

Community of License Coverage**Introduction**

Fitzgerald and Hawras, Partnership desires to show coverage of its community of license South Waverly, Pa, with a supplemental showing since the standard model does not show adequate coverage of the community of license.

Discussion

Using the standard FCC model, the predicted 70 dBu F(50/50) contour does not cover the community of license as required by 47 C.F.R. Section 73.315(a). However, use of an alternate propagation method is warranted since the terrain between the transmitter site and the community of license departs widely from the assumed 124m average terrain.

The following parameters were used in determining the Longley/Rice 70 dBu coverage for the community of license:

Conductivity:	0.005
Dielectric Constant:	15
Refractivity:	311
Climate Zone:	Continental Temperate
Receiver Height:	9 m AGL
Receiver Gain:	0
Time Variability:	50
Situation Variability:	50
Terrain Database:	USGS 30 Second Terrain

Exhibit 28-A1 and A2 show the 100 to 103 degree radials that fall over the proposed community of license of South Waverly, Pa. Exhibit 28B shows the FCC standard F(50/50) 70dBu contour has an average distance of 20.35km based on these 4 radials. Using the Longley/Rice model, the same contours have an average distance of 28.57km which is an increase in distance of 40.4%. Thus, the area covered by the supplemental method is more than 10% greater than the standard contour prediction method.

Exhibit 28C shows both the FCC standard F(50,50) 70dBu contour and the Longley-Rice model 70dBu contour (first occurrence). The Longley-Rice coverage is also shown with gradient color shading.

As can be seen in Exhibit 28C, the 70dBu calculated contour using the Longley/Rice propagation model, provides more than adequate coverage for the community of license.

As can be seen in Exhibit 28D, 100% of the area and 100% of the population located inside the corporate boundary of South Waverly, Pa, is covered by the 70dbu Longley Rice (first occurrence) signal.

Exhibit 28E demonstrates the 60dbu(F50-50) contour extends beyond all parts of the corporate boundary of South Waverly, Pa. Exhibit 28F demonstrates the line of sight path that exists from the proposed transmit site and the proposed community of license of South Waverly, Pa. No part of the proposed community of license falls outside of a line of sight signal path.

Conclusion

Based on the above exhibits the residents of South Waverly, Pa will be more than adequately served with a 70dBu signal strength contour. Fitzgerald and Hawras, Partnership respectfully request that the Commission permit this supplemental showing and grant its application.

Exhibit 28-A1
Radials Extending over Community of License of South Waverly, Pa.

WENY-FM
BLH19971106KC
Latitude: 42-01-55 N
Longitude: 076-47-02 W
ERP: 1.25 kW
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 620.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

