2016 Exhibition of School Planning and Architecture

SAMUELI ACADEMY

New Construction

Charter High School Santa Ana, California





SAMUELI ACADEMY

PHASE 1 SITE PLAN

LEGEND:

- A. PHASE 1 ACADEMIC BUILDING
- B. STEM LABS (FUTURE)
- C. STUDENT SERVICES/UNION BUILDING (FUTURE)
- D. WELLNESS CENTER (FUTURE)
- E. FAMILY STYLE RESIDENCES (FUTURE)
- F. COMMUNITY BUILDING
- G. VISITOR PARKING AND DROP OFF

Community Environment:

Orangewood Children's Foundation (OCF) has found that by the time a foster child starts high school they have had as many as 10 placements and attended as many as 15 different schools. Creating a strong School community, with joint-use and industry partnerships was part of the educational mission for the school and has these characteristics:

- A safe, stable and consistent environment where they can thrive academically, socially, ethically, and emotionally.
- A faculty who will show unconditional support and pose high expectations.
- A learning environment that will support how this generation's children learn best.
- A school where students can learn strong life skills, build trust and maintain personal relationships.
- A place where they belong.









Community Environment:

Samueli Academy is financed entirely by donation from local charities, organizations and generous philanthropists, and will be built overtime as funds are accumulated. It was decided that the academic building would be the first phase of permanent construction on campus to suit capacity needs. As a token of immense gratitude and to memorialize these charitable contributions, donors are recognized throughout the campus with various types of building signage.





urban village : [live + learn]



Learning Environment:

Samueli Academy is a microcosm of the world that these children will becoming a part of and need to find success in. One of their tools for success will be a STEAM education which will be a first step in becoming lifelong learners and career-ready community contributors. Real-world experience, both inside and outside of the classroom, help prepare students for life after Samueli Academy, whether they are college-bound or ready to enter the workforce.





project based collaboration : walls open + furniture rolls





Learning Environment:

Engineering and Design Pathways were created as the foundation for a STEAM program. Flexibility is paramount for supporting multiple teaching modalities and allowing a project-based learning environment to thrive. Walls open, furniture rolls, and collaboration is supported within classrooms, commons areas and even in cozy corridor wall niches. Technology is integrated and students learn with interactive smart boards which help to support the 1 to 1 ratio of laptops to student. Four studios, a learning commons and STEM lab are featured on each floor.

Physical Environment:

The 7.1 acre site, once blighted by an abandoned hospital that was a breeding ground for crime, has become a proud member of this diverse neighborhood. Numerous outreach meetings were held to engage neighbors in the Schools Master Plan and establish agreeable zoning guidelines to address building height, parking, noise, safety and security.

The 3 story, 30,000SF Phase 1 academic building features innovative learning spaces that support the engineering and design pathways in their STEM focused, project-based curriculum. Within the academic building are flexibly designed studios, articulated in a simple building mass and straightforward steel braced frame structure. Separated from the ground by a durable 18" concrete stem wall, they are sheathed with vertical corrugated siding custom painted in varied warm hues. The unique program elements and the building entrances are highlighted with smooth fiber cement panels and glass. Learning studios feature operable windows, with ample daylight and views. Clip-on shades protect glass at southern orientation.



Physical Environment:

- Currently seeking LEED for Schools Certification
- Exceeds California Title-24 2008 standards by approximately 26%.
- Buildings orients on an east-west axis to maximize north light, while sunshades on the south protect from glare and heat gain
- Windows open, natural light illuminates the classroom, and daylighting occupancy controls are provided.
- Exposed steel structure and building systems are a laboratory and educational tool for smart green design
- Phase 1 storm water runoff is collected and infiltrated in permeable pavers beneath parking spaces at the perimeter of the site to recharge the groundwater.

| INNOVATION IN DESIGN

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Display signage is used throughout the building to educate occupants on methods used to create a healthy, sustainable building.

| INDOOR ENVIRONMENTAL QUALITY

Direct view to outdoors in 90% of all occupied space. All classrooms and other educational spaces are designed to have 45 decibel sound levels.



| ENERGY & ATMOSPHERE

Low wattage light fixtures. Heating, Ventilation and Air Conditioning (HVAC) equipment uses refrigerants that minimize or eliminate emission of ozone-reducing compounds.

| MATERIALS & RESOURCES

Materials used throughout the interior of the building contain a high recycled content. Wood based materials and products used throughout the building have been certified by the Forest Stewardship Council (FSC).

