



# EDUCATIONAL TECHNOLOGY

BUILDING COMMITTEE MEETING

Perkins&Will

FEBRUARY 4, 2021



edvance  
technology design

# AGENDA

- Process
- Classroom Technology Experience for Teachers and Students
- Specialized Areas – Equipment and Programs
- Core Equipment
- District Connectivity
- Budget
- Procurement Method
- Schedule

## PROCESS

Infrastructure

Equipment

SOA Integrated Technology



# PROCESS



MEETINGS WITH  
TECHNOLOGY LEADERSHIP  
AND DEPARTMENT HEADS



COORDINATION WITH THE  
DESIGN TEAM



CONSTANT CONTACT  
WITH VENDORS AND  
MANUFACTURERS



EXISTING HIGH SCHOOL  
MOCK-UP



PRELIMINARY QUOTES AND  
PROJECT BUDGET

# CLASSROOM TECHNOLOGY

- SMART MX286-V2
- 4K Ultra HD LED 50,000 Hours
- 20 Points of Touch
- Energy Star Certified
- Ceiling Speakers



# CLASSROOM TECHNOLOGY



- Multiple students can write, move, gesture and erase all at once
- Device agnostic screen sharing (4)
- Students can contribute their ideas from their devices
- Reverse casting
- Access to Smart content





# CLASSROOM TECHNOLOGY

- Teacher Laptops (not project funded)
- Docking station at teacher desk
- Data patch cord, HDMI and USB cables connecting dock to wall outlets
- Podium
- Flexible Learning Environment
- Communication – VoIP and Intercom
- Conference Rooms + Teacher Planning (GX)



# SPECIALIZED AREAS

Electronic  
Music Lab

Digital Art

Photography

World  
Language  
Lab

7-8 Maker  
Space

Maker Space  
Robotics

Maker Space  
Engineering

Maker Space  
Physics

9-12  
Computer  
Lab

Coding

Resource  
Learning  
Centers





# ELECTRONIC MUSIC LAB

- 21.5" iMacs
- 49-Key Midi Keyboards Akai Prof MPK249
- University and Professional Level Production
- Major upgrade to current levels of work
- Creation of Level 2 and 3 Courses in the Future



# DIGITAL ART

- iMacs for Students
- Cart of 16" MacBook Pros
- Industry Standard Hardware and Software
- Drawing and Editing in Fine Detail



# PHOTOGRAPHY

- 21.5" iMacs for Students
- Shared MacBook Cart with Digital Art
- Industry Standard Hardware and Software
- Photo Editing in Fine Detail

The background image shows a large, bright, modern interior space, likely a university or corporate innovation hub. It features high ceilings with exposed concrete beams and blue-painted structural elements. People are seen working at various tables and desks, some using laptops. In the foreground, a young man and woman are focused on a task. In the background, a man stands near a table where others are seated. A balcony with a glass railing is visible on an upper level. The overall atmosphere is collaborative and creative. A dark blue, rounded rectangle is centered over the image, containing the text 'MAKER SPACES' in white, bold, sans-serif capital letters. Faint, white, circuit-like line art is visible on the left and right sides of the image, connecting to the central text area.

# MAKER SPACES

## 7/8 MAKER SPACE



- Dell Laptop Cart
- Coding and 3D Printing
- Greater Collaboration

# MAKER SPACE - ENGINEERING

- Dell Workstations (AIO) for Teacher/Students
- Robust Workstation and 24" Displays for Graphics, 3D Modeling





# MAKER SPACE - ROBOTICS



- Dell Laptop Cart
- Will also use the Workstations in Engineering due their robust design capabilities





## MAKER SPACE - PHYSICS

- Student Chromebooks
- Docking Stations with Larger High-Res Displays for Collaboration
- Shared Project Space for Physics and Other Groups

The background image shows a modern building interior. On the left, there are large glass windows and doors. In the center, a black rectangular box with rounded corners contains the text "OTHER SPECIALIZED SPACES" in white, bold, sans-serif capital letters. To the right of the box, there is a wall with a colorful, abstract pattern. In the foreground, several people are sitting on a bench, looking at books or papers. The overall atmosphere is bright and modern.

