

Notes from walk-through for 20230104

Multi-mode or single-mode; Whatever will give us the bandwidth for that range.

Detailed out, verbally only, the attic structure of the main buildings. Namely, elementary, rooms 1-10 and office, lousy, dusty, dark, and low roof. Rooms A-F, catwalk, plenty of clearance, adequately lit. Upper Elementary and Library, suspended ceiling, but no attic; ladders and stilts needed. Firewall, several inches thick, between Rooms 1-10, and both other wings.

Secondary building: All 1 big catwalked attic, and well lit.

It may be possible to swap out existing Unifi-Lite-AC WAP's for new WAPs of a different make, rather than run all new drops. This is acceptable, where practical, but bidder is responsible for ensuring that it works.

As many of our oldest, still in use, WAPs are the weaker Unifi-Lite-AC units, and those replaced an earlier iteration, that were placed in about every third or fourth classroom, rather than every classroom, it is probable, but not certain, that that earlier, less dense, configuration could be reconstructed using existing drops.

Am okay with on-premises controller for new equipment. Prefer it, actually.

Walls are primarily sheetrock. Ceilings are primarily suspended, except in the middle part of the elementary, (rooms 1-10, plus office), where they are sheetrock over the ceiling joists. Secondary building does have some steel, built-in, lockers along the hallway, which may cause some shadows. Although I didn't mention it today, the Superintendent's Office has a "vault" constructed from masonry, with a steel door, which does attenuate the signal of the WAP in the neighboring classroom. Although not mentioned then, the exception is the Vo-Arts building, where several walls are sheet steel over wooden studs and some drywall. However, even then, the ceilings are wooden, at worst, and the current WAP is mounted high, and penetrates down into all three classrooms, and both workshops, adequately.

There are several firewalls, and formerly brick exterior walls, in both the Elementary (3 walls), and Secondary (2 walls), that will attenuate signal. The firewalls in the elementary (2 of them, at least), are still intact and will need to be breached if new cabling is to be run between the different sections of the building. The Secondary firewalls have been fully breached, already, and is essentially a single open span in the attic.

I do not recall any other major internal walls, or structures, likely to attenuate signal more than normal.

Switches: All to be placed in peripheral locations, modernizing the periphery. Not intending to swap out the current Ubiquiti equipment, as we're not facing bottlenecks on that equipment at this time.

Need 1 new switch in HSRoom03. 3 switches in HSRoom09, (moving 1 switch from there to the New Gym, and retiring the other 2), 5th and 6th switch probably not purchased, but in case I think of a need before they're purchased.

Need a UPS in Vo-Arts. Need a UPS for the New Gym. Was recently reminded how hostile the electrical system can be in Vo-Arts, as something recently killed one switch, and damaged another. I suspect someone turned on an arc welder that had had time to collect some dust internally, or something, causing a decently large spike, but that is merely speculation on my part.

Not wanting to replace the current, "trunk", Ubiquiti switches, but okay with placing new switches, running on a different controller, in peripheral locations, such as computer labs, where they can serve on a single vLan. All current switches, running on current controller, left in place.

New, more capable, WAPs to be installed in fewer classrooms. Existing WAPs to be concentrated in areas where managing multiple clients is less of a concern, such as outbuildings with smaller class sizes. Existing WAPs to be doubled up in these areas to provide failover capability.

Firewall is currently being set up through OneNet, and is of the type we're bidding for. Will entertain bids seeking to takeover service from OneNet.