SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

January 14, 2020

ARCHITECTURAL SERVICES POOL

ARCHITECTURE ENGINEERING PLANNING INTERIORS SUSTAINABILITY GRAPHICS ACCESS COMPLIANCE

LIONAKIS

Laura Knauss

Principal-in-Charge

Brian Bell

Project Manager

Matthew Harris

Project Architect

Aaron Buehring

Director of Educational Environments

Elena Nansen

Sustainability Specialist

Local Project Team

FOUNDED IN
1909

190+
EMPLOYEES

8
SERVICES

- Architecture
- Engineering
- Planning
- Interiors
- Graphic design
- Sustainability
- Access Compliance
- Laboratory Design

5
CORE MARKETS

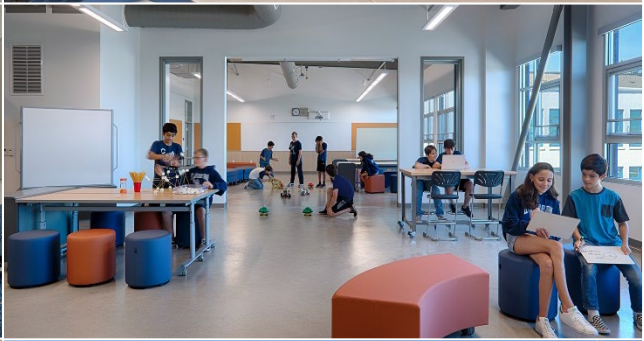
- Education
- Healthcare
- Commercial
- Civic
- Science & Technology

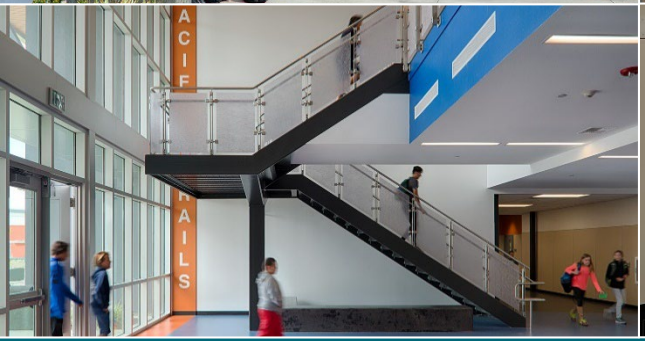
5
OFFICES

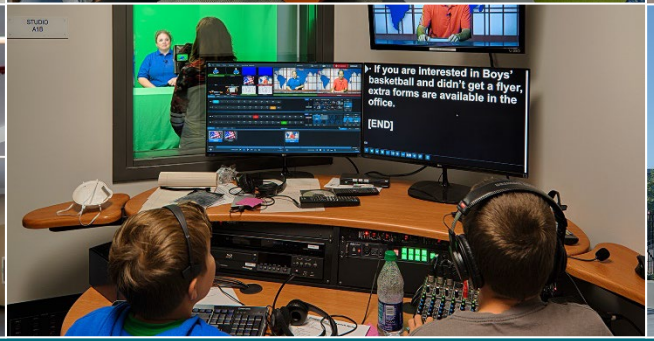
- Sacramento
- Oakland
- San Jose
- Newport Beach
- Honolulu

