# BOARD OF EDUCATION LONG BEACH UNIFIED SCHOOL DISTRICT

Approved by

SUBJECT:

Resolution 061813-G

Enclosures:

CATEGORY: New Business

Reason for Board

Consideration:

Action

Facilities Development & Planning

Date:

June 18, 2013

# BACKGROUND:

In January 2008, the Board approved a Facility Master Plan which included, approving K-12 Educational Specifications as well as Construction and Material Standards to facilitate the standardization of certain specified systems across the designs of schools were there would be renovation, reconstruction, modernization, replacement, upgrades or new construction projects. Pursuant to Public Contract Code Section 3400, the District intends to establish uniform, complete and compatible Standardized Equipment and Systems District-wide in order to match existing, planned and/or acceptable field test product installations. Uniform systems district-wide will increase efficiency and ensure the continued safety for our students and staff. The District continues to evaluate various systems and its components as part of updating the Facility Master Plan documents and will make recommendations as needed.

The District intends to install, replace or upgrade numerous wireless infrastructure systems, which consist of switches, routers, wireless access points and wireless control systems; security surveillance camera and management systems; and library book detection systems as part of the Maintenance and Repair and Capital Facilities Program throughout the District as defined in

# RECOMMENDATION:

Adopt Resolution No. 061813-G

A RESOLUTION OF THE GOVERNING BOARD OF EDUCATION OF THE LONG BEACH UNIFIED SCHOOL DISTRICT ADOPTING COMPATIBILITY, UNIFORMITY, STANDARDIZATION FOR **WIRELESS INFRASTRUCTURE** SECURITY SURVEILLANCE CAMERA AND MANAGEMENT SYSTEMS AND LIBRARY BOOK DETECTION SYSTEMS AT THE LONG BEACH UNIFIED SCHOOL

Approved:

Approved and Recommended:

James Novak Chief Business & Financial Officer

Christopher J. Steinhauser Superintendent of Schools



#### RESOLUTION NO. 061813-G

A RESOLUTION OF THE GOVERNING BOARD OF EDUCATION OF THE LONG BEACH UNIFIED SCHOOL DISTRICT ADOPTING COMPATIBILITY, UNIFORMITY, AND STANDARDIZATION FOR; WIRELESS INFRASTRUCTURE SYSTEM, SECURITY SURVEILLANCE CAMERA AND MANAGEMENT SYSTEMS AND LIBRARY BOOK DETECTION SYSTEMS AT THE LONG BEACH UNIFIED SCHOOL DISTRICT

WHEREAS, the Governing Board of the Long Beach Unified School District ("District") intends on expending funds installing, replacing, or upgrading numerous wireless infrastructure systems, security surveillance camera and management systems and library book detection systems (Standardized Equipment and Systems) throughout the District as part of the Maintenance and Repair and Capital Facilities Program throughout the District;

**WHEREAS**, the District, pursuant to Public Contract Code Section 3400, intends to establish uniform, complete and compatible Standardized Equipment and Systems District-wide in order to match existing, planned and/or acceptable field test product installations;

**WHEREAS**, the District has determined that uniform systems District-wide will facilitate the most technologically competitive and feasible education for school children in the District;

WHEREAS, the District has determined that uniform systems District-wide will facilitate technical familiarity among faculty and staff while reducing training and increasing efficiency in the District;

**WHEREAS**, the District has determined that uniform systems District-wide will facilitate a safe environment;

**WHEREAS**, the District has determined that uniform systems District-wide will protect the District's limited fiscal resources by providing cost savings by ease of maintenance, operations and familiarity with service;

**WHEREAS**, the District has determined that uniform systems District-wide will reduce the inventory costs associated with maintaining multiple brands of replacement inventory in the District:

**WHEREAS**, the District has determined that uniform systems District-wide will reduce the costs associated with training and certification of staff for multiple brands of systems and equipment in the District;

**WHEREAS**, the District has determined that uniform systems District-wide will increase the serviceability of the systems or equipment while decreasing the repair time;

