

ENGINEERING REPORT
RE NEW APPLICATION FOR FM TRANSLATOR STATION
PER FCC PUBLIC NOTICE
ON BEHALF OF
KANV(FM), OLSBURG, KANSAS
FOR THE COMMUNITY OF MANHATTAN, KANSAS
CHANNEL 258 170 WATTS ND 431 METERS R/C AMSL

JUNE 2008

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

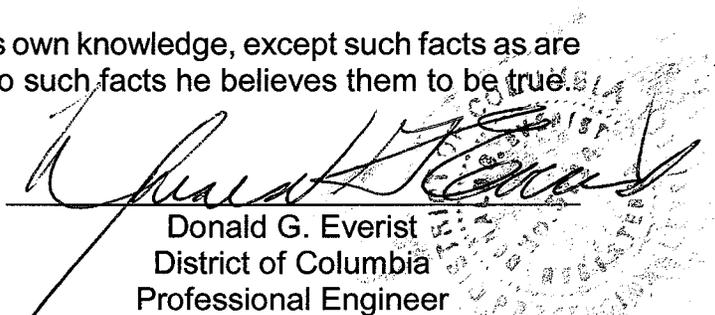
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

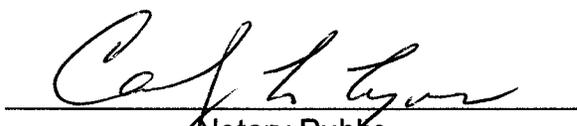
That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

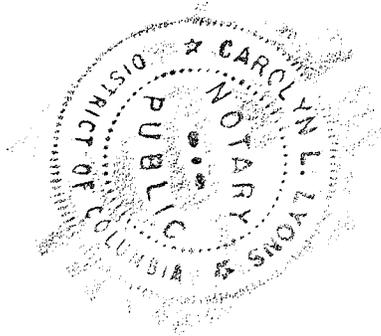
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.


Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 19th day of June, 2008.


Notary Public

My Commission Expires: 2/28/2013



Introduction

This engineering report has been prepared on behalf of the University of Kansas (“KANV”), licensee of FM broadcast station KANV(FM), Olsburg, Kansas, in support of its application for a new FM translator to serve the community of Manhattan, Kansas. Station KANV operates on an assigned frequency of 91.3 MHz, Channel 217A with an effective radiated power (“ERP”) of 6 kW at a height above average terrain (“HAAT”) of 100 meters. The following report outlines the proposed Channel 258 facilities.

Antenna Location

The geographic coordinates of the site are as follows:

North Latitude: 39° 14' 12"

West Longitude: 96° 35' 25"

(NAD-27)

The associated antenna structure registration number for this site is: 1031165. (See Exhibit E-2.)

Elevation Data

Elevation of the site above mean sea level	350.8 meters (1150.9 feet)
Elevation of the top of existing supporting structure above ground including appurtenances	101.7 meters (333.7 feet)
Elevation of the top of supporting structure above mean sea level including appurtenances	452.5 meters (1485.2 feet)

Height of FM antenna radiation center meters above ground	80.0 meters (262.5 feet)
Height of FM antenna radiation center above mean sea level	431.0 meters (1414.0 feet)
Height of FM antenna radiation center above average terrain	73.2 meters (240.2 feet)

The elevation data used in this report is based on the NGDC 3-second computerized terrain database.

Power Data

According to Section 74.1235 of the Commission's rules, this height above average terrain ("HAAT"), 73.2 meters, allows facilities with a maximum effective radiated power ("ERP") of 170 Watts.

FM Allocation Situation

The FCC file number associated with the initial filing is:

<u>Channel</u>	<u>FCC File No.</u>
258	20030317KRF

The FM allocation study was completed using data provided by the FCC's CDBS as of June 13, 2008. Channel 258 was listed as a singleton, therefore, there are no pending translator operations that require consideration. Table I lists all the pertinent facilities that require consideration. Protection criteria published in Section 74.1204 of the FCC Rules is used. Exhibit E-3 provides the allocation analysis based on contour methodology. Since Channel 258 is located within the commercial FM band, no study of TV Channel 6 is required per FCC Rule

Section 74.1205.

Environmental Statement

The radiofrequency field level (“RFF”) contribution of the proposed 250 watt facility will be calculated. The following calculation shows the RFF contribution of the newly proposed translator.

$$S = \frac{33.4 (F^2) ERP}{R^2}$$

ERP =	170 Watts (H & V)
R =	78.0 meters (antenna height above ground -2 meters)
F =	0.3 (assumed)

$$S \leq 0.5 \mu\text{W}/\text{cm}^2$$

The limit for an uncontrolled environment (general population) for this frequency is 200.0 $\mu\text{W}/\text{cm}^2$

The new translator contributes less than 1% RFF level for an uncontrolled environment (general population) two meters above the ground.

The applicant indicates that all authorized personnel climbing the tower will be alerted to the potential zones of high field levels, and if necessary, the station will operate with reduced power or terminated power should the situation require.

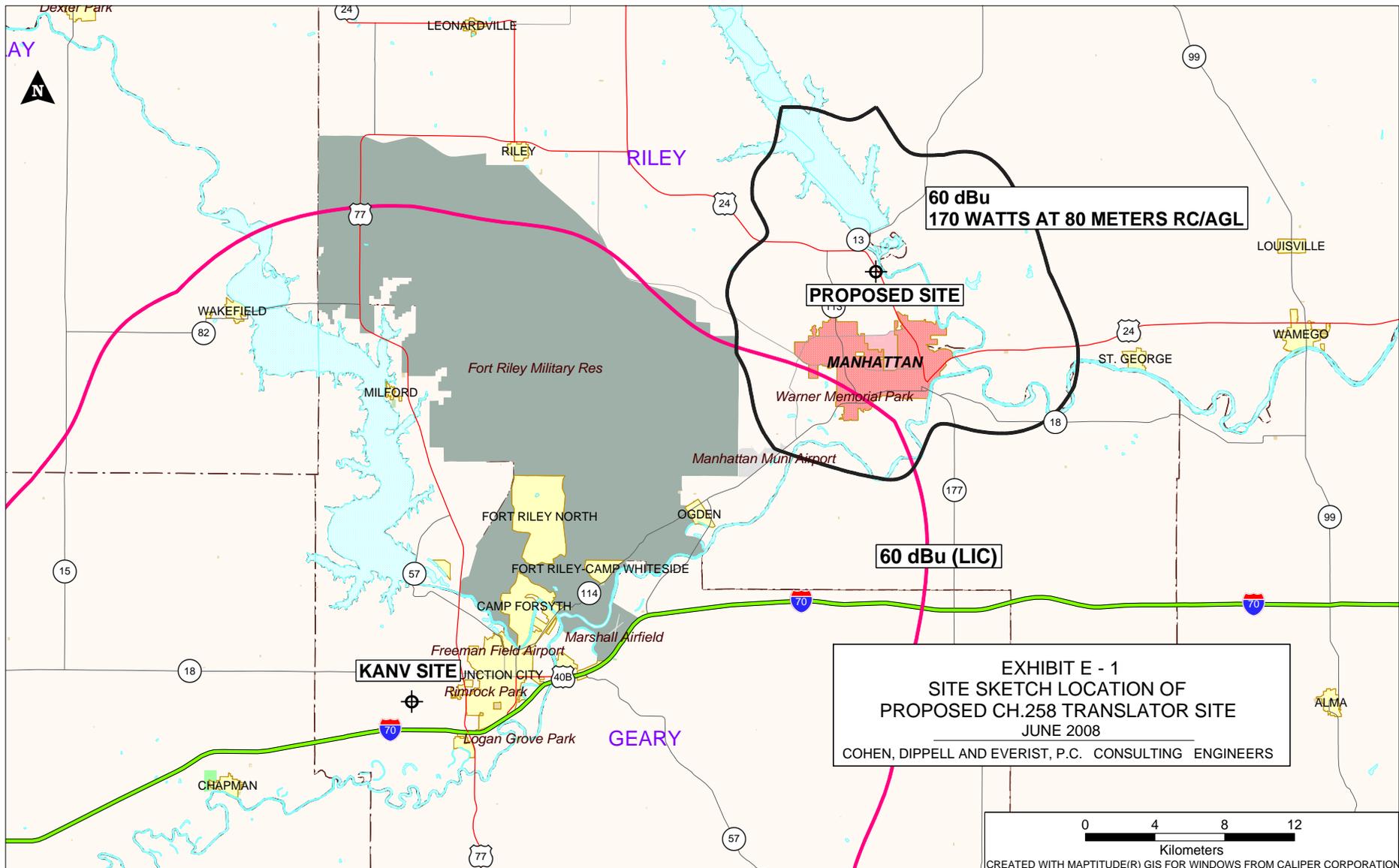
An environmental assessment (“EA”) is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the licensee indicates:

Summary of Environmental Assessment

- (a)(1) The proposed facilities are not located in an officially designated wilderness area.
- (a)(2) The proposed facilities are not located in an officially designated wildlife

preserve.

- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The proposed facilities are not located near any known Indian religious sites.
- (a)(6) The proposed facilities are not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) The existing tower lighting will remain unchanged.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin 65 (Edition 97-01) and Supplement A. Authorized personnel will be alerted to areas of the antennas where potential radiation levels are in excess of the FCC guidelines. A security fence with a locked gate precludes access to the tower site.



**60 dBu
170 WATTS AT 80 METERS RC/AGL**

PROPOSED SITE

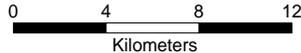
MANHATTAN

60 dBu (LIC)

KANV SITE

**EXHIBIT E - 1
SITE SKETCH LOCATION OF
PROPOSED CH.258 TRANSLATOR SITE
JUNE 2008**

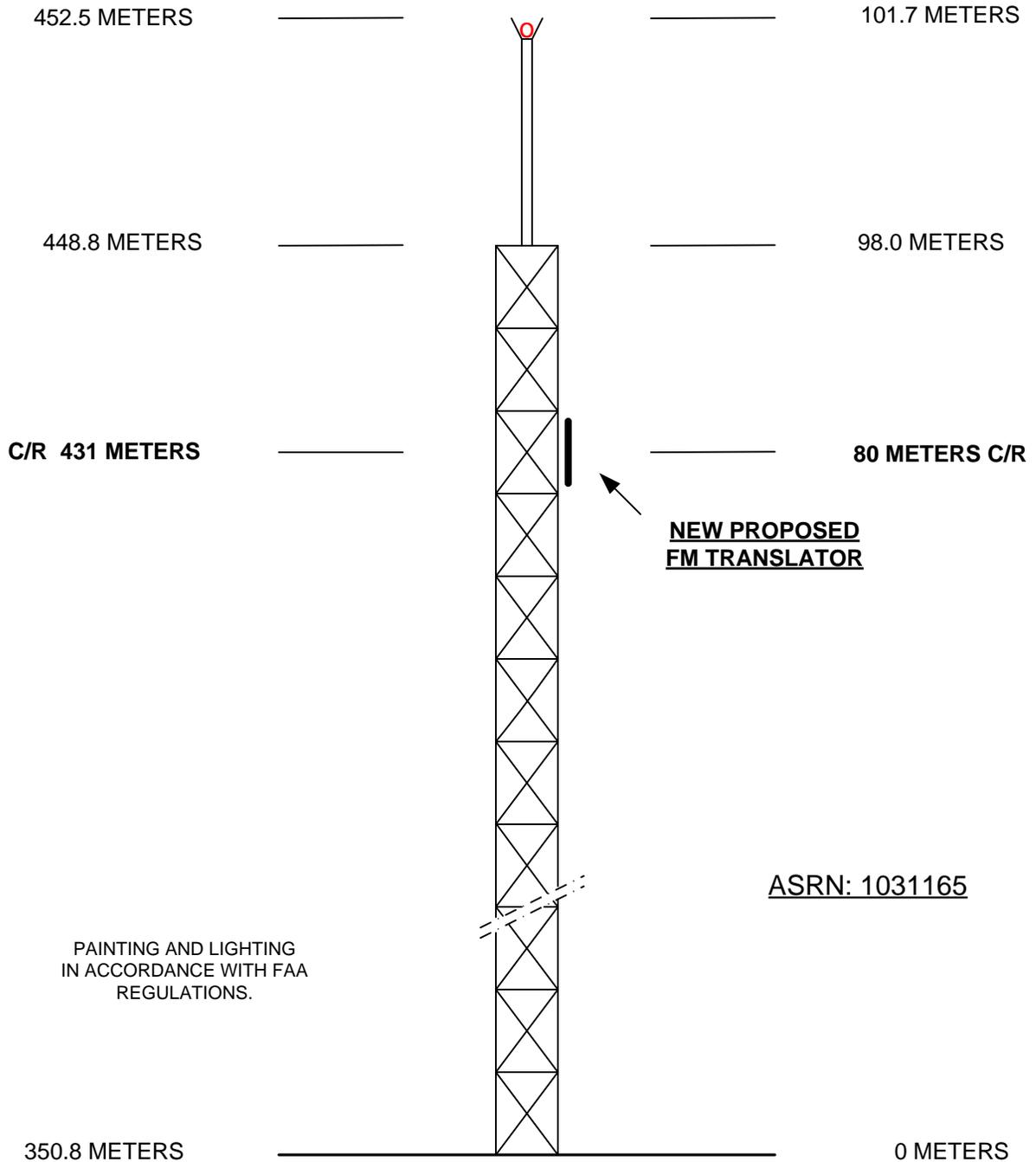
COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS



CREATED WITH MAPITUDE(R) GIS FOR WINDOWS FROM CALIPER CORPORATION

ABOVE MEAN SEA LEVEL

ABOVE GROUND



(NOT TO SCALE)

EXHIBIT E - 2
TOWER SKETCH
FOR PROPOSED FM TRANSLATOR
JUNE 2008

