

## CELL TOWERS

The facility will not pollute, will not create noise, or vibration, will not create an increase of traffic or cause environmental problems, it will not be detrimental to adjoining property owners, or change the character of the neighborhood, but it will enhance and promote public welfare by providing a modern more efficient system of communications for police, fire and other emergency services. ( Statement by Verizon)

## CELL SITES

Wireless telephones and other wireless devices operate by transmitting a very low power radio signal between the wireless device and an antenna mounted on a tower, pole, building or other structure. The antenna feeds the signal to electronic apparatus housed in a small equipment building near the antenna(base station) where it is connected to a fiber cable (or sent back up the tower to be relayed by microwave signal),and is then routed anywhere in the world. The antennas base center is called a “cell site”.

Because of low power a cell site is capable of transmitting to and from wireless phones only within a limited geographic area. This limited area is called a “cell”. A cell site must be located within a prescribed area in order to provide coverage for the entire cell.

Wireless telephone technology requires that cells overlap somewhat in order to provide uninterrupted service. When the telephone users move into a new cell, if there is no cell site in the new cell there is no wireless telephone service.

Because each cell site must be placed in such a manner as to provide service within a particular cell, and so as to provide overlapping (but not duplicate) coverage with the existing or planned cells around it there is limited flexibility as to where a cell site can be placed.

Wireless providers conduct a thorough engineering study, using an elaborate computer program known as “propagation study”. A propagation study shows, based on cell boundaries, topography and other factors, where a cell site needs to be located in order to provide cellular coverage in a particular cell.

## LINE OF SIGHT

Traditional cellular radio and modern 4G wireless communications are “line-of-sight” technologies. For this reason signals transmitted by these systems can only travel so far and are impeded by topography, vegetation, hills or buildings, and even foliage can block the signal, which is why wireless coverage is generally better in the winter (when the leaves are down)

## WIRELESS Facility Development

In order to expand wireless broadband service in rural PA, Verizon wireless must identify feasible cell tower locations that afford the opportunity to maximize coverage while maintaining reasonable access to nearby roadways as each facility requires a connection to the power grid and to a Verizon Switching Center. Although mobile phones, tablets, computers etc connect “wirelessly” to a nearby cell site, the cell site itself must sustain a reliable high band with connection to the internet.

Since power is generally readily available along or near most existing roadways, connecting a cell site location to the power grid is typically feasible via a new run of buried power cable.

**WHARTON (PCPC 2591)**  
**2637 Wharton Rd Austin PA 16720**  
**Lat 41-33-10.23 Long 78-01-45.08**

There is no reliable service in Wharton

Closest towers:

“Mina” 12 mi north

“Coudersport” 13.4 mi and the Coudersport DT facility 14.5 mil north

All other facilities are 20+ miles away and are too distant to offer reliable service to the targeted coverage area.

There are two other areas in various stages of development,

“Logue” 2.8 miles east

“Austin” 6.14 mi northwest

Although relatively close compared to neighboring existing Verizon facilities, these facilities are intended to provide wireless broadband service within their respective coverage objective areas and unfortunately are not capable of extending adequate service ( due to distance, local terrain, or vegetative features, or a combination of the three )into the target coverage area.

This tower should provide coverage and wireless broadband services 5.10 miles along Rte 872, 1.0 miles along Nelson Run Rd, and several miles along misc. local roads.

**ROULETTE “Card Creek” (PCPC 2580)**  
**77 Card Creek Rd, Roulette, PA**  
**Lat 41-46-32.09 Long 078-10-22.14**

When this facility is complete and is activated in conjunction with the tower site in Mina and the facility in Liberty, it will extend Verizon coverage across the majority of Roulette, and Mina generally in the western portions of Potter County.

**Abbott Township “Germania” (PCPC 2581)**

113 Gross Rd Galeton Pa 16922

Lat 41-39-47.35 Long 077-40-41.13

The service will be extended into the Germania Village area including 6.6 miles along Rte 144, 3.5 miles along PA 44(Cherry Springs Rd) 1.3 miles along Crippen Run Rd, 2.0 miles along Brecher Rd, 1.7 miles along Club Hill Rd, 4.1 miles along Pigeon Hill Rd, 2.0 miles along Hoppe Hollow Rd, 1.4 Miles along Gross Rd, 2.1 miles along Ridge Rd, and several miles along local roads passing through the northeastern Abbott Township and southeastern West Branch Township.

