

# **Bond Project Network Refresh**

## **Progress Matrix Report - Major Milestone Definitions**

### Phase 1

### **SBAC Readiness**

Partnered with the Technology Services Team to create technology ready school sites, district wide, to support SBAC testing through the delivery and deployment of technology network upgrades. SBAC classrooms identified, wired and ready to support SBAC Testing Laptop Carts.

### **Fiber Installation**

Install and terminate a new twelve (12) strand 10 GIG multi-Mode fiber Cable. Route the new Fiber from the existing MDF to the new IDF locations via existing/new pathways. Terminate Mutli-Mode SC terminations, test and label.

#### **Enclosure Installation**

Installed new network cabinet enclosures for MDF and IDF locations as designated by customer.

# **Wireless Drop & Device Installed**

Installed AP drop Location in each classroom. Run all Cat6 station cables to the network room/s. Installed 2600 Cisco Wireless Access Point in every other classroom, cafeteria's, multi-purpose room, gymnasiums, and Admin offices as designated to provide full site wireless coverage. Tested each new station cable to confirm Category 6 compliance. Labeled each station in accordance with industry standards or client's request.

# **Network Equipment Programmed Ready for Install**

AMS.NET Engineer(s) worked with Sacramento City Schools to determine the ideal user level configuration for the new Cisco Catalyst 4500 switch based on current



configurations, desired features and AMS.NET Engineering expertise. VLAN security was configured for the technologies being deployed as well as Quality of Service for traffic shaping and prioritization. As part of the replacement of the core network, AMS.NET Engineer(s) configured the Cisco 2960X Ethernet Access Switches to provide a robust WAN core for remote site connectivity. AMS.NET Engineer(s) worked with Sacramento City Schools to develop a configuration to provide best WAN performance using features such as H-QoS, MPLS and VPLS where necessary. Configurations are based on Existing WAN configuration and AMS.NET Engineering expertise. In order to minimize service interruptions, switches are configured and programmed for each specific site prior to delivery and installation.

#### **Network Backbone Installed**

AMS.NET engineers rackmount and install the Cisco Catalyst 4500 switches at the core of each site. Install and configure the Cisco Catalyst catalyst 2960X switches into each closet location of the sites. Removing all existing network equipment and cutover to the Cisco backbone.

## **Wireless Network Migrated**

AMS.NET Engineer(s) configured the Cisco 2600 Clean Air, High Density Wireless Access Points using the Cisco Prime NCS Management tool. Each WAP is configured with the district standard SSID wireless networks as well as wireless encryption Protocol (WEP, WPA, WPA2). AMS.NET Engineer(s) worked with Sacramento City Schools to determine the WAP deployment that best suits the district needs (tunnel mode, HREAP/FlexConnect, Etc). WAPs are labeled in the management tool with site name and location. Removing all existing HP wireless access points and cutover to the new Cisco wireless network.