80+
LEED Accredited
Individuals on Staff

LIONAKIS QUICK FACTS



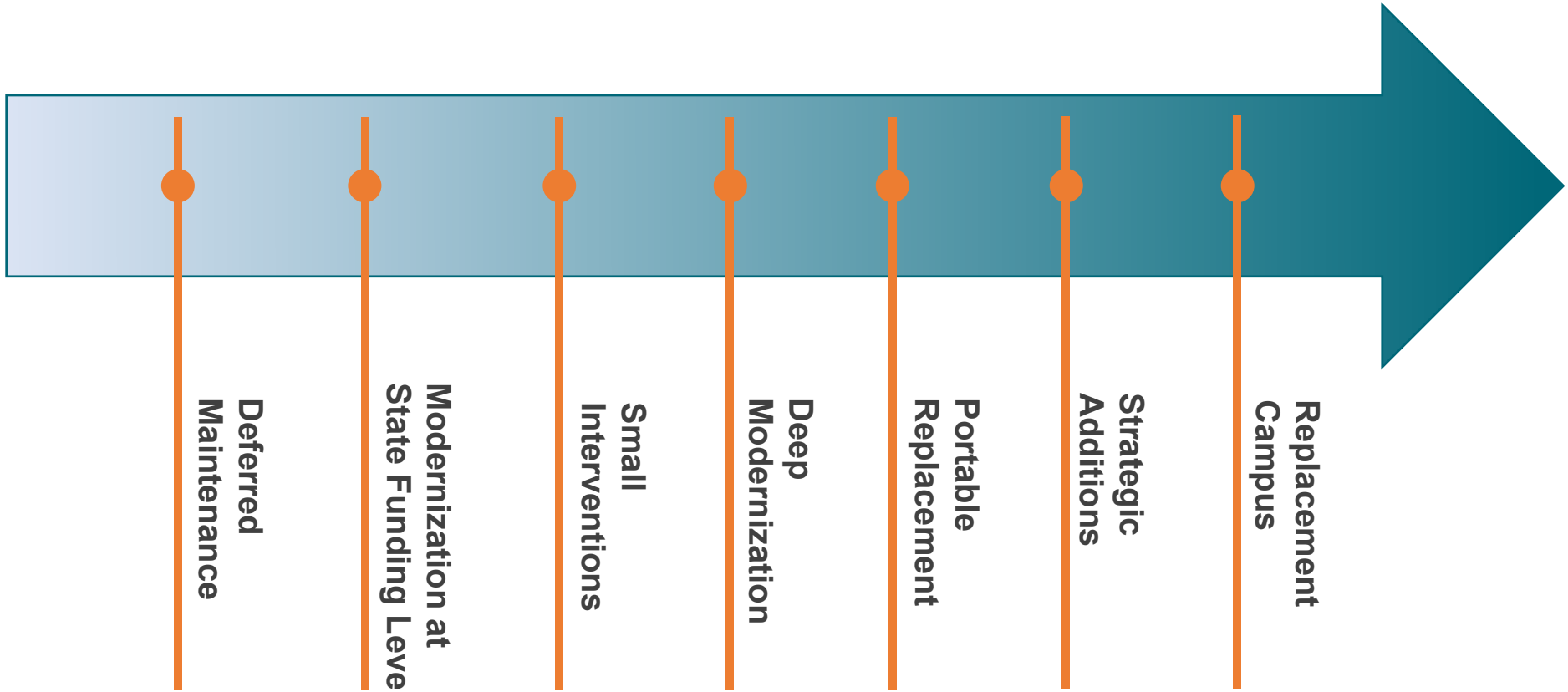




K-12 Experience

Modernization Spectrum

From Basic to Transformation

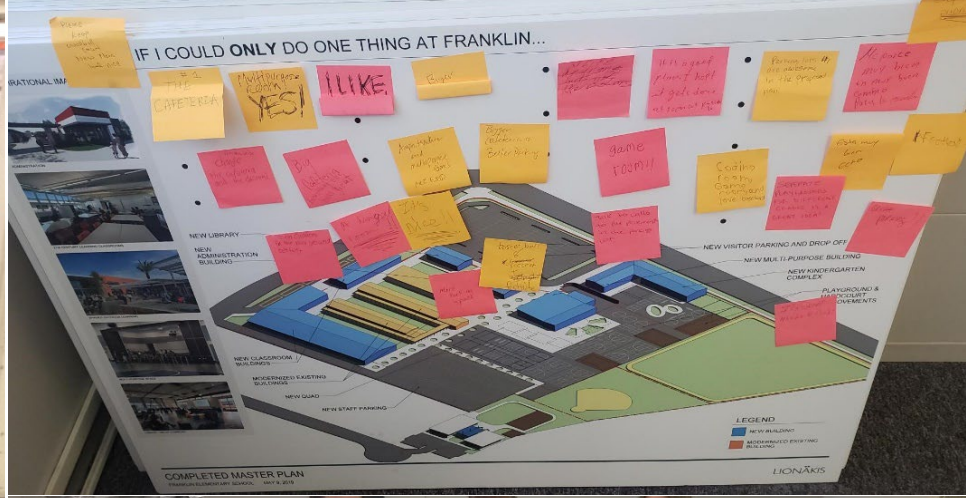


Finding the balance…

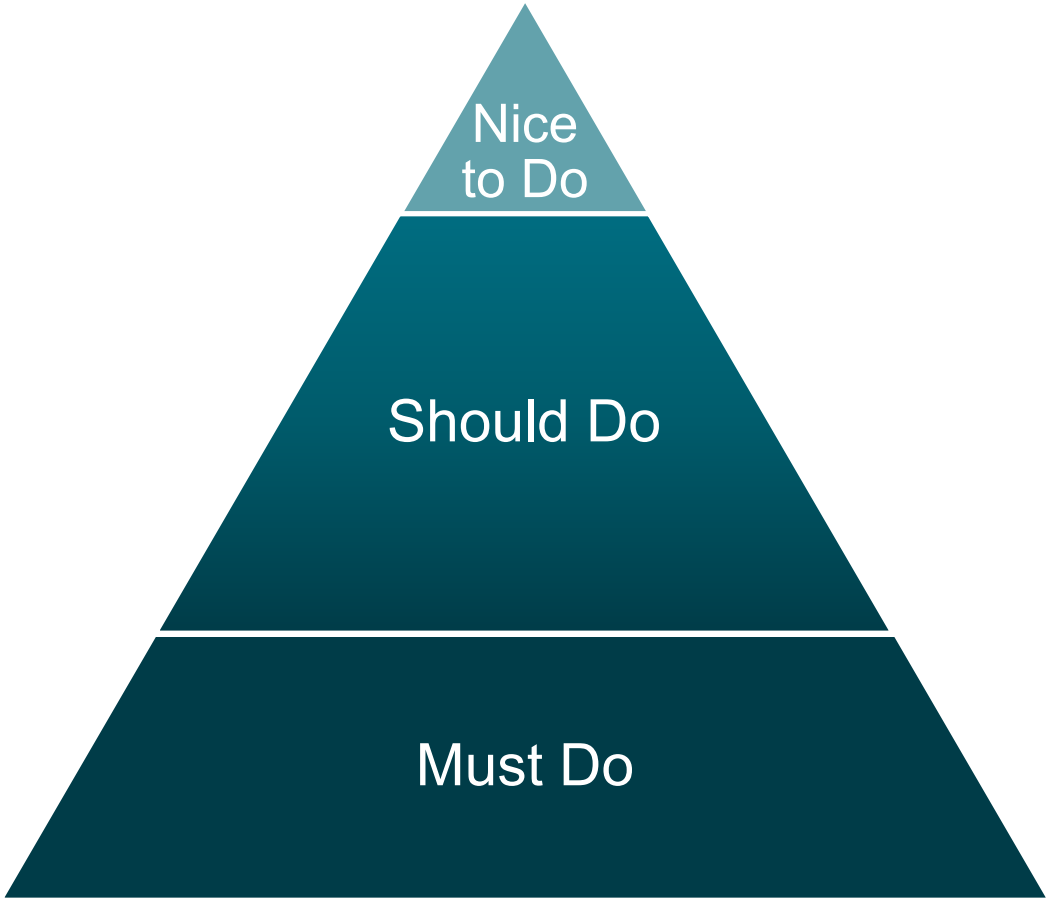
What are the options for construction type?

How do we prioritize new construction and modernization?

