Phase 3 – Gold Gymnasium & Exploration Building
Santa Monica High School
Santa Monica Malibu Unified School District

A4LE – Conceptual Design

June 9th, 2021
Redefining Public Education
Innovative K-12 schools like our High School client engage contemporary social and cultural change by fostering evolving pedagogy to prepare students for a dynamic future. The new Exploration Building and Gold Gymnasium provide an equally dynamic environment that integrates new technologies and nurtures creative thinking, focusing on career pathways with flexible, media-rich learning spaces. The project breaks new ground as architecture that is an interactive, adaptable platform, not just a static building. It takes the School’s progressive learning approach to a new level, sets the stage for further campus improvements, and redefines the campus and the educational experience the School provides.

Transforming the Campus
The Exploration Building and Gold Gymnasium comprise a major addition to the 3,000+ student campus. We reimagined the surrounding site to maximize outdoor learning opportunities and augment physically distanced indoor classroom learning. Contiguous open spaces converge on a Central Commons, providing a new campus focal point. The project site is at the intersection of two main pedestrian axes, providing a welcoming public face to the greater community.

Inviting Community Engagement
Exploration Building educational programs will have close ties to the regional economy of Southern California. The project’s presence along a major boulevard and visibility as the new face of the School will facilitate industry partnerships. The building’s open loft format supports a range of interactive classroom/lab environments allowing integration of real-world workplace experiences with academics. Gold Gym also provides direct community engagement—in athletics, dance programs, yoga & fitness, and includes support facilities for the adjacent landmark amphitheater.

Advancing Open Building Design
The Exploration Building has a steel moment frame, open ceilings with flexible pipe grids, and non-bearing partitions that are reconfigurable for evolving needs. Stacked air handling units on the south facade mechanical towers allow for independent zoning and leave the roof free for outdoor learning. Gold Gymnasium follows the steep existing grade to create a stepped building of telescoping volumes that open onto one another. The court configuration allows for diverse uses—practice games, competitive tournaments and multi-purpose assemblies.

Teaching Sustainability
The Exploration Building and Gold Gym, together with the new Discovery Building (in construction), are intended to teach sustainability through demonstration features. The Exploration Building’s rooftop photovoltaic arrays form a shade structure over five rooftop classrooms bordered by garden planters. East and west staircases wrap around living/green walls. Roll up glass doors connect engineering labs and art studios to outdoor working terraces. An adjacent hill, at the highest level of the sloping site is preserved and enhanced as a green oasis at the campus heart.

Consensus-Building Design Process
The design process was conducted entirely during the global pandemic. Thus, the team relied heavily on web-based conferencing. Socially distanced hybrid sessions were held with District Staff and key educators to work with physical models and large-scale plans to finalize massing and site configuration. In addition, an extensive programming process allowed educators to specifically shape the career technical program. Student and community input were solicited through separate, dedicated zoom sessions and District staff participated extensively in ongoing design and technical sessions.

Promoting Diversity, Equity, Justice
Our planning approach connects spaces and programs at multiple levels for equal accessibility to enhanced learning. The current maze of buildings will become a coherent, navigable network in an interconnected landscape. Useable and accessible open space at the center replaces the inaccessible slopes fronting an empty boulevard. Greater visibility, varied outdoor gathering spaces and contemporary lighting enhance both security and social engagement. Removing dysfunctional older classroom buildings creates spaces for active outdoor learning and social interaction. Healthy, daylit interior spaces will provide a positive student experience. The Exploration Building offers generous rooftop classroom spaces with spectacular views of the coastline and mountain ranges.

Reframing Active Learning
The Exploration Building’s space program provides access to active, career-oriented learning. Its full range of environments includes:
• simulation spaces for careers in justice
• health, engineering & technology class-labs
• graphic arts & ceramics studios
• collaboration spaces on every level
• dynamic multi-level Pitch Space for gatherings and exhibitions

Executive Summary
Santa Monica High School
Phase-3 – Gold Gymnasium & Exploration Building

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Key Site Characteristics

The new Gymnasium and Exploration Buildings sit within a multi-building hillside campus. The new complex will replace the existing Gould Gym Cafeteria and a small surface parking lot bordering Pico Boulevard to the south. In preparation for Phase 3, the History Building and existing Art Studio Building will be demolished, and Prospect Hill lowered and partially re-graded. Organized on a series of terraces stepping down towards the football field on the southwest corner of the site, the existing densely clustered academic buildings are varied in age and character and have reached the point of obsolescence.

The project site gives the new buildings a prominent location within the campus. Bridging Viking Way at mid-campus the Exploration Building will have dramatic views to the Santa Monica Mountains to the north and west to the Greek Theater and the new Gymnasium Building will orient to the west toward the football field Athletic fields and the ocean beyond. The Paseo and Gateway Plaza will unite the two new buildings and provide generous outdoor pedestrian circulation and places for outdoor gathering, enhancing the presence and access of the Greek Theater.

Gold Gym

The Santa Monica High School Gymnasium building is built on a steep hillside along Pico Blvd. The existing hill rises twenty-nine feet from west to east. The Gymnasium building gracefully steps up the hill with three main levels connected by a continuous undulating curved roof. This approach highlights the existing landscape of the Santa Monica High School site and reduces the amount of excavation required.