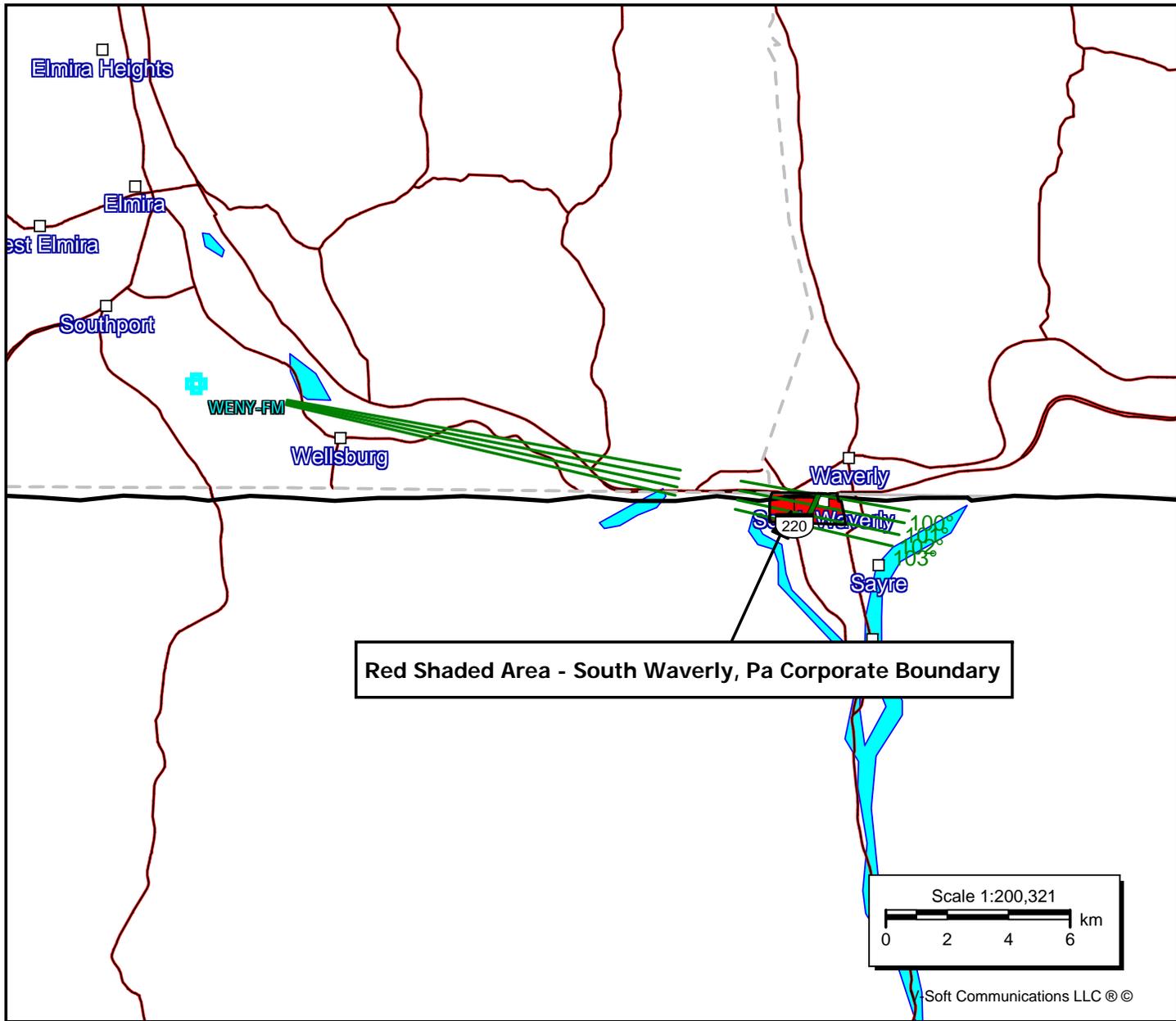
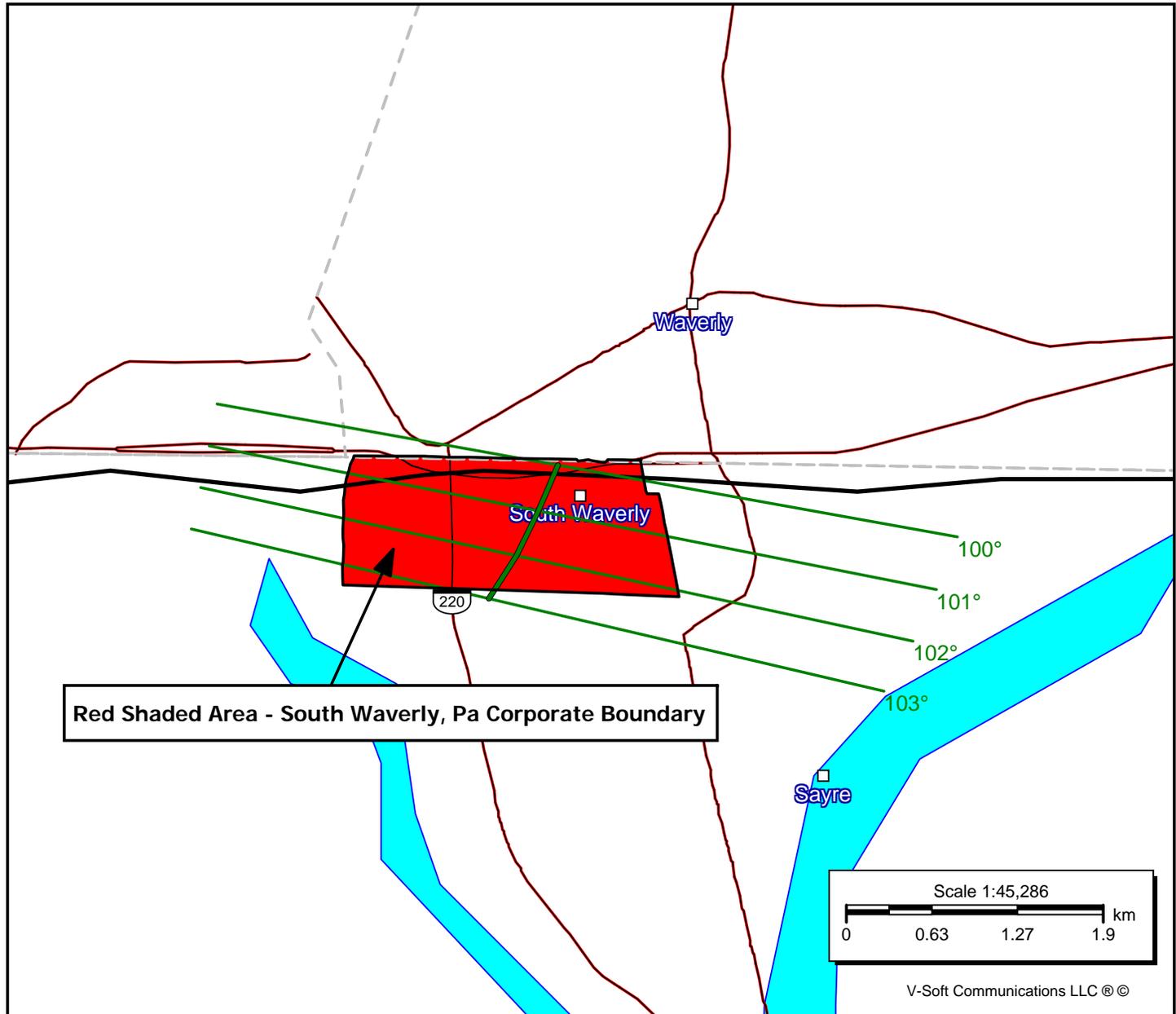
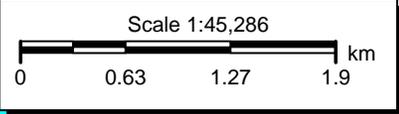