WHEREAS, uniform systems District-wide will reduce the storage space required to carry items of similar function for multiple brands in storage facilities and on maintenance vehicles;

**WHEREAS**, uniform systems District-wide will reduce the inventory costs required to carry items of similar function for multiple brands;

WHEREAS, the District has found incompatibility of product substitutions to the proposed Standardized Equipment and Systems to be problematic, the District finds it necessary to establish one complete District-wide Standard in order to avoid incompatibility issues and costs associated with replacement of equipment that fails to perform to the level of the proposed Standardized Equipment and Systems. These failures include equipment that is not supported by the manufacturer and incompatible and useless products that waste District funds associated with addressing incompatibility;

**WHEREAS**, the District and its consultants have undertaken considerable research into the proposed Standardized Equipment and Systems that would properly serve the District's administrative and educational purposes;

**WHEREAS**, the District has invested significant financial and human resources in testing, documenting, training and management systems to support the current install base of Standardized Equipment and Systems;

WHEREAS, the District's existing facilities already utilize specific products/brands relating to the Standardized Equipment and Systems. The District's intent is to match those existing systems currently in use to avoid the cost of designing and engineering systems that may not be compatible or backward compatible and can never be made compatible or may be compatible only after expending considerable District resources and funds;

WHEREAS, pursuant to Public Contract Code Section 3400(b), the District desires to design current and future projects utilizing certain products/brands to match items in existing projects so as to establish a District-wide, homogenous system of Standardized Equipment and Systems, thus avoiding incompatibility issues, and increased cost benefit of training, and maintenance;

**WHEREAS**, the District has determined that due to the compatibility issues which arise from non-standard equipment and systems only the specified manufacturers may provide products as set forth in these documents;

WHEREAS, the District has established a committee comprised of District personnel ("Facility Design Standards Committee") that meet on an on-going/as needed basis to reevaluate the Districts findings and Specifications related to the Standardized Equipment and Systems. Based on the Facility Design Standards Committee's evaluation of other products, manufacturers, equipment, and systems submitted by vendors, contractors, or manufacturers for proposed substitutions, the District may revise its Specifications accordingly and issue updated findings and;

**WHEREAS**, the District, pursuant to Public Contract Code 3400, intends to establish uniform standards for the following equipment and systems for the following reasons:

#### WIRELESS INFRASTRUCTURE COMPONENTS:

- The Wireless Infrastructure Components as provided by <u>Cisco Systems</u>; Core Switches, routers and wireless access points and wireless control systems includes; Catalyst 3750-X and 3560-X Series, Aironet 2600 Series Access Point, 8500 Series Wireless Controller, Catalyst 4500 Series Switches, Catalyst 6500 Series 10/100 and 10/100/1000 Ethernet Interface Modules. Specification is attached by reference hereto as *Exhibit A*.
  - a. The specified network core switches, routers and wireless control systems are capable of utilizing the existing rack mounted chassis which results in large monetary savings by not purchasing new chassis and reducing labor for replacement. Chassis based models have the field replaceable supervisor cards. If issues occurs, only the component needs to be replaced (typically the line card or the supervisor). This means faster turnaround than having to disable, unbolt, pull out, replace, re-bolt, and re-cable an entire switch, which may be as large as a quarter-rack, weigh over 150 pounds, and service over 500 cables.
  - b. The specified Network Switches offer redundancy. A redundant supervisor engine may be installed to rapidly recover from supervisor outages. This can typically result in restoration in less than 90 seconds.
  - c. The specified network switches offer future expandability. Line cards including supervisor modules may be upgraded after purchase, increasing performance and adding features without losing any investment in the rest of the switch.
  - d. The Network Switches and Routers have a number of different interfaces available which give them flexibility.
  - e. The specified components include advanced customization and manageability.
  - f. The Routers offer standard based and advanced protocols supporting existing and emerging technologies
  - g. By using the specified manufacturer for the Switches, Routers and Wireless District has customer support for all interoperable connectivity and configurations.
  - h. By using specified manufacturer end to end at core, edge, and wireless technologies, the District benefits from enhanced end to end interoperable network security.
  - i. Will provide consistent and cost-effective maintenance, operating and repair costs.

