

JOB 106127  
CITY OF LICENSE SUN VALLEY

VER 1

# **CONSOLIDATED**

# **ENGINEERING EXHIBIT**

FCC Form 340 - Section VII - FM Engineering

Michael D. Brown

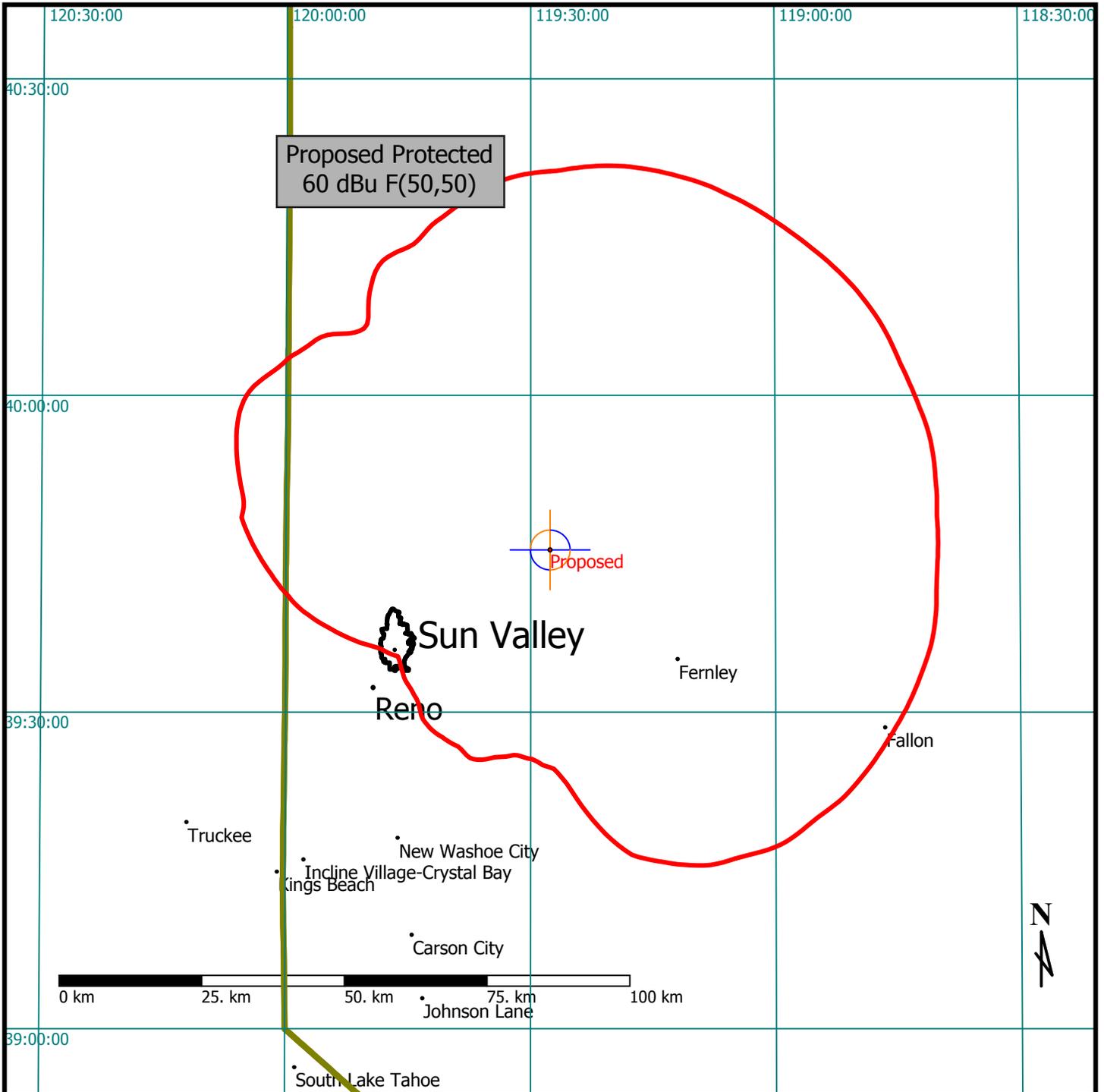
**BROWN BROADCAST SERVICES**  
INCORPORATED  
3740 S.W. Comus St. Portland, Oregon 97219-7418

503-245-6065

# Exhibit 14 - Community Coverage

Brown Broadcast Services, Inc.  
Job: NCE Reno FINAL.fmj  
Master Database: 2007\_Oct\_10.fmd  
Lat: N39:45:22 Lon: W119:27:37 NAD-27  
Scale: 1:1000000  
Channel: 206 Class: C1

rfInvestigator Version 3.2.41  
by rfSoftware, Inc.  
Date: 10/15/2007 6:36:33 PM  
Key:  
City Grade  
Protected  
Co-Channel  
1st Adj  
2nd/3rd Adj



**EXHIBIT 16**  
**CONTOUR OVERLAP PROTECTION TO OTHER**  
**RESERVED-BAND STATIONS,**  
**& SPACING REQUIREMENTS TO NON-RESERVED-BAND STATIONS**

The proposed facility meets the contour overlap requirements of §73.509 with respect to all other reserved-band stations, shown by the attached contour maps. The proposed facility also meets the §73.207 spacing requirements with respect to all non-reserved-band stations, as shown by the table below.

This application does not take into account BPED-19950718MA, and BPED-19951113MB, which were dismissed by DA-07-4137, released on October 3, 2007.

