



Transforming
Downers Grove
North & South
High Schools



2023 A4LE Project Awards
Transformation



Executive Summary

This submittal covers a 2018-2021 building program implemented across two separate high school campuses serving seven different communities. Following a two-year comprehensive master planning study, Community High School District 99 received community support, via referendum, to make extensive improvements to the physical infrastructure and the learning environments at each of its campuses. Completed as a single building program, work at each facility addressed the common themes/goals of improved safety and accessibility, enhanced indoor air quality, and modernization of instructional spaces.

Parity between campuses was a must and celebrating the unique character and community connection of each facility was essential to the success of the improvement program. The District's success in balancing the unique needs and priorities created a single solution which re-imagines and transforms the student learning experience, pivots teacher expectations for a new instructional day model and establishes a common identity for the entire community.



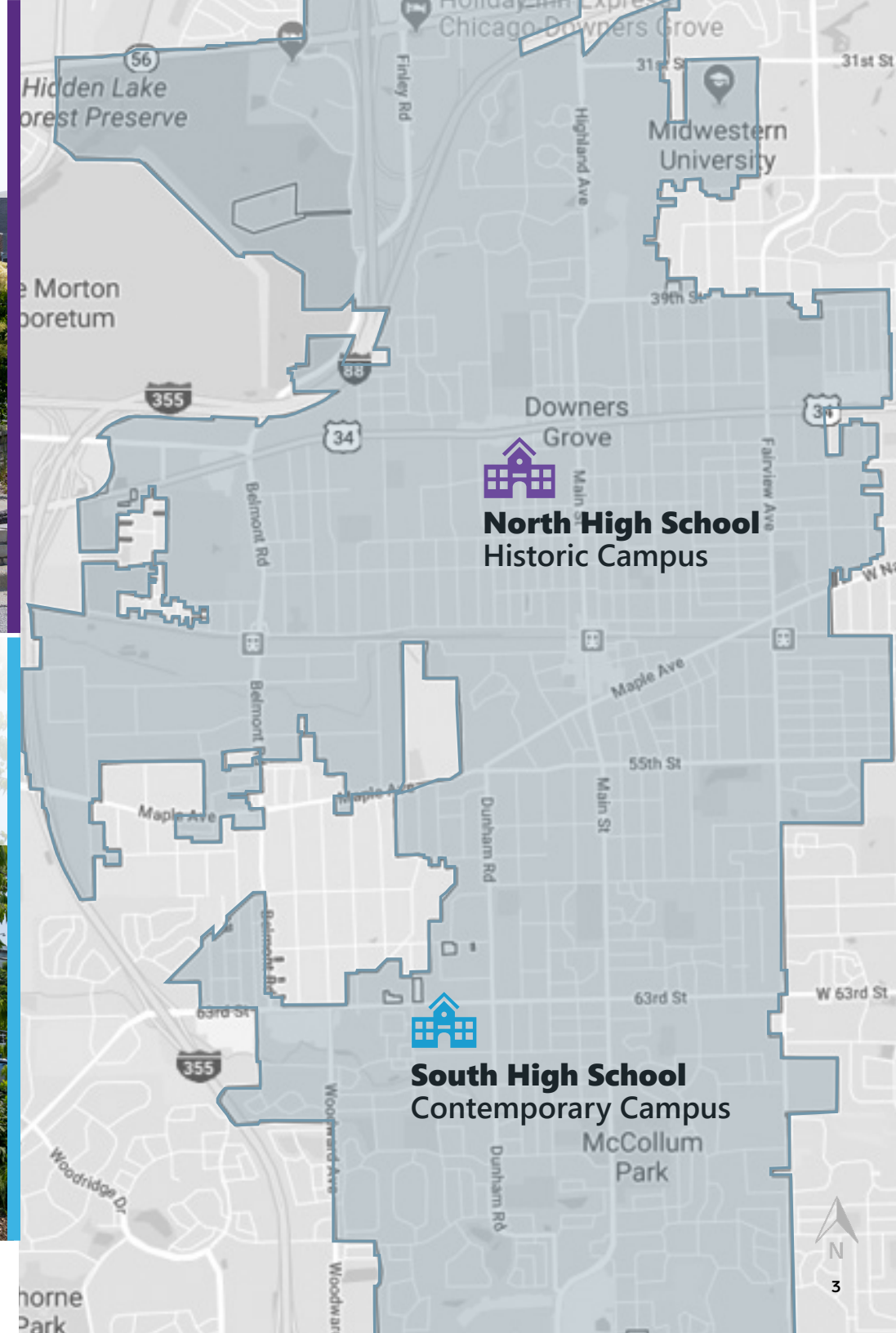
Executive Summary



The new construction (in the background) respects and celebrates the historic quality of this cherished, early 20th century structure.



A new main entrance for an understated, mid-century modern structure hints at the aesthetic reinvention that awaits students and visitors in the rest of the building.



Scope of Work & Budget



Seeking to fulfill the vision of consistent and quality education for all of its students, the District explored a series of improvements at each of its facilities that jointly respects the historical qualities of each building while aligning the student experience across the diverse communities it serves.



Owner: **Community High School District 99**
Location: **Downers Grove, Illinois**
Enrollment: **5,000 students**
Grades: **9 – 12**

Mission + Visioning Statement

Every day, the District 99 community works to provide a foundation for students to confidently pursue a future of their choosing.

District 99 will graduate students who are equipped to realize their potential and positively impact their community and the larger world.