BETWEEN MUST DO, SHOULD DO AND NICE TO DO



Stakeholder Engagement



Confirming Priorities

KIT CARSON INTERNATIONAL BACCALAUREATE ACADEMY

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

Relocated Administration | Kit Carson International Baccalaureate Academy

Deep Modernization | Kit Carson International Baccalaureate Academy

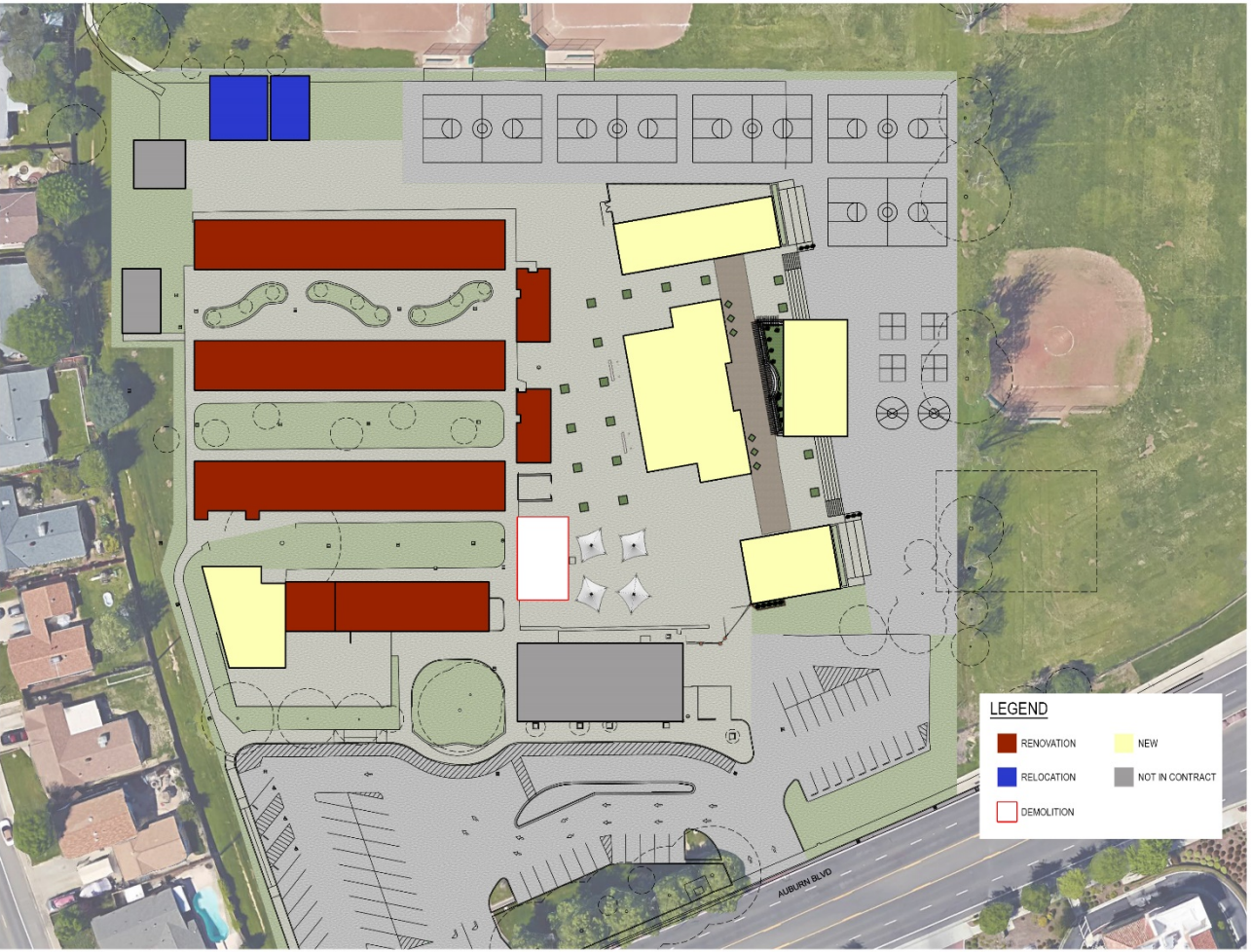
Strategic Addition | Kit Carson International Baccalaureate Academy

Outdoor Classroom | Kit Carson International Baccalaureate Academy

Performing Arts | Kit Carson International Baccalaureate Academy

SYLVAN MIDDLE SCHOOL

SAN JUAN UNIFIED SCHOOL DISTRICT



Site Plan | Sylvan Middle School

Before

New Front Door | Sylvan Middle School

Modernized Classrooms | Sylvan Middle School

STEAM | Sylvan Middle School

Maker Spaces | Sylvan Middle School

MIRA LOMA HIGH SCHOOL SCIENCE ADDITION

SAN JUAN UNIFIED SCHOOL DISTRICT

Strategic Addition | Mira Loma High School Science Addition

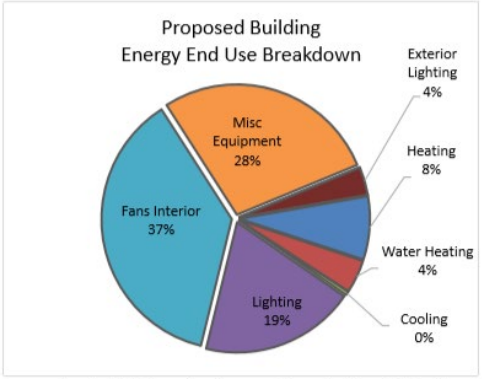
NextGen Learning Environments | Mira Loma High School Science Addition

VISUALIZATION IN 3D: Virtual Reality (VR) & Quick Response (QR) Codes

CLAIRE LILIENTHAL K-8 SCHOOL

SAN FRANCISCO USD

Analysis and Results



The team modeled the building in Energy Pro. Daylighting was modeled using IESve with the Radiance plug-in. The daylighting results were integrated into the EPro simulation by adjusting the annual lighting schedule.