All contour calculations were made using the methods and procedures described in 47 CFR §73.313(c). FCC 30 second terrain data was employed. Areas were calculated using a spline integration in one-degree increments. Population totals were calculated by testing each U.S. Census-defined block-centroid population point in the region with a point-in-polygon method. The population was summed for each point within the polygon using data from the 2000 Census.

Domestic stations considered:

ID	City	St	Chan	CL	Stat	Prefix	ARN	Dist	Min 207	Clear 207
KUNR	RENO	NV	204	C	LIC	BMLED	19930412KA	59	105	-46
KHAP	CHICO	CA	206	B1	LIC	BLED	19880915KB	190.23	233	-42.77
951127MA	RENO	NV	208	A	CP	BPED	19951127MA	35.42	75	-39.58
KPJP	GREENVILLE	CA	207	C1	LIC	BLED	20040920ADN	143.26	177	-33.74
KXPR	SACRAMENTO	CA	205	B	APP	BPED	20070518AAY	217.16	195	22.16



Federal Communications Commission  
Washington, D.C. 20554

October 3, 2007

**DA 07-4137**

*In Reply Refer To:*

1800B3-IB

Released: October 3, 2007

Thomas Aquinas School  
c/o Dennis J. Kelly, Esq.  
P.O. Box 41177  
Washington, D.C. 20018

Re: NEW(FM), Reno, Nevada  
Facility ID No. 78489  
BPED-19951127MA  
MX Group No. 95072E

**Petition to Deny**

Dear Counsel:

We have before us a Petition to Deny ("Petition") filed on May 2, 2007, by Thomas Aquinas School ("TAS"). TAS is a party to MX Group 95072E, a group of three mutually exclusive applicants competing for a single permit to build a new noncommercial educational ("NCE") FM station. TAS argues that the Commission should deny the application of the group's tentatively selectee, the Board of Regents of the University of Nevada Acting on Behalf of Truckee Meadows Community College ("Regents"). For the reasons set forth below, we deny TAS's Petition and grant the referenced Regents application for a new NCE FM station in Reno, Nevada.

On March 27, 2007, the Commission released the *Omnibus Order*,<sup>1</sup> which applied the Commission's NCE comparative selection criteria<sup>2</sup> to seventy-six groups of mutually exclusive NCE FM applications and tentatively selected one winner in each group. The Commission determined that all three of the applicants in Group 95072E tied for the same number of points. The Commission tentatively selected Regents under the first tie-breaker criterion because Regents had the fewest attributable interests in existing radio authorizations.<sup>3</sup> TAS held the second-fewest attributable interests.

The Commission's *Omnibus Order* delegated authority to the Media Bureau ("Bureau") to consider petitions to deny the tentative selectees, and to grant and dismiss applications in accordance with the Commission's tentative determinations in cases where no substantial and material question of fact is

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<sup>1</sup> See *Comparative Consideration of 76 Groups of Mutually Exclusive Applications for Permits to Construct New or Modified Noncommercial Educational FM Stations*, Memorandum Opinion and Order, 22 FCC Rcd 6101 (2007) ("*Omnibus Order*").

<sup>2</sup> See 47 C.F.R. §§ 73.7000 – 05.

<sup>3</sup> See *Omnibus Order*, 22 FCC Rcd at 6132 - 33; 47 C.F.R. § 73.7003(c)(1).

raised through the petition to deny process.<sup>4</sup> TAS does not question the Commission's point determinations but alleges that two matters disqualify Regents from receiving a construction permit.

First, TAS alleges that Regents's ability to construct the proposed station is questionable because Regents once held a permit to construct an FM station in Reno but did not build. TAS demonstrates that Regents held a construction permit for DKRNC(FM), Facility ID 6082, between 1993 and 1994, let that permit expire, and failed to have the permit reinstated on reconsideration.<sup>5</sup> TAS provides no support, however, for its proposition that an applicant's past failure to build a station is potentially disqualifying. Its claim that a hearing is appropriate relies primarily on inapposite permit extension proceedings before the Review Board in the 1970's.<sup>6</sup>

Second, TAS alleges that Regents's application is defective because 11 members of its governing board at the time of its 1995 application are no longer on the board. TAS alleges that Regents has failed to keep its application complete and accurate, as required.<sup>7</sup> It further alleges that it is not clear whether there has been a major change in control of Regents, possibly necessitating a dismissal or denial of the application.

A fifty percent change in the governing board of an NCE applicant would generally be considered a "major change" and would not be permissible outside of a filing window.<sup>8</sup> The *Omnibus Order* recognized, however, that many NCE applicants had experienced such changes and determined that it would be unreasonable to penalize applicants for routine and inevitable changes over the substantial period that the Commission was unable to act on their applications due to judicial challenges to the new NCE comparative procedures.<sup>9</sup> The Commission thus waived the major change rule for many NCE applicants that experienced gradual ownership changes over long periods and not as an outgrowth of the party's desire to gain control over the NCE station application. It directed the staff to grant such waivers for similarly situated NCE applicants.<sup>10</sup>

On May 9, 2007, Regents amended its application to provide updated information about its governing board.<sup>11</sup> It reports that the changes were the result of gradual changes that occurred in the normal course of operations, and requests a waiver of the major change rule pursuant to the *Omnibus Order*. Regents should have notified the Commission contemporaneously of the changes that it first reported in May 2007. Nevertheless, its delayed reporting of that information is neither disqualifying nor comparatively decisional. In particular, TAS has not shown that the change in Regents's governing board

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<sup>4</sup> See *Omnibus Order*, 22 FCC Rcd at 6132 - 33; 47 C.F.R. §§ 0.61(h), 0.283.

