

MEMORIAL HIGH SCHOOL

On-site Replacement

Spring Branch Independent School District

Houston, TX





01 EXECUTIVE SUMMARY

Early Beginnings

For nearly six decades, Memorial High School (MHS) has served the needs of the Spring Branch Independent School District (ISD) community with only minor additions and upgrades. Built in 1962, the original campus was innovative and flexible for its time, but the needs of today's learners required a broader look at the entire campus.

MHS was a flagship school from the start, with the vast majority of the student population attending a post secondary college upon graduation from high school.

The school received an addition and renovation in 1995 comprising an additional gymnasium and science building.

Between 2005 and 2011 a new auditorium was constructed along with a third gym and dance studio. The primary entry was shifted to the east from the south with an updated administrative suite addition.

The older classroom wings were nearing the end of their useful life of many building systems and the need to replace a major portion of the classrooms is high.

The 2017 Bond Program passed with 80% voter approval to provide \$898.4 million for Spring Branch ISD improvements, including the MHS project.

The project's planning and creative design solutions helped reinvent the aging facilities. The campus improvements align with excellence in MHS academics and pride in performance for its 2,600 students.





Project Goal & Outcomes


The goals for the new MHS centered on carrying the original campus's collegiate feel into the new design while modernizing its features for today's students.

Spring Branch ISD and the Project Advisory Team's priorities for the facility include:

- Provide state-of-the-art classrooms and science rooms
- Integrate plenty of collaborative and open space into the learning communities
- Have a strong connection to the outdoors
- Include flexible and multipurpose spaces requiring minimal reconfiguration
- Incorporate long-lasting materials
- Reflect the school's high performance in academics, athletics and fine arts
- Upgrade and expanded campus dining

The project began with a master plan study for the entire campus to thoughtfully plan for the best strategy to implement the 2017 Bond Project (MHS Phase 1) with the future development in mind. The project resolved how to add buildings, parking, and athletics, and solve current traffic flow conflicts. The end goal of the multi-phased master plan replacement was to create a campus that felt like it was built on a greenfield site.

The new campus is changing the way instructors teach with more engaging spaces and more efficient infrastructure. The construction of these upgrades never displaced the student body, allowing them to continue their studies while their campus improvements came to life.



02 SCOPE OF WORK & BUDGET

MHS Master Plan, Phase-1 project consists of:

Approximately 161,250 square feet of new building; 27,000 square feet of renovations; and a 4,234 square-foot athletic facility serving tennis and football.

The scope of services included architectural and engineering services for master planning, design and documentation, procurement, and construction.

Phase 1 of the project was completed in September 2022 and involved the following improvements:

- New four-story building with 29 general classrooms, 21 science labs
- Asst. Principal's suite and other instructional support spaces
- Student dining commons and multi-purpose assembly space
- Outdoor courtyard connecting the new and existing buildings
- Athletic upgrades for football/soccer, field events, and tennis
- Bus drop-off and staff parking with secure access to courtyard
- Parent drop-off loop with secure access to courtyard
- Student access drive to parking and new student plaza
- Pedestrian access improvements to east campus
- Library facade renovations at classroom wing demolition area
- MEP building system upgrades and renovated student restrooms
- LED site and auditorium lighting
- Life safety upgrades throughout campus
- Revised traffic flow patterns

CONSTRUCTION COST: \$83,000,000

MHS Master Plan, Phase-2 plans to include:

- Phase II Building(s) to replace the remaining instructional spaces, including CTE spaces
- Front parking lot expansion with dedicated parent drop-off lane
- Campus administration replacement and enhanced green space
- Additional parking space for students and staff
- New administration and events entry

03

SCHOOL & COMMUNITY ENGAGEMENT





About the Community

Spring Branch ISD is a strong supporter of the community and the value the community bring to every project in the district. Memorial High School was no exception. The district's Project Advisory Team (PAT) brings community members into the early stages of planning and design and become stakeholders in the project.

The process began with a campus-wide master plan that was influenced by a community wide survey of over 250 Students, Parents, and Staff. With this the PAT helped to develop the design of the campus and craft the guiding principles for the project. These principles helped the design team understand the importance of the outdoor spaces, transparency, flexible learning, collegiate campus feel, and many other important needs.

The results of the community's influence is a campus that serves the community in ways they could not have imagined. Examples include the outdoor gathering spaces, the expansive cafeteria which also serves as an assembly space, the student plaza that also supports athletics, and the improved pedestrian safety of the

About the stakeholders

Many voices were part of the planning and design process for Memorial High School. From the beginning of the Masterplan to the Project Advisory Team to the final Design the stakeholders were a positive driving force that included:

The Spring Branch ISD District Objectives and Standards

- Educational Specifications, Design & Construction Standards, T-2-4 Readiness

The Community Survey

- Students, Parents, and Staff

The Masterplan Advisory Team (MPAT)

- Community Business Partners, Local Government Leaders, SBISD Leadership, Campus Leaders, Parents, Students, and Neighborhood Representatives

The Project Advisory Team (PAT)

- Community Business Partners, Local Government Leaders, SBISD Leadership, Campus Leaders, Parents, Students, and Neighborhood Representatives



Challenges

The MHS campus is considered a small site for a high school and is extremely tight with space. The school is landlocked by residential and commercial properties. The solution required keeping all the existing buildings active during construction without disrupting the current students. The existing tennis courts had to be relocated to the east campus in order to create room for the new four-story building in a very limited footprint.