This site when activated with the future Verizon “Cherry Springs” Tower located in West Branch Township will extend coverage across the majority of West Branch an Northern Abbott Township, generally in the eastern portions of the county.

**WEST PIKE “Pike/Ulysses “(PCPC 2582)**

3454 Route 6, Ulysses Pa

Lat 41-47-04.22 Long 77-43-45.16

The service will extend into the village of West Pike, 5.31 miles along route 6, 3.2 miles along Loucks Mills Rd, 1.4 miles along Meeker Rd, 1.93 miles along Telephone Rd, 1.5 miles along Rock Run Rd, and several miles along misc. local roads passing through the Village of West Pike. When activated in conjunction with the proposed Verizon sites “Denton Hill”, “Brookland” (also located in Ulysses) and Loucks Mills (in Hector Twp.) it will extend coverage across the majority of Ulysses Township, and western portions of Pike Township, generally central and eastern portions of Potter County.

**SUNDERLANDVILLE (PCPC 2583)**

969 Fry Rd,

Lat – 41-50’-00.68” (North) Long – 77-37’-30.30” (West)

The service will extend into southwestern Clymer Township and northeastern Pike Township including the community of Sunderlandville, 7.5 miles along RT1005/Phoenix Rd, 3.3 miles along 1007(Little Phoenix Rd) 2.6 miles along Glover Rd, 2.3 miles along Fry Rd, 1.1 miles along Parker Hill Rd, 0.9 miles along Foster Rd, 1.2 miles along Meeker Rd and several miles along misc. local roads.

When activated in conjunction with the future sites in Hector Township (Hector & Loucks Mills) and West Pike (\*Ulysses Twp) it will extend coverage across the majority of Hector and Pike Townships in eastern Potter County.

**HARRISON TWP. “NORTHFORK” (PCPC 2565)**

720 Kibbe Hill Rd, Westfield, PA  
Lat. 41 -59’-37.89” Long – 77-38’-26.24”

The service will extend into the community of North Fork, the northeastern portions of Harrison Township, and extending into the northwest portions of Brookfield (Tioga County). New service includes coverage 6.6 mi along Rte1016(North Fork Rd) 3.2 mi along Plumstead Rd/Reitter Rd, 1.8 miles along Shall Rd, 1.6 mi along Miller Rd. 2.7 mi along SR 4005(Brookfield Northfork Rd in Tioga Co)and several miles along Misc. local roads across northeaster Harrison Twp and into northwestern Brookfield Twp.

The site when activated in conjunction with the future sites in “Whites Corners” and “Harrison Valley” will extend the coverage throughout the southeastern, central and northern Harrison Twp. and effectively complete broadband services across approximately 24 square miles within this Twp.

**HARRISON TWP “HARRISON VALLEY” (PCPC 2566)**

Tannery Street  
Lat 41-56’-31.52” (North) Long 077-37’-32.19” West)

The service will cover the community of Harrison Valley and the central and southeastern portions of Harrison Twp, including 5.7 mil along RT49, 4.3 mi along SR1019(Whites Corners Rd) 2.4 mi along Fox Hill RD, 1.2 mi along State Rd, 1.4 miles along McCutcheon RD, and several miles along misc. local roads across central and southeastern Harrison Twp. When activated in conjunction with the “Whites Corners and “North Fork” sites, it will extend coverage throughout southeastern and central Harrison Twp, and cover approximately 24 square miles.

**Ulysses Township “ Pusher siding” (PCPC 2564)**

Pushersiding Rd  
Lat. 41-54’-44.10” Long 77-47’-30.83”

The service will cover the Borough of Ulysses and the northern portions of Ulysses Township, including approximately 3.2 miles along Rt 49 2.2 mi along SR 1001(South Main St/ Fox Hill RD) 2.9 miles along SR1008 (Empson RD) 4.7 mi along SR1009 (Pushersiding RD) 1.3 mi along Hickox Ulysses RD and several miles along local roads in the borough and across northern Ulysses Twp.