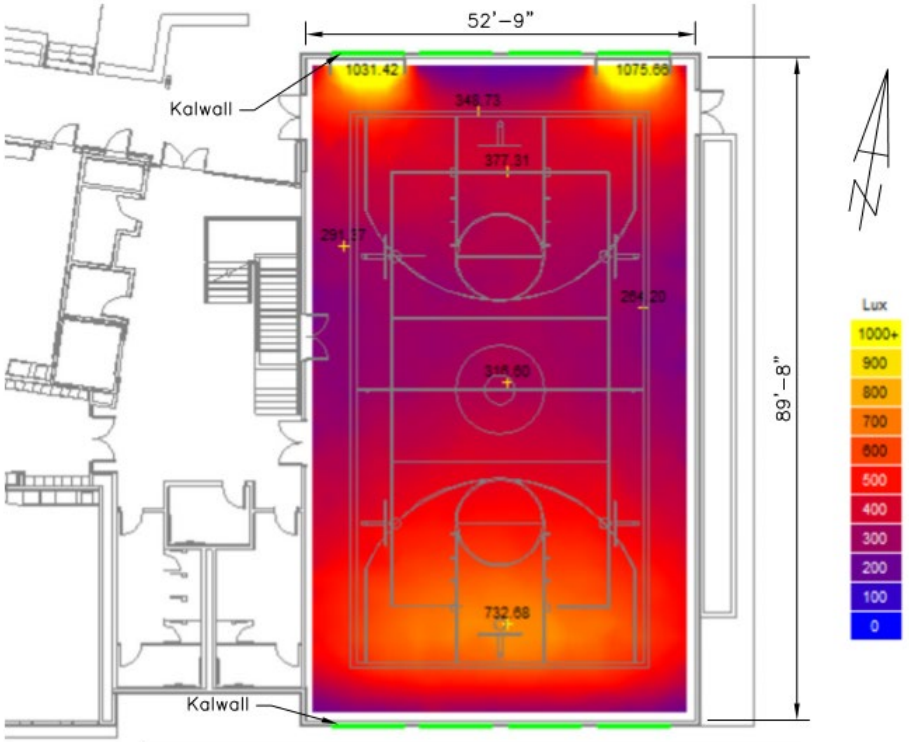
The team used a "traditional" school schedule, which assumes 180 instruction days per year, 1 week spring and fall vacations, and Christmas and summer vacations.

The Energy Pro simulation predicts an annual energy consumption of **82.476 kWh**. This equates to a **EUI of 13.4 kbtuh/sf-yr**.

The energy simulation shows power is used according to the graph at left.

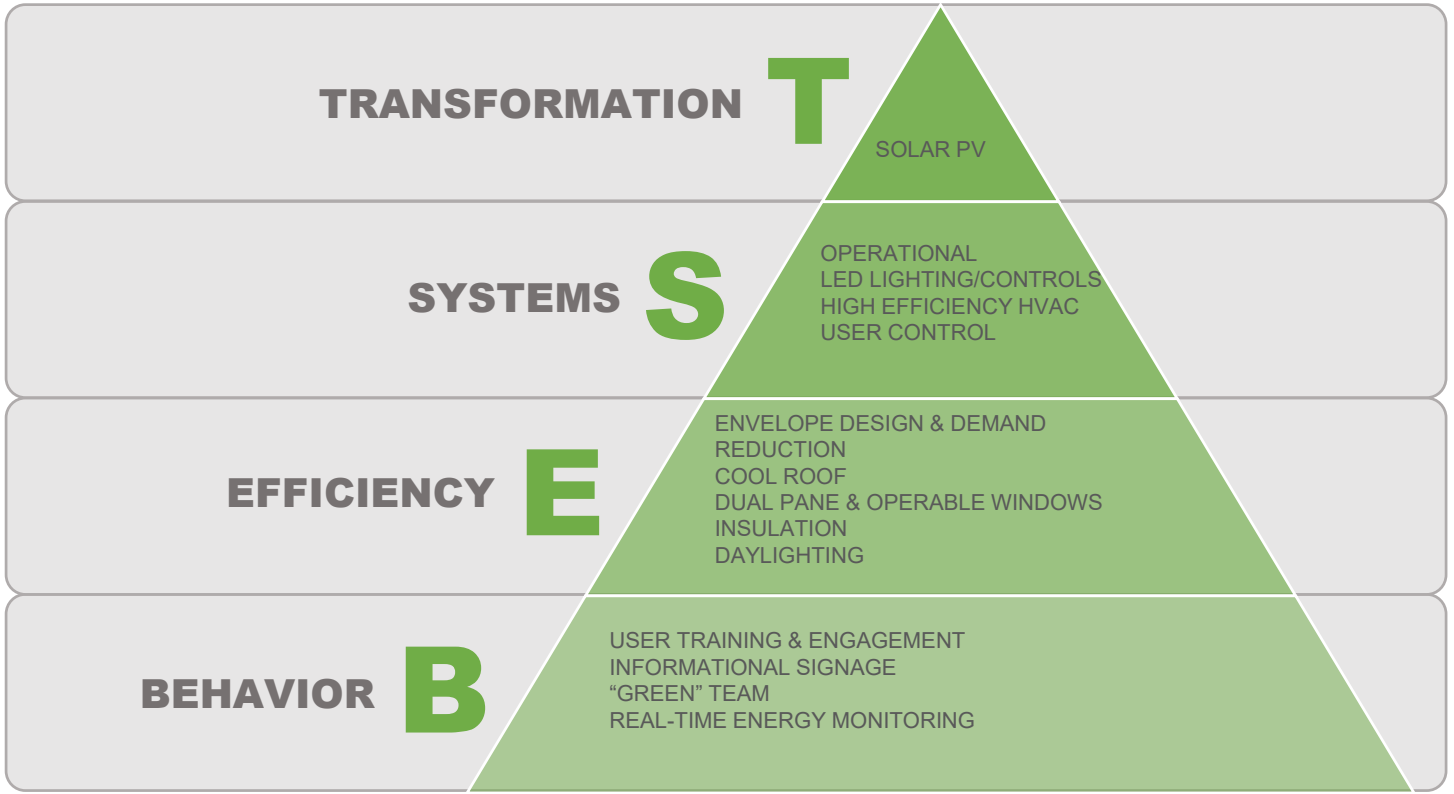
The graph at left shows the total building energy use, EUI, and the campus solar potential. **It shows the building has done significantly better than its target energy use, and that the expected energy consumption is slightly lower than the generation potential confirming this project has been designed to achieve ZNE.**

DAYLIGHT MODEL RESULTS
Illuminance



Radiance Illuminance for June 21st at 12:00 pm during sunny sky
10.76 Lux = 1 fc. Task height is 3'-0"
Average Value is 39.1 fc (421 lux)

New Multi-Purpose Space | Claire Lilienthal Elementary School


TRANSFORMATION
T
SOLAR PV
SYSTEMS
S
OPERATIONAL
LED LIGHTING/CONTROLS
HIGH EFFICIENCY HVAC
USER CONTROL
EFFICIENCY
E
ENVELOPE DESIGN & DEMAND REDUCTION
COOL ROOF
DUAL PANE & OPERABLE WINDOWS
INSULATION
DAYLIGHTING
BEHAVIOR
B
USER TRAINING & ENGAGEMENT
INFORMATIONAL SIGNAGE
“GREEN” TEAM
REAL-TIME ENERGY MONITORING

DID YOU KNOW?