<sup>5</sup> See *Petition*, Exhibit B.

<sup>6</sup> E.g., *Harold A. Jahnke*, Decision, 74 FCC 2d 276 (Rev. Bd. 1978); *Community Telecasters of Cleveland, Inc.*, Decision, 58 FCC 2d 1296 (Rev. Bd. 1976). The Commission has since done away with permit extensions, and implemented tolling rules. See *1998 Biennial Regulatory Review -- Streamlining of Mass Media Applications, Rules, and Processes*, Report and Order, 13 FCC Rcd 23056, 23092 (1998), *aff'd*, Memorandum Opinion and Order, 14 FCC Rcd 17525, 17539 - 40 (1999); 47 C.F.R. § 73.3598(b).

<sup>7</sup> See 47 C.F.R. § 1.65(a).

<sup>8</sup> 47 C.F.R. § 73.3573(a)(1), (b)(2), and (b)(3).

<sup>9</sup> See *Omnibus Order*, 22 FCC Rcd at 6125.

<sup>10</sup> *Id.*

<sup>11</sup> Regents also reported that its name had changed to Board of Regents of the Nevada System of Higher Education for the Benefit of Truckee Meadows Community College, without any corresponding change in ownership.

would reduce the number of points for which Regents would have qualified or its standing in the tie-breaker. TAS has failed to make a *prima facie* issue that the grant of Regents's application would be contrary to the public interest.

Accordingly, IT IS ORDERED, That the Petition to Deny filed on May 2, 2007, by Thomas Aquinas School IS DENIED.

IT IS FURTHER ORDERED, That Section 73.3573 of the Commission's Rules, 47 C.F.R. § 73.3573, is waived with respect to the ownership change in Board of Regents of the University of Nevada Acting on Behalf of Truckee Meadows Community College (now Board of Regents of the Nevada System of Higher Education for the Benefit of Truckee Meadows Community College).

IT IS FURTHER ORDERED, That the application of Board of Regents, University of Nevada System of Higher Education on behalf of Truckee Meadows Community College (File No. BPED-19951127MA) IS GRANTED CONDITIONED UPON its compliance with Section 73.7005 of the Commission's Rules, 47 C.F.R. § 73.7005, which sets forth a four-year holding period for applicants that are awarded permits by use of a point system.

IT IS FURTHER ORDERED, That the mutually exclusive applications of Thomas Aquinas School (File No. BPED-19950718MA) and of Stockton Christian Life College (File No. BPED-19951113MB) ARE DISMISSED.

Sincerely,

Peter H. Doyle  
Chief, Audio Division  
Media Bureau

cc: Board of Regents, Nevada System of Higher Education  
Stockton Christian Life College