# OTHER SPECIALIZED SPACES



# WORLD LANGUAGE LAB

- iMacs for Students
- Software-Based (DiLL)
- Intuitive, Connection Based Approach
- Paired and Group Conversations
- Streamlined Communication





## 9-12 COMPUTER LAB

- Dell Workstations (AIO)
- Flex Space/Professional Development
- Shared Space

# CODING



- Dell Laptop Cart
- Docking Station with (1) Larger High-Res Displays for Collaboration



# RESOURCE LEARNING CENTERS

- Dell Laptops per Space for Students
- Individualized Workspaces



# THEATER AND PERFORMING ARTS



- Projectors for Music Spaces
- iPad Pro for AV/Lighting Controls
- 16" MacBook Pros for FPA Teachers
- iPads for Snack Bar and School Store



# ADMIN AND OTHER EQUIPMENT

- Standard MFF Workstation with Monitor(s) (AIO)
- Docking Station and Monitors for Guidance Offices
- Printers
- Point of Sale Equipment
- Digital Messaging – Samsung/MagicInfo





# CORE EQUIPMENT

- VoIP
  - Existing NEC 9300 VoIP System (current) to be Relocated to New School
  - New Handsets for Classrooms and Admin (Existing where possible)
- Connectivity/Network Electronics
  - Designed to Support Instructional Needs
  - SOA Facility for IT and Building Systems
  - Integration, Flexibility and Capacity
  - Wireless – WIFI 6

# DISTRICT CONNECTIVITY AND REDUNDANCY

- Coordinating with BMLD
- Temporary Connection from Town Library - BMLD
- Re-Route Existing Fiber to New MDF
- Cutover
- Create Redundant Loop, Connect to BMLD at Hittinger/Trowbridge – P2



# BUDGET

EDUCATIONAL TECHNOLOGY EQUIPMENT	ESTIMATES
<b>Core Equipment</b>	<b>\$ 710,697.00</b>
<i>Server</i>	<i>\$ 6,500.00</i>
<i>District Fiber</i>	<i>\$ 70,000.00</i>
<i>Professional Services (Network)</i>	<i>\$ 50,000.00</i>
<i>VoIP Hardware, Handsets</i>	<i>\$ 200,000.00</i>
<i>Wireless Network</i>	<i>\$ 384,197.00</i>
<b>Staff, Classroom and Specialized Technology</b>	<b>\$ 2,257,321.70</b>
<i>SMART Display Technology + Projectors</i>	<i>\$ 1,612,475.00</i>
<i>Teacher/Admin Computing Devices</i>	<i>\$ 148,848.50</i>
<i>Specialized Areas</i>	<i>\$ 447,448.20</i>
<i>Printers</i>	<i>\$ 41,800.00</i>
<i>Servery</i>	<i>\$ 6,750.00</i>
<b>Final Programming, Testing, Documentation and Closeout</b>	<b>\$ 74,200.47</b>
<b>Contingency (5%)</b>	<b>\$ 148,400.94</b>
<b>Total Tech Estimate</b>	<b>\$ 3,190,620.10</b>
<b>Project Technology Budget</b>	<b>\$ 3,322,500.00</b>
<b>Transfer to FFE</b>	<b>\$ 50,000.00</b>
<b>Total (Under Budget)</b>	<b>\$ 81,879.90</b>