Natural Daylight has a number of advantages, including improving occupant's productivity, increasing the connection to the outdoors, improving health, increasing energy savings and enhancing quality of light.

DID YOU KNOW?

Landscape irrigation practices consume a large quantity of potable water, sometimes accounting for **30%-70% of the water consumed** in nonagricultural uses.

NATURAL DAYLIGHTING

Ways we achieved natural daylight in this building:

Tubular skylights bring in daylight and diffuse it throughout the second floor hallway and gym.

White ceiling tiles help reflect natural light deeper into the classrooms.

Special glazed windows are used in the gym which evenly disperse the light throughout the space.

SITE

The implementation of **bio-swales** mimics the site's natural hydrology which helps the water filter through the soil below, returning to the water table naturally.

Permeable pavement is used through-out the hardscape. This pavement lets water infiltrate through to the soil below the pavement. Doing this reduces the amount of chemicals picked up by the water before it goes back into the water system.

By using **native and drought tolerant** plants, we are able to reduce the site's potable water use.

Reclaimed water: The building is set to hook onto the city's reclaimed water. This "purple pipe" water can be used to replace potable water in some building uses.

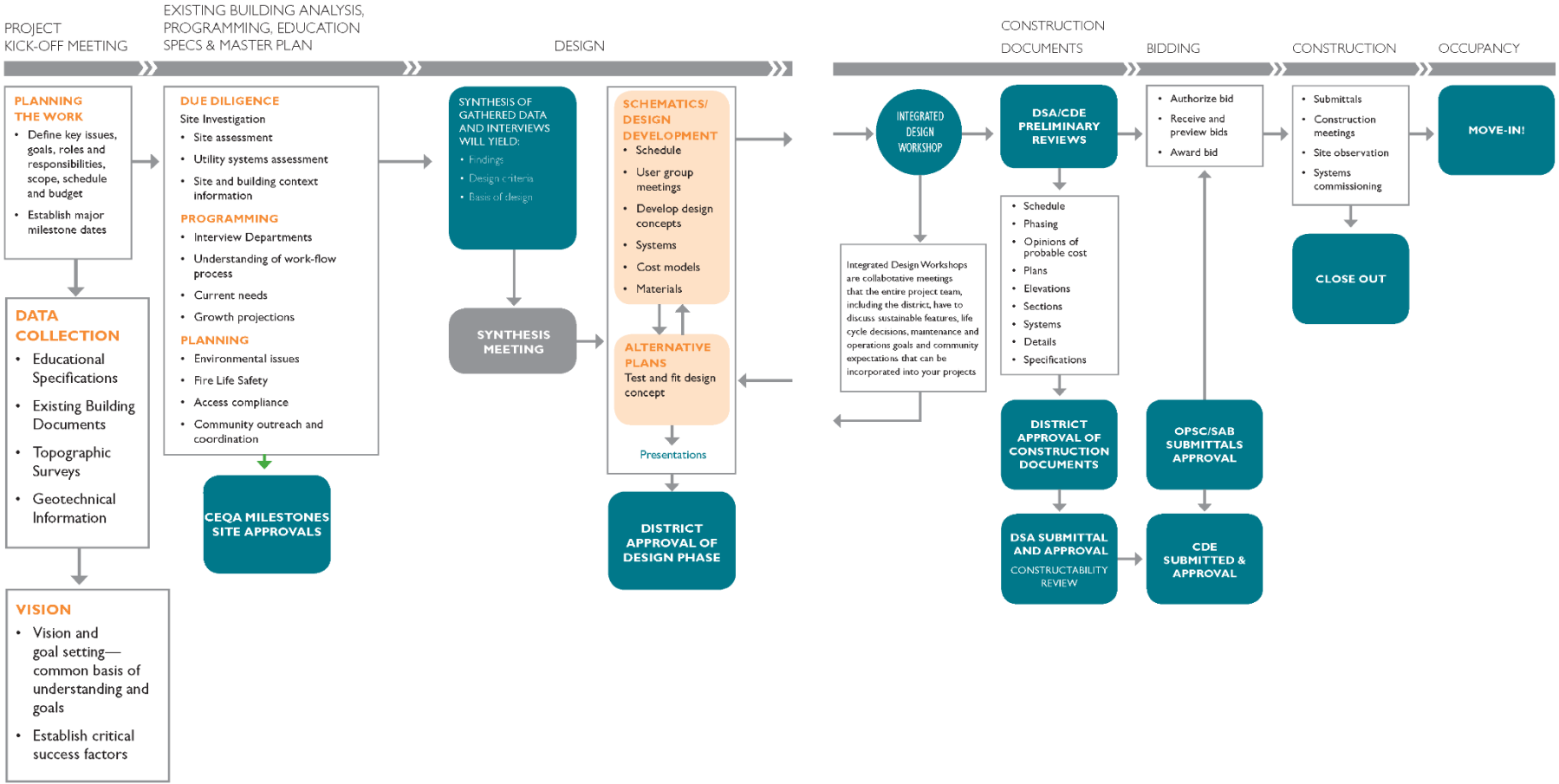
Libraries & Innovation Labs | Claire Lilienthal Elementary School

Innovation Labs | Claire Lilienthal Elementary School

Interiors & Furnishings | Claire Lilienthal K-8 School

FRANKLIN HIGH SCHOOL CAREER TECHNICAL EDUCATION

STOCKTON UNIFIED SCHOOL DISTRICT



Work Plan & Schedule

Black Box Theater | Franklin High School

Scene Shop, Make-up Lab, Costume Lab | Franklin High School

SHASTA ELEMENTARY SCHOOL

CHICO UNIFIED SCHOOL DISTRICT

CHPS DIRECTORY

Shasta Elementary School's Campus was designed to meet rigorous CHPS (Collaborative for High Performance Schools) guidelines for an environmentally friendly, green and energy efficient building.

One of the primary goals of high performance school design is to expose students and staff to the close connections that behavior and building operations have on energy and resource use, and their impact on the environment. **Look for the signs that describe the green features of the building.**

Other high performing features on the campus include:

New Kindergarten Classrooms | Shasta Elementary School

"The study showed that students that attended daylit schools ***outperformed*** the students in non-daylit schools 5 to 14%."