- j. The specified manufacturer provides low power, "Green" technologies\_to reduce District operating expenses
- k. The specified manufacturer provides self-configuring, self-optimizing, self-diagnosing and self-healing technologies in their product line.
- The specified manufacturer provides consistent backward compatibility of older equipment and technology investments by District of previous manufacturer products.
- m. Current availability of spare parts.
- n. District personnel are currently trained to maintain and utilize the specified switches, routers and wireless devices.
- o. System components can be centrally monitored off site using existing management systems in which the District has made previous investments.

#### SECURITY CAMERA SYSTEMS:

- 1. The Security Camera System as provided by <u>Bosch Security Systems Inc. for surveillance cameras</u>, <u>Management systems and components include</u>: <u>FlexiDom and, AutoDomes</u> series cameras, <u>Digital Recording and Storage systems</u>, <u>Work Stations</u>, and <u>Monitors</u>. Specifications are attached hereto as *Exhibit B*.
  - a. Design and Integration of the surveillance camera system offers the design ability for integration with the existing technology network infrastructure system, which includes existing fiber optics, patch panels, and switches to maximize both camera potential and networking capability.
  - b. The specified surveillance camera system provides maximum performance with up to 50% less bandwidth reducing network bandwidth usage and storage costs.
  - c. The specified surveillance camera system provides ONVIF (Open Network Video Interface) compliance enabling simplified integration with 3<sup>rd</sup> party systems.
  - d. The specified surveillance camera system built-in video content analysis, reinforces the state of the art Intelligence-at-the-Edge concept where edge devices (the camera) become increasingly intelligent and reliably detects and analyzes moving or loitering objects while suppressing unwanted alarms while IVA (Intelligent Video Analysis) also supports BEV (Bird's Eye View) people counting reducing operator work load.
  - e. The specified surveillance camera system power for IP (Internet Protocol) cameras is established over Ethernet. This means no additional power supplies are required at IP camera locations.

- f. The specified surveillance system high performance LED (Light Emitting Diode) monitors support in multiple sizes and up to 1920 x 1080 full HD (High Definition) resolution, HDMI (High Definition Multimedia Interface), DVI (Digital Visual Interface) and VGA (Visual Graphics Array) inputs, High contrast ratios, precise color reproduction, LED backlighting for high luminance and lower power consumption with standard wall mounting or desktop mounting features which, are designed to remain on 24/7 for longer viewing capability.
- g. The specified surveillance system high performance workstation is designed with Intel's latest generation microarchitecture, Dual-monitor support (NVDIA Quadro 4000, 2 GB graphics cards), Silent running with liquid cooling solution and, includes a 3 years Next business day on-site support.
- h. This specified surveillance system allows for earlier detection and enables the camera system to assess situations faster and respond with the most appropriate action on recorded events. Advanced handling of IVA (Analytics) alerts allows the camera system to trigger alarm and start recordings more quickly.
- i. The specified surveillance system provides scheduling events, includes up to 10 recording schedules, with holidays and exception days and up to 100 alarm priorities and selective auto-popup on alarm with Motion and Audio Alarm triggers and instant playback features. The flexible network access options include; web browser with remote access, viewing and control with email and SMS notification.
- j. The specified surveillance camera system allows for Intelligent Video Analysis (IVA) with focused attention. With built-in IVA, Bosch IP cameras analyze a scene and assist personnel by alerting them to suspicious activity, including loitering, perimeter breaches and blocked emergency exits.
- k. The specified surveillance system specifications allow for control of remotely scheduled events. This saves the District the time and effort of dispatching Personnel to events on each site.
- I. The specified surveillance system IVA's Forensic Search feature helps you locate specific events rapidly and reliably. When IVA is active all metadata is stored with the recording allowing you to search video in seconds, applying all possible detection criteria. BVC (Bosch Video Client) software allows up to 20+ live SD (Standard Definition) and HD channels simultaneously and play back should display up to 4 channels, which allows you to search for alarm and motion events, and export relevant video footage.
- m. The specified surveillance systems' File Compression of camera system and video recorders feature provides 30% to 50% additional storage space vs. MPEG-4 (Moving Picture Experts Group) file storage.
- n. The specified surveillance system IP dome cameras provide direct network connections using H.264 and Jpeg compression and bandwidth throttling to efficiently manage bandwidth and storage requirements.

