

Engineering Statement in support of  
FCC FORM 349  
APPLICATION FOR AUTHORITY TO  
CONSTRUCT OR MAKE CHANGES  
IN AN FM TRANSLATOR  
(For Minor Amendment to a Construction Permit)  
BMPFT-20161024AAI  
Facility ID 141730

**Introduction:**

This is an application by ABC Radio Los Angeles Assets, LLC (the Applicant) for a minor amendment to BMPFT-20161024AAI, K256CX, Facility ID 141730.

The proposed change is minor in that it involves no change in location or frequency.

The translator will serve as a fill-in for AM station KDIS, Facility ID 25076. The applicant is the licensee of KDIS. The proposed site is Tower #2 of the KDIS antenna array.

The proposed facility is within the service contour of second-adjacent stations KKLA-FM 258B and KYSR 254B.

The proposal's 94dBu interfering contour is contained within the 82dBu contour of KKLA-FM and the 76dBu contour of KYSR, so an interfering contour of 116dBu will provide 40dB or more of interference protection to both stations. The 116dBu contour is entirely contained within the KDIS tower site. See the 116-dBu Interference Exhibits.

The proposal will use a custom designed circularly polarized antenna. The envelope shown in the antenna pattern exhibit is the actual antenna pattern provided by the antenna manufacturer.

This application was prepared using FCC 30-arc-second terrain data.

### Section III-A Engineering Data:

#### Tech Box Data:

1. Channel: 256
2. Primary Station: Facility ID 25076, Callsign KDIS, Pasadena, CA, 1110kHz
3. Delivery Method: Other
4. Antenna Location Coordinates: 34° 06' 50" N (NAD-27)  
117° 59' 50" W
5. Antenna Structure Registration Number: 1012885
6. Antenna Location Site Elevation: 113 meters AMSL
7. Overall Tower Height: 100 meters AGL
8. Height of Radiation Center: - 98 meters AGL (H) 98 meters AGL(V)
9. Effective Radiated Power: - 0.240 kW(H) 0.240 kW (V)
10. Transmitting Antenna: Custom @ 0-degrees.
11. Booster or Fill-in within protected contour: Yes.
12. Interference: No. Overlap with KKLA-FM 258B and KYSR 254B.
  - a) Contour Overlap Requirements: Checked.
  - b) TV Channel 6 Protection: Not Checked.
13. Unattended Operation: Yes
14. Multiple Translators: Yes
15. NEPA, Yes.
  - a) Operation of this facility will not have a significant environmental impact. The existing site is located on a multi-tower AM facility. To the best knowledge of the Applicant:
    1. The structure is not located in an officially designated wilderness area or wildlife preserve, nor does it threaten the existence or habitat of endangered species.
    2. The proposed changes will not affect districts, sites, buildings, structures or objects significant in American history, architecture, engineering or culture that are listed in the National Register of Historic Places, or eligible for listing.
    3. The site is not located in a flood plain. Nothing is proposed that would require significant changes in surface features such as wetland fill, deforestation or water diversion.
    4. The existing structure has markings and lights in accordance with FAA requirements.
  - b) The Applicant will cooperate with all site users, managers and owners with regard to the cessation of operation or the reduction of operating power, whenever it is necessary to comply with the FCC Regulations and Guidelines on Human Exposure to Non-Ionizing RF Radiation.
  - c) The proposed site is in compliance with permissible exposure requirements in that its contribution to the RF environment is less than 5% of the maximum permitted level. Based on this information the proposed facility is in compliance with 47 C.R.R. Section 1.1306 with regards to radio-frequency electromagnetic exposure. See RFR Exhibit.