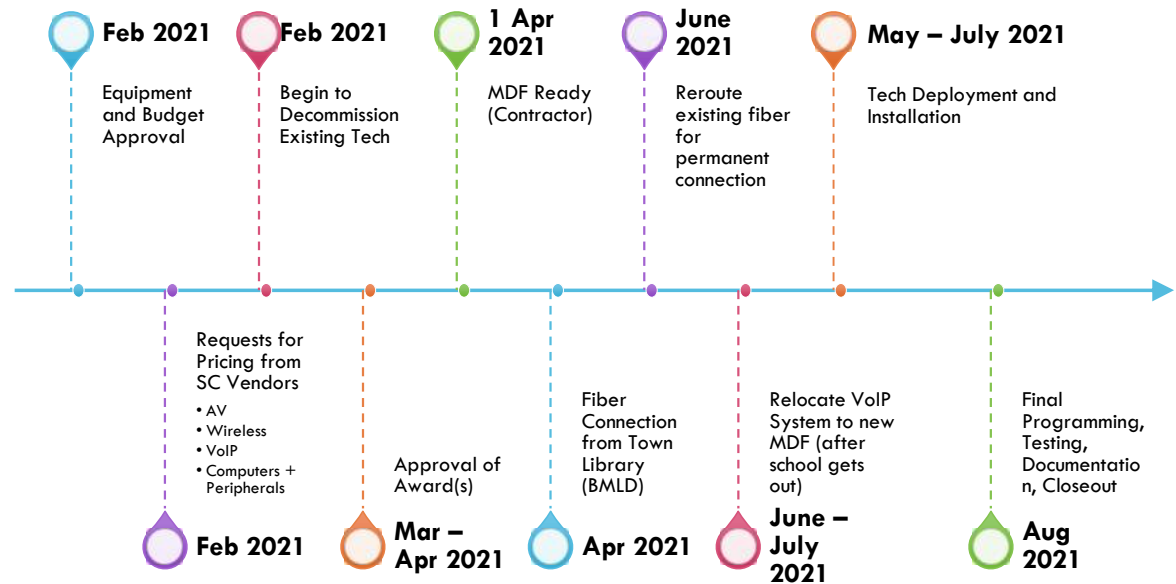
# PROCUREMENT METHOD

- State Contract (SC) Similar to FFE
- Two Primary Phases of Procurement

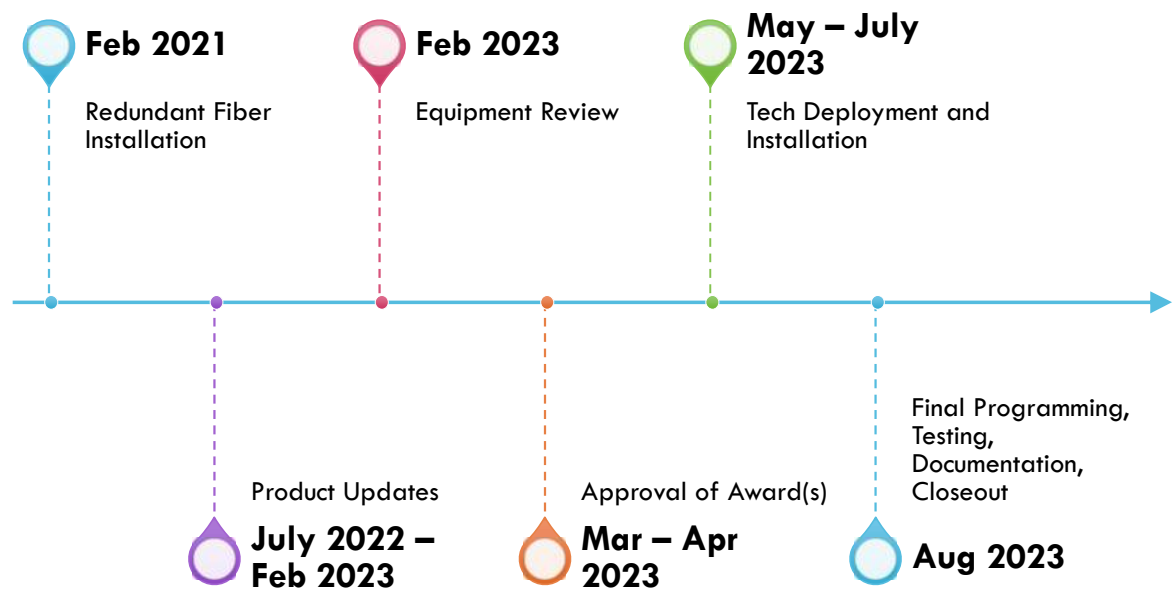


- Network, Wireless, VoIP
  - Network Professional Services – SC LCN
  - Wireless Professional Services – SC LCN
  - AP Installation – 2-3 SC Vendor Quotes (ALE Authorized)
  - VoIP - NEC via State Contract
- Classroom AV Technology
  - 2-3 State Contract Quotes (SMART Authorized)
- Computing Hardware
  - Direct SC – Dell and Apple
  - Hardware Deployment and Installation – Dell and Apple Authorized/Approved Vendor via SC
- Printers and Peripherals
  - Direct SC – CDW
  - Deployment and Installation – Dell/Apple SC Vendor

# PHASE 1 SCHEDULE



## PHASE 2 SCHEDULE







QUESTIONS