MAKING CONNECTIONS

RESHAPING THE STUDENT EXPERIENCE
+ LOOKING TO THE FUTURE



BY PROVIDING THINGS LIKE
OPEN COMMONS, INDOOR-
OUTDOOR TRANSITIONS,
OPEN SIGHTLINES,
ACCESS TO RESOURCES,
AND BRIDGES AND
STAIRS BETWEEN SPACES,
DESIGNERS CAN CREATE
CONNECTED EXPERIENCES
FOR STUDENTS.

Downers Grove South High School, built as one of a handful of prototype high schools in the region, existed as a sprawling campus with several buildings wings terminating into one another. The resulting image was one that many students described as “factory-like” and “blocky”. Due to its sprawl, core common spaces, such as the library, dining, and performance, existed at opposite ends of the building from one another, limiting the synergy between them and putting a heavy burden on hallway traffic.

The use of sweeping, curved additions helped soften the stocky build of the school and made connections to functions that were previously disengaged from one another. A new learning commons, built in the existing courtyard at the heart of the school, serves as a hub that connects students to programs and resources. Ultimately, with carefully planned additions around the perimeter, a new building image was created for the community.



SOUTH HS / Contemporary Campus

Additions + Renovations: **154,415 gsf**
Existing Site Redevelopment: **41.2 acres**
Construction Cost: **\$62,966,471**

Several core instructional spaces were also modernized. No longer confining learning to individual rooms, these instructional venues are reimagined interconnected programs, that share resources and make instruction transparent. Within these groupings, related academic areas, such as fine arts, science, and career & technical services are visually connected to one another, creating interest and curiosity in programs beyond the four walls of one's classroom.

The relocated main entry projects a new image to the surrounding community. The shaping of the canopy and touches of school pride as one approaches the school sets the table for what one can expect to experience once inside this revitalized, state of the art facility.



The Downers Grove North campus is home to the original Downers Grove High School, which was constructed in 1928 to serve the growing population of this small, railroad-centered town and only served 350 students, at the time. Like many high schools of that era, the building underwent several additions over the decades to accommodate a continuously growing population. The result was a dense and landlocked site, with a proud history left largely engulfed by subsequent building additions.



HONORING

1928

ALLEYS, PLAZAS,
AND MARKETPLACES
COMPRISED AN
URBANISTIC APPROACH
TO HIGH SCHOOL
MODERNIZATION

Given the density of the building, the planning centered around urban strategies, where square footage could be most effectively put to use. The servery opens onto a skylit 'alley', the learning commons is articulated as an outdoor 'plaza', and various student services are accessed via a 'marketplace' of resources. Additions that once enveloped the original high school building were removed, uncovering the rich history of the campus and restoring the original 1928 building as the centerpiece of the school.





Decades of opaque construction was removed around the original school building and replaced with skylights and new program space. The result washes this vintage part of the campus in light, opens it up to a more direct connection with adjoining spaces and celebrates the school community's heritage.

NORTH HS / Historic Campus

Additions + Renovations: **137,200 gsf**
Existing Site Redevelopment: **26.8 acres**
Construction Cost: **\$47,077,582**

Three key strategies were implemented to emphasize the original building. First, as much construction as possible was removed and separated from the original structure, then replaced with a series of skylights. Natural light floods the surrounding area and helps celebrate the vintage quality of the school.

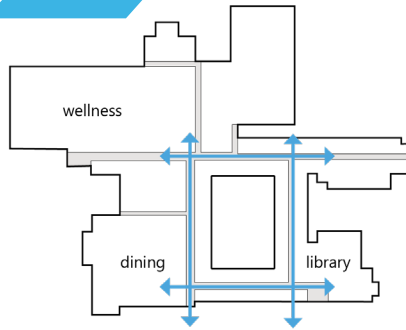
Secondly, an unused exterior courtyard at the center of the campus is replaced by a new, three-story, indoor learning commons. Streamlined access to student resources is prioritized from this venue.

Thirdly, adjacent rows of discrete classrooms lined down adjoining hallways are merged into interconnected suites of related fields, where learning is put on display and curiosity, both inside and outside the instructional venues, is encouraged. This new organization provides the opportunity to realign the daily student schedule, allowing students to be more active participants of their own education.

Scope of Work & Budget

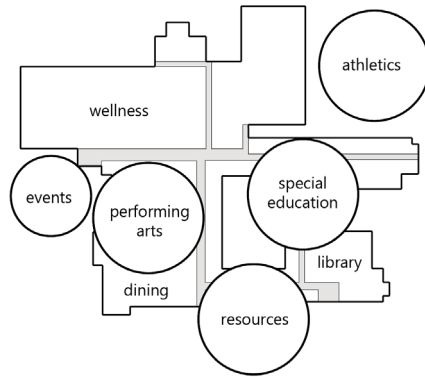


DOWNERS GROVE SOUTH HS



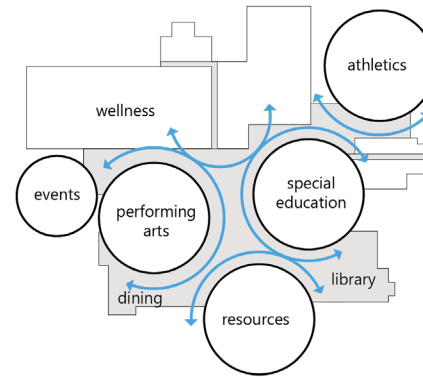
CONGESTION + DISCONNECTION

Interactions were confined to the classroom box. Corridors were only for the 'commute'. Core common spaces remained isolated from one another, limiting positive interactions among programs and students.