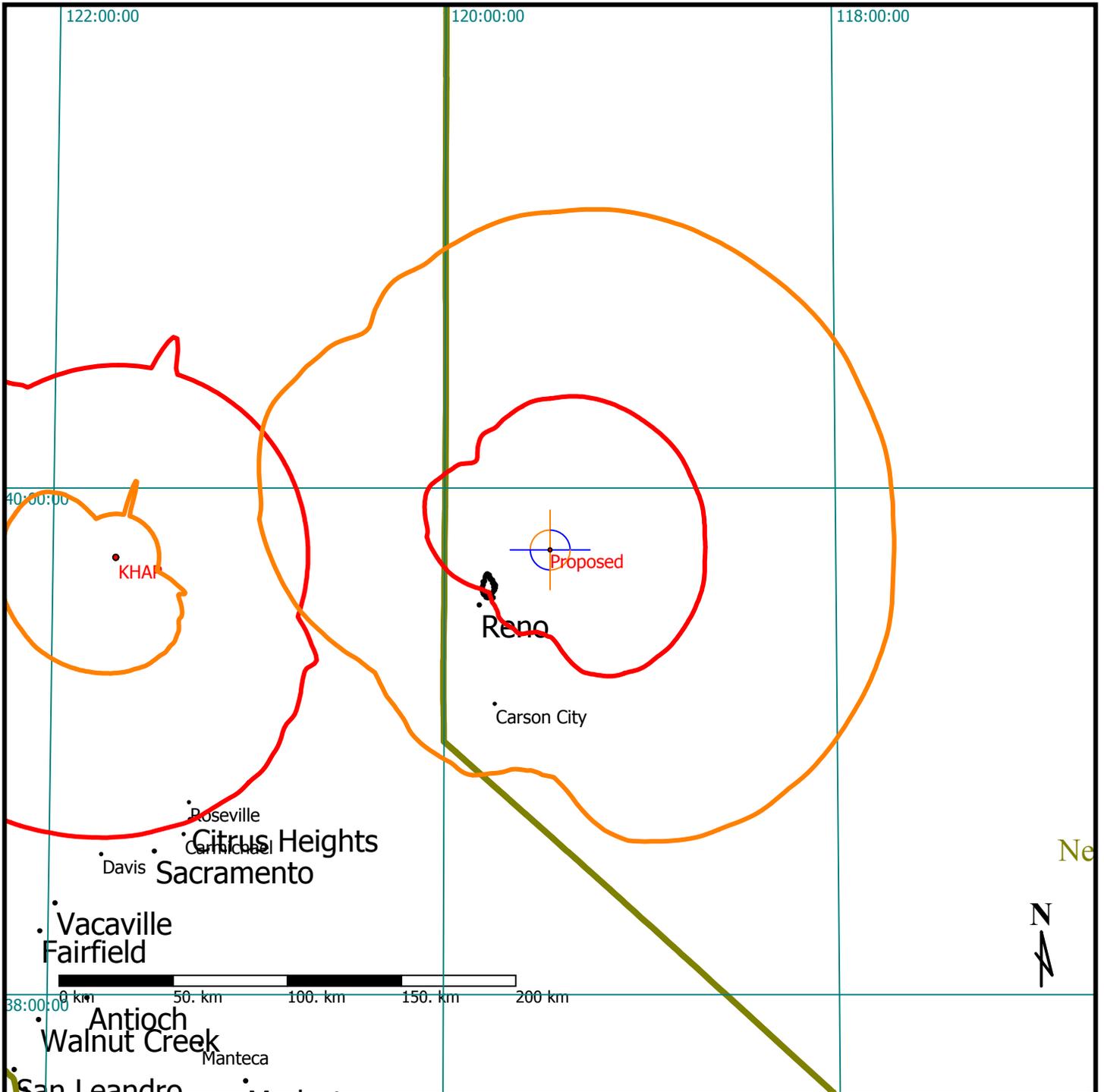
# 16a - Co-Channel Contour Analysis

Brown Broadcast Services, Inc.  
 Job: NCE Reno FINAL.fmj  
 Master Database: 2007\_Oct\_10.fmd  
 Lat: N39:45:22 Lon: W119:27:37 NAD-27  
 Scale: 1:2500000  
 Channel: 206 Class: C1

rfInvestigator Version 3.2.41  
 by rfSoftware, Inc.  
 Date: 10/15/2007 6:44:45 PM  
 Key:

<b>PROPOSED</b>
Protected: 60dbu F(50,50)
Interfering: 40dbu F(50,10)
<b>AFFECTED</b>
Protected: 60dbu F(50,50)
Interfering: 40dbu F(50,10)

City Grade  
 Protected  
 Co-Channel  
 1st Adj  
 2nd/3rd Adj



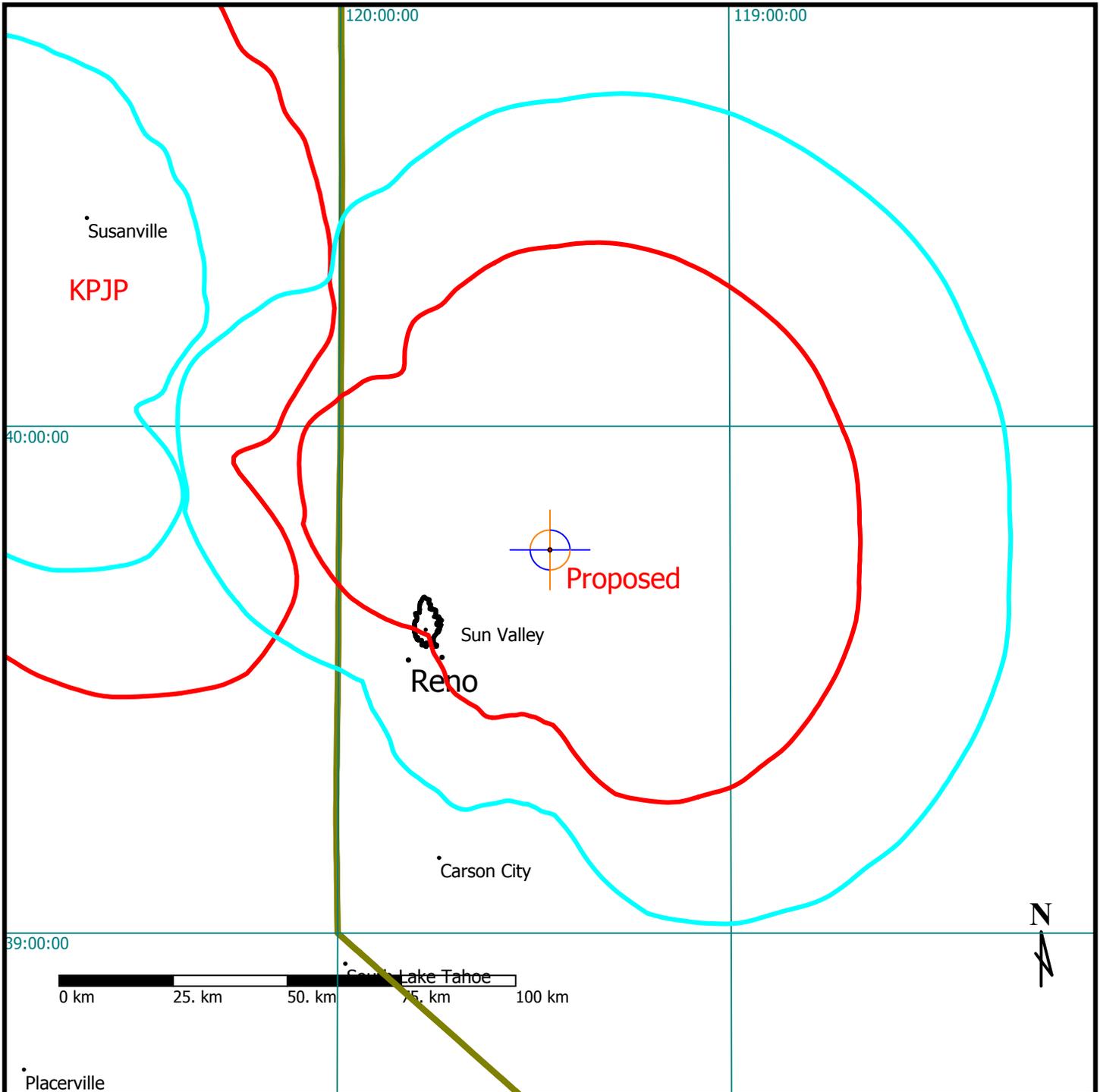
# 16b - First Adjacent Contour Analysis

Brown Broadcast Services, Inc.  
Job: NCE Reno FINAL.fmj  
Master Database: 2007\_Oct\_10.fmd  
Lat: N39:45:22 Lon: W119:27:37 NAD-27  
Scale: 1:1250000  
Channel: 206 Class: C1

rfInvestigator Version 3.2.41  
by rfSoftware, Inc.  
Date: 10/15/2007 6:48:53 PM  
Key:

<b>PROPOSED</b>
Protected: 60dbu F(50,50)
Interfering: 54dbu F(50,10)
<b>AFFECTED</b>
Protected: 60dbu F(50,50)
Interfering: 54dbu F(50,10)

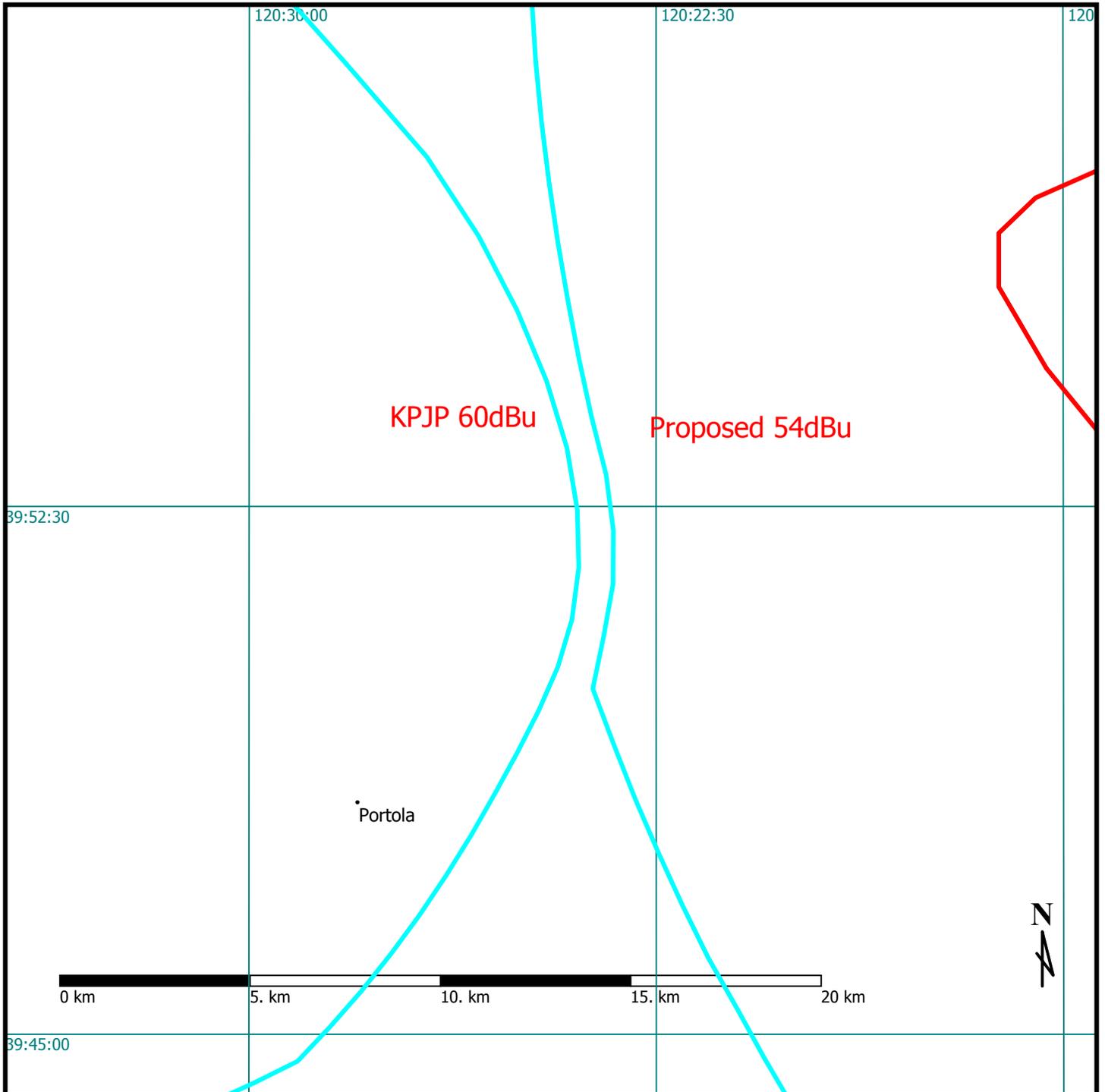
- City Grade
- Protected
- Co-Channel
- 1st Adj
- 2nd/3rd Adj



# 16c - 1st-Adjacent - Zoom

Brown Broadcast Services, Inc.  
Job: NCE Reno FINAL.fmj  
Master Database: 2007\_Oct\_10.fmd  
Lat: N39:51:53 Lon: W120:24:26 NAD-27  
Scale: 1:150000  
Channel: 206 Class: C1

rfInvestigator Version 3.2.41  
by rfSoftware, Inc.  
Date: 10/15/2007 6:49:37 PM  
Key:  
City Grade  
Protected  
Co-Channel  
1st Adj  
2nd/3rd Adj

