COMPREHENSIVE MODERNIZATION

GROVER CLEVELAND HIGH SCHOOL

LOCATION
RESEDA, CA

COMPLETION
2022

CATEGORY
NEW CONSTRUCTION

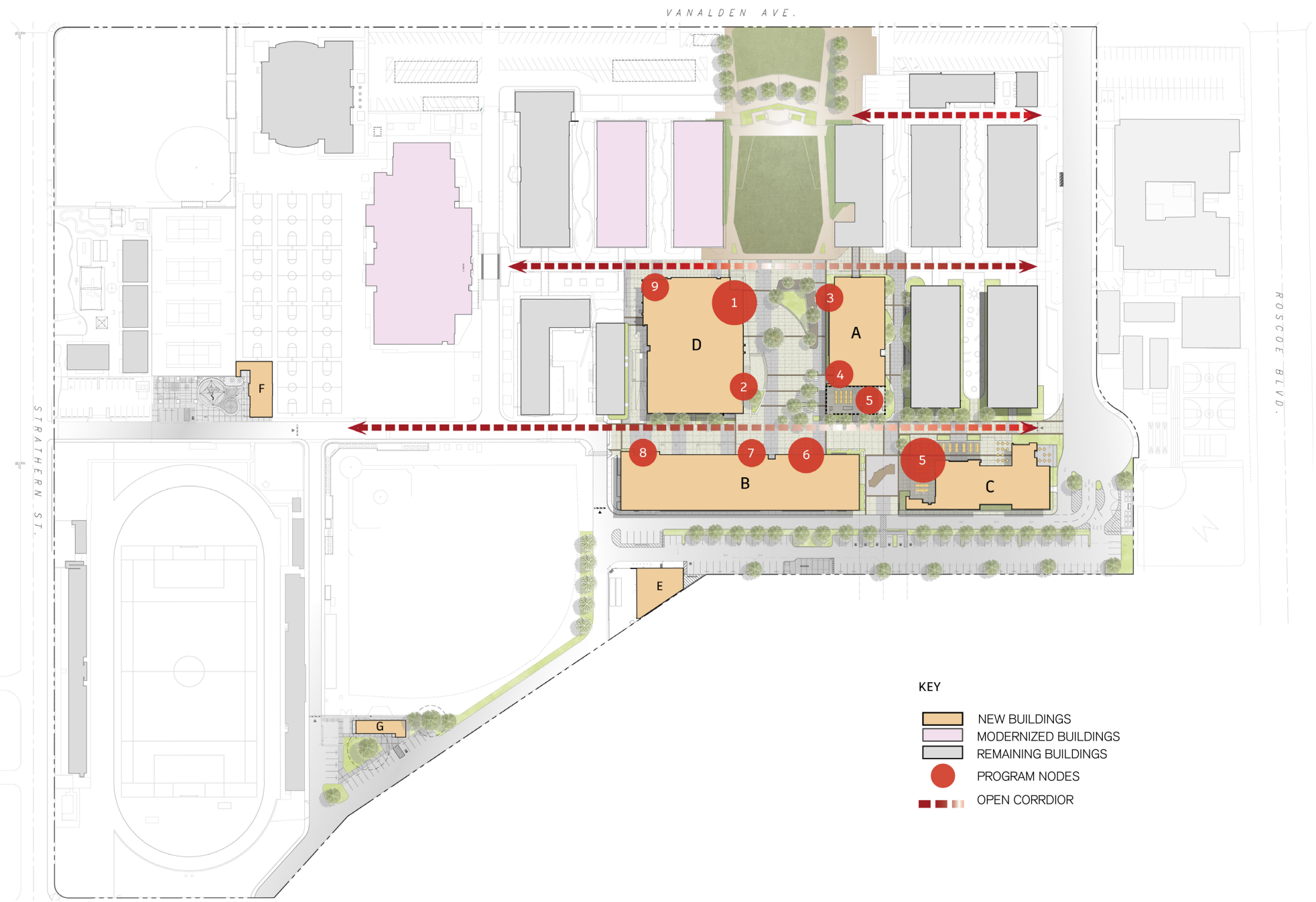
Grover Cleveland High School was constructed during the post-war building boom that transformed Los Angeles. Like the surrounding neighborhoods that sprouted from the farms of the San Fernando Valley, the high school's design reflected the mid-century sensibilities of the time. The original campus plan is characterized by single-story classroom buildings with low-slope roofs laid out in a finger-plan united by a central covered walkway/circulation spine.