Exhibit 28-A2
Radials Extending over Community of License of South Waverly, Pa.

WENY-FM
BLH19971106KC
Latitude: 42-01-55 N
Longitude: 076-47-02 W
ERP: 1.25 kW
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 620.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None



Red Shaded Area - South Waverly, Pa Corporate Boundary



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Exhibit 28B - Distance to Contour Report

Distance to Contour Report

Type of contour: FCC

Location Variability: 50.0 %

Time Variability: 50.0 %

of Radials Calculated: 360

FCC Matching HAAT Calculation Used

Field Strength: 70.00 dBuV/m

Primary Terrain: FCC 30 Second US Database

Transmitter Information:

Call Letters: WENY-FM

File Number: BLH19971106KC

Latitude: 42-01-55 N

Longitude: 076-47-02 W

ERP: 1.25 kW

Channel: 224

Frequency: 92.7 MHz

AMSL Height: 620.0 m

Elevation: 538.0 m

Horiz. Antenna Pattern: Omni

Vert. Elevation Pattern: No

Azimuth (deg)	Distance (km)	HAAT (m)
100.0	20.56	351.1
101.0	20.42	348.1
102.0	20.28	344.7
103.0	20.14	340.0

Average Contour Distance: 20.35km

Distance to Contour Report

Type of contour: Signal Calculated Longley-Rice

of Radials Calculated: 360

Using the first occurrence method at 70.0dBu

Transmitter Information:

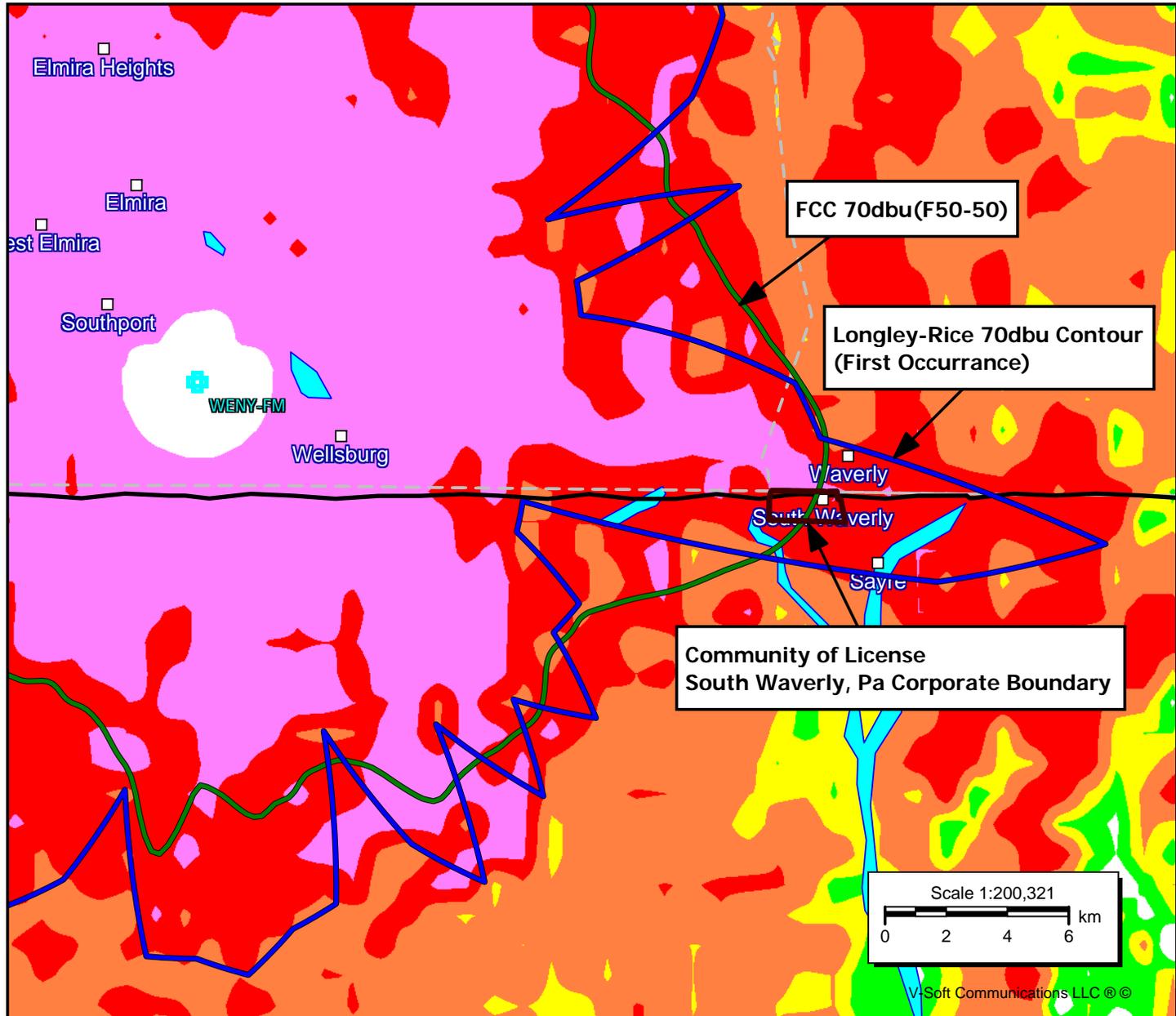
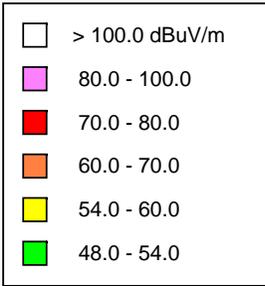
Call Letters: WENY-FM
File Number: BLH19971106KC
Latitude: 42-01-55 N
Longitude: 076-47-02 W
ERP: 1.25 kW
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 620.0 m
Elevation: 538.0 m
Horiz. Antenna Pattern: Omni
Vert. Elevation Pattern: No

Azimuth (deg)	Distance (km)	HAAT (m)
100.0	30.10	351.1
101.0	29.08	348.1
102.0	28.06	344.7
103.0	27.04	340.0

Average Contour Distance: 28.56km

Exhibit 28-C
Radials Extending over Community of License of South Waverly, Pa.