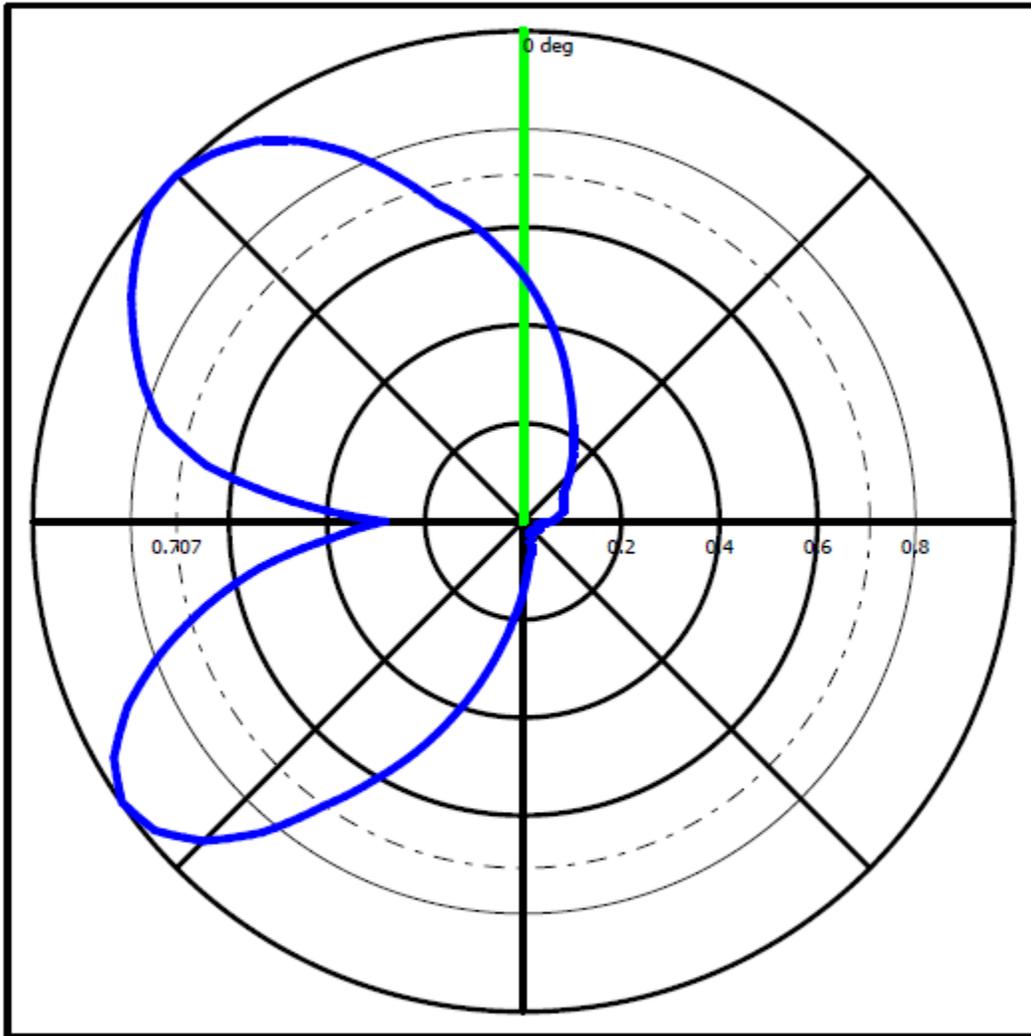
# Antenna Envelope

## Antenna Pattern (Azimuth)

RFSoftware, Inc.