The Gold Gymnasium the Auxiliary Gymnasium and the Dance Studio are the three main spaces created by the level changes. The three volumes are interconnected with a continuous curving ceiling and telescoping views through the length of the building.

The main circulation is pulled outside along the north façade of the gymnasium which further exemplifies the Santa Monica region and its local Mediterranean climate. The Paseo is an exterior promenade shared with the campus.

Exploration Building

The new Exploration Building is a four-story Career Technical Education (CTE) Classroom building that is centrally located on the Santa Monica High School Campus along Viking Way between the Greek Amphitheater and Prospect Hill. The building will house various Learning Labs for PLTW/Engineering Health/Wellness and Law/Justice for Career Technical Education (CTE) programs as well as Studios for the Media & Entertainment and Visual Arts Programs.

The ground level of the building consists of Learning Labs that are visually open to the Paseo to the south and open to an outdoor workspace to the north. The eastern portion of the building at ground level opens out to a Plaza at the base of a new amphitheater. Art Studios have access to an Outdoor Arts Plaza to the east at the top of Prospect Hill. The second and third levels of the Exploration Building house Learning Labs Studios and Design Labs connected by a two-story Atrium that bridges over Viking Way and marks a major north-south axis through the campus. The Atrium is programmed as a Student Commons a gathering space for Pitch Presentations and Exhibition space.

Scope of Work Narrative / Program, Budget, Stakeholders

Program

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<tr>
<th>Program</th>
<th>Cost</th>
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<tbody>
<tr>
<td>ATHLETICS / PE / DANCE</td>
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<tr>
<td>ACADEMIES / CAPSTONE</td>
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<tr>
<td>VISUAL &amp; MEDIA ARTS</td>
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<td>ADMINISTRATION</td>
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<td>BUILDING / FACILITY</td>
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<tr>
<td>GROSSING FACTOR</td>
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<tr>
<td>TOTAL</td>
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Budget

$105,000,000
Demolition, Buildings and Site Development cost

Stakeholders

1. Board of education of the School District
2. Superintendent and Assistant Superintendent of Education
3. Facilities Improvement Program staff
4. Principal and faculty (especially relating to athletics, visual arts and career technical education)
5. Site Committee, including parents, teachers and facility staff
6. Students
Redefining Public Education
Innovative K-12 schools engage in diverse social and cultural challenges and rapidly evolving pedagogy to prepare students for a dynamic future. Incorporating new technologies, nurturing creative thinking, focusing on career pathways, and providing flexible learning spaces are ways in which schools are redefining public education. Learning calls for the architecture to be less about a building and more about an operable, adaptable platform.

Unifying the Campus
The New Classroom and Gymnasium Buildings are a major addition to the 3000+ student campus. The surrounding site is also reimagined to maximize outdoor learning opportunities to augment physically distanced indoor classroom learning. A series of contiguous open spaces converge on a new Central Commons that provides a new focal point on campus. The project is sited at the intersection of existing main campus axes and provides a positive public face to the greater community.

Key Programs:
- Classroom
- Art & Multi-Media Studios
- Gymnasium

Site Condition:
- Existing Hillside
- Demolition of Two Existing Buildings

Project Date:
- Expected Completion 2023

Project Size: 111,000 GSF

Connecting the Campus & Community

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New Classroom Building: 54,000 gsf / 36,750 nsf

New Gymnasium Building: 57,000 gsf / 46,140 nsf
Cross Sections through Exploration Building

East-West Section through Gymnasium

Santa Monica High School
Phase-3 – Gold Gymnasium & Exploration Building
View of Exploration Building Looking South
View of Paseo Looking North
Informal Collaboration

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Center for Innovation – Pitch Space
Typical Art Studio
Rooftop Classroom
Dance Studio overlooking Gold Gym
Cascading Athletic Arenas
Gold Gym and Exploration Entry View to Northwest
Street View Looking West from Bench
Paseo View Looking to Gold Gym Entry
Flexible Circulation System

Open Building Components & Envelope

Defining a Versatile Footprint

Flexible Column Grid

Open Building Components
Open Building – Reconfigurable Floor Plans
Pipe Grid System

Dispersed Mechanical Towers

FLEXIBLE UNISTRUT GRID AT OPEN CEILING

MECHANICAL SYSTEM: 12 INDEPENDENT AHU ZONES (LEVEL 2 TO ROOF)
A Health & Wellness
- Optimizes daylight, views and outdoor connection
- Maximizes north & south fenestration with east-west orientation
- Promotes increased activity and social interaction
- Maximizes outdoor circulation and minimizes climate controlled interior spaces

B Living Wall & Roof Garden
- Absorbs solar radiation and reduces cooling loads
- Creates natural habitat and aesthetically enhances building
- Adds passive cooling to exterior stairways at each end of building
- Potential for demonstration hydroponic gardening for Health / Wellness / Sports Medicine Program
- Reduces storm water run-off

C Photovoltaic Panels
- Estimated roof areas for PV panels: 14,000 sf

D Moment Frame Structure
- Minimizes construction impact on the surrounding neighborhood by reducing onsite welding and construction time
- Builds long term flexibility into each floor plate
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