

Exhibit 11.1

DESCRIPTION OF PROPOSED DAYTIME ANTENNA SYSTEM

WWCS - CANONSBURG, PA

1. The antenna system consists of two (2) vertical, insulated, guyed, uniform cross-section, steel towers. The towers stand 321 feet or 97.9 meters (63.5°) above a three foot base and insulator for an overall height of 324 feet or 98.8 meters (1549 feet AMSL or 472.1 meters AMSL). The towers are constructed so as to conform with the rules of the Federal Aviation Administration (FAA) regarding marking and lighting. Both towers will be used for the proposed daytime operation as well as the currently authorized nighttime operation.
2. The ground system for the operation consists of 120 buried copper radials about the base of each tower extending out a distance of 455 feet or 138.7 meters except where shortened to terminate at copper transverse strap running midway between towers. An additional 120 buried copper radials extending out a distance of 50 feet or 15.2 meters are interspersed between the long radials.
3. Theoretical Antenna System Parameters:

DAYTIME				
TOWER	FIELD	PHASE	SPACING	ORIENTATION
1	1.000	±0.0°	0.0°	0.0°
2	0.910	+80.0°	80.0°	334.0°

4. The theoretical RMS for the proposed daytime antenna system is 576.28 mV/m at one kilometer. The "standard pattern" RMS is 605.44 mV/m at one kilometer, with the theoretical RSS being 549.87 mV/m at one kilometer. Daytime power will be a nominal 3.8 kW.
5. The existing sampling system meets all the requirements of Section 73.68 of the Commission's Rules. The details of the specific installation were set forth in the application for a previous facility which used the present two towers with a power of 7.5 kW.
6. The phasing and coupling equipment will be designed to minimize system losses and the components will be chosen to provide maximum stability of the arrays.

Exhibit 11.2

VERTICAL PLAN OF PROPOSED ANTENNA SYSTEM

Site Coordinates:

N 40° 17' 22"

W 80° 11' 07"

One of two (2) like towers.

WWCS - Canonsburg, PA

NOTE: Top beacon is mounted
inside the tower
structure.