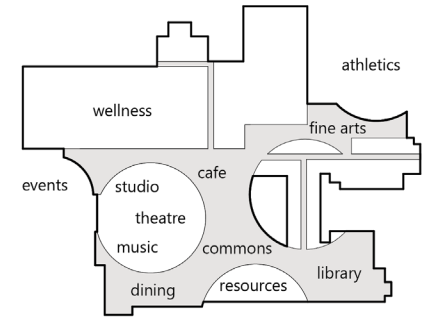
PROGRAM IMPROVEMENTS

Realignment of key program spaces help connect major resources within the school. Linking as many key areas as possible provides better access to these resources for students and staff.



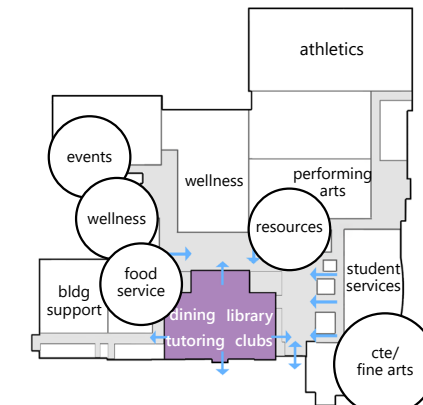
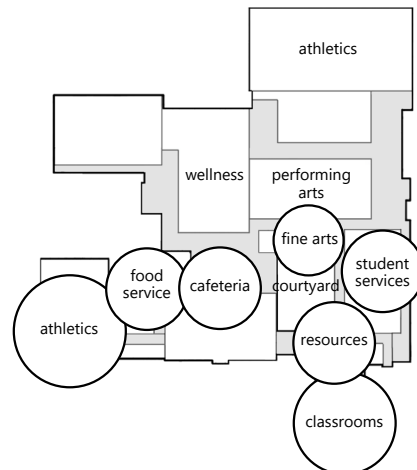
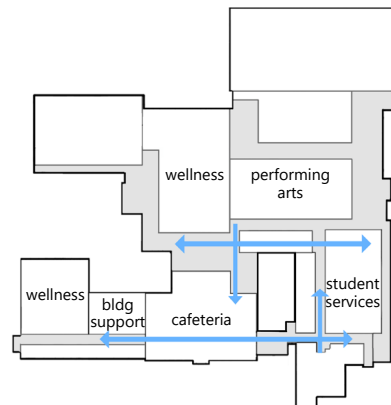
RECONNECTION

Circulation is no longer confined to hallways, facilitating daily positive interactions as students and staff move through building in carrying out their day. Academic areas are connected visually to the common circulation, creating interest in the programs beyond the walls.

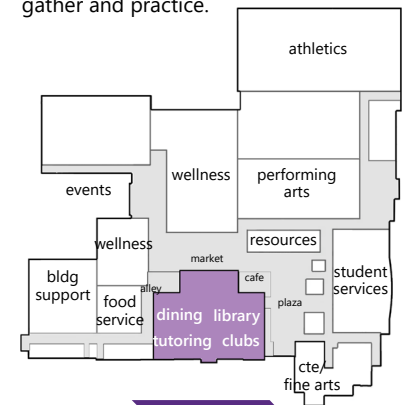


COALESCENCE

Visual connections aid newcomers as they find their way around the facility. Bottlenecks are reduced and direct connections are made between multiple core areas of the school, reducing travel times and overcrowding. Space evolves throughout the day and into after-school hours for clubs and teams to gather and practice.



DOWNERS GROVE NORTH HS





The enclosed courtyard serves multiple functions. But most prominently, as the heart of the school, it is envisioned as a mixing valve that efficiently connects students to services and activities along the perimeter of the first floor.

Scope of Work & Budget

Collectively, over **155,000 sf** of **additions** and **136,000 sf** of **renovations** modernized these two campuses.



No other activity occupies as much as these students' lives as attending school. Schools can, and should, go beyond merely functional settings. The improvements made to North and South merge the best of multiple worlds, delivering modern academic environments

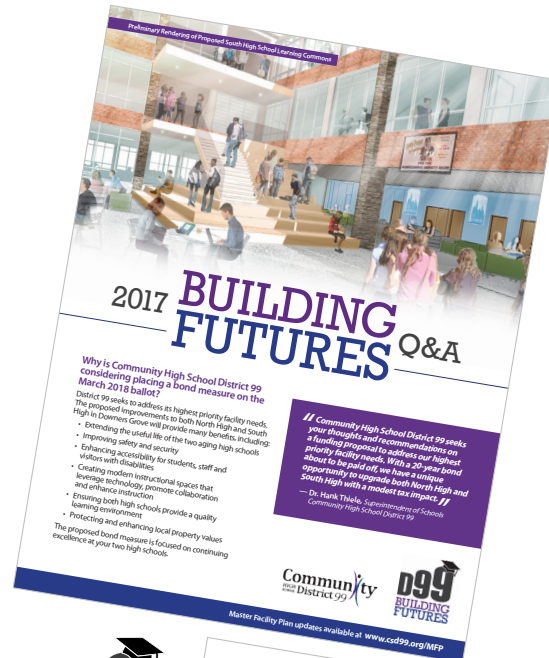
and incorporating professional and social learning opportunities. Creating dynamic learning communities, the student experience transitions from one driven by convenience and efficiency, to one that prioritizes initiative, independence, innovation, and curiosity.

School & Community Research and / or Engagement

Over the course of four years, District administrators, teachers and students worked diligently with the design and construction teams to identify and prioritize improvements that would modernize and make relevant their two aging facilities.

