

# CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT

### **INFORMATION TECHNOLOGY MASTER PLAN**

## **ITS DETAILED SPECIFICATIONS**

UPDATED 2012



### ITMP 2012 UPDATE

#### 5.0 NETWORK INFRASTRUCTURE ACTIVITIES IN SUPPORT OF MEASURE B BOND PROJECTS

CLPCCD District ITS has continued to participate in the design review and construction for new and modernized buildings at the Chabot and Las Positas campuses. The main areas of activity have been:

- Design input to architect teams for current infrastructure.
- Review of IDF spaces: location, size and access.
- Review of voice/data station outlet placement: location, cable density, outlet quantity.
- Conformance to CLPCCD Standards: Category 6A cabling to voice/data outlets, single mode fiber backbones.
- On-site construction review: inspections, punchlists, manufacturer's review and certification, acceptance.

During the 2012 year, the principal construction projects were as follows.

| Name       | Scope                            | CLPCCD ITS contribution   |
|------------|----------------------------------|---|
| PE Complex | B2500, 2600, 2700,<br>2800, 2900 | <ul> <li>Coordination of IDF construction to<br/>maintain CUP uptime.</li> <li>Coordination of phased construction.</li> <li>Review of pathway and cable length issues.<br/>Investigation of design alternatives with<br/>direction documented to A&amp;E team.</li> <li>Detailed specification of voice<br/>terminations.</li> <li>Construction walkthroughs and inspection.</li> <li>Punchlist for cabling completion.</li> </ul> |
| B1200/1300 | Music/PAC Plaza<br>Modernization | <ul> <li>Coordination of fiber cable rerouting to maintain B1300 uptime.</li> <li>Supplemental review/input of security devices and placement. Main input from Campus Security and Chabot CS.</li> <li>Review of pathway and cable length issues. Investigation of design alternatives with direction documented to A&amp;E team.</li> <li>Construction walkthroughs and inspection.</li> </ul>                                     |

#### 5.1 Chabot Campus Construction



| B1800 | Math/Science | - Clarification of legacy cable demolition.  |
|-------|--------------|--|
|       |              | - Review of submittals.                      |
|       |              | - Inspection of floorbox/conduit and non-    |
|       |              | compliance with design.                      |
|       |              | - Construction walkthroughs and inspection.  |
|       |              | - Review of pathway and cable damage         |
|       |              | issues. Investigation of design alternatives |
|       |              | with direction documented to A&E team.       |
|       |              | - Punchlist for cabling completion.          |

#### 5.2 Las Positas Campus Construction

| Name   | Scope  | CLPCCD ITS contribution   |
|--|--|---|
| LPC Solar  | New construction   | <ul> <li>Review of design for network connectivity.</li> <li>Coordination of current PV network<br/>connectivity and integration to Draker<br/>system.</li> <li>Specification of fiber backbone and<br/>enclosure. Review of pathway and<br/>submittals.</li> <li>Coordination of security devices for PV<br/>project. Troubleshooting of device<br/>instability.</li> </ul>  |
| Science  | Modernization of<br>existing and<br>construction of new<br>Science Buildings | <ul> <li>Participation in construction process for<br/>new Science Building. Attendance at<br/>weekly construction meetings.</li> <li>Redesign of IDF room layouts.</li> <li>Site inspection of cabling and pathway<br/>workmanship.</li> <li>Clarification of scope for existing Science<br/>building remodel. Review with contractor<br/>for cable demolition and preservation.</li> <li>Investigation of design alternatives for<br/>replaced lab table tops with direction<br/>documented to A&amp;E team.</li> <li>Construction walkthroughs and inspection.</li> <li>Punchlist for cabling completion.</li> </ul> |
| Student<br>Services and<br>Administration<br>(SSA) | New building   | <ul> <li>Participation in construction process for<br/>new Science Building. Attendance at<br/>weekly construction meetings. Submittal<br/>and RFI reviews with design clarifications.</li> <li>Review of underground floorbox conduits<br/>and non-compliance with design and ISP</li> </ul>   |



|                     |             | <ul> <li>cabling.</li> <li>Redesign of DSPS computer classroom<br/>spaces. Detailed review/redesign of<br/>Assessment computer room.</li> <li>Supplemental review/input of security<br/>devices and placement. Main input from<br/>Campus Security and LPC Technology.</li> <li>Coordination of installation and IP<br/>addressing requirements of BAS devices,<br/>kitchen devices and other networked<br/>control panels.</li> </ul> |
|---------------------|-------------|--|
| Campus<br>Boulevard | New project | <ul> <li>Review of current pathways to be<br/>unharmed during project execution.</li> <li>Onsite walkthroughs with contractors and<br/>A&amp;E team.</li> <li>Reroute of Science and Library backbone<br/>cables through new pathways.</li> </ul>  |

#### **5.3 ADDITIONAL DESIGN ACTIVITY**

In addition to the projects described above, CLPCCD District ITS has provided additional expertise for the coordination of proper design/construction activities for:

**Dublin Center:** The third floor of the Dublin Center was selected for the relocation of the Franklin District office. CLPCCD ITS participated in the following activities:

- 1. Feasibility analysis/design of first floor spaces for new District IT server room.
- 2. Specification of IDF/server room sizes and locations.
- 3. Production of drawings and specifications for voice/data infrastructure.
- 4. Specification of electrical and HVAC requirements for IDF rooms.
- 5. Coordination with General, Electrical and Data contractors during construction.
- 6. Coordination of configuration and scope for provisioning of new telephone system for new site.

#### 5.4 NETWORK/SERVER UPGRADE ACTIVITY



- **Switch Bid** With the construction and modernization of buildings at the campuses, additional network switch equipment was needed. A new bid was prepared and awarded to provide network switching equipment for:
  - .1 LPC SSA
  - .2 LPC Science
  - .3 CC 1200
  - .4 CC 1800
  - .5 CC 1700
  - .6 CC 4000
  - .7 CC 2500, 2600, 2700, 2800, 2900

In addition, 10Gb upgrades to the 6509 core switches were procured, allowing CLPCCD to begin the migration of the 1Gb fiber backbones to 10Gb connectivity.

#### 7.0 DISASTER RECOVERY

A key element to CLPCCD ITS functionality is the 99.9 percent uptime that is maintained for access to servers by students and staff. During the Dublin project, two significant changes occurred to improve the uptime environment:

- Server rooms The new server room environment on the third floor will provide an environment for Novell and Windows servers that is substantially improved from that at the Franklin site. The lack of first floor space that could be renovated into a suitable server room, and complications with UPS/generator support will prevent the construction of a space comparable to that at Franklin that could accommodate the Banner Enterprise failover system. As, such the Banner Enterprise system will remain as a failover pair in the LPC IT Building.
- **Off-site storage** The Dublin site can also provide off-site storage for backups and materials from the Chabot and LPC sites.