
RRK Associates is proud to announce it made a huge step into another area of IT management with the successful completion of our first Point to Point WiFi installation. This project marks RRK Associates ability to provide our customers with dedicated WiFi connections over distances as much as 15 kilometers. These connections can be used to connect buildings, provide internet access to remote locations, and generally help expand your network to areas otherwise not covered with traditional wired connections.

Project: Point to Point WiFi connection providing remote access to control equipment located 160' above ground on the town's water tower.

Location: Federalsburg, MD

WiFi Link Distance: 3500ft

Equipment Used: Ubiquiti UniFi and AirMAX

RRK Associates was contracted to provide a link to the town's water tower to access equipment located on the deck of the tower. Prior to the link, the equipment was accessed by use of a single CAT6 cable dropped to the ground from the deck forcing someone to drive out to the tower, hook up to the cable, and managed the equipment at this site.

We worked with the town to choose a location for a base where we could install internet and house the base equipment. The choice was made to use a municipal pump house about 1000 meters away from the tower. The location of the pump house presented a challenge of shooting over/through a grove of trees to make the link.

Although, data throughput for this link was not a priority, the choice of Ubiquiti NanoStation 5AC was made in case requirements change. We used UniFi network hardware both in the pump house and on the tower to provide remote access and management of the network hardware that would otherwise be difficult to access in locked facilities. The installation took two days, one day at the pump house and one day on the tower. We configured all the equipment in our shop before installing on site making the onsite installation smooth. Antenna alignment went very well with a good, solid link on the first shot.

The project took almost a year from initial planning to installation; working with the town on placement, planning, meetings, site visits, approvals, etc. Getting Comcast to the pump house took a few months alone, as they had to run cable under adjacent railroad tracks to get it to the pump house.

The link is up, and the clients are happy with the project.

Practical applications for Point to Point or Point to Multi-Point WiFi: Connecting large campus environment outbuildings such as barns, garages, facility buildings, workshops, and other types of buildings. Building to building links providing interlinked homogenous networks between multiple building locations. Internet access to otherwise remote locations challenging to reach with traditional connections methods. WiFi coverage of larger areas such as campgrounds, marinas, fairgrounds, etc.

For this or any other WiFi networking needs, please contact RRK Associates at (202) 237-8703.