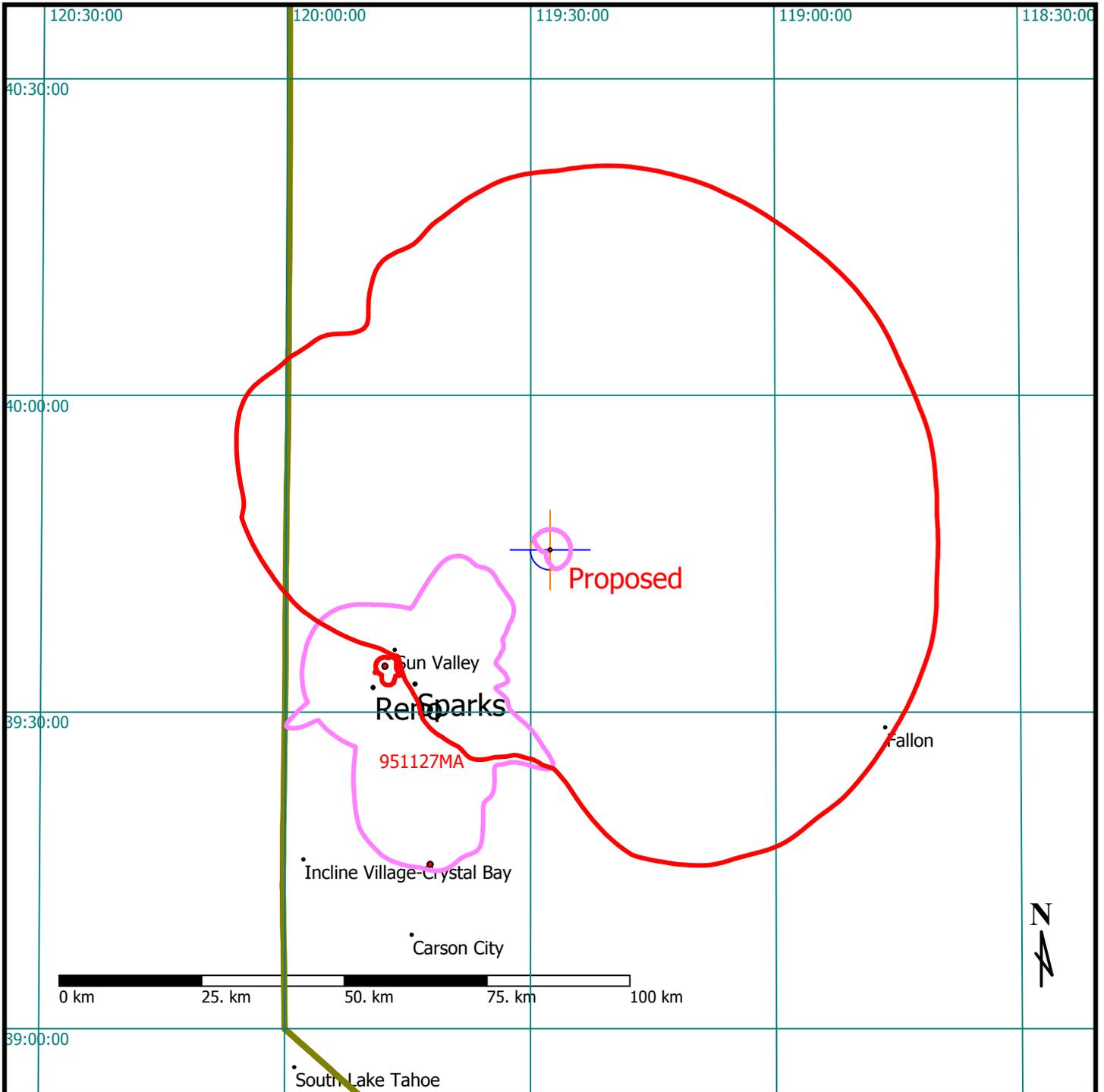


# 16d - 2nd & 3rd-Adjacent Contour Analysis

Brown Broadcast Services, Inc.  
Job: NCE Reno FINAL.fmj  
Master Database: 2007\_Oct\_10.fmd  
Lat: N39:45:22 Lon: W119:27:37 NAD-27  
Scale: 1:1000000  
Channel: 206 Class: C1

rfInvestigator Version 3.2.41  
by rfSoftware, Inc.  
Date: 10/15/2007 6:52:37 PM  
Key:  
City Grade  
Protected  
Co-Channel  
1st Adj  
2nd/3rd Adj

