

Colusa Water Tower

Scope of Work

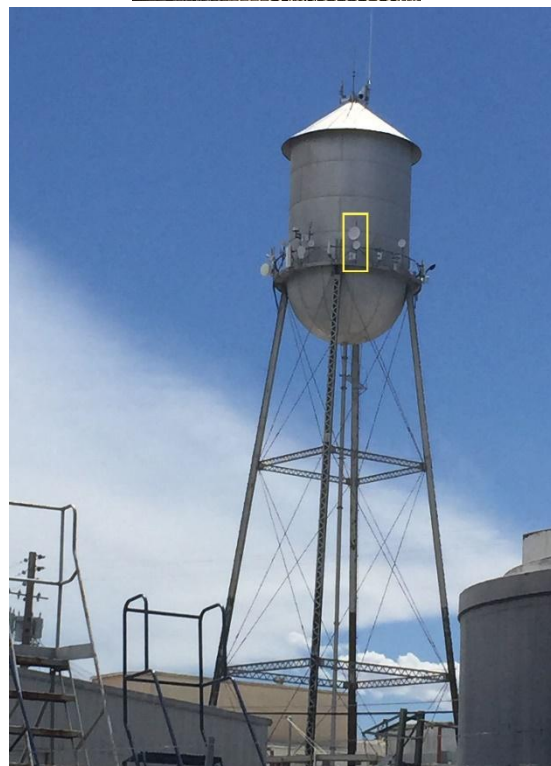
1.1 Client and Project Information

Name of Client/Organization Colusa Water-Sewer Department			Name of Project Colusa Water Tower	
Name of Contact Person			Project Location 840 Main St	Project No. N/A
Contact's Mailing Address 840 Main St			City Colusa	Province CA
City Colusa	Province CA	Postal Code 95932	E-mail Address of Contact Person N/A	
Telephone Number Ext.			Fax Number	

1.2 Project Description:

We have a high demand from rural internet residents without internet or acceptable internet in the surrounding areas. We would like to put 2 Wireless Access Points and 4 Backhaul Dishes on the west water tower, mounted on the white rails outside of the top platform. Cable runs on the leg of the tower behind the ladder, snug and out of the way with cable grabs. Attachment points are clamps that are attached to the handrails, the equipment suspends outward keeping the walk clear. Two access points are mounted to the southwest and southeast. Two 2-foot backhaul antennas and two 3-foot antennas will be mounted also to the hand rails. There is a small box at the top and another at the bottom. We store battery backup in the bottom box for power outages This enclosure can be mounted to the leg of the tower or preferred inside of the building. We will get a 10 Gbps comcast fiber circuit installed to the build or tower for our internet feed to redistribute.

RF energy is a type of non-ionizing radiation. Non-ionizing radiation is not strong enough to directly affect the structure of atoms or damage DNA. The FCC limits our DBm to 1 Watt of Power, A typical FM radio station is 50,000 Watts. Microwave and millimeter frequencies are very safe given the power levels we are limited to.



2 x SAF Integra X 2 Foot Dish's

Antenna Type Parabolic Dish (VHLP2-11 or VHLP2-18)

Temperature -35°C to +55°C (-28°F to +130°F)

Wind Survival 160 km/hour

Wind Loading 200 N at 160km/h

Weight 43 lbs. – single unit*

Size 11" x 17"x 3.9" (Radio)

Frequency Range 11 GHz or 18 GHz



2 x SAF Integra X 3 Foot Dish's

Antenna Type Parabolic Dish

Antenna Size

Temperature -35°C to +55°C (-28°F to +130°F)

Wind Survival 160 km/hour

Wind Loading 43 N at 160km/h

Weight 18.7 lbs. – single unit*

Size 11" x 17"x 3.9"

Frequency Range 11 GHz or 18 GHz



1 x Ubiquiti Wave Micro AP 60 GHz & 5 GHz

Antenna Type Sector

Size 11" X 6"x3"

Radio Weight 2.9 lbs.

Max. Power Consumption 24W

Wind Survival 125 MPH

Frequency Range 5.1 GHz – 5.8 GHz & 59-69 GHz



Tycon Solar Cabinet (Enclosure on ground or in room mounted to wall)

Size 24" x 24"x 16"

Weight 25 Pounds

2 x 100 AH Batteries for Backup Power (Lipo4)



Cables

Fiber – 2x Single Mode LC Fiber 200'

Weight 6 lbs

6 x Cat5e Ethernet Cables

Weight 30 lbs 150'