Completed in 1961, the school was planned for 1,500 students. By 2017 when planning for the comprehensive modernization of the campus began, the enrollment had grown to over 3,200 students. The facilities and grounds were impacted by overcrowding and in need of a major expansion to address ongoing educational needs.

The District's campus master plan called for the design and construction of seven new buildings adding over 176,000 GSF (more than doubling the square footage of the existing facilities) for performing arts, general & special education classrooms, science labs, drafting & engineering labs, multi-media classroom, food service and dining, childcare, and campus support services.

The program also called for the modernization of two existing classroom buildings, a voluntary seismic upgrade of the gymnasium, and a refresh of finishes throughout the existing campus buildings.

SCHEMATIC RENDERINGS



BUILDING NAME

GENERAL CLASSROOM BLDG
GENERAL & SCIENCE CLASSROOM BLDG
FOOD SERVICE BLDG
PERFORMING ARTS BLDG
MAINTENANCE & OPERATIONS
CHILD DEVELOPMENT CENTER
TRANSPORTATION

1 MPR LOBBY
2 DANCE ROOM
3 STUDENT STORE
4 BUILDING A LOBBY
5 COVERED EATING AREA
6 BUILDING B LOBBY
7 FLEXIBLE ENGINEERING YARD
8 DEAN'S SUITE
9 CAD DRAFTING LAB

SITE PLAN

LEGEND

1 QUAD
2 COVERED WALKWAY
3 ORIGINAL QUAD
4 EXISTING CLASSROOM BUILDING
5 LANDSCAPED PASEO
6 STAGE
7 OUTDOOR CLASSROOM
8 OUTDOOR COVERED DINING
9 PROMENADE / FIRE LANE
10 COVERED ROBOTICS YARD
11 CALIFORNIA MAP
12 CAMPUS SECURITY PARKING
13 FACULTY PARKING
14 BUILDING A - GENERAL CLASSROOMS
15 BUILDING B - SPECIALTY & SCIENCE CLASSROOMS, SATELLITE ADMINISTRATION
16 BUILDING C - FOOD SERVICE
17 BUILDING D - PERFORMING ARTS

NORTH

0' 25' 50' 100' 150'

ENLARGED SITE PLAN

DESIGN GOALS

THE DESIGN-BUILD TEAM'S SOLUTION FOCUSED ON FOUR KEY GOALS:

- respecting the campus' mid-century design and site planning;
- creating environments that promote and foster relationship building through serendipitous social interaction, collaboration, extracurricular activities, and self-directed problem solving;
- employing the tenets of biophilic design to improve cognitive function, psychological and physiological health; and,
- emphasizing security, ease of maintenance, durability, and long-term performance.

CONSTRUCTION COST

New Construction: $105 million
Modernization: $9 million
Interim Housing: $13 million

SCHOOL & COMMUNITY ENGAGEMENT

Through a multi-layered process of community engagement, the client developed the following goals for the project: 1) Improve circulation to minimize conflicts between vehicular and pedestrian traffic (Provide a safe, student-oriented environment). 2) Replace modular / portable buildings with purposefully integrated, visually and physically, accessible facilities which enhances student safety by removing hidden areas, creating defensible space, and improve wayfinding. 3) Provide engaging and purposeful exterior spaces that offer opportunities for instruction, learning, and socialization. 4) Upgrade / replace aging infrastructure. 5) Increase parking. 6) Support the school's unique instructional vision by providing improved and flexible large group assembly areas. 7) Provide unique flexible environments for specialized programs such as media arts, drafting, engineering design, science, etc. with spaces that support instruction and collaboration. 8) Provide flexible "collaboration" spaces; places for students to gather, collaborate, or work on assignments during extended campus hours. 9) Improve and balance core facility needs with campus enrollment. 10) Replace portable/modular buildings with safe, accessible, state-of-the-art instructional facilities.

Achieving these goals ultimately supports Cleveland High School's mission: "to create community that nurtures global citizens who pursue academic excellence, realize personal success, and demonstrate social responsibility."

Community engagement, including formation of a Project Advisory Group, workshops with campus administration and stakeholders, community informational meetings (in-person and virtual), surveys, and regular bulletins on the school website, extended throughout the predesign, design, and construction phases. Design features that were shaped by the process include: 1) Expansion of parking to reduce impacts to neighboring streets. 2) Protection of existing mature trees and planting of new trees to increase the overall tree canopy on site. 3) Elevated design for the CAD Drafting Classroom to pay homage to the history of the program on the campus.