A master plan was developed during this time which addressed security issues, accessibility concerns, updates to current programs and outdoor areas, as well as the creation of new spaces envisioned to connect students with their peers and teachers and to services they need on a daily basis. Given the size and extent of the contemplated improvements at each facility, the District would need to use a combination of maintenance/operation funds and a voter-approved bond issuance to enact changes in their buildings. To achieve this funding scenario, a 40-member Citizen Task Force comprised of business leaders, civic leaders, and other community members – was assembled to provide input into and during a 4-step, public engagement process focused on articulating priorities and gaining support for the same.

Mail surveys, phone polling, and several public information forums were conducted by the District Superintendent and staff. Questions and concerns for timing, real estate values, tax impacts were all addressed in a thorough and frank manner. On March 20, 2018 community members overwhelmingly voted for a \$136.6M bond issuance to reinvest in the future of their students and the places where they learn and grow.



This School District serves over

65,000 Residents



5,000 Students



8 Culturally and Economically Diverse Communities



\$136.6M Referendum Passed March 20, 2018

20 user groups with over 200 participants

**Core team – 50 people
Administrative team – 9 people**

BUILDING TRUST Building strong community support provides the foundation for successful master facility plans

Community feedback and priorities shaped the master plan and scope for the ballot question.

Update classrooms and science labs to allow for new instructional technologies and collaborative, project-based learning.

68%

Create a secure main entrance at both North High and South High.

67%

Address safety and security enhancements at both North High and South High, including installation of secure, entry vestibules.

64%

Improve accessibility for students, teachers, parents, grandparents and other community members with disabilities at both North High and South High.

63%

Install air conditioning at both North High and South High in classrooms that currently do not have air conditioning.

59%

Public Opinion Strategies: November 2017 Phone Survey

The approach was about connecting, listening, and understanding the community. Those efforts helped us determine what our taxpayers valued and the work was essential in passing a \$136.6 million bond issue with strong support. As our construction is underway, I am continually complimented on the process of securing support for the project as a key part of the product. The two are inseparable to our residents.

Dr. Hank Thiele, Superintendent,
Community High School District 99



PUBLIC ENGAGEMENT TIMELINE: A FOUR-STEP PROCESS

Community High School District 99
Voter Analysis

Demographic	Age	Gender	Ethnicity	Income	Education	Home Ownership	Marital Status	Children	Vehicle	Internet	Phone	TV	Radio	Magazines	Newspapers	Other
White	65.0%	50.0%	85.0%	55.0%	75.0%	65.0%	55.0%	45.0%	55.0%	65.0%	55.0%	45.0%	35.0%	25.0%	15.0%	5.0%
Black	15.0%	45.0%	15.0%	45.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Hispanic	10.0%	55.0%	15.0%	45.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Asian	5.0%	55.0%	15.0%	45.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Pacific Islander	5.0%	55.0%	15.0%	45.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Other	5.0%	55.0%	15.0%	45.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%

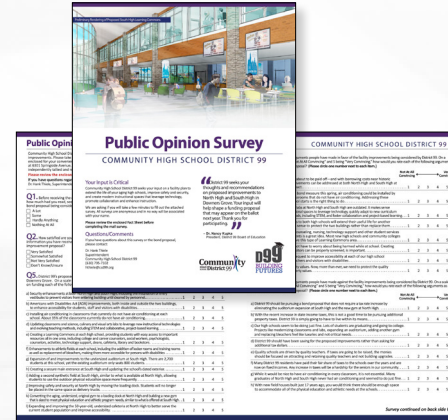
1

NEEDS ASSESSMENT



2

PUBLIC INFORMATION PROGRAM



3

COMMUNITY COMMENT



4

CAMPAIGN

TWO YEAR FACILITY ASSESSMENT, PLANNING AND PUBLIC ENGAGEMENT

- Voter Analysis / Timing
- Define Proposal(s) to Review With Citizen Task Force
- Assemble Supporting Information
- Develop Core Argument
- Key Influencer Database
- Citizen Task Force Formation
- Task Force Vets Proposal & Recommends Plan to Test District-Wide

- Staff Communications
- Key Influencer Letter / Attachment
- Registered Voter Letter / Attachment
- FAQ Newsletter to Registered Voters
- Community Presentations
- Citizen Task Force Meetings
- Earned Media
- Other

- Public Meetings
- Mail Survey
- Phone Poll
- Citizen Task Force Recommendations
- Follow-Up Letter

THREE MONTH CAMPAIGN

- Organization
- Fundraising
- Supporter Database
- Letterhead Letter
- Community Events
- Presentations
- Fact Sheet
- Signage
- Direct Mail
- Voter ID
- Canvassing
- Letters to Editor
- Print Ads
- GOTV / Other

The existing courtyard at Downers Grove South is reactivated with a two-story, learning commons infill addition highlighted by a sweeping, fritted glass wall.



Across town at the district's oldest school building, Downers Grove North, a curtain wall is used to enclose an open, three-story courtyard. The existing 1970s addition to the right was reclad with masonry that is complementary to the original building, but executed with a contemporary flare. The inside of the wing was repurposed for art studios, CTE spaces, and science labs on the first, second, and third floors respectively.