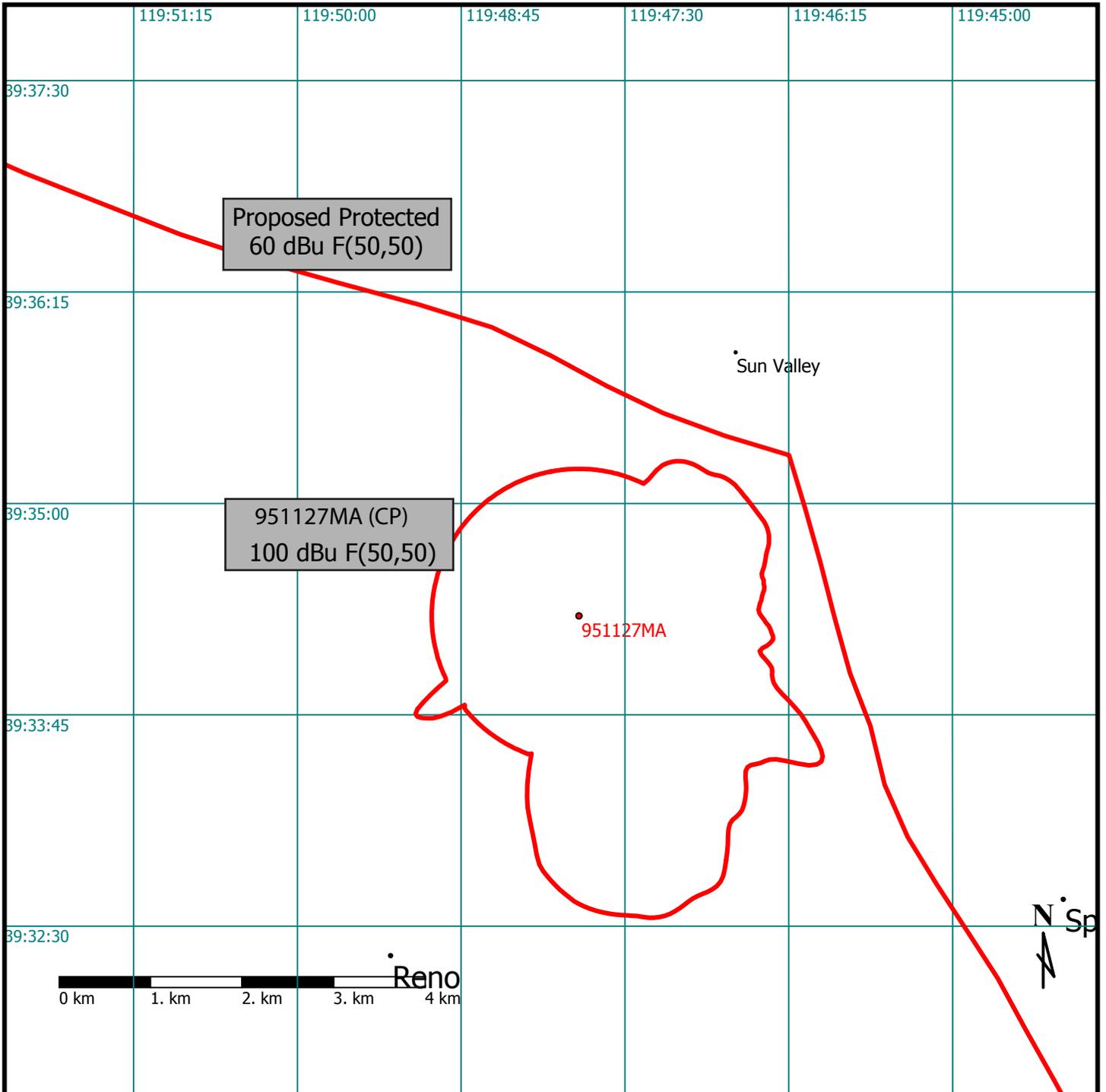
<b>PROPOSED</b> Protected: 60dbu F(50,50) Interfering: 100dbu F(50,10) <b>AFFECTED</b> Protected: 60dbu F(50,50) Interfering: 100dbu F(50,10)
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# 16e - Proposed vs 951127MA

Brown Broadcast Services, Inc.  
Job: NCE Reno FINAL.fmj  
Master Database: 2007\_Oct\_10.fmd  
Lat: N39:34:43 Lon: W119:48:04 NAD-27  
Scale: 1:62500  
Channel: 206 Class: C1

rfInvestigator Version 3.2.41  
by rfSoftware, Inc.  
Date: 10/15/2007 6:53:31 PM  
Key:  
City Grade  
Protected  
Co-Channel  
1st Adj  
2nd/3rd Adj



## EXHIBIT 19

### TV CHANNEL 6 PROTECTION PER §73.525

Compliance with the TV Channel 6 provisions of §73.525 is shown below.

When an NCE station is not co-located with the TV6 station in question, the interference area must not contain more than 3,000 persons. When mixed polarity is used, the permissible ERP is determined by the formula: Effective ERP = ERPH + (ERPV/40 or 10), with the “40” divisor used when all interference<sup>1</sup> will fall outside any community with 50,000+ persons. A 6db antenna-directivity adjustment may be used when mixed polarity is employed.

When vertical-only polarity is used, the 6db antenna-directivity adjustment is not used.

Population was counted using the block-centroid method - 2000 Census. See attached maps for a visual representation.

In this case, mixed polarization was employed. For purposes of determining the Effective ERP in the final calculations, a vertical power divisor of 10 was employed. The horizontal ERP= 2.95kw , and the vertical ERP= 2.95kw. Therefore, the effective ERP = 3.19kw. The total affected persons is 0.