- o. The specified surveillance system Records directly onto ISCSI (Internet Small Computer System Interface) storage systems connected anywhere on the network without a PC (Personal Computer) or added software. Local SDXC (Secure Digital eXtended Capacity) storage (up to 2TB cards), ISCSI and ANR (Application Not Responding) support provides increased system reliability, guarding against loss of video in the event of network failures.
- p. The specified surveillance software management system provides advanced software algorithms to analyze and enhance each pixel, and highly-sensitive CCD (Charge Couple Device) sensors create progressive scan images for clear, sharp details in low light and busy scenes.

The specified surveillance system provides software-based IP video recording and management solution or an all in-one IP video management appliance and Enterprise-Class Client/Server based video management system has full virtual matrix capabilities, including analog monitor support and CCTV (Closed Circuit Television) keyboard control.

- q. The specified surveillance system promotes Privacy Masking: The ability to mask out a specific area to prevent it from being viewed in order to comply with privacy laws and particular site requirements.
- r. The specified surveillance system is carefully engineered with heavy duty rugged construction surveillance camera and dome system, is suitable for all indoor and outdoor locations and is highly resistant to damage due to harsh weather, water, dust, high impact flying debris and is tamper and vandal resistant.
- s. The specified surveillance system Warranty extends three (3) years at no charge for replacement and repair of defective equipment. Warranty of manufacturers or defective parts <u>includes all branded components</u>; Recording devices, cameras, monitors, workstations and mounting brackets.

#### LIBRARY BOOK DETECTION SYSTEM:

- The Library Book Detection System as provided by <u>3M Library Systems</u> for Book Detection Systems include: Detection Systems 3500 Series, Bookcheck Unit 940-Series and Tattle-Tape Security Strip Specifications are attached hereto as *Exhibit C*.
  - a. The specific Book Detection System offers the ability to install in a modernization or new construction project with direct mount, base plate or buried cable installation.
  - b. The specified Book Detection System affords the availability of a 36" single or double corridor that meets ADA requirements.
  - c. The Book Detection System is compatible with the Destiny Follet software. The library software integrates and centralizes the circulation, cataloging, searching and reporting functions into one flexible library management system. If the

- interface between the library management software and the book detection system is not compatible neither system will function properly.
- d. Will provide consistent and cost-effective maintenance, operating and repair costs. Because it protects library assets directly, it reduces the need for locking cases.
- e. Current availability of spare parts.
- f. District personnel are currently trained to maintain and utilize the specified Book Detection System.
- g. The specified Book Detection System utilizes electromagnetic technology that minimizes interference with electronic equipment. It is completely safe for all magnetic media.
- h. The system has integrated red alarm light, it features an audible alarm and accurately identifies items that trigger an alarm.
- i. The Book Detection System is upgradable with a voice alarm and equipped with auxiliary contacts for signaling remote devices such as cameras.