Educational Environment Design

The District's 2022-2027 Strategic Plan

2 KEY GOALS

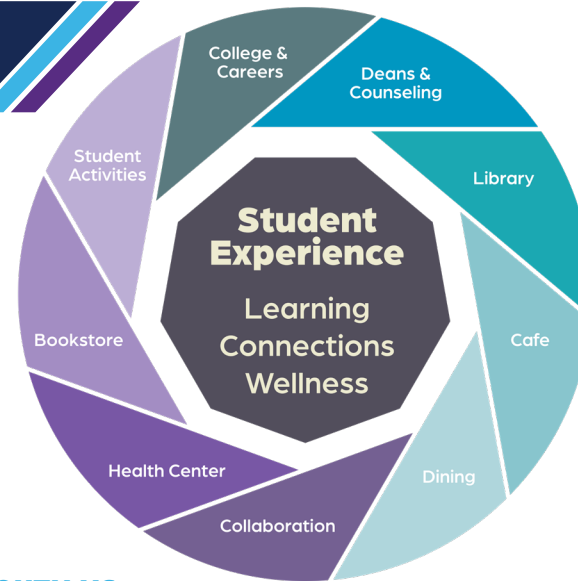
**Growth of Student Ownership
& Agency**

**Increased Student Engagement
in Post-Secondary Planning**

In moving to a hybrid block schedule, both the facility organization and school culture needed to be re-aligned to better meet student needs, provide flexibility in the day, reduce stress, and better prepare students for a variety of settings after high school. Inspired from both professional and social co-working environments, the linchpin of the design solution on each campus is the learning commons.

Centered as the new heart of the school, the **learning commons** is a place that links learning, fosters connections, and promotes wellness.

Designed to enhance student choice and autonomy in their daily schedule, the space serves as the new flexible and inspirational network point for the library, student activities, deans and counseling, bookstore, college and careers, café/dining, and the health center. The student experience transitions from one driven by convenience and efficiency, to one that prioritizes student initiative, independence, innovation, and curiosity.



SOUTH HS

Several key strategies were implemented at the “newer” campus with a distinct, contemporary feel. A sweeping curved addition in the center courtyard connects parts of the campus that were previously disengaged and/or remote from one another. The new learning commons takes up a portion of the existing courtyard at the heart of the school to serve as a hub of student life. It provides students and staff access to services, resources, and opportunities to study, socialize, or simply refuel with a healthy snack or beverage. **The learning commons connects major program areas and departments on the first level, such as the library, dining, and the new performing arts center; but it also connects core academic spaces on the second and third floors via an extended circulation route of alternating stairs and platforms.** This vertical pathway helps relieve hallway congestion at the far reaches of the building and facilitates interaction and contact between students and staff throughout the school day.

NORTH HS

Similar strategies were implemented to reshape the traditional organization of the district’s oldest building and honor this vision. **The most prominent change is the infill of an unused exterior courtyard and surrounding hallways at the center of the campus into a new three-story, indoor learning commons.** Streamlined access to student resources is prioritized from this venue, connecting day-long food offerings, college and career planning, counseling, and guidance. Opportunities for scheduled and unexpected collaborative activities and conversations allow student and staff to connect in ways previously made impossible by the layout of the old facility. A variety of seating options are provided so that students wishing to study or “catch up” on homework by themselves have ample choices to nestle in amongst the crowd.



BEFORE

NORTH HS



BEFORE

Results of the Process & Project

At both campuses, several key strategies were implemented to reshape how the buildings were organized and resources accessed by students throughout the day. In addition to the learning commons previously described, visual arts studios, college career education spaces and science laboratories populate the new and renovated areas. In every instance, care was taken to honor and support the project-based, collaborative nature of individual programs. Visibility into and through these areas showcases student projects. And direct connections between labs and studios streamlines the sharing of valuable resources. Exposed structural elements, mechanical/electrical and plumbing systems and other building components are treated in a way which enhances the unique vibe of the school and the making/doing process happening throughout the day.

Enhanced safety and security measures were core objectives overarching the two campus solutions. Design decisions were carefully crafted with balanced consideration given to individual privacy, accessibility, and constant monitoring of student/visitor movement. Primary emphasis was on security checkpoints around the building perimeter along with layout of pedestrian and vehicular traffic flows. Using basic CPTED (Crime Prevention Through Environmental Design) principles, extensive visibility between and through all occupiable spaces was emphasized with strategically placed walls in all new instructional spaces to reduce site-lines into studios and classrooms during a lock-down situation. Exterior and interior security cameras are located for 24-hour remote monitoring.