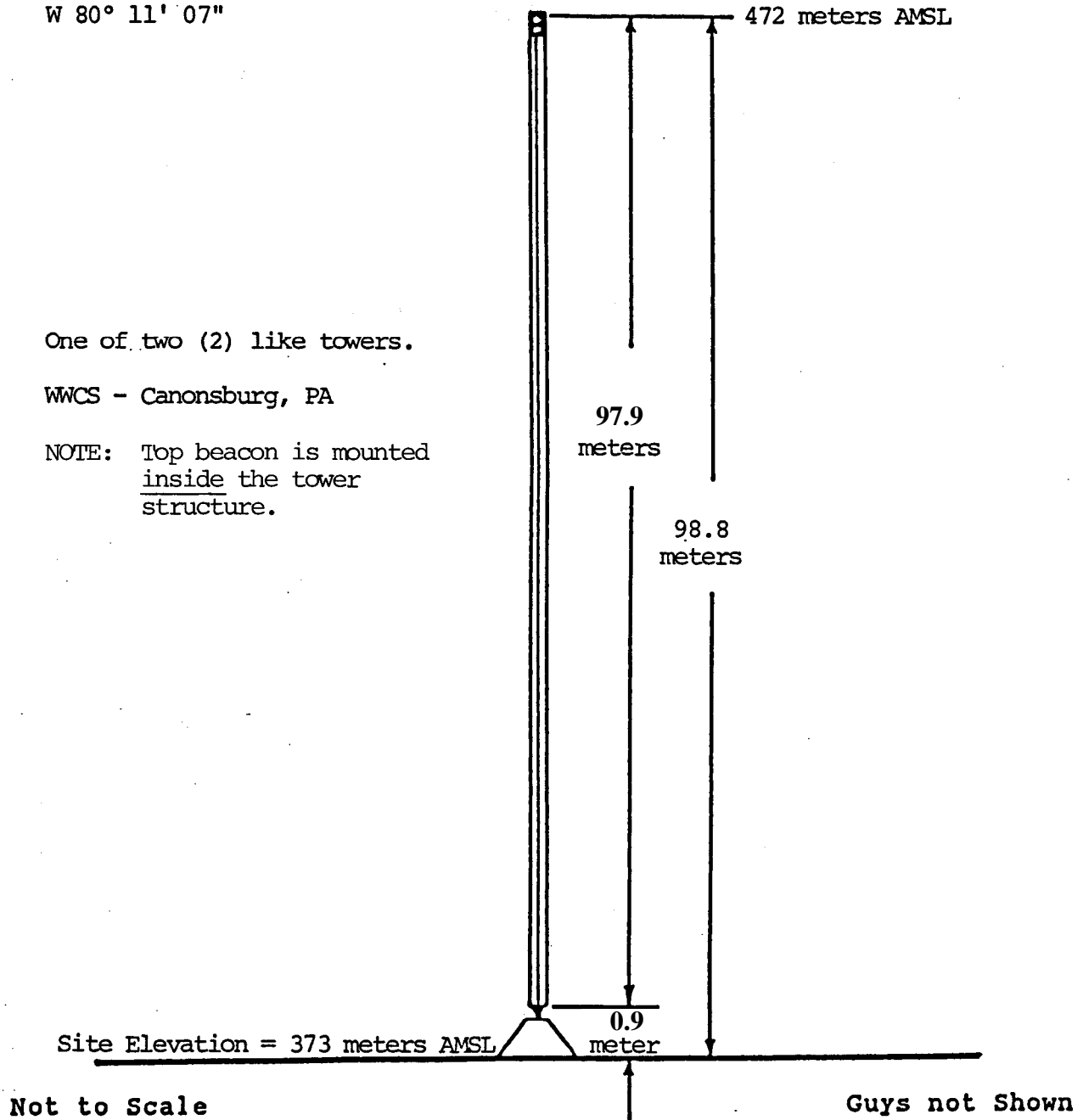
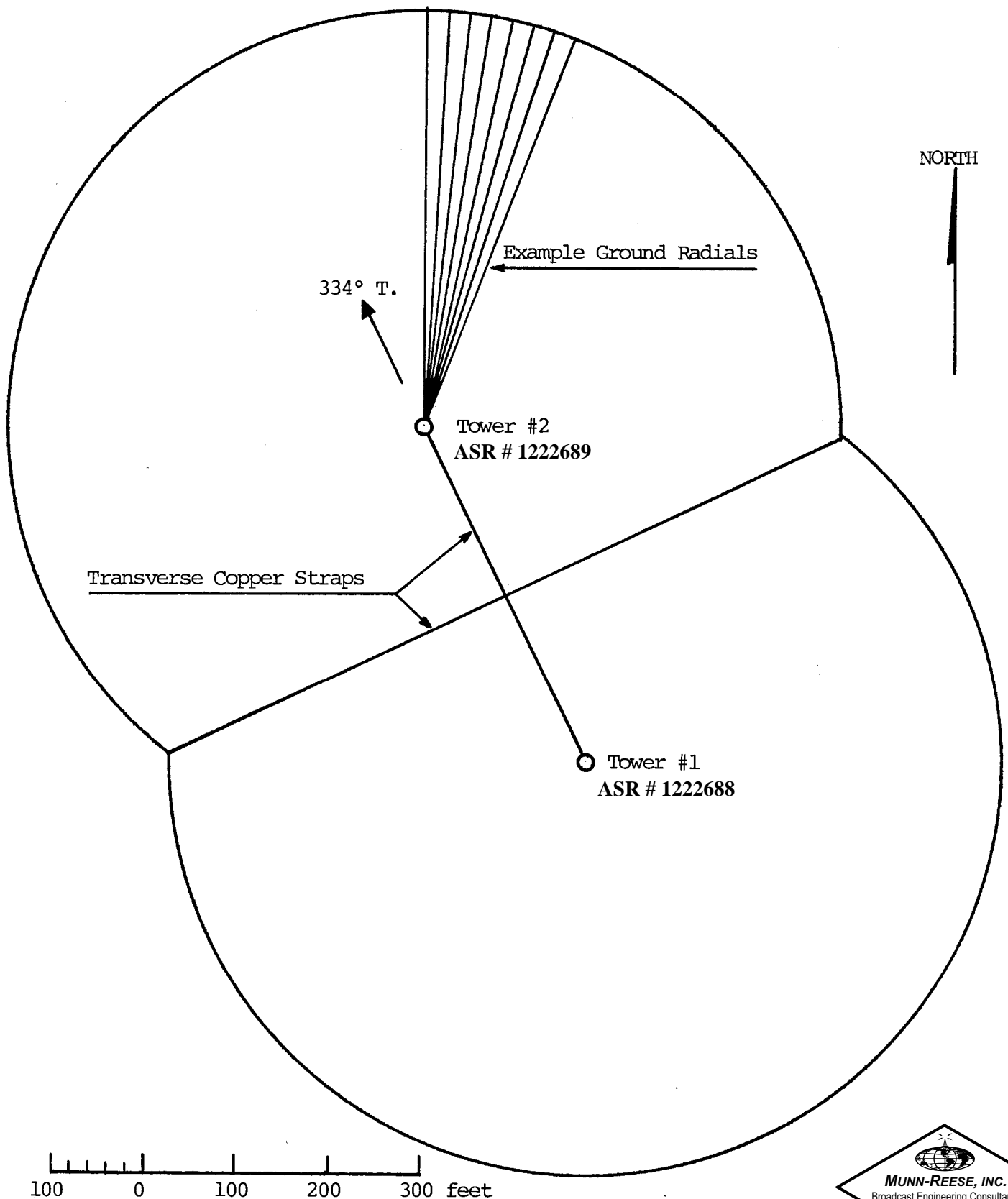