WENY-FM
BLH19971106KC
 Latitude: 42-01-55 N
 Longitude: 076-47-02 W
 ERP: 1.25 kW
 Channel: 224
 Frequency: 92.7 MHz
 AMSL Height: 620.0 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: Longley-Rice
 Climate: Cont temperate
 Conductivity: 0.0050
 Dielec Const: 15.0
 Refractivity: 311.0
 Receiver Ht AG: 9.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast



Overlap Population Report
 WENY-FM (224) / South Waverly, PA

Overlap Area Type: Intersection
 Areas Included:
 WENY-FM (224): Signal (F): 70.0 dBu
 PGON: South Waverly, PA

Population Database: 2010 US Census (PL)

Total Population: 1,027
 Housing Units: 439
 Overlap Area: 2.29 sq. km

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
WENY-FM (224): Signal (F): 70	94,126	1,055	1.1 %	0.2 %
PGON: South Waverly, PA	1,027	2.29	100.0 %	100.0 %

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 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: Longley-Rice
 Climate: Cont temperate
 Conductivity: 0.0050
 Dielec Const: 15.0
 Refractivity: 311.0
 Receiver Ht AG: 9.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast

Exhibit 28D - Overlap Study of Longley-Rice 70dbu Signal and Community of License of South Waverly, Pa.

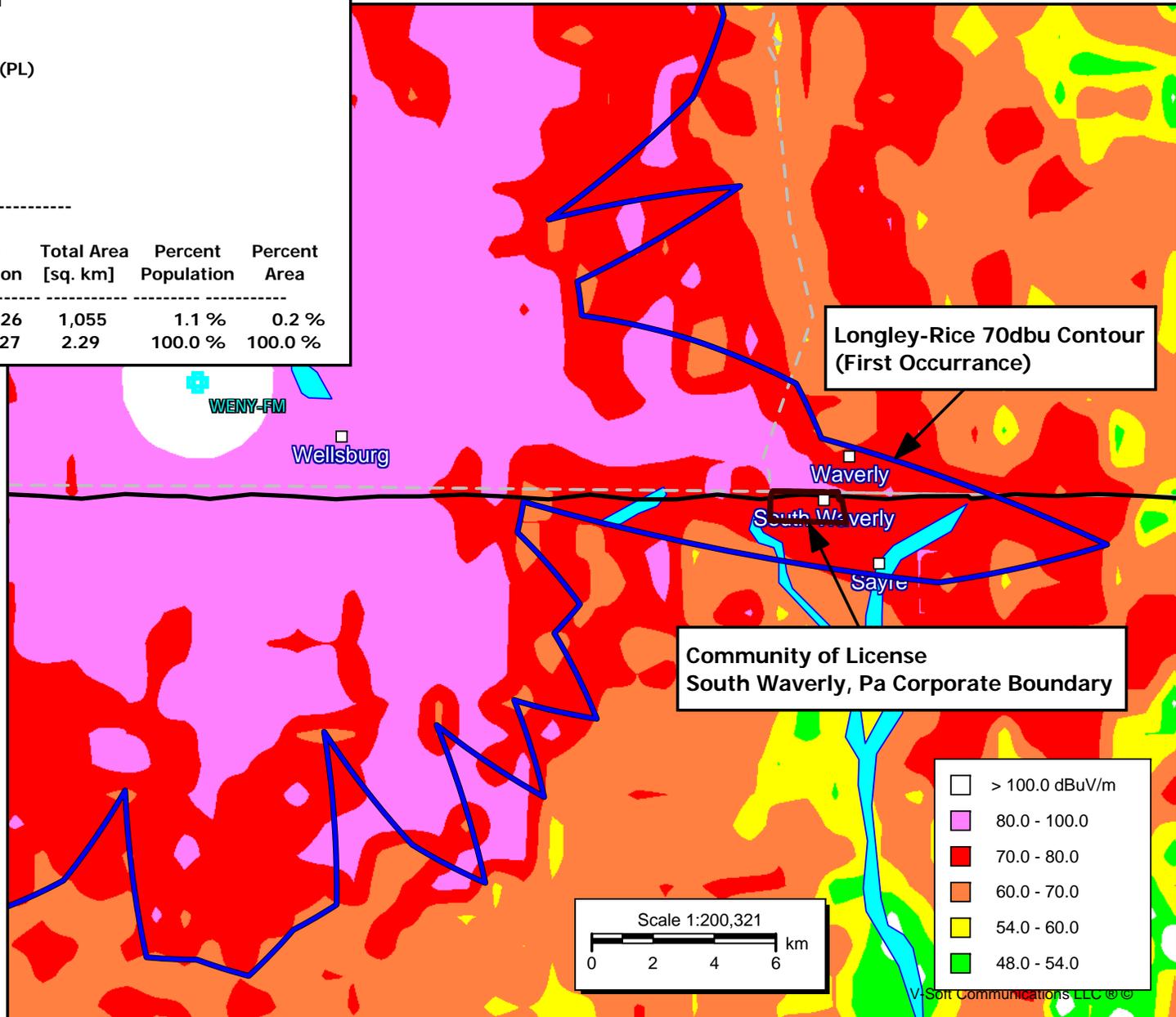


Exhibit 28E - Proposed Community of License and 60dbu(F50-50) Contour

WENY-FM
BLH19971106KC
Latitude: 42-01-55 N
Longitude: 076-47-02 W
ERP: 1.25 kW
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 620.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

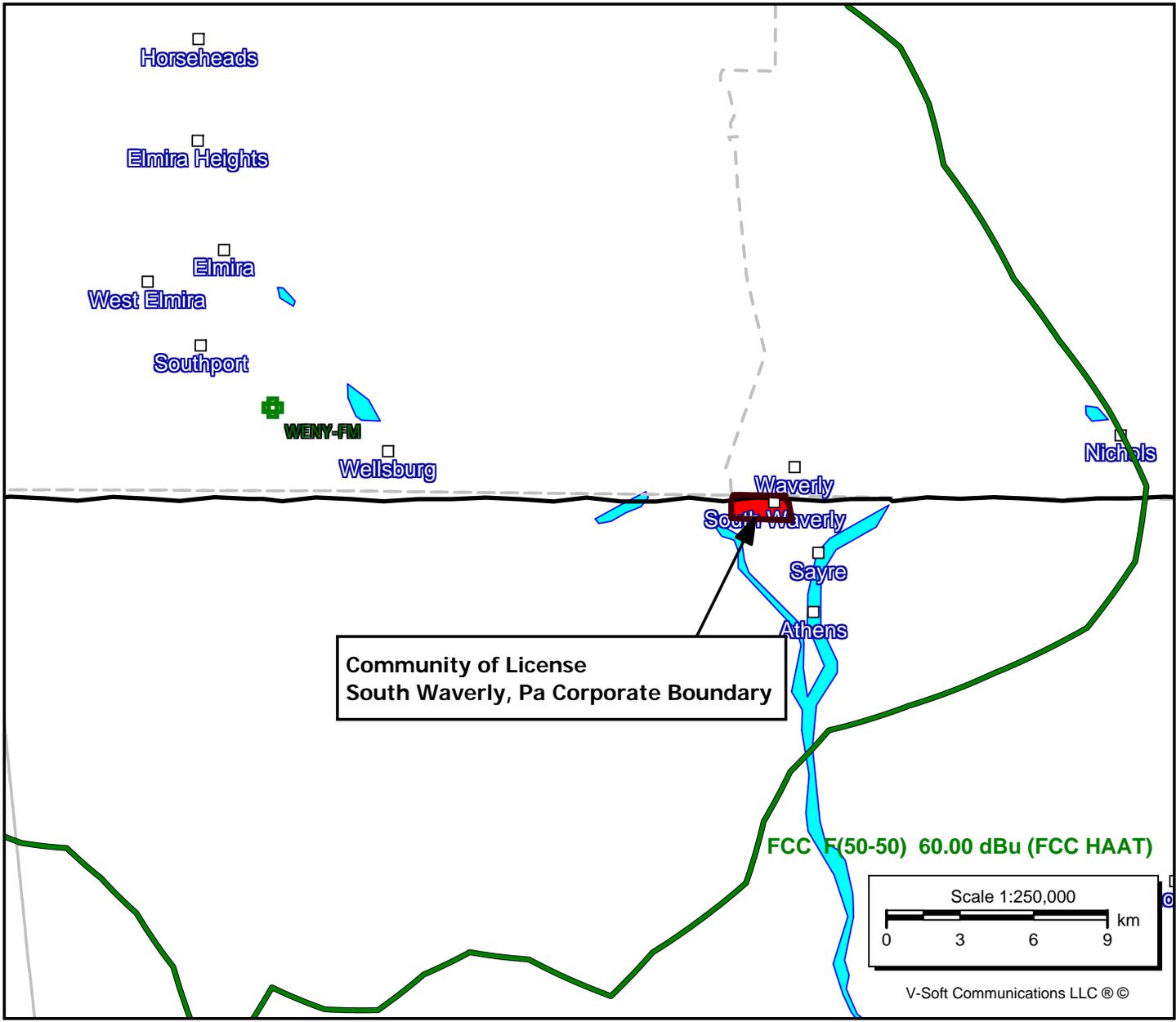
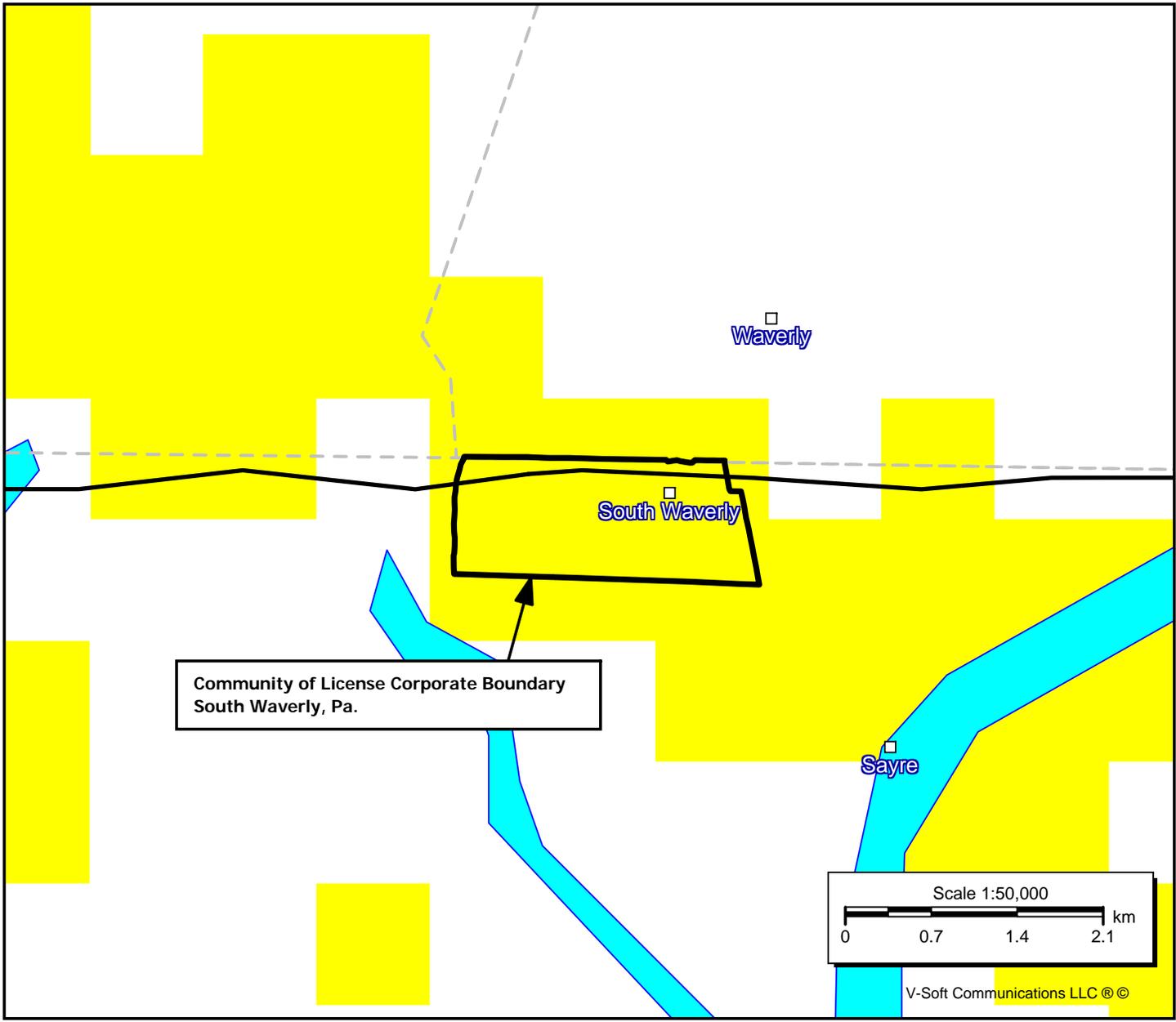


Exhibit 28-F
Line of Sight to Community of License

Line of Sight
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WENY-FM
BLH19971106KC
Latitude: 42-01-55 N
Longitude: 076-47-02 W
ERP: 1.25 kW
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 620.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Line of Sight
Receiver Ht AG: 2.1 m
Earths curvature: 1.3



Community of License Corporate Boundary
South Waverly, Pa.

Scale 1:50,000
0 0.7 1.4 2.1 km