When activated with the “Brookland”, “Bingham Center” and “Cobb Hill” sites

Coverage will be extended throughout Ulysses, Allegany and Bingham Townships.

**Sweden Township, “North Hollow” (PCPC 2563)**

412 Brookland Road

Lat 41-46'-56.51" Long 77-56"-03.64"

The service will cover the western portion of Sweden Twp, specifically the North Hollow targeted areas, approximately 4.0 miles east and 1 mi south along Brookland Rd, 3.5 mi northeast & 1.5 miles west along North Hollow Rd.

When activated in conjunction with “Denton Hill” and “Sweden Valley”, it will extend coverage across Sweden Twp.

**WEST BRANCH TWP “CHERRYSPRINGS” (PCPC 2554)**

1111 Chipmunk Trail, Coudersport

Lat -41-39'-59.10" long 77-50'-22.10"

The service will cover the western and southeastern portions of West Branch Twp and Summit Township. These new services will extend into Cherry Springs Park, 8.1 miles along Rt 44, 2.9 miles along Rte 2002 (W Branch Rd), 1.8 mi along 3001 (East Fork RD) 3.5 mi along Rock Ridge Rd, and several miles along misc. local roads passing through western West Branch and southeastern Summit.

**BINGHAM TOWNSHIP”BINGHAM CENTER” (PCPC 2543)**

41 Thompson Rd, Ulysses

Lat. 41-56-23.66 Long 77-46-45.24

The service will cover the central and eastern portions of Bingham Township, and extend into the southwestern portion of Harrison Twp., including the communities of Bingham Center and West Bingham, approximately 2.5 miles along Rt 49, 3.5 miles along SR 1011 (Hickox Ulysses Rd) 1.8 miles along SR 1012 (Jackson Rd) 2.6 mi along SR 1015 (Collins Hill Rd), 3 mi along Bingham Center Rd, 3.1 mi along Johnson/Bunnel Rd, 1.6 mi along Morley Rd, 1.5 miles along Musto Hollow, and several miles along misc. local roads passing through central Bingham Twp .

**Allegheny Township”CobbHill” (PCPC 2544)**

Lat. 41-52'-20.05(N) Long 77-52'=02.2”(W)

The service will cover the eastern portions of Allegheny Twp, and western Ulysses, including the communities of Raymond and Gold, approximately 4.8 mi along Pa Rt 49, 2.8 mi along PA 449, 4.3 mi along Cobb Hill Rd, 1.2 mi along Kidney Rd, 2.3 mi along Ben Green Rd/Cowburn Rd 1.8 miles along Rapley rd, 2.0 mi along Gross Hollow Rd, and several miles along local roads generally in East Allegheny Twp.

**Ulysses Twp “Brookland”**

33N Brookland Rd

Lat 41-50'-08.4" Long 77-48-04.0

The service will cover Brookland, western and eastern part of Ulysses Twp, 3.0 miles along St Rt 1001 (Sweden Hill RD) 2.5 mi along 449/S Brookland Rd toward Rt6 2.2 mi along Rte 449/N Brookland Rd, 2.3 mi along Fox Hill Rd, 2.0 miles along Horseshoe Rd, and along local roads in central UlyssesTwp.

When activated in conjunction with the “Cobb Hill,”West Pike”, and North Hollow sites, coverage will extend across the majority of Ulysses Twp.

**Hector Township “Crippen Run” (PCPC 2555)**

279 Crippen Rd, Westfield

Lat 41-52-33.3 Long 77-37-54.9

The service will cover eastern and northeastern portions of Hector Twp and extending into the western portions of Westfield and Clymer Twp, including the communities of Hector and Clymer.3.6 mi along SR 1005(Phoenix Rd), 3.1 mi along 4001 (Potterbrook Rd) 2.8 mi along SR1021 (Teed Hollow RD) 2.9 mi along Carr Hill Rd, 2.0 mi along Douglas RD/Mixtown Rd1.0 mi along Sperry and Young Rd, 1.3 mi along Echman Rd, and several miles along misc. roads passing through northeastern Hector Twp.