Daylighting in Schools: Improving Student Performance and Health at a Price Schools Can Afford

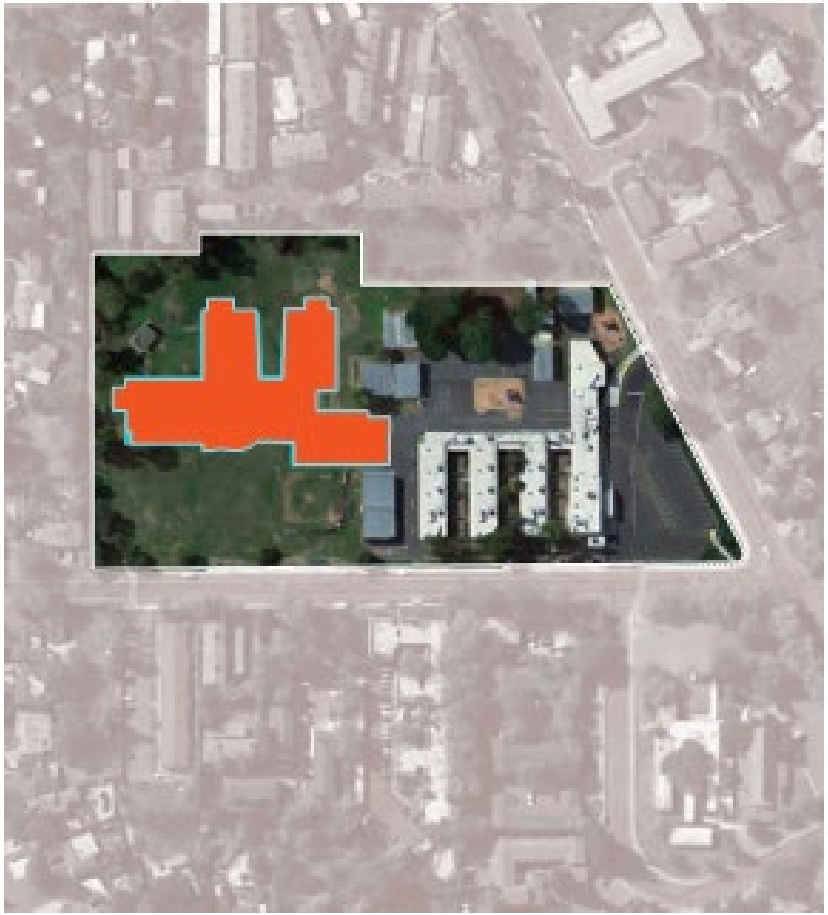
- With reference to Heschong Mahone Study and a similar study of schools in North Carolina

Chico Unified School District: District Specifications / Standards Matrix and Comparison

CUSD Specification Number	UPDATE 3/1/18	Section Title	Current CUSD Product Material / District Standard	CUSD Comments / Standards	Lionakis Specification Number	Section Title	Current Lionakis Product Material/ Manufacturer	Comments / Proposed Modifications / Sustainability Features
DIVISION 09 - FINISHES								
09 30 13		Ceramic Tile Work	Dal-Tile, American Olean 4.25 x 4.25 semi-gloss, epoxy grout -	STD - toilet rooms - wainscot w/ accent pattern per Dist Std Details	~~09 30 00~~	~~Tiling~~	Daltile, US Ceramics, American Olean	
~~09 51 00~~		~~Acoustical Ceilings~~	~~Armstrong - Cortega Tectum "v" line - NRC .50 .60~~		09 51 13	Acoustical Tile Ceilings	USG, Armstrong, Certainteed	12/4 - forward tech cut sheets for Certainteed Performa Symphony ceiling tile; cheaper and higher NRC rating /better acoustical performance
~~09 53 00~~	3/1/2018	~~Suspended Acoustical Ceilings~~	~~USG, Armstrong, Chicago Mettalic~~		09 53 00	Suspended Acoustical Ceilings	USG, Armstrong, Chicago Mettalic	Lionakis spec section has current DSA IR and code referecnes. Installation requirements are taken directly from DSA IR 25-2.13
					09 54 26	Linear Metal Ceiling Systems	Ceilings Plus, Hunter-Douglas, Rulon	Vestibule / Admin only - acoustical insulation
					09 64 66	Wood Flooring	Junkers Solid Wood	
09 65 16		Resilient Flooring	Armstrong (VCT,Sheet), Burke/Flexco/Roppe (Rubber)		~~09 65 00~~	~~Resilient Flooring~~	Armstrong, Forbo, Tarkett, Mannington	Lionakis spec section combines all resilient flooring and base products into one section and eliminates the requirement for ASTM F1869 calcium chloride testing
09 65 43	3/1/2018	Linoleum Floor Coverings	Armstrong (DLW, Marmorette), Forbo	STD - limit linoleum to MPRs, SDC CRs - not for wet locations. Paint game striping				
				STD - sports flooring use Tarkett Omnisports Compact (2mm)	~~09 65 66~~	~~Resilient Athletic Flooring~~	Use Tarkett Omnisports 2mm flooring	
~~09 67 00~~		~~Decorative Urethane Cement Flooring System~~	~~Sika Industrial Flooring System~~					
~~09 67 23~~	3/1/2018	~~Resinous Flooring~~	~~Sikafloor Comfortfloor~~		~~09 67 23~~	~~Resinous Flooring~~	Sika, Dex-o-Tex, General Polymers	
09 68 00		Carpet	Tandus Centiva (C&A FlexAire, abrasive action II walk-off) 24x24 tiles or Mohawk Group ("First One Up") 24x24 tiles	STD - All carpet Tandus Powerbond roll goods or Mohawk Unibond Plus Bloc System. Provide walk-off mat at all exterior door locations. Confirm tile vs roll; conflicting info	~~09 68 13~~	~~Tile Carpet~~	Tandus, Shaw, Milliken	12/4 - Between Mohawk and Tandus; interiors to review finish/color in roll vs tile; CHPS recycle points
					09 77 23	Fabric Wrapped Panels	Micore 300, Homaste - 4'w x 1/2" thick panels	
					09 77 23	Fabric Wrapped Panels	MDC Wall Coverings, Len-Tex, Kampala	LL - identify # of walls at offices, conf rooms, etc. for tack board; detail to adhere to wall - not hang with clips
					~~09 81 00~~	~~Acoustical Insulation~~	Knauf Ecobatt, Owens-Corning, Johns Manville Thermafiber	Included in CUSD insulation spec