Job: K256CX\_24May2017.fmj  
Description: SHI 6025-1-1-2

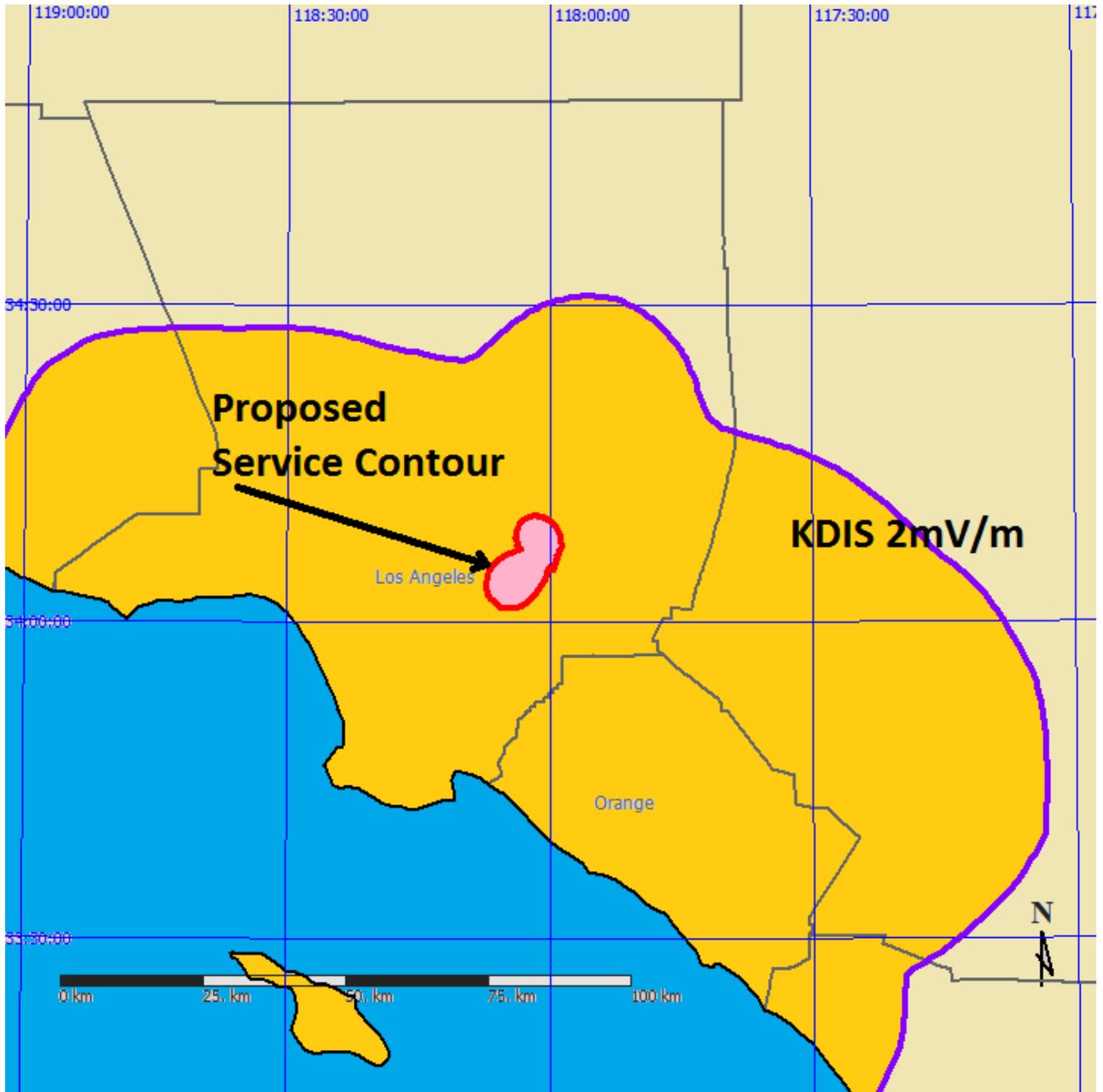
rfInvestigator Version 3.8.16  
Pattern RMS = 0.539  
Date: 5/24/2017 6:31:19 PM



Degree	Field										
000	0.502	060	0.093	120	0.033	180	0.143	240	0.964	300	0.923
010	0.385	070	0.089	130	0.032	190	0.260	250	0.787	310	0.995
020	0.279	080	0.075	140	0.029	200	0.428	260	0.545	320	0.981
030	0.204	090	0.058	150	0.027	210	0.610	270	0.282	330	0.895
040	0.154	100	0.033	160	0.044	220	0.828	280	0.655	340	0.748
050	0.116	110	0.030	170	0.076	230	0.981	290	0.825	350	0.619