To meet the school's needs in this footprint, the new building needed to be at least four stories. The residential zoning required local government coordination and approval efforts to meet ordinances and codes. The team created multiple studies and sections for the City to show the relationship of the new building to its surroundings and agreed not to exceed 75 ft in height.

Traffic flow has long been an issue for drivers in and around MHS. The small site had a disjointed layout that caused significant delays and backups. The solution involved designing a dedicated parent drop-off space, dedicated bus lanes, and separate student parking areas to reduce congestion. The new facility has dedicated parking lots that are separated for students, staff, and visitors. Phase 2 will include considerations for future parking garage locations that make sense for the campus.

Available Assets

Spring Branch ISD leveraged the use of its existing campus to begin the rebuild of Memorial High School. While the campus land area is small and heavily wooded, the trees became a great asset and not only enhanced the overall campus but was a driving force on where parts of the building were relocated.

With no additional room to build on the project recognized a way to reconfigure some athletics that triggered the phasing to relocate tennis and build the new building. This phased approach allowed the district to invest in the athletic modifications instead of building temporary portable learning spaces. In the end, the assets that may have seemed like a challenge at the beginning of project ultimately became a positive driving force in the final outcome.

Value of Process & Project to Community

The community was highly invested in this project. The project advisory teams participated in and attended 5 Master Plan Advisory Team meetings, and 5 Project Advisory Team meetings and presentations, eager to weigh in on the facilities that will serve the community well into the future.

04

LEARNING ENVIRONMENT



Educational Vision & Goals

The vision for the new MHS centered on flexible learning spaces, distributed collaborative spaces, and a large dining commons that could serve a variety of assembly uses.

The educational goal was to encourage learning beyond the classroom with these spaces. The new campus supports direct instruction, outdoor learning, and collaboration.

Learning Beyond the Classroom

- Facilitate a variety of teaching methods
- Support personalized learning
- Extended classroom into flex spaces
- Easy to adapt for future expansion (M. Plan, Phase 2)
- Learning environment choices (Individual/ Group)
- Technology rich / Interactive environment
- Flexible and mobile furniture
- Acoustic separation between uses

The PAT Committee described the future of MHS to have the following characteristics:

School Identity + Branding

- Have a WOW factor - Exterior and Interior
- Reinforce MHS Brand in graphics and signage
- **Sense of Place = Desired Destination**
- Welcoming for Community Access/ Community Use
- Easy to navigate the campus
- Connection to the outdoors
- **Flexible for Future**
- Accommodate the needs of today's learner with the ability to adapt over time
- Indoor and outdoor learning spaces
- **Architectural Expression**
- Collegiate feel
- High levels of transparency for active learning
- Strong connection to the outdoors



How the Environment...

...SUPPORTS THE CURRICULUM

The new facility includes 20 science classrooms, 20 general classrooms, and 4 special education classrooms. It creates a cohesive setting with its intentional design.

...SUPPORTS A VARIETY OF LEARNING AND TEACHING STYLES

MHS supports lecture, collaboration, and demonstration:

- Provides multiple types of spaces to support teaching and learning (lecture, collaboration, demonstration)
- Provides multiple sizes of space (individual, small group and large group) for study and collaboration
- Provides spaces to serve the wide range of student needs (independent study, social spaces, collaboration spaces, instructional spaces, access to outdoor spaces, etc.)

An AP Physics Teacher at the school says it best:

"My new classroom allows for multiple teaching and learning configurations. There is space for both traditional desk seating and collaborative lab investigations.

Students can be grouped together to carry out discussions or sat individually for assessments; a whiteboard and active panel at the front of the class is used to display all relevant information.

Use of these collaborative learning spaces provides more room for break-out groups that make differentiation easier."

...IS ADAPTABLE AND FLEXIBLE

Personalized learning choices and extended classrooms provide flexibility and choice for group and individualized work settings beyond the classroom.

Large flex spaces between regular classrooms give students the room to collaborate in whatever way makes sense, they can move furniture around or write on whiteboard walls. Smaller flex spaces in the science wing provide opportunities to socialize, collaborate and demonstrate. The options provide students with a new perspective and refreshing change of pace from the traditional classroom.



05

PHYSICAL ENVIRONMENT





Physical Attributes of the Environment

"High-performing materials for a high-performing campus" was one of the attributes for MHS's new design. The district wanted to maximize their investment by selecting building materials with a long life and low requirement for maintenance. The PAT group wanted a "wow" factor to reflect the forward thinking and high performance expectations/ outcomes for the MHS students. The district and the PAT wanted the new facility to enhance and support the MHS campus identity.

The four-story red ornamental stair is the central focal point and main circulation pathway for the whole building. This signature piece