DYER-KELLY ELEMENTARY SCHOOL

SAN JUAN UNIFIED SCHOOL DISTRICT



Plans | Dyer Kelly Elementary School

RELATIONSHIP WITH DSA

All Files › 04-112835

04-112835

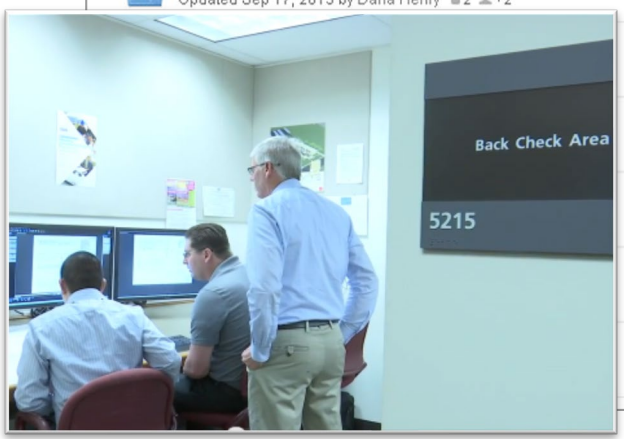
Files and Folders

Canyon Crest Academy

04-112835_AE_20149
Updated Sep 17, 2013 by Alyssa Jose 4 +1

04-112835_CCD Submission
Created Jun 10, 2013 by Laura Vioral 0

04-112835_Contractor_20090
Updated Sep 17, 2013 by Dana Henry 2 +2



DSA 6-A

ARCHITECT/ENGINEER VERIFIED REPORT

This form shall be completed by the Architect or Structural Engineer in General Responsible Charge and those architects o with delegated responsibility for observations of construction, as reported on the Application for Approval of Plans and Sp (form DSA 1), in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-336 or 4-240.

School District/Owner: Roseville Joint Union High School District	DSA File #: 31 - H3
Project Name/School: Oakmont High School - Life Skills	DSA App. #: 02 - 11
Date of Report: 09-17-13 / Number of Attached Pages: 2 (If none, enter zero.)	DSA 152 Card #(s): 1

Note that ***DSA approved*** construction documents, referred to below, are those portions of the construction documents, duly approved by the DSA, that contain information related to and affecting the Structural Safety, Fire/Life Safety, and Accessibility portions of the project.

List all inspection card numbers for which this verified report applies.

COMPLETE SECTIONS 1 & 2 AND PROVIDE ALL REQUIRED DOCUMENTATION

1. REASON FOR FILING THIS VERIFIED REPORT *(Check applicable box.)*

☒ **Interim Verified Report:** List affected form DSA 152 Inspection Card Section #(s): 2, 3, & 4

☐ **Final Verified Report:** Construction of all work, shown in the *DSA approved* construction documents, is complete. *The Design Professional in Responsible Charge shall complete the following:*
Deferred Submittals: One of the following must be checked in order to file a Final Verified Report
☐ This project does not require deferred submittals
☐ All deferred submittals are approved by the DSA.

☐ **Termination of services** prior to completion of all work shown in the *DSA approved* construction documents. *The A General Responsible Charge, and the professional whose services are terminated, as indicated below, shall sign th*
☐ Arch/Eng. in General Responsible Charge ☐ Structural Engineer ☐ Mechanical Engineer ☐ Electrical En

☐ **Construction work suspended** for more than one month. Provide date of last construction activity:

☐ **DSA Request** Dated:

2. CONSTRUCTION CHANGES AS OF THE DATE OF THIS REPORT *(Check applicable box.)*

☐ There are no changes to the *DSA approved* construction documents.

☒ All changes to the *DSA approved* construction documents have been approved by the DSA.

☐ There are changes to the *DSA approved* construction documents that have **not** been approved by the DSA. *(Briefly the changes. Attach additional pages if necessary.)*

I attest that, based on my own personal knowledge (as defined in California Code of Regulations, Title 24, Part 1, Sections 4-336 a that, except as marked in Section 2, as of the date of this report, the work has been performed and materials have been used and i in every material respect, in compliance with the *DSA approved* construction documents. I declare under penalty of perjury that I pr this report and that all statements are true.

Design Professional in General Responsible Charge: *(Signature)* _____
Print Name: Laura Knauss-Docous | CA Registration No: C-20[illegible] | Date: 09/

Architect with delegated responsibility: *(Signature)* _____
Print Name: | CA Registration No: | Date:

Structural Engineer with delegated responsibility: *(Signature)* _____
Print Name: Kerry Volker | CA Registration No: S-3737 | Date: 9/17

Mechanical Engineer with delegated responsibility: *(Signature)* _____
Print Name: | CA Registration No: | Date:

Electrical Engineer delegated responsibility: *(Signature)* _____
Print Name: | CA Registration No: | Date:

Submit completed form to the DSA Regional Office with construction oversight authority for the project.

☐ DSA OAKLAND 1515 Clay Street, Suite 1201 Oakland, CA 94612	☒ DSA SACRAMENTO 1102 Q Street, Suite 5200 Sacramento, CA 95811	☐ DSA LOS ANGELES 700 N. Alameda Street, Suite 5-500 Los Angeles, CA 90012	☐ DSA SAN DIEGO 10920 Via Frontera Rd., Suit San Diego, CA 92127

Revised 03/22/13 | DIVISION OF THE STATE ARCHITECT | DEPARTMENT OF GENERAL SERVICES | STATE OF CAL

LIONAKIS

MEETING MINUTES

Bidwell Junior High School
014229
DSA Pre-Application Meeting

Meeting Number: 01
Meeting Date: September 10th 2014

Attendees: Julie Kistle, CUSD
Lalanya Rothenberger, CUSD
Sal Dutta, DSA
Tim Powell, DSA
Zhengchang Yong, DSA
Brian Bell, Lionakis
Lucas Jolly, Lionakis
Jeffrey Yip, Lionakis

