

EASTERN SIERRA BROADCASTING
New AM Radio Station
Reno, NV
1180 kHz, 7.5 kW-D, 7.5 kW-CH, 1 kW-N, DA-N, U

ENGINEERING STATEMENT

This engineering statement, together with the attached figures, has been prepared on behalf of Eastern Sierra Broadcasting in support of an application for construction permit. Short-form application BNP-20040127AAR (facility ID #160544) has been identified as a singleton in AM Auction No. 84. By this filing, the applicant proposes operation on 1180 kHz to and specifies a power of 7.5 kW daytime and critical hours non-directional and 1 kW nighttime, employing a three-tower directional array.

Overall height of each tower is 55.8 meters, while the height above mean sea level is 1455.8 meters. All three towers pass the tower test and do not require marking or lighting. Each tower is 77.7° at 1180 kHz.

The proposed ground system will consist of 120 copper radials 63.5 meters in length and 120 interspersed radials 15.2 meters in length, buried 12.7cm or 5" beneath ground level, except where shortened to 10 cm copper bonding strap.

ENVIRONMENTAL CONSIDERATIONS

The Commission's Rules implementing the Environmental Policy Act does not categorize this proposal as a major action, as it does not involve any of the facilities or actions listed under §1.305 or §1.307 of the Rules.

Regarding the non-ionizing radiofrequency emission from the proposed antenna, Table 2 on page 4 of O.E.T. Bulletin No. 65 (August 1997 Edition) list the distances in meters at which fields from AM stations are predicted to fall below the FCC and ANSI maximum.

For a 7.5 kW station with 0.216 wavelength antennas, the tower fence must be, by interpolation, at least 2 meters from the tower face. Since the applicant proposes fencing complying with these distance requirements, the FCC and ANSI limits will not be exceeded.

Should any maintenance worker require access to the towers, the proposed facility will either reduce power or cease operation until workers are outside the tower fence. Appropriate RF warning signs exist at the sides of the fences and it may be assumed that there will be no significant effect on the human environment with regard to exposure of the general public.

DAYTIME ALLOCATION CONSIDERATIONS

A study has been again made of stations on 1180 kHz and on channels within 30 kHz of that frequency in determining the protection requirements of the proposed daytime operation. Those stations which were deemed to merit particular consideration are:

KERI - Wasco Greenacre, CA	1180 kHz, 50 kW-D, 10 kW-N, DA-2, U
NEW - Jacksonville, OR	1180 kHz, 50 kW-D, 5 kW-N, DA-2, U
KLOK - San Jose, CA	1170 kHz, 50 kW-D, 5 kW-N, DA-2, U
KDYA (Lic) - Vallejo, CA	1190 kHz, 1 kW-D
KDYA (CP) - Vallejo, CA	1190 kHz, 3.5 kW, DA-D

The remaining stations studied were at such a distance so as not to require detailed contour protection study. Figure 8 is an allocation map showing contours of particular allocation interest for this proposal and the above listed stations. Location of contours for these stations employed notified inverse fields in conjunction with M-3 soil conductivity. Figures 9A through 9F are facility data and conductivity tabulations for this proposal and the above facilities and proposals.

NIGHTTIME ALLOCATION CONSIDERATIONS

Figure 10A is a tabulation of the nighttime protection study to all authorized facilities. In no case does the proposed nighttime pattern exceed these constraints. Figure 10B shows the proposed nighttime 0.025 mV/m 10% contour does not overlap the WHAM 0.5 mV/m 50% contour. Figure 10C also shows that the proposed nighttime 0.25 mV/m 10% contour does not overlap the 0.5 mV/m groundwave contours of first-adjacent stations KEX and KFAQ. Figure 10D is a night limit study for KORL, Honolulu, HI. KORL is protected to a 50% RSS of 2.5 mV/m and a 25% RSS of 0.625 mV/m. This proposal will not enter the RSS calculations of KORL.

Figure 11A is a detailed night limit study of this proposal showing the 50% RSS limit at the proposed site to be 11.472 mv/m with contributions from KOFI. The 25% RSS limit was found to be 11.907 mv/m with contributions from KOFI & KERI. Figure 11B, Pages 1 and 2, are both tabulation and polar plot of the proposed nighttime pattern.

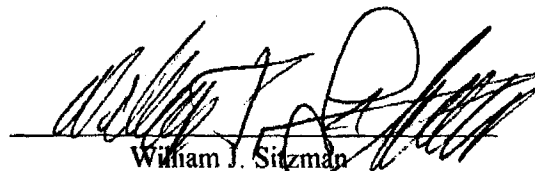
CRITICAL HOURS CONSIDERATIONS

Figure 12 is a map showing the 0.005 mV/m daytime contour does not overlap the 0.1 mV/m groundwave contour of Class A station WHAM, Rochester, NY. The nearest point on the WHAM 0.1 mV/m groundwave contour is 3301.6 km at 72.2°T from this proposal and will allow a maximum inverse field of 3760 mV/m during critical hours. Since this proposal will radiate only 815.385 mV/m during critical hours, WHAM is duly protected.

PROPOSED SERVICE CONTOURS

Figures 5A and 5B, respectively, show the proposed 5, 2 and 0.5 mv/m daytime contours. Figure 6 shows the proposed 11.472 and 5 mv/m nighttime contours. The daytime 5 mv/m contour serves all of Reno, NV and the nighttime 11.472 mv/m interference-free contour serves, by population block count, 191,499 or 93.3% of Reno's total population of 205,327 persons.

June 2, 2008



William J. Sitzman
Consulting Radio Engineer

VERTICAL PLAN SKETCH OF PROPOSED ANTENNA SYSTEM - RENO, NV

N 39-34-10
W 119-44-03
NAD-27

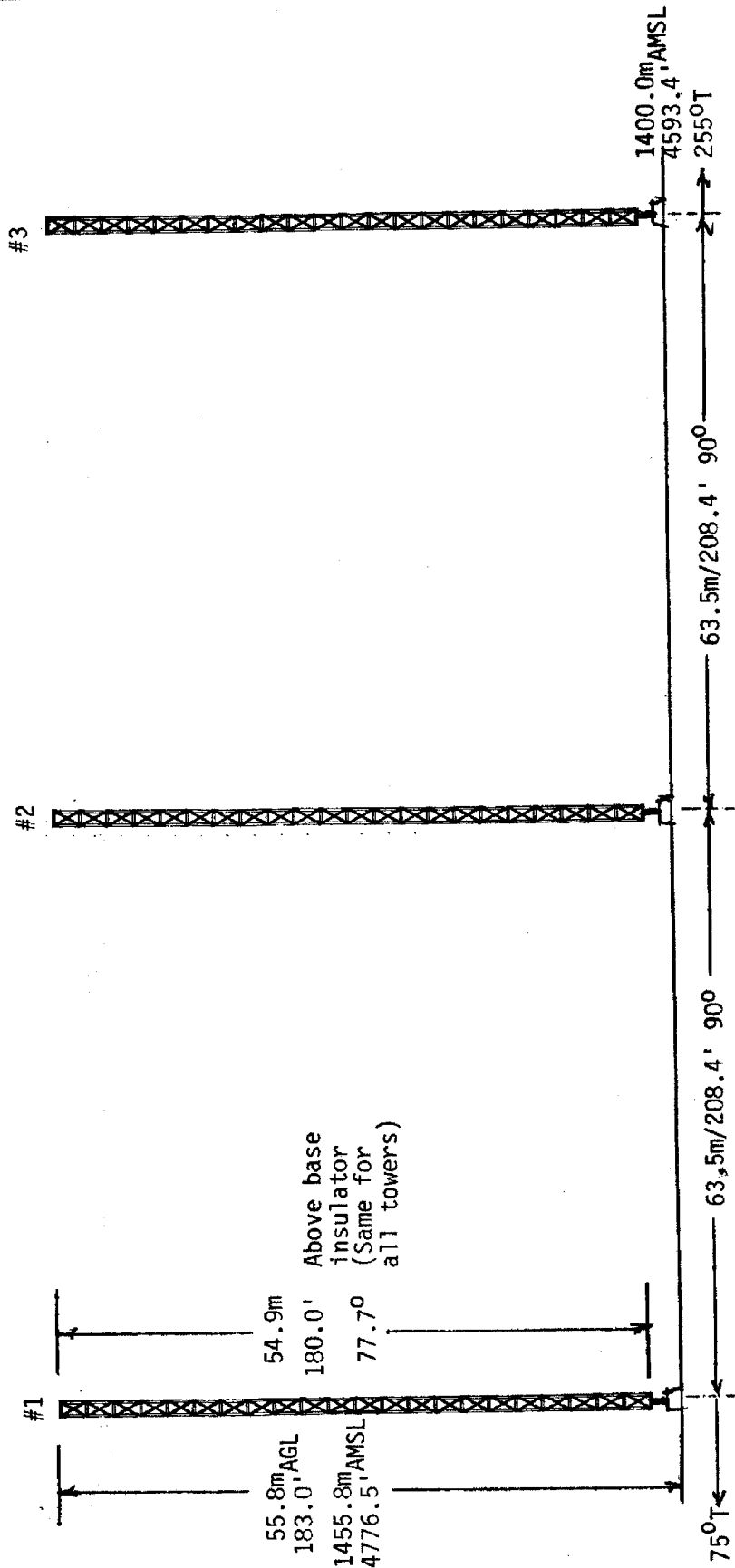
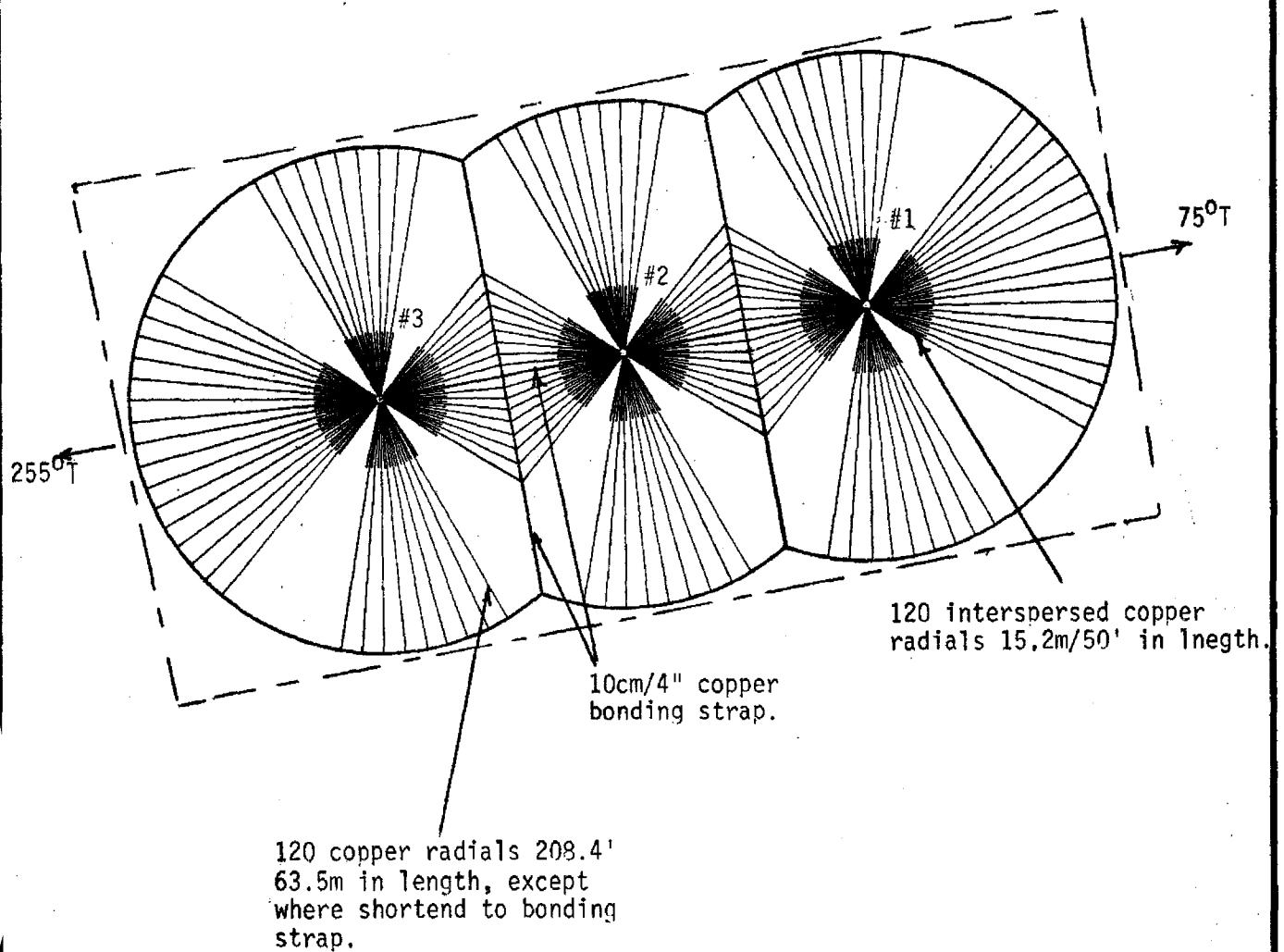


FIGURE 2

HORIZONTAL PLAT OF PROPOSED GROUND SYSTEM

N 39-34-10
W 119-44-03
NAD-27



SITE PHOTOS TO BE SUPPLIED AS AN AMENDMENT

Proposed Reno, NV 1180 kHz Daytime & Nighttime 1000 mV/m Contours

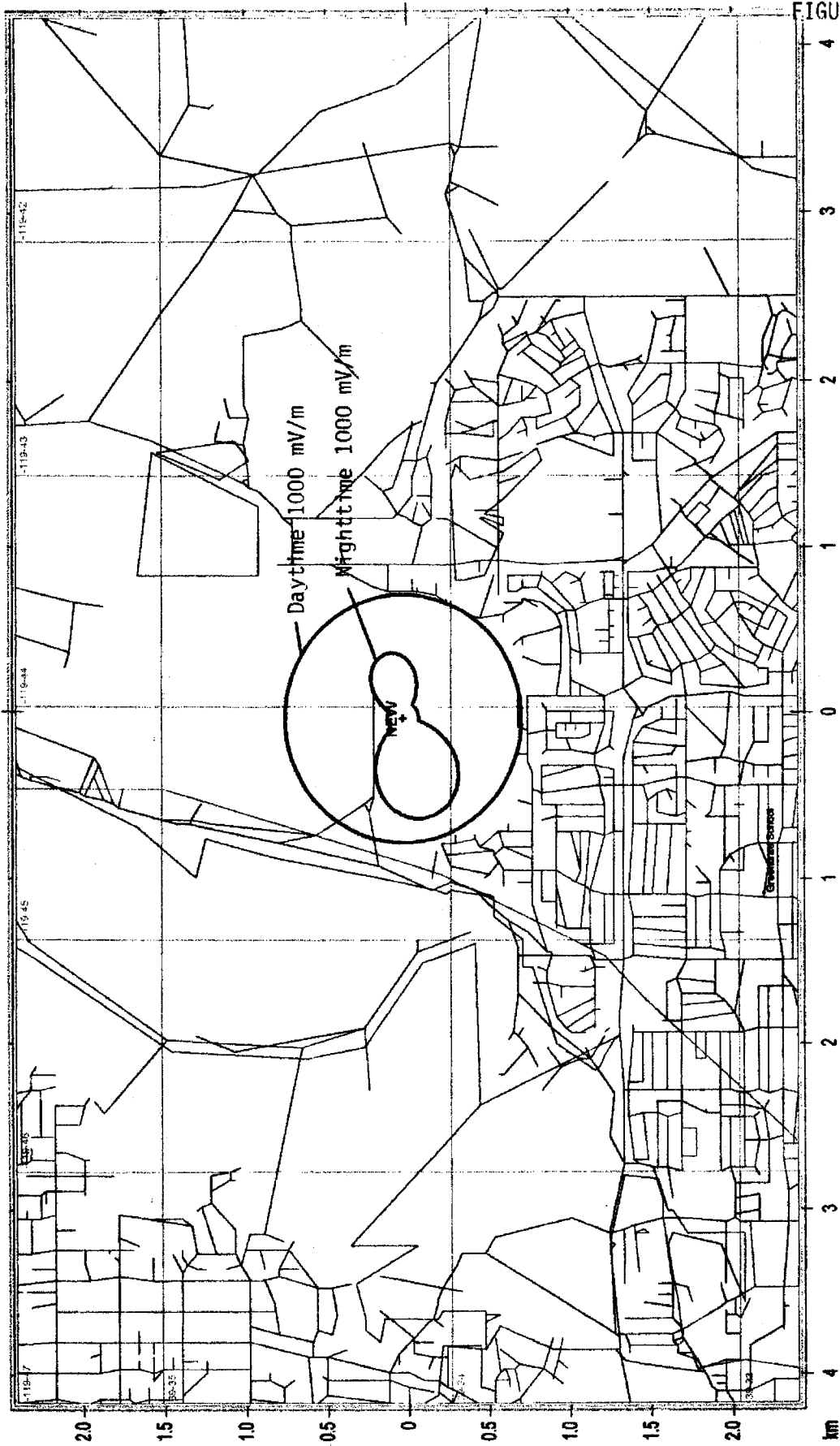


FIGURE 4

Proposed Reno, NV 1180 kHz Daytime 5 mV/m Contour

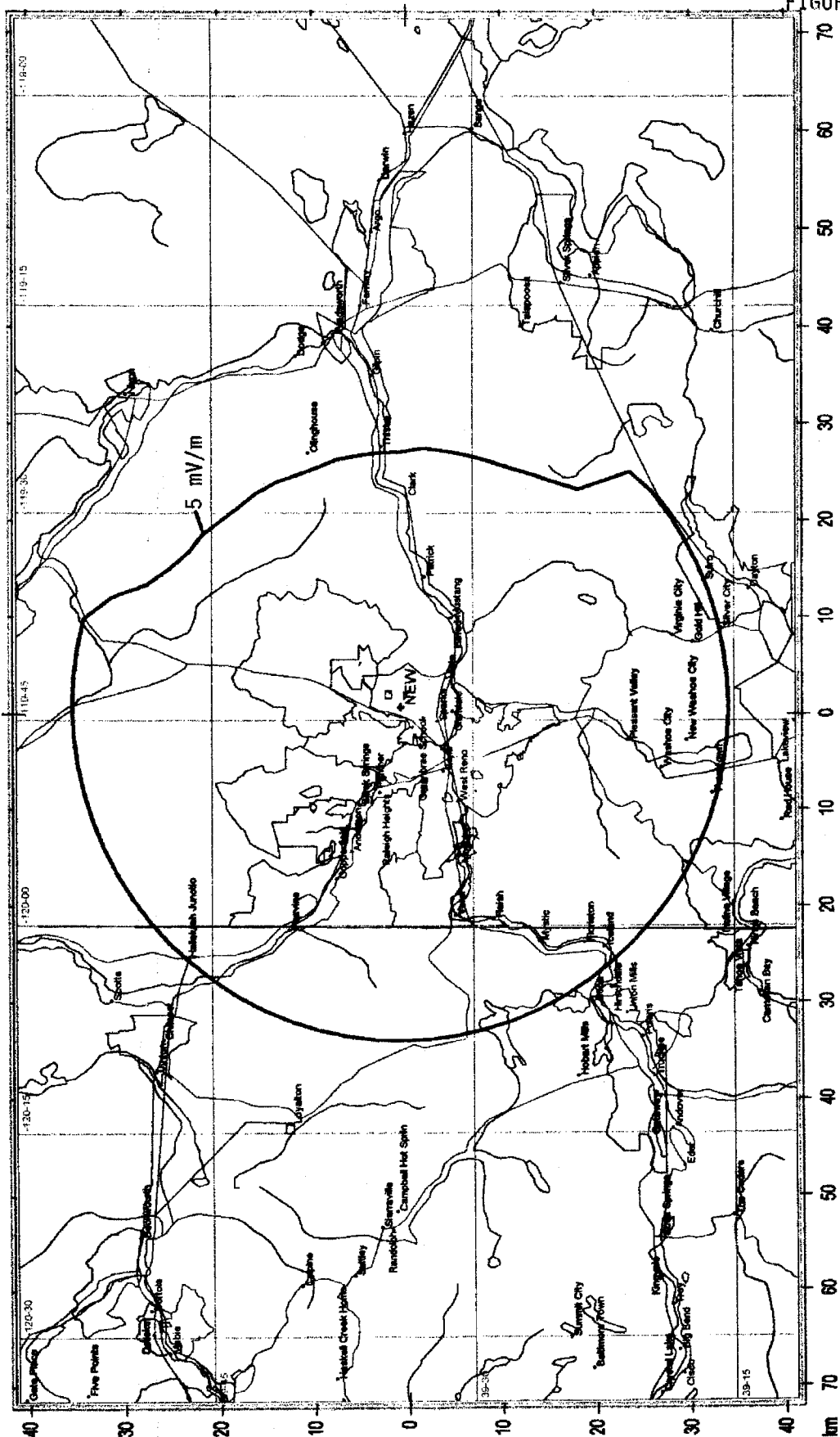


FIGURE 5

Proposed Reno, NV 1180 kHz Daytime 2 & 0.5 mV/m Contours

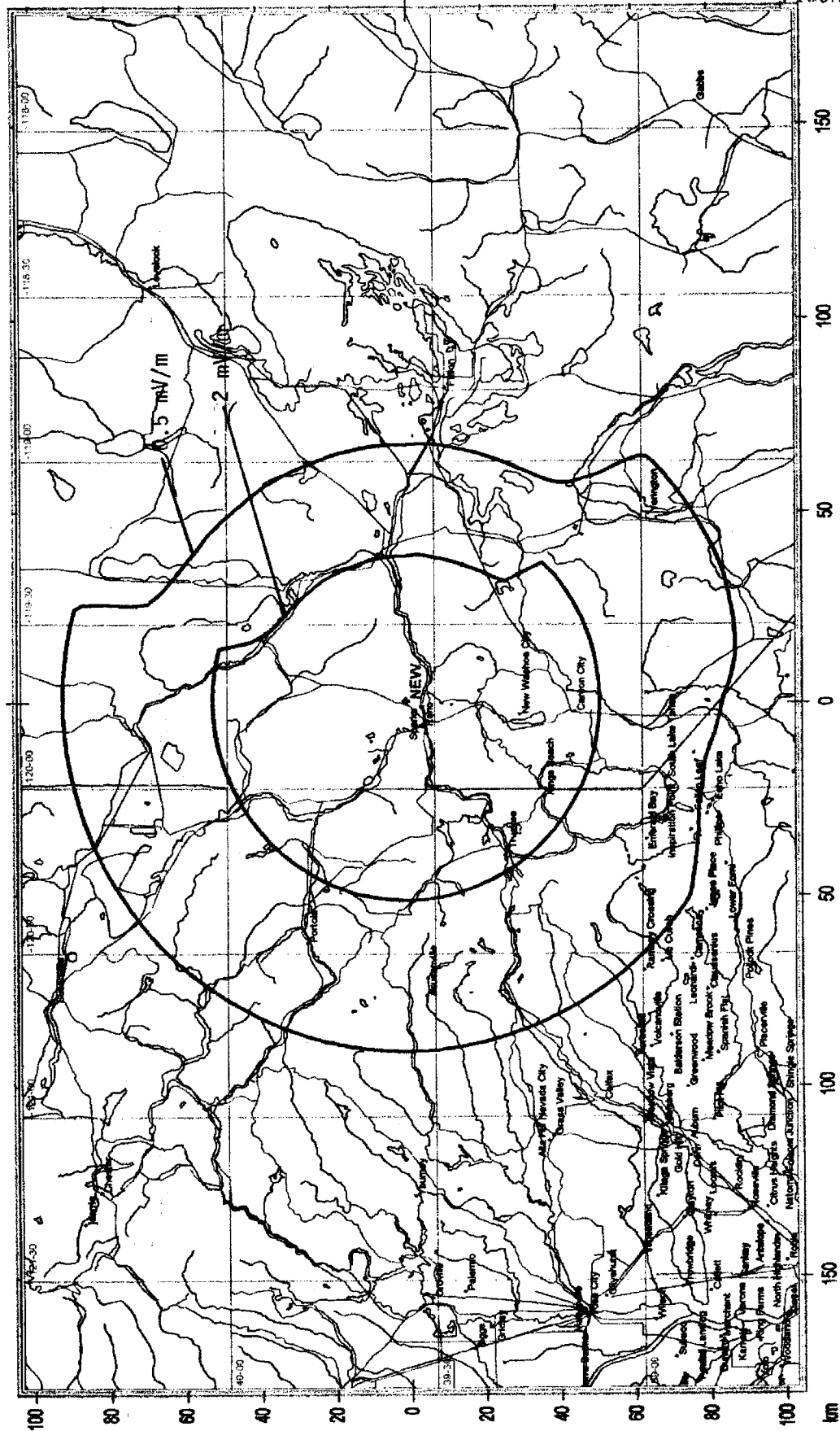


FIGURE 6

Proposed Reno, NV 1180 kHz Nighttime 11.472 & 5 mV/m Contours

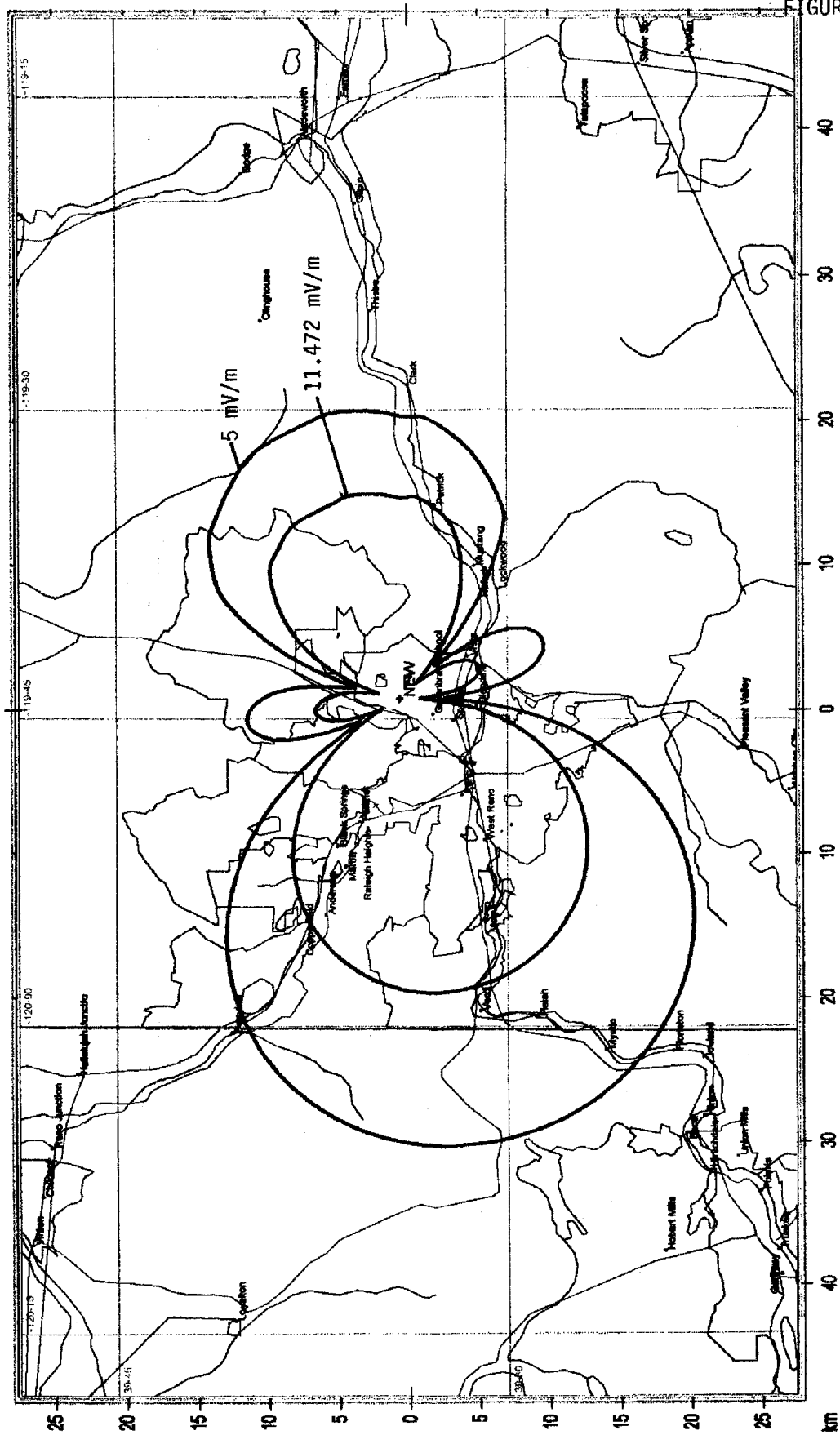


FIGURE 7