8 | WATER EFFICIENCY







THE ACADEMY VISIONING COMMITTEE - " A Partnership Mission"



Planning Process:

For over 30 years, the Orangewood Children's Foundation (OCF) has provided innovative services for abused and neglected children and at-risk families to end the cycle of child abuse one life at a time. The Samueli Academy is a pivotal part of this mission. The planning engaged OCF board members, emancipated foster students, educators, county officials, philanthropists, OCstem, and a design team of architects, landscape architects, engineers and interior designers. Facility tours, case studies and design charrettes encouraged participation and engagement in a fun and meaningful way to establish shared values and vision for the new school.



Planning Process:

The result was a Master Plan for 450 students with a 115,000 SF academic downtown focused on project based learning featuring a student union, innovation and health center intertwined with studios, labs and collaborative learning commons. The 40,000 SF residential village will board 80 students and their guardian families creating a vibrant neighborhood featuring patios, terraces, and growing gardens. This 'live and learn' urban village is designed to be an inspirational environment where learning happens everywhere.

Planning Phase Timeline

Visioning Committee Meetings

Mtg #1	August 4, 2011
	conceive the program & conceptual design
Mtg #2	August 16, 2011
	conceive the program & conceptual design
Mtg #3	August 25, 2011
	entitlements process and other issues
Mtg #4	August 30, 2011
	Exploration the program & conceptual design
Mtg #5	September 7, 2011
	confirm Program and Space
Mtg #6	September 15, 2011
	conceive the program & conceptual design
Mtg #7	September 21, 2011
	Team meeting
Mtg #8	October 3, 2011
	demolition/ community outreach
Mtg #9	October 10, 2011
	Team meeting
Mtg #10	October 11, 2011
	conceive the program & conceptual design
Mtg #11	October 14, 2011
	Team meeting

Mtg #12	October 21, 2011	
	Team meeting	
Mtg #13	October 25, 2011	
	conceive the program & conceptual design	
Mtg #14	October 28, 2011	
	Team meeting	
Mtg #15	November 4, 2011	
	Team meeting	
Mtg #16	November 11, 2011	
	Team meeting	
Mtg #17	November 15, 2011	
	Team meeting	
Mtg #17	November 17, 2011	
	Cost estimate kick off	
Roard presentation, and Subsequent Committee Meeting		

Board presentation and Subsequent Committee Meeting updates/ Design Phase

Visioning Committee (23 members)

Orangewood Children's Foundation (OCF) (15 members) Griffin Structures (1 member) Charter Applicant Consultant (1 member) Design Team (6 members)



THE ACADEMY VISIONING COMMITTEE - " A Partnership Mission"



- student gallery 1
- classroom 2
- 3 flex lab

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- learning commons 4
- workroom/prep 5
- counselling office 6
- small group huddle 7
- 8 faculty work area

PHASE 1 ACADEMIC BUILDING

16'

Exhibition of School Planning and Architecture Project Data

Submitting Firm :	LPA, Inc.
Project Role	Planner, Architect and Engineer
Project Contact	Wendy Rogers
Title	СТО
Address	5161 California Ave #100
City, State or Province, Country	Irvine, CA
Phone	949-261-1001

Joint Partner Firm:	
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	Griffin Structures, Inc.
Project Role	Construction Manager
Project Contact	Deryl Robinson
Title	Vice President
Address	2 Technology, Suite 150
City, State or Province, Country	Irvine, CA
Phone	949-497-9000

Exhibition of School Planning and Architecture Project Details

Project Name	Samueli Academy
City	Santa Ana
State	California
District Name	Charter High School
Supt/President	Chris Simonsen, C.E.O.
Occupancy Date	9/14/2015
Grades Housed	9-12
Capacity(Students)	450
Site Size (acres)	7.1
Gross Area (sq. ft.)	30,100 s.f.
Per Occupant(pupil)	67
gross/net please indicate	
Design and Build?	Yes
lf yes, Total Cost:	\$9 M
Includes:	
lf no,	
Site Development:	
Building Construction:	
Fixed Equipment:	
Other:	
Total:	\$9 M





