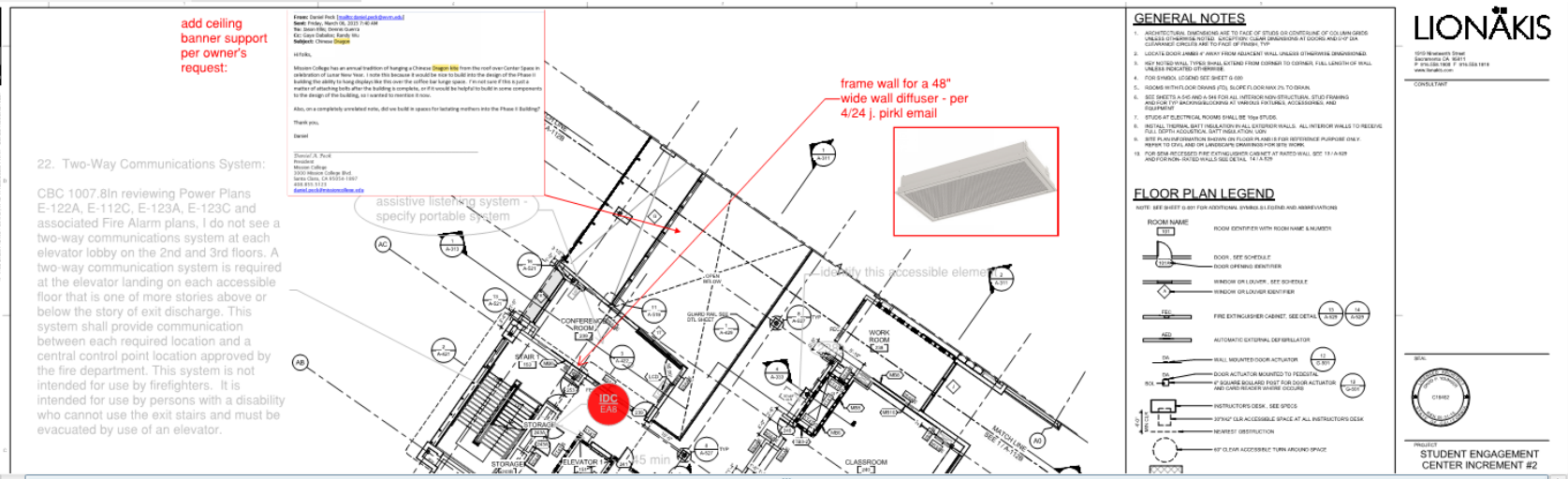
CC:

Item No.	Action	Subject/Comment

		Bidwell Junior High School modernization
		• Budget - $4.2 mil construction cost
		• Schedule:
		  o DSA submittal by end of November 2014
		  o DSA back check and approval end of March 2015
		  o Start of Construction June 1st 2015

1.1		**Campus Program Overview** Lionakis presented the overall scope of work at the Bidwell Junior High School campus: • Complete renovation of Administrative Space; including offices, lobby, and student/staff restrooms • Modernized multi-purpose room with new finishes, in-wall tables, technology, etc. • Modernized library with new space for resource room, new finishes, technology and mechanical upgrades • Modernized Gymnasium with new HVAC, electrical upgrade and new finishes • Parking and drop-off lane improvements at campus entry
1.2	Lionakis / DSA	**Structural Review** The topics of structural concern were: • Admin structure would maintain the same lines of lateral resistance. • Collector modifications may be required based on extend of shear wall modifications. • Existing diagonally sheathed roof diaphragm capacity may be determined from SDPWS values. • Additional interior square footage at administration is okay since existing roof diaphragm is unchanged and the wall being moved is not a shear wall.

MBRII - ARCHITECTURAL | MBRII - TELECOMM



75% A-112A (15 of 170)

Filter Search Columns Summary

Subject	Page	Lock	Status	Checkmark	Author	Date	Color	Comments	Depth	Priority	Primary Locati...	Assigned To	Primary
Re: IDC-Callout	Page A-...				Jason Ellis	5/15/2...		pulls coordinated					
Callout	Page A-...				michael.walsh	4/9/20...		what is this dimensioning to?					
Callout	Page A-...				michael.walsh	4/9/20...		we don't seem to be showing solid surface and MDF seems to be called out twice.					
Callout	Page A-...				Lucas.jolly	4/22/2...		Coord extents of depressed slab wtih structural and this detail.					
Callout	Page A-...		Completed set...		Lucas.jolly	4/2/20...		Hide duct. Coord louver height with mech.					
Rectangle	Page A-...		Completed set...		michael.walsh	4/2/20...							
Callout	Page A-...		Completed set...		michael.walsh	4/2/20...		these issues are why the annotation phase exists					
Group	Page A-...		Completed set...		DSA-ACS	4/2/20...		fire					
Line	Page A-...		Completed set...		DSA-ACS	4/2/20...							
Group	Page A-...		Completed set...		DSA-ACS	4/2/20...		opening effort may be increased to					
Text Box	Page A-...		Completed set...		DSA-FLS	4/2/20...		45 min					

Home Session Leave Finish

Lionakis Project Delivery - 60...

Status:

Attendees

- kristina.gard... O...
- Jason Ellis M...
- alaina.moore O...
- Alexis Carver O...
- arnold O...
- Ashley Page... O...
- Brad Dupon... O...
- CEN O...
- Charissa.Chan O...
- Chuck Gard... O...
- Cynthia Goo... O...
- Dave Huhn,... O...
- David Lamei... O...
- Dennis O...
- dennis.guerra O...
- Emily.Clark O...
- Erica Alexan... O...
- everett.barney O...

Documents

- MBRII - ARCHITE...
- MBRII - CIVIL.pdf
- MBRII - CIVIL - SS...
- MBRII - FIRE PR...
- MBRII - FIRE PR...
- MBRII - FOODSE...
- MBRII - FOODSE...
- MBRII - LANDSC...
- MBRII - LANDSC...
- MBRII - MEP.pdf

Quality Control | Bluebeam

Community Spaces | Dyer Kelly Elementary School

New Learning Spaces | Dyer-Kelly Elementary School

Sacramento City Unified School District

relationships. performance. design.

LIONAKIS