Exhibit 11.3

HORIZONTAL PLAN OF PROPOSED ANTENNA SYSTEM



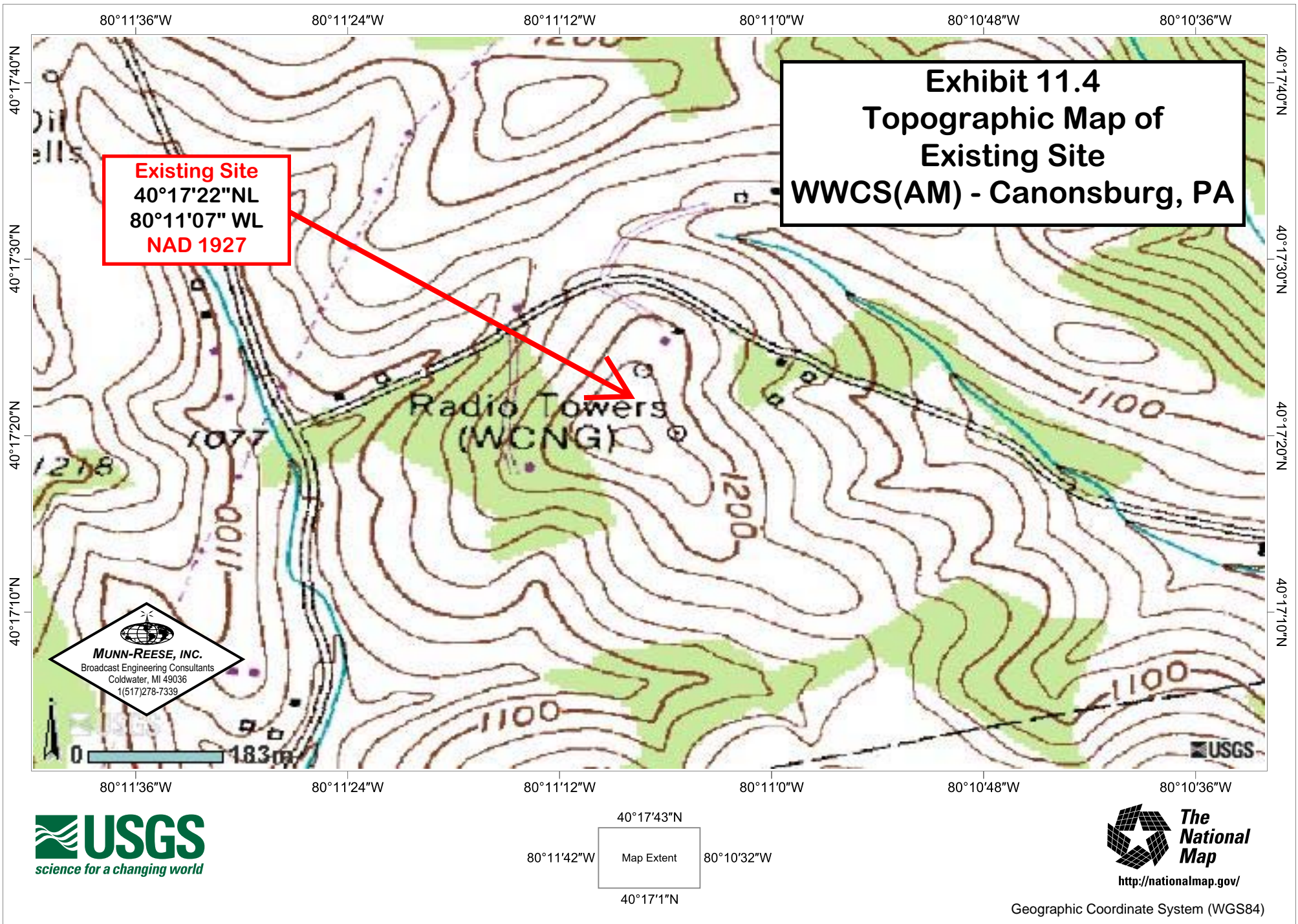
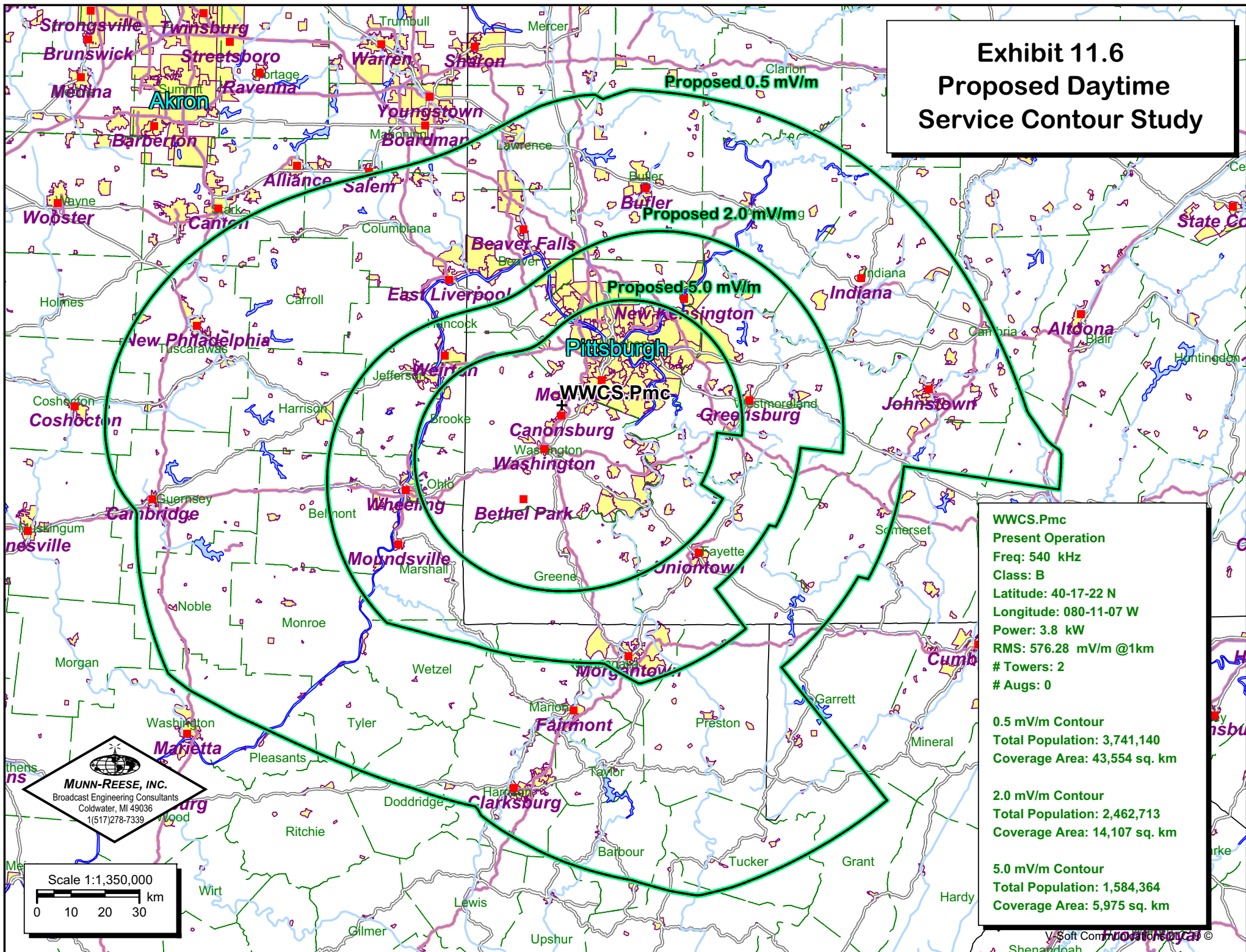




Exhibit 11.6 Proposed Daytime Service Contour Study



WWCS.Pmc
Present Operation
Freq: 540 kHz
Class: B
Latitude: 40-17-22 N
Longitude: 080-11-07 W
Power: 3.8 kW
RMS: 576.28 mV/m @1km
Towers: 2
Aucs: 0

1.0 V/m Contour
Total Population: 146
Coverage Area: 1 sq. km

Exhibit 11.7 Proposed Daytime 1.0 V/m "Blanket" Contour Study

