

Non-Interference Compliance

Regarding Facility id 152364

Channel 227

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 dBμ 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.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
21196	BLH19800616AK	WBCT	79.3	79.3
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				79.3

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 **79.3 dBμ**, this makes the proposed translator's worst-case interfering contour **119.3 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **120.2 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:	NIC
Antenna Model:	BKG88-2
CORAGL:	175 m
Maximum ERP:	0.25 kW
Interfering Contour:	119.3 dBμ
Max Int. Contour Distance:	120.2 m

Adjacent Channel Study

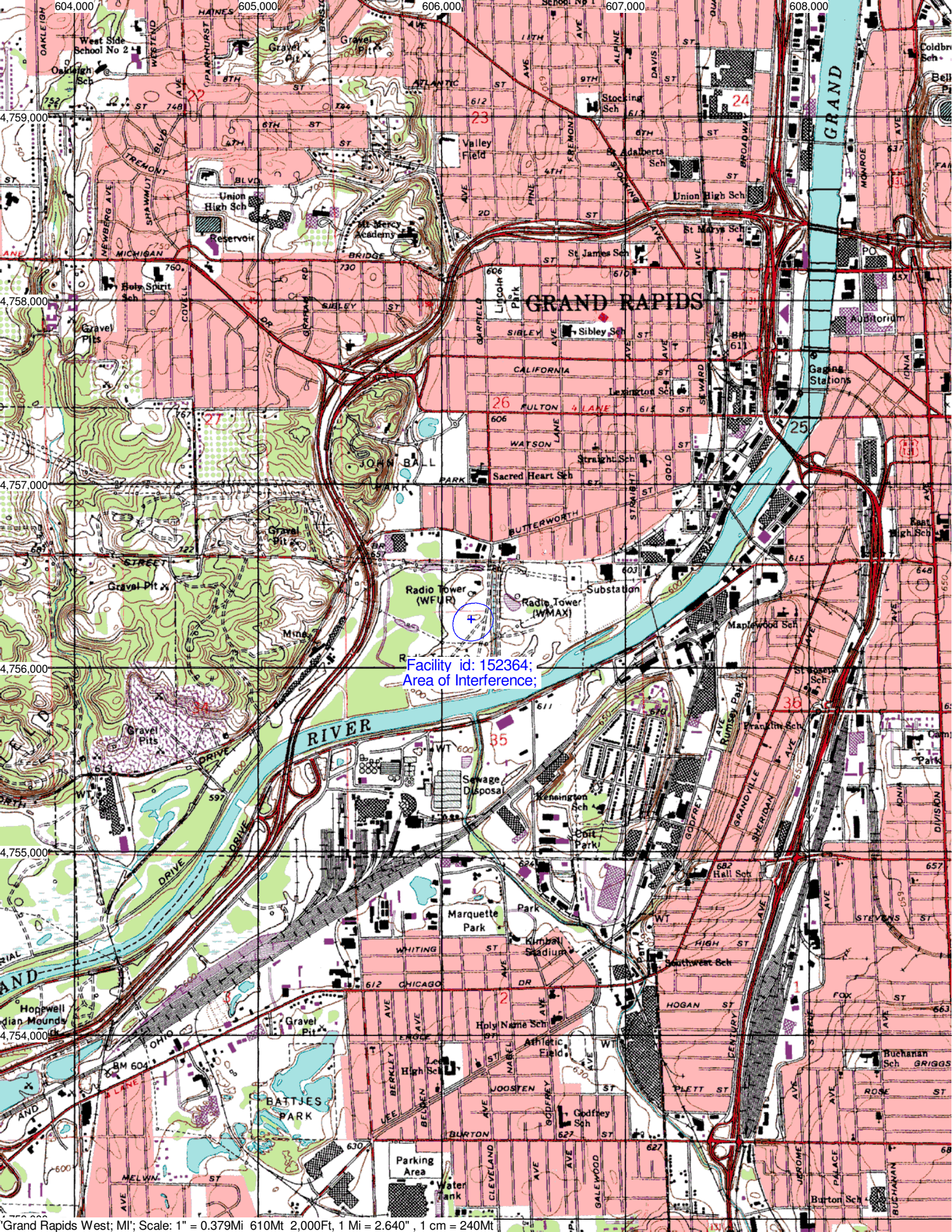
For Station W225BA, Facility_id: 152364

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
598319	0	RM	10401	Null		A	FERRYSBURG	MI	USE	0	0	226	1	43.3	30.8366
1068262	73606	BXLH	20050615ACQ	WBCT	CC LICENSES, LLC	B	GRAND RAPIDS	MI	LIC	70	427	229	2	38.1	3.2707
21196	73606	BLH	19800616AK	WBCT	CC LICENSES, LLC	B	GRAND RAPIDS	MI	LIC	320	486	229	2	38.1	3.2707
1521586	152350	BPFT	20121023ACB	W277BB	FIRST VENTURES CAPITAL PARTNERS, INC.	D	GRAND HAVEN	MI	APP	0.25	360	225	2	0	1.1721
291103	73606	Null	Null	WBCT	CC LICENSES, LLC	B	GRAND RAPIDS	MI	USE	0	0	229	2	38.1	0
1506393	189472	BLH	20120723ADX	WMPA	WGHN, INC.	A	FERRYSBURG	MI	LIC	6	249	226	1	45.6	0
613526	13676	BLH	20021002ABE	WYVN	MIDWEST COMMUNICATIONS, INC.	A	SAUGATUCK	MI	LIC	3.3	311	224	3	48.5	0
290675	13676	Null	Null	WYVN	MIDWEST COMMUNICATIONS, INC.	A	SAUGATUCK	MI	USE	0	0	224	3	48.5	0
1359221	152369	BLFT	20100309ABQ	W224BZ	PACKER RADIO WION, LLC	D	IONIA	MI	LIC	0.212	300	224	3	50.2	0
1118055	126066	BLL	20060308AIZ	WDLP-LP	MONTCALM PUBLIC RADIO, INC.	L1	FENWICK	MI	LIC	0	287	226	1	51.7	0
1192335	145377	BLFT	20070622ADT	W227BB	RADIO ASSIST MINISTRY, INC.	D	FREMONT	MI	LIC	0.01	250	227	0	61.2	0
1434872	145404	BLFT	20110708ACM	W227AS	FIRST VENTURES CAPITAL PARTNERS, INC.	D	WHITEHALL	MI	LIC	0.01	207	227	0	72.2	0
1429545	145404	BSTA	20110526AEW	W227AS	FIRST VENTURES CAPITAL PARTNERS, INC.		WHITEHALL	MI	APP	0.01	207	227	0	72.2	0
1270013	127139	BLL	20081002AFQ	WGLN-LP	GREAT LAKES ADVENTIST ACADEMY	L1	CEDAR LAKE	MI	LIC	0	317	228	1	76.9	0
1246491	0	RM	bxx-16	Null		A	STANWOOD	MI	ADD	0	0	228	1	81	0
654431	0	RM	10812	Null		A	GRAND LEDGE	MI	USE	0	0	225	2	92	0
1219027	24645	BLH	20071119AEL	WLMI	MIDWEST COMMUNICATIONS, INC.	A	GRAND LEDGE	MI	LIC	5.4	365.2	225	2	96.5	0
1499729	152312	BLFT	20120511ACO	W225BB	SWICK BROADCASTING COMPANY, INC.	D	ATHENS	MI	LIC	0.25	285	225	2	99.1	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
295358	66309	Null	Null	WVGR	REGENTS OF THE UNIVERSITY OF MICHIGAN	B	GRAND RAPIDS	MI	USE	0	0	281	54	33.4	18.4
1413558	66309	BXLED	20110105ABP	WVGR	REGENTS OF THE UNIVERSITY OF MICHIGAN	B	GRAND RAPIDS	MI	LIC	19.5	359	281	54	36.1	21.1
1235719	66309	BMLED	20080306ABQ	WVGR	REGENTS OF THE UNIVERSITY OF MICHIGAN	B	GRAND RAPIDS	MI	LIC	96	469	281	54	36.1	21.1



Facility id: 152364;
Area of Interference;



Google earth

feet
meters