# NOW, THEREFORE, THE BOARD DOES HEREBY RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

- Section 1. That the above recitals are all true and correct.
- Section 2. That the District's Facility Design Standards Committee shall re-evaluate District Specifications on an ongoing basis and review the products and systems addressed in this Resolution based on issues of compatibility, durability, price, competitiveness, maintenance and other criteria as the Facility Design Standards Committee deems appropriate.
- Section 3. That any vendor or manufacturer may submit requests with appropriate backup documentation and information in the future to be considered as a District Standard. The Facility Design Standards Committee shall evaluate all such requests as established by the Facility Design Standards Committee when it re-evaluates the District's Standards on an ongoing basis.
- Section 4. That the District has established that the Specification sections attached by reference hereto as Exhibits A thru C of this Resolution, and no other Specification sections, are affected by this Resolution in connection with the District's construction projects.

- Section 5. That the District's Facility Design Standards Committee may substitute upgraded standardized products, as listed in this resolution, as determined to be in the best interest of the District.
- Section 6. That the District's Facility Design Standards Committee may substitute an obsolete model with the manufacturer's superseding product, should a product in this Resolution become obsolete.

#### WIRELESS INFRASTRUCTURE COMPONENTS:

- Section 7. That the District intends on expending considerable funds toward classroom Wireless infrastructure systems and is concerned with the following critical issues:
  - 1. That all network Wireless infrastructure components throughout the District are compatible;
  - 2. That all network Wireless infrastructure systems are uniform;
  - 3. That all network Wireless infrastructure systems may be serviced on a District-wide basis;
  - 4. That all network Wireless infrastructure systems are consistent to promote educational technology, safety of students and to protect District property;
  - 5. That all systems and equipment are standardized District-wide to minimize system failures and repairs

#### SECURITY SURVEILLANCE CAMERA AND MANAGEMENT SYSTEMS:

- Section 8. That the District intends on expending considerable funds toward Security Camera systems and is concerned with the following critical issues:
  - 1. That all surveillance camera and management systems throughout the District are compatible;
  - 2. That all surveillance camera and management systems are uniform:
  - 3. That all surveillance camera and management systems may be serviced on a District- wide basis:
  - 4. That all surveillance camera and management systems are consistent to promote school safety; and
  - 5. That all systems and equipment are standardized District-wide to minimize system failures and repairs.

#### LIBRARY BOOK DETECTION SYSTEM:

- Section 9. That the District intends on expending considerable funds toward Library Book Detection systems and is concerned with the following critical issues:
  - 1. That all book detection systems throughout the District are compatible;
  - That all book detection systems are uniform;

- That all book detection systems may be serviced on a Districtwide basis;
- 4. That all book detection systems are consistent to promote school safety, access; and prevent loss of materials.
- 5. That all systems and equipment are standardized District-wide to minimize system failures and repairs.

Section 10. Effective Date. This Resolution shall take effect upon adoption.

PASSED AND ADOPTED
--------------------

this 18th day of June, 2013 by the following vote:

AYES:

4

NOES:

0

ABSENT:

1\_\_\_\_

ABSTAINED:

0\_\_\_\_

I, Jon Meyer, President of the Long Beach Unified School District Governing Board, do hereby certify that the foregoing is a full, true, and correct copy of the resolution passed and adopted by said Board at a regularly scheduled and conducted meeting held on said date, which resolution is on file in office of said Board.

President of the Board of Education Long Beach Unified School District

I, Christopher J. Steinhauser, Clerk of the Board of Education of the Long Beach Unified School District, do hereby certify that the foregoing Resolution was introduced and adopted by the Board of Education of the Long Beach Unified School District at a regular meeting thereof held on the 18th day of June, 2013, by the following forgoing vote.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Long Beach Unified School District this 18<sup>th</sup> day of June, 2013.

Clerk of the Board of Education Long Beach Unified School District

# **RESOLUTION NO. 061813-G**

## LIST OF EXHIBITS

EXHIBIT A	Wireless Infrastructure System
EXHIBIT B	Security Surveillance Camera and Management Systems
EXHIBIT C	Library Book Detection System

### **RESOLUTION NO. 061813-G**

### **EXHIBITS A-C**

The following exhibits are included in the agenda and available under separate cover at the District's Business Office located at 1515 Hughes Way, Long Beach, CA 90810.