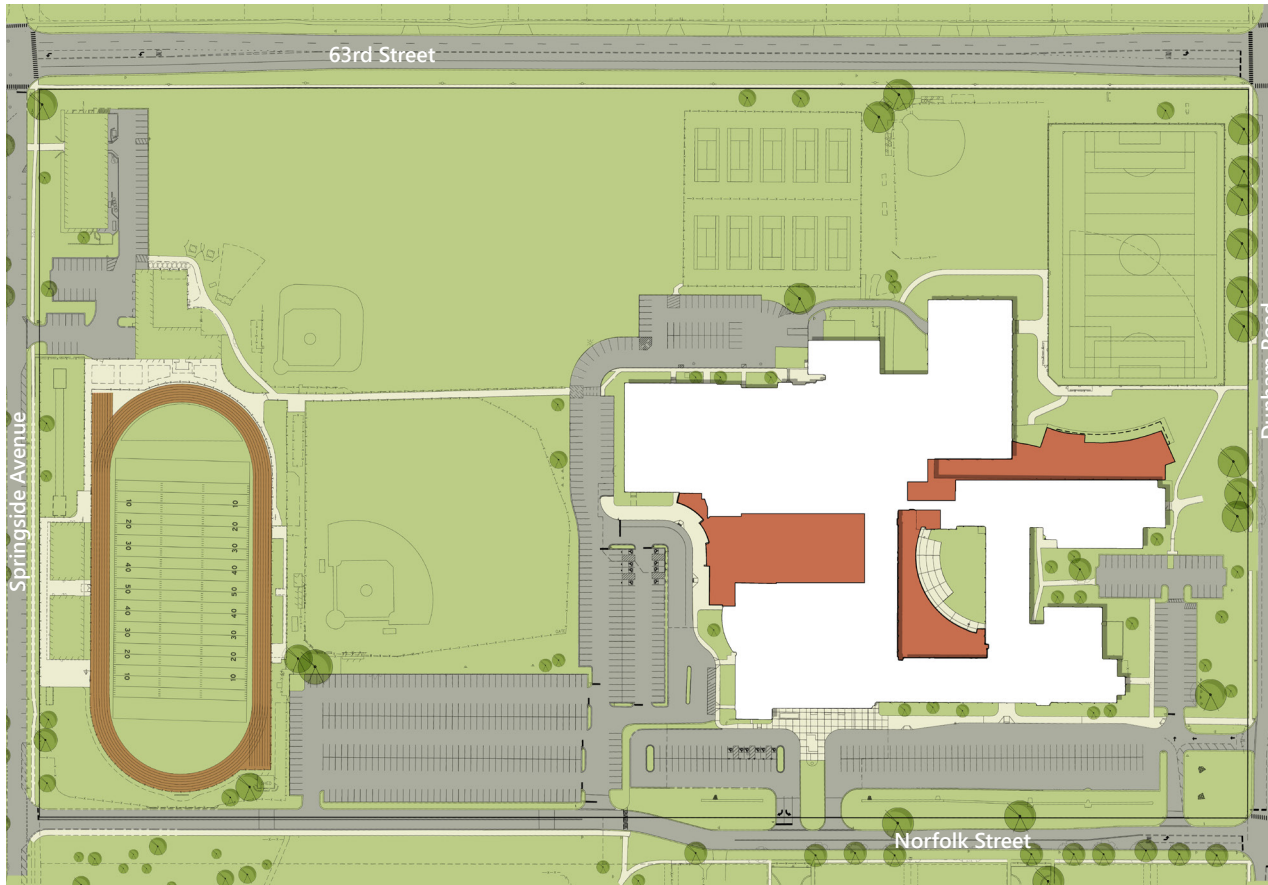
The best way to assure that we could accomplish everything we promised to the community was to engage the design team to provide full design-build services. The phenomenal results of the project have validated the wisdom of that decision.

The journey exceeded our expectations. The cohesion amongst designer and builder teams was evident from the start, and their engagement with our teachers, administrators, and staff was a positive and collaborative experience for all involved. Because of this teamwork, we all were always focusing on ways to benefit the program.

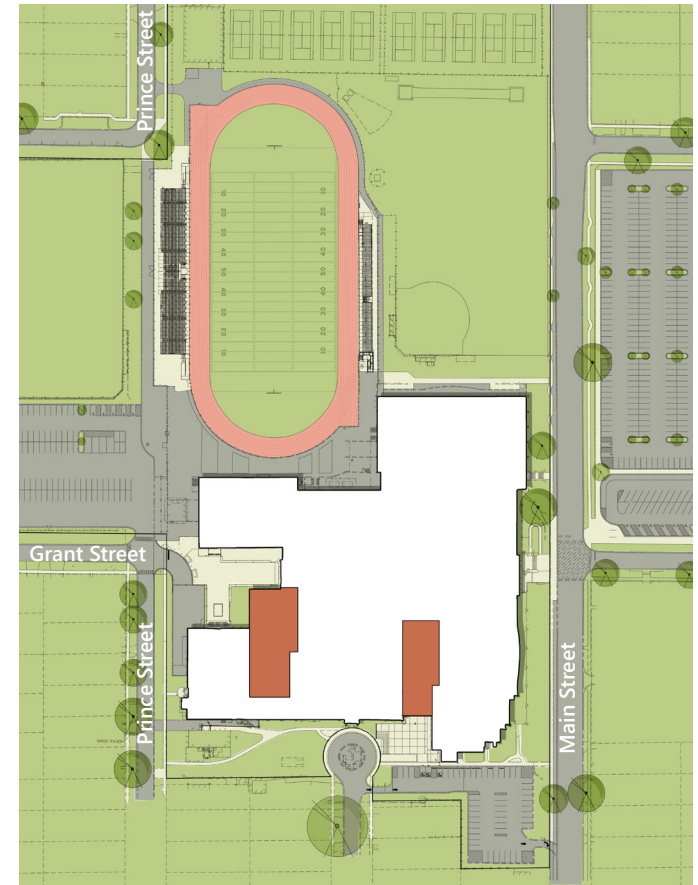
┌ **Dr. Hank Thiele**, Superintendent
Community High School District 99

Jim Kolodziej, Director of Physical Plant & Operations
Community High School District 99

Physical Environment Design



South HS / Contemporary Campus



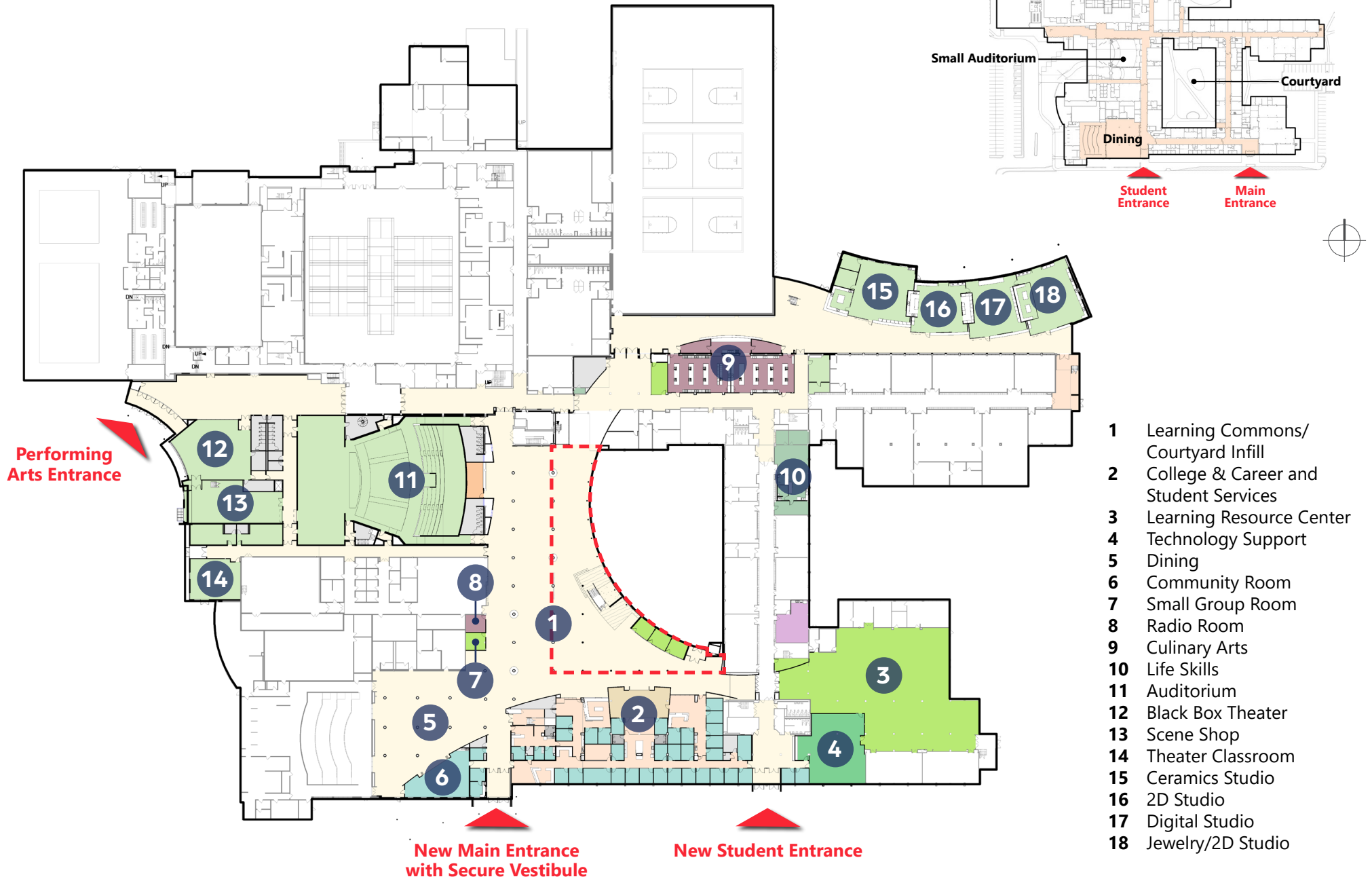
North HS / Historic Campus



Physical Environment Design

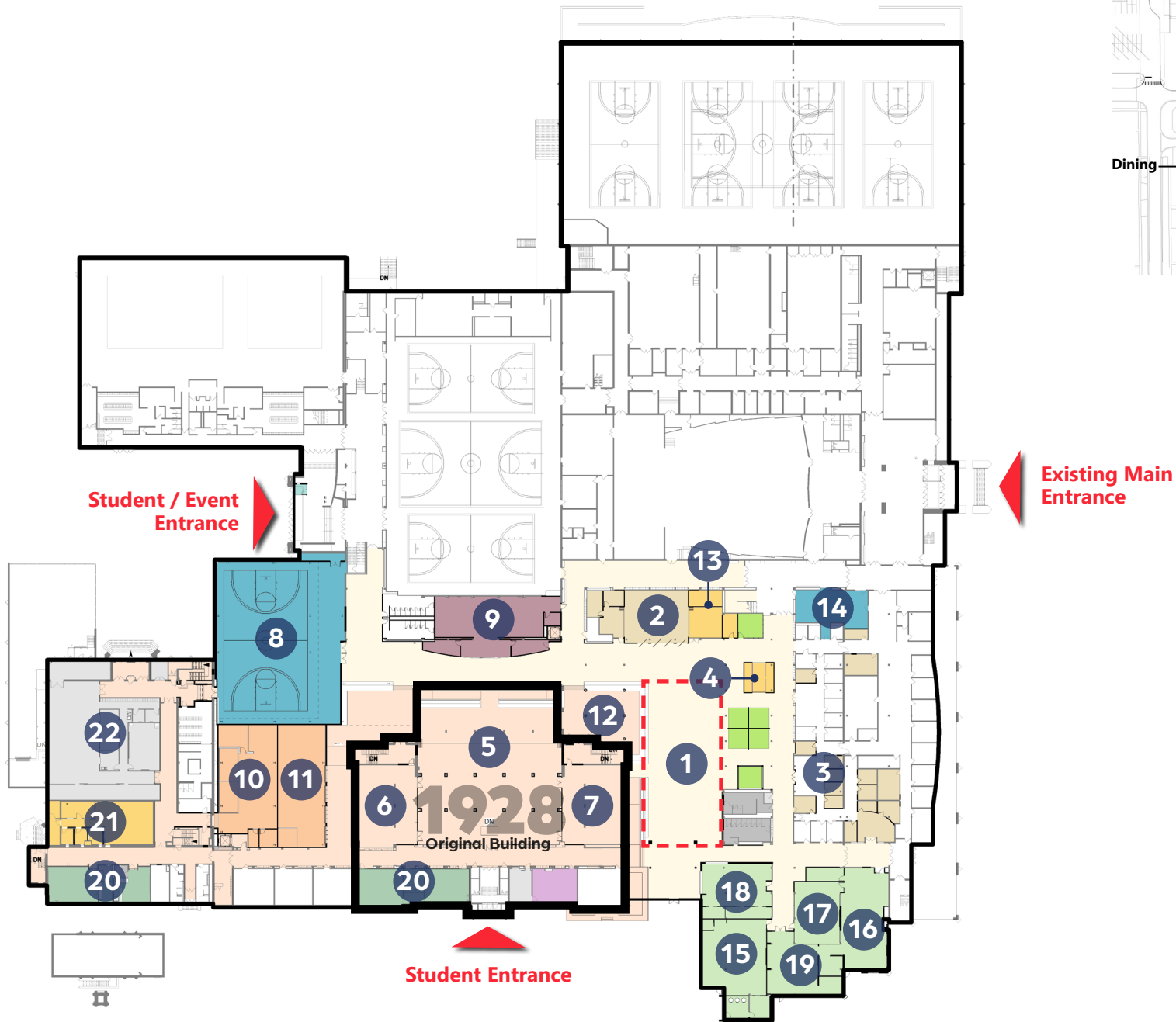
SOUTH HS / First Floor Plan

First Floor Plan / Existing

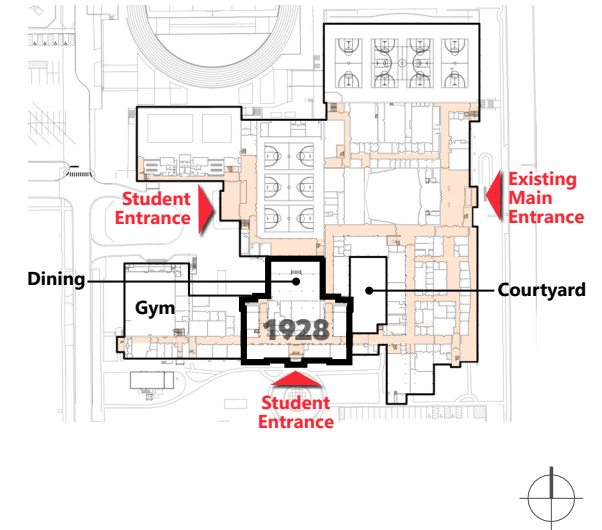


Physical Environment Design

NORTH HS / First Floor Plan



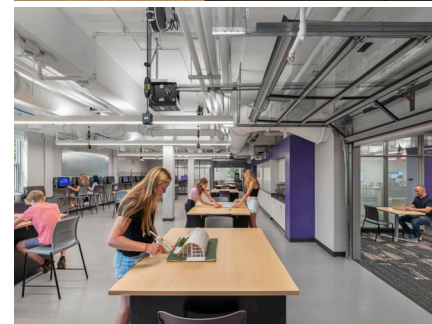
First Floor Plan / Existing



Physical Environment Design



NORTH HS



SOUTH HS

Sustainability & Wellness

Both commons spaces used strategically placed skylights and curtainwall systems to fill the spaces in the heart of each building with daylight reducing artificial lighting loads, increasing visibility to the outdoors, and increasing human health. Aside from incorporating daylight as a biophilic approach, the design also incorporated live plants to integrate health and positive energy into the space.

Community High School District 99 and the design/construction teams share a commitment to environmental stewardship, and this commitment was exemplified on the project through the selection of building systems and materials. Specific strategies to reduce short- and long-term environmental impact included: replacing existing T8 fixtures with energy efficient LED light fixtures; connecting each building to a robust BAS system; selecting energy-efficient HVAC equipment and reusing major portions of the existing building rather than demolishing and building new. HVAC components were also selected to optimize indoor air quality.

Life Cycle Cost Benefits

The Life Cycle Cost benefits of the project can be seen in material selections, HVAC system efficiency, and the re-use and repurposing of existing material.

Material Selections

- Use of porcelain tile throughout the corridors and commons for reduced maintenance and longevity.
- A biophilic approach incorporating daylight to integrate health and positive energy through the use of skylights and curtainwall systems.

HVAC System Efficiency

- Daylighting studies were completed for each of the added spaces and appropriate mitigating strategies were incorporated to minimize solar gain. These strategies included sunshades, high performance glass, and extended overhangs.
- Each school's entire BAS System was upgraded, producing an integrated HVAC system which reduces energy consumption.
- LED lighting, occupancy sensors, and other lighting controls were installed to reduce electrical usage.

Re-Use and Re-Purposing

- Significant areas of the existing building brick and stone façades were restored in lieu of removing/replacing or covering up. These stained and restored façades eliminated waste but still offered a new, modern look.
- An existing chiller was retrofitted and relocated onsite instead of buying new.
- Underutilized space at both schools was recaptured to create a learning commons that allows for collaborative meeting spaces.

These extensive sustainability and re-use strategies will provide significant long-term cost benefits and were factors that contributed to District 99 recently being named by the U.S. Department of Education as **1 of only 5 "Green Ribbon School Districts" nationwide.**



The U.S. Department of Education Green Ribbon Schools is a public engagement initiative structured as a federal recognition award for whole school sustainability.