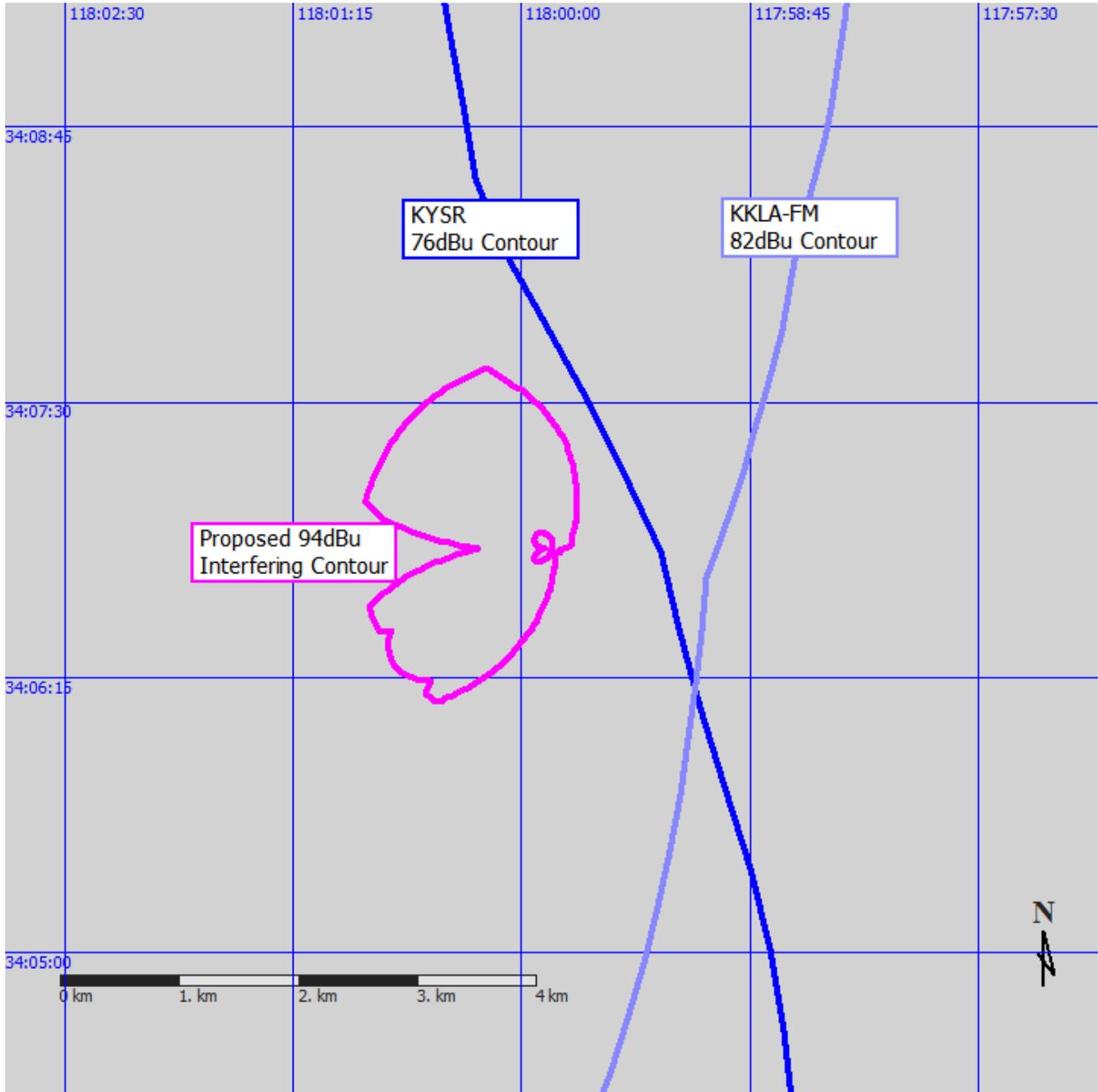
Additional Azimuth: 315-degrees; Field 1.000 | 235-degrees; Field 0.999 | 135-degrees; Field 0.026  
125-degrees; Field 0.030 | 115-degrees; Field 0.038

# Fill-In Exhibit



*The proposed service contour is contained within the Primary 2mV/m.*

# 116 dBu Interference Exhibit



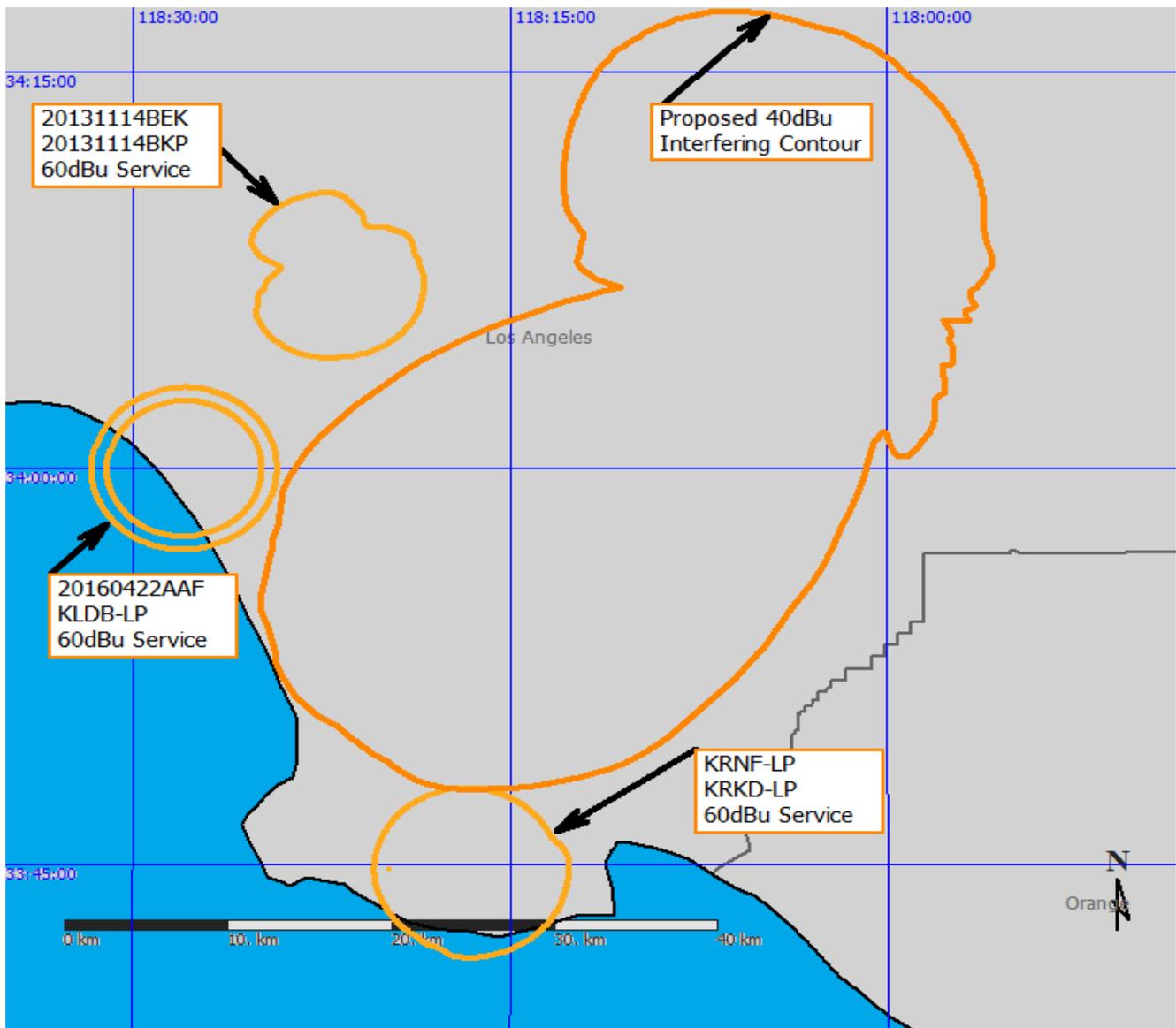
*The proposals 2nd Adjacent Interfering contour is within KYSR's 76dBu contour.*

## 116 dBu Interference Exhibit



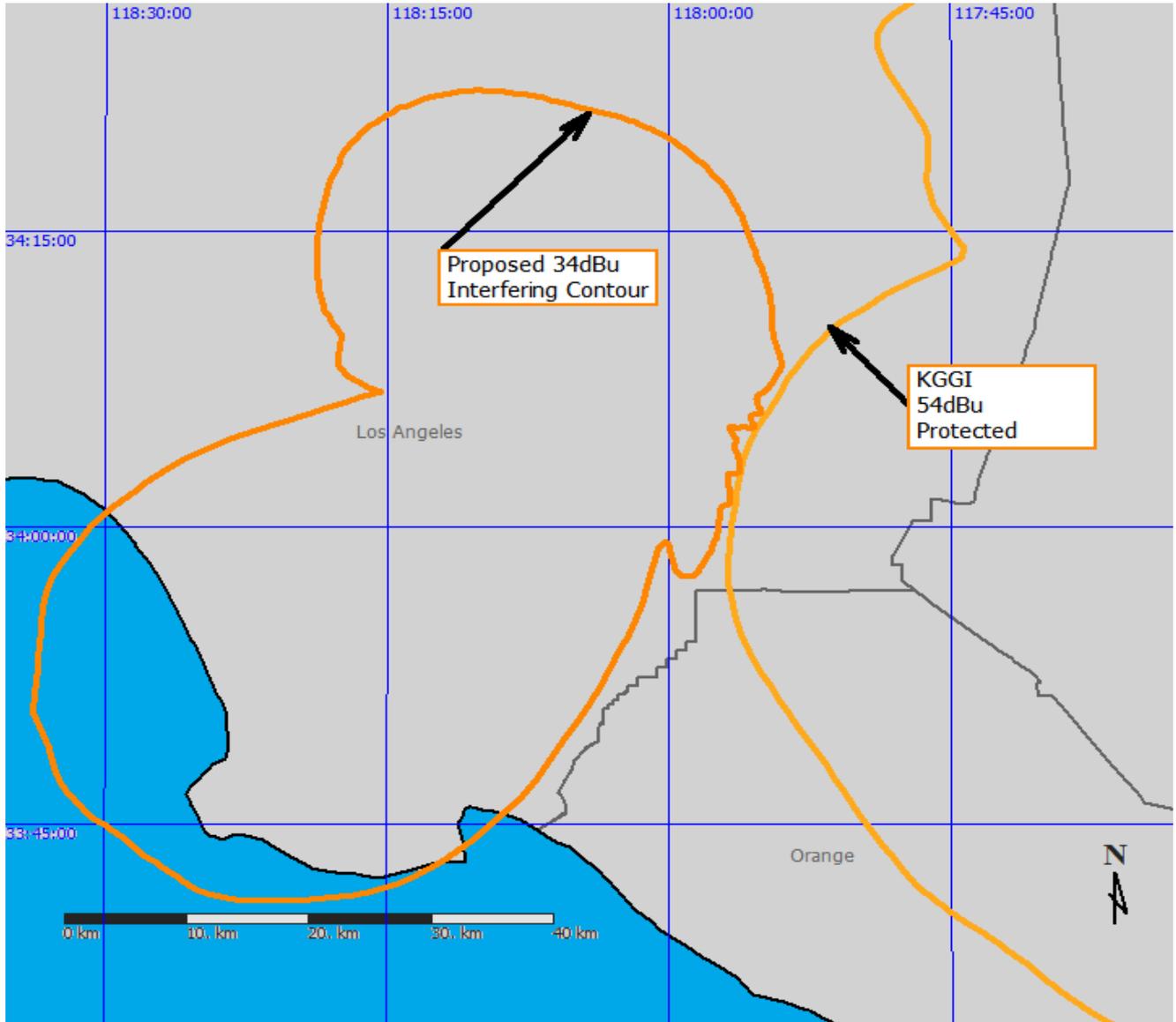
*The 116dBu contour is contained within the boundary of the KDIS Tower site.*

# Contours



*No overlap between 60dBu Service and 40dBu Interfering Contours.*

# Contours



*No overlap between 54dBu Protected and 34dBu Interfering Contours.*

## RFR Exhibit

Ref Line #			
(1)	Rad Center Height	98.000	Meters AGL
(3)	Building Height	0.000	Meters AGL
(4)	Clearance Height	98.000	Meters AGL
(5)	Head Height	96.000	Meters AGL
(6)	Horizontal ERP	0.240	kW
(7)	Vertical ERP	0.240	kW
(8)	Total Power	0.480	kW
(9)	Power x 33.41	16.037	
(10)	line 5 squared	9216.000	
(11)	Line-9 / Line-10	0.002	
(12)	Percent Exposure	0.174	%