	1	79.9	0
1668008	196878	BNPL-20131115AAM	NEW	UNIVERSITY OF HEAVEN WSDA	L1	AURORA	IL	APP	0	238.9	256	0	82.1	0
273451	19211	BLH-19980901KE	WJEZ	CUMULUS LICENSING LLC	A	DWIGHT	IL	LIC	1.3	352	255	1	83.9	0
1293886	28195	BLH-20090317AAM	WYXY	SAGA COMMUNICATIONS OF ILL	B	SAVOY	IL	LIC	50	354	256	0	140.2	0

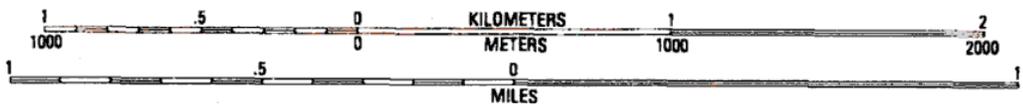
### Intermediate Frequencies (53 and 54 channels difference):

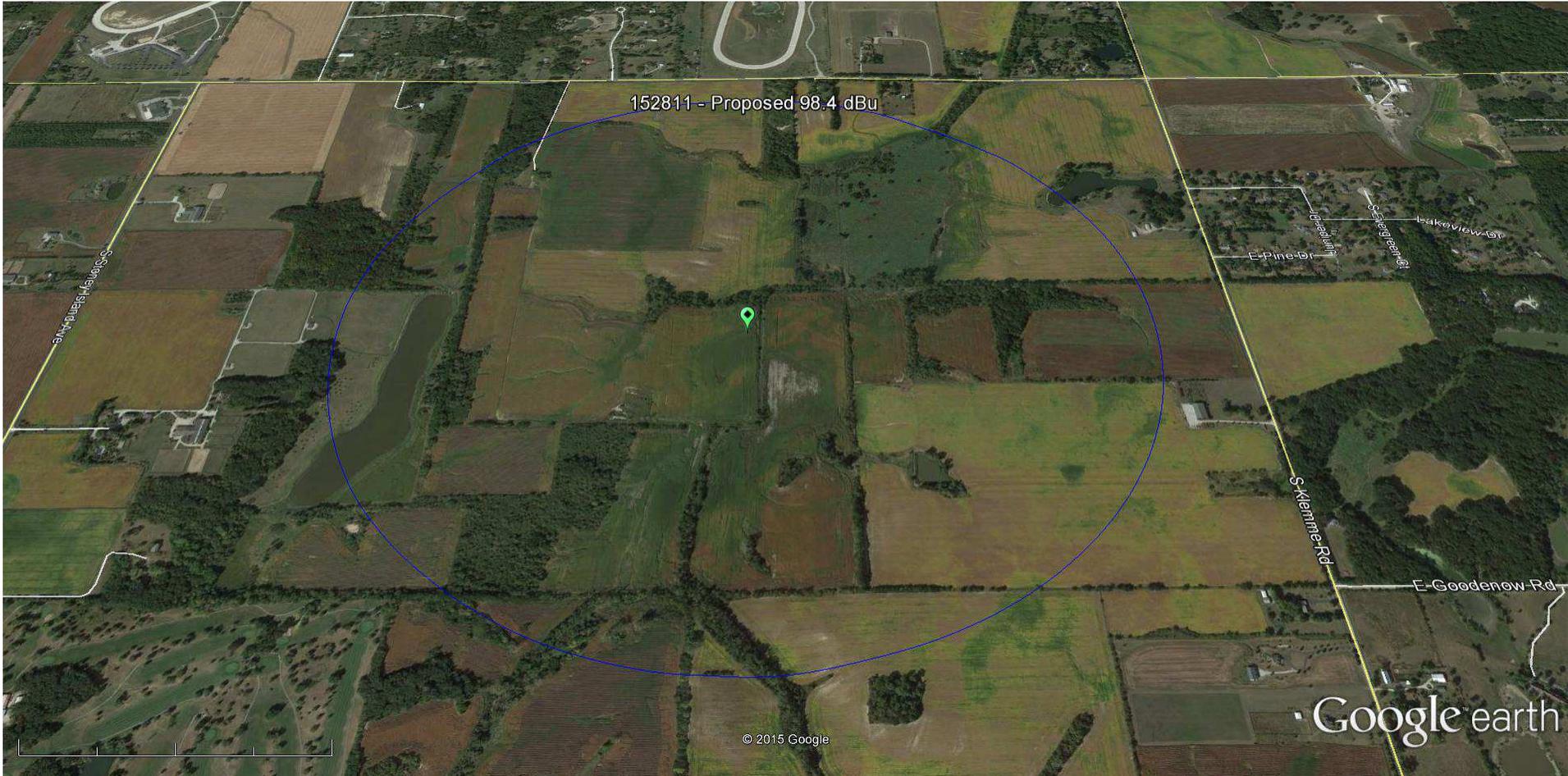
App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
20116	12922	BLED-19800513AE	WHFH	COMMUNITY HIGH SCHOOL DIST	A	FLOSSMOOR	IL	LIC	1.5	236	203	53	19.8	9.8
1553347	12922	BPED-20130515ABL	WHFH	COMMUNITY HIGH SCHOOL DIST	A	FLOSSMOOR	IL	CP	1.5	236	203	53	19.9	9.9
164019	62179	BLED-19910819KB	WXAV	ST. XAVIER COLLEGE	A	CHICAGO	IL	LIC	0.15	224	202	54	37.1	27.1
498096	78927	BLED-20000512AAE	WAWF	FAMILY WORSHIP CENTER CHUI	A	KANKAKEE	IL	LIC	1.25	279	202	54	39.4	29.4
1569853	69000	BPED-20130618ABI	WHPK-FM	UNIVERSITY OF CHICAGO	A	CHICAGO	IL	CP	0.125	228.3	203	53	43.1	33.1
1563756	69000	BSTA-20130717AIK	WHPK-FM	UNIVERSITY OF CHICAGO	A	CHICAGO	IL	APP	0.04	222.5	203	53	43.1	33.1
78966	69000	BLED-19850611KC	WHPK-FM	UNIVERSITY OF CHICAGO	A	CHICAGO	IL	LIC	0.1	220	203	53	44.1	34.1
1622549	90498	BMPED-20140210AA	WTMK	OLIVET NAZARENE UNIVERSITY	A	WANATAH	IN	CP MOD	3.4	317.6	203	53	45.6	35.6
1104002	90498	BLED-20051212ACI	WTMK	OLIVET NAZARENE UNIVERSITY	A	LOWELL	IN	LIC	1.5	260	203	53	47.2	37.2
1039004	17731	BMLD-20050107AB	WDSO	DUNELAND SCHOOL CORP.	A	CHESTERTON	IN	LIC	0.4	241	202	54	47.5	37.5
88420	27263	BLED-19860522KA	WHSD	HINSDALE TWSP. HIGH SCH. DIS	A	HINSDALE	IL	LIC	0.125	254	203	53	53.5	43.5
293561	59285	BLED-1271	WDGC-FM	WDGC-FM, SCHOOL DISTRICT #6	A	DOWNERS GROV	IL	LIC	0.25	258	202	54	58.9	48.9
1519492	177028	BLED-20121003AAZ	WMNK	AMERICAN EDUCATION FOUNDA	A	MINOOKA	IL	LIC	0.2	208	203	53	62.8	52.8



Facility id: 152811;  
Area of Interference;

SCALE 1:24 000





Google earth

feet  
km