**Wharton Twp “Logue” PCPC 2591**

1431 East Fork Rd

Lat 41-32-56.38 Long 77-58-26.03

This service will cover central portions of Wharton Twp including local residents along East Fork Rd, and 4.90 mi along E Fork Rd, 1.04 mi along Jordon Run Rd, 1.0 mi along Forestry Rd and several miles along misc local roads passing through central Wharton Twp.

**Summit Township “Beech Run” (PCPC 2589)**

Beach Run Rd

Lat 41-38-55.57 Long 77-57-20.65

This service will cover the western portions of Summit Twp, and extending into the northeastern portions of Sylvania Twp, including local residents along SR 3003(1<sup>st</sup> Fork Rd) also 1.04 mi along Crandall Rd, 1.03 mi along Watson Farm RD, 1.0 mi along Prouty Rd and several miles of local roads passing through western portions of Summit Township.

When activated in conjunction with “Cherry Springs”, “Costello”, and “Austin” it will extend coverage to the Southern parts of Potter County.

### **Harrison Township “Whites Corners”**

720 Kibbe Hill Rd

Lat 41-59-06.9 Long 77-43-31.5

The service will cover the northwest portions of Harrison Twp. and the northeast portion of Bingham Twp, including the community of North Bingham, approximately 6 mi along SR1010, 5.5 mi along State Rd/Harrington Rd/Cemetery Rd, 1.5 mi along Bingham Ctr Rd, and several miles along misc local roads northwest of Harrison Valley to the North Bingham area (the intersection of Bingham Rd and Genesee Mills Rd in the NE corner of Bingham Twp).

When activated the “Whites Corner” site in conjunction with “North Fork”, and “Harrison Valley” sites will extend coverage to the majority of Harrison Township.

### **Hebron Township “Hebron Center”**

378 Carpenter Rd

Lat 41-51-57 Long 78-00-24.00

The service will cover the western section of Hebron Twp, Hwy 44 and the Village of Hebron Center, 5 mi along PA 44, 2.35 mi along Dry Run, 3.4 mi along SR4008/S Branch Rd, 2.7 mi along Carpenter Rd and several miles along misc. local roads passing through Hebron Ctr. When activated in conjunction with the existing “Coudersport”, “Coudersport DT”, “North Hollow”, and “Cobb Hill coverage will be across the majority of Hebron Twp and in the central portions of Potter Co.

### **Hector Township “Loucks Mills” (PCPC 2640)**

1655 Lei Ridge Dr Ulysses

Lat 41-50-43.88 Long 71-42-33.52

The service will cover the southwestern portions of Hector Township, services will be extended into the Village of Loucks Mills including 6.31 miles along Loucks Mills Rd, 1.5 mi along Parker Hill Rd, 1.2 miles along Forks Rd, 1.63 mi Stiles Hill Rd and several miles along misc local roads passing through the Village of Loucks Mills.

When activated in conjunction with “Hector” and “Sunderlandville” Verizon Wireless will cover the majority of Hector Twp and the Eastern Portions of Potter County.



**Austin Borough “Austin PA” PCPC 2638**

149 Barnet Lane

Lat 4-37-23.02 Long 78-06-45.08

The service will cover portions of Austin and Portage Twp, approx 5.77 miles along Rt 872, 2 mi along Rugabager St, Austin School District, and several miles along misc local roads generally in Austin Borough.

When activated in conjunction with the “Odin” site, it will extend coverage across the majority of Austin and Portage Twp.

**Wharton Township “Wharton Cell” PCPC 2639**

2637 Wharton Rd

Lat 41-33-10.23 Long 78-01-45.08

The service will cover central areas of Wharton Twp, 5.10 mi along Rte 872, 1.0mi along Nelson Run, and several miles along misc local roads passing through the area.

When activated in conjunction with the “Logue” Site, it will extend the service over the majority of Wharton Twp and southern portions of Potter County.