Affected TV6 stations examined:

ID	City	St	Chan	CL	Stat	Prefix	ARN	Dist	Min 207	Clear 207
KBVE-LP	HAWTHORNE	NV	6					154.08	211	-56.92
KEFM-LP	CHICO	CA	6					179.84	211	-31.16
KEFM-LP	CHICO	CA	6					190.23	211	-20.77
KVIE	SACRAMENTO	CA	6					241.98	211	30.98

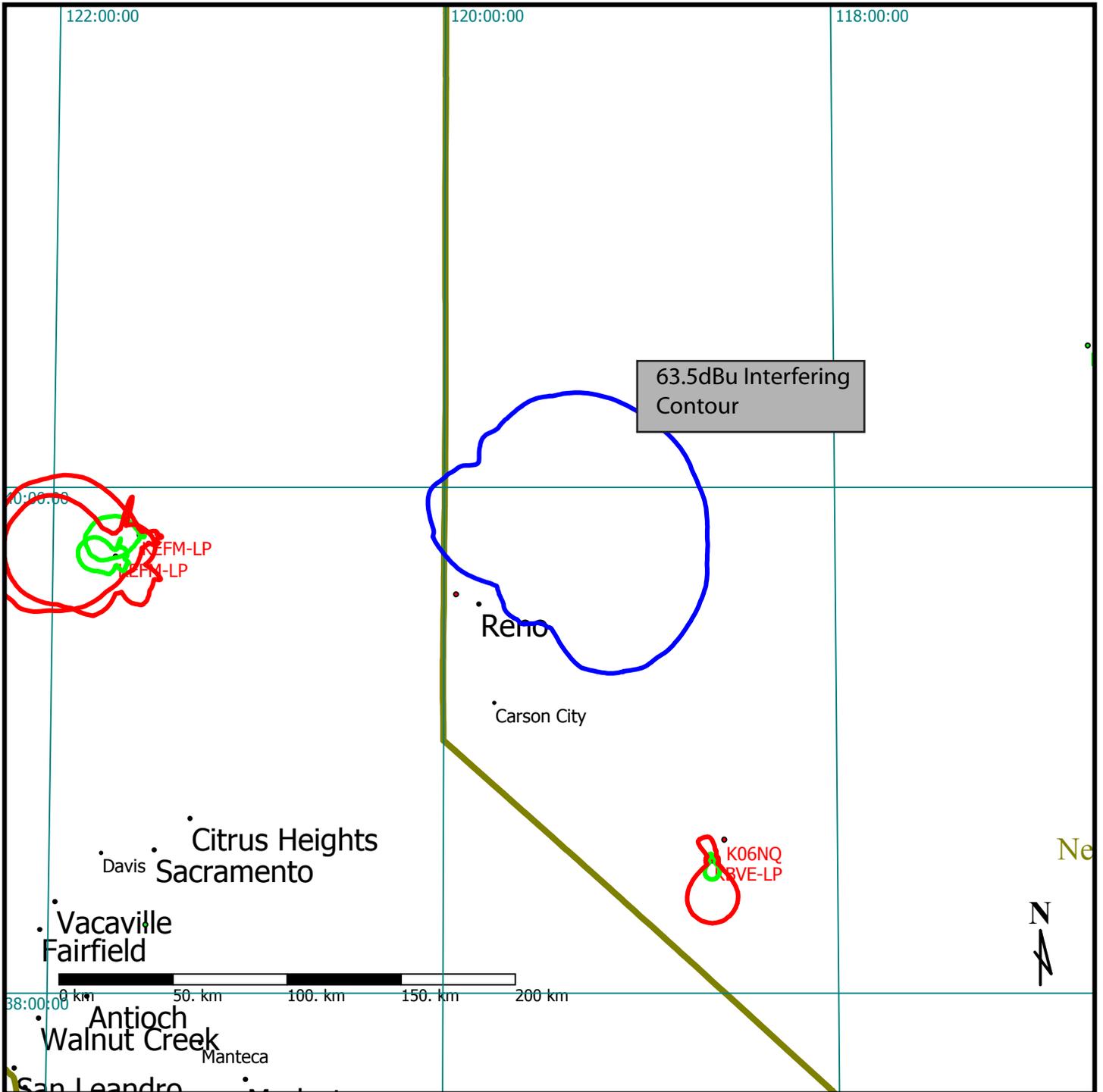
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<sup>1</sup>Current FCC policy apparently requires the 50,000-person test to be done using the “10” divisor. If it results in interference within such a city, the 10 divisor is used for calculations.

# TV Channel 6 Protection

Brown Broadcast Services, Inc.  
Job: NCE Reno FINAL.fmj  
Master Database: 2007\_Oct\_10.fmd  
Lat: N39:45:22 Lon: W119:27:37 NAD-27  
Scale: 1:2500000  
Channel: 206 Class: C1

rfInvestigator Version 3.2.41  
by rfSoftware, Inc.  
Date: 10/15/2007 7:03:58 PM  
Key:  
City Grade  
Protected  
Co-Channel  
1st Adj  
2nd/3rd Adj



## **EXHIBIT 22**

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

The applicant proposes mounting a new antenna on an existing 24 meter tower. The proposed center of radiation is 14m AGL. A 2 bay Shively 6810 0.5 wavelength antenna is anticipated. Calculations were made using FM Model for Windows. FM Model predicted a peak exposure of  $115.4\mu\text{w}/\text{cm}^2$ , at 22 meters from the tower. This represents 57.7% of the Maximum Permissible Exposure (MPE) of  $200\mu\text{w}/\text{cm}^2$  for uncontrolled environments. The other facilities at or near this site are non-broadcast in nature, and are not significant RF Exposure contributors for humans at ground level.

The applicant will ensure that public access to the tower is restricted by fencing, anti-climb devices, or other appropriate measures. The site will be posted with appropriate RF exposure warning signs. If tower climbing by authorized personnel becomes necessary, transmitter power will be reduced or operation will cease, as necessary, so as to not exceed the RF exposure limits.

No modification of the existing tower is proposed, other than side-mounting the antenna. The tower was constructed prior to March 16, 2001. The National Programmatic Agreement generally allows such a collocation without consultation or review under Section 106 and Subpart B of 36 CFR §800. The applicant believes that it is in full compliance with the Agreement, and that no further study is required.