EDUCATIONAL ENVIRONMENT

Cleveland High School provides multiple pathways for students based on areas of interest, as well as two magnet schools. Pathways include Advanced Studies, Media Arts, Visual Arts, World Languages and Cultures, Child Development, Science & Technology, and Performing Arts. The school hosts a Humanities Magnet and Global Media Studies Magnet as well.

The project enhances the implementation of the school's pedagogies in specialized programs such as media arts, drafting, digital humanities, engineering, science, theater, music, and art, that had previously been restricted due to a shortage of space.

Performing Arts Center

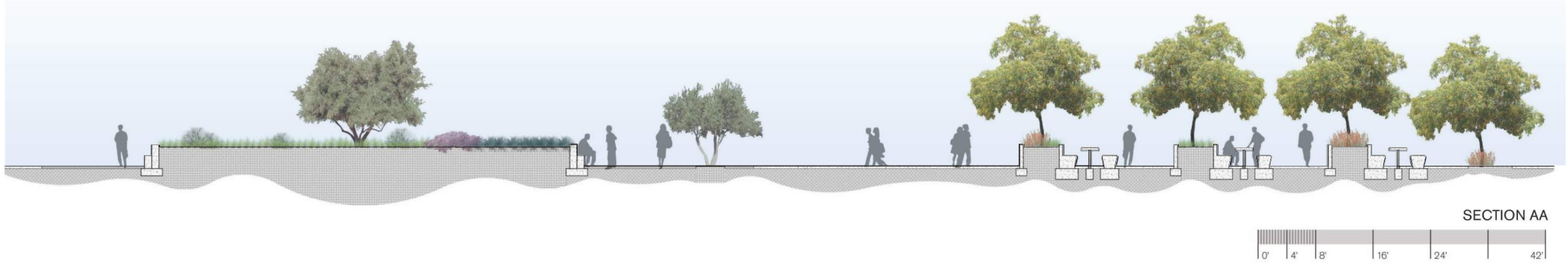
The Multi-purpose Room can seat 1,100 people. Retractable seating creates 450 seats of flexible seating for a variety of uses.

INTEGRATING EXISTING AND NEW

The massing of the program was arranged to reinforce the original finger-plan by extending the existing quad across the central covered walkway and creating a new circulation spine parallel it. The new buildings are organized around the expanded quad with the largest building placed near the back of the site and the two-story buildings stepping down the mass as they merge with the existing single-story campus. The use of a complimentary palette of brick, steel, stucco, and metal-framed glazing that draw from the high school's original mid-century finishes adds to the feeling of visual integration. The new buildings are articulated in simple, geometric volumes that result in a composition of buildings that, while doubling the existing square footage of the school, do not overpower it.

QUAD

The expanded Quad is now the heart of the high school campus. The original covered walkway that connects the new and existing areas of the campus can be seen above.



ENVIRONMENTS FOR BUILDING RELATIONSHIPS

As the new heart of the campus, the Quad provides multiple locations for casual social interaction and collaboration through a variety of seating options, a tree-shaded outdoor classroom, an elevated performance stage, a venue for school dances and concerts, and a covered pre- and post-function event space adjacent to the Performing Arts Lobby. It is further activated by the programs of the adjacent buildings such as the student store, engineering lab yard, student dining, and entrance lobbies. This multi-functional, amenity-rich outdoor gathering space expands the existing landscaped open area to create a large space capable of accommodating the entire student body.

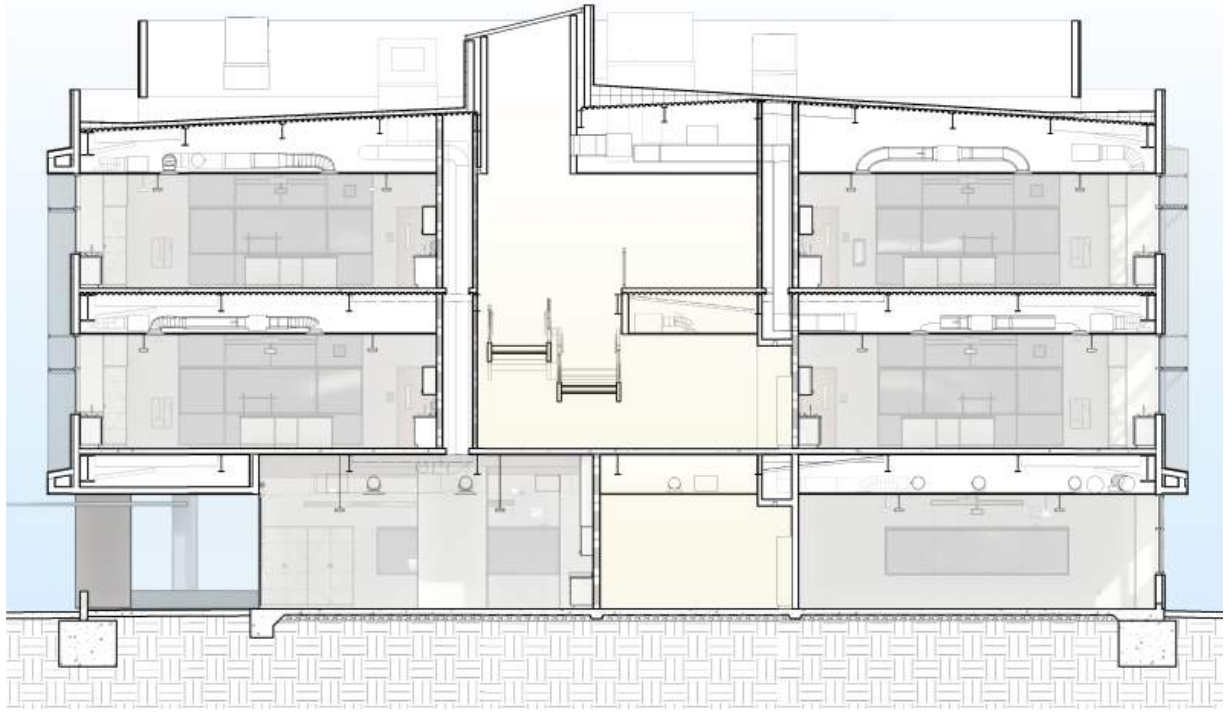
The design team created four different areas for students to use during the lunch period, a key component of relationship-building activities in school. Taking advantage of California's mild climate, they range from totally enclosed and conditioned to exterior with partial shade to exterior with full, deep shade to exterior with vegetated shade. Differing levels of environmental protection allows students to experience thermal variability across the campus, a biophilic tenet. Permitting student choice by providing diverse environments encourages self-determination.

Interior circulation spaces were also designed for social interaction, including furnished breakout spaces in the lobbies of the classroom buildings, alcoves with benches and lockers along the corridors, and seating areas beneath stairs. In the three-story classroom building, a section of the science labs was offset to create a 2-story atrium and stair resulting in an inter-connected Science Village. Breakout areas within the atrium provide opportunities for small group work, tutoring, homework, and socialization within the science-focused environment. Creating quality places outside the classroom for positive social interactions and activities contributes to students' sense of belonging, which is associated with higher student achievement.


EXIT

BIOPHILIC DESIGN

The science atrium is topped with a translucent skylight which provides dynamic and diffuse daylight, a tenet of biophilic design. To this end vision glazing and skylights are provided throughout corridors and lobbies. Natural daylight is also provided to every classroom. Vision glazing in classrooms and corridors, dining spaces and lobbies also provides a visual connection to nature.



BUILDING B SECTION

0' 25' 50' 100' 150'

Vision glazing in classrooms and corridors, dining spaces and lobbies also provides a visual connection to nature. The existing mature tree canopy and new raised and bio-filtration planters provide green views from buildings. Landscaping decisions focused on providing shade and softening edges by creating planting beds that also provide seating opportunities.

Material connections with nature are provided internally as well, not through planting, but through the use of wood finishes. The multi-purpose performing arts room incorporates wood veneer in the acoustical treatment. Casework throughout classrooms is finished with woodgrain plastic laminate or wood veneer. And linear metal ceilings in the corridors and lobbies use a woodgrain finish.

The circulation design also incorporates places for refuge and prospect, dual tenets of biophilic design. Alcoves in corridors, breakout spaces, and seating areas under stairs provide places for students to withdraw without being cut off from the larger social setting. From these areas of refuge as well as at lobby railings and corridor windows, students can survey long distances to observe campus activities and connect with nature.

LONG TERM PERFORMANCE

While achieving programmatic goals, the project also had to meet the District's stringent requirements for security, ease of maintenance, and durability. Vulnerable finishes such as wood veneer and metal panels were held above ten feet to keep them out of reach. Finishes like linoleum, ceramic tile, and high-impact gypsum board were selected for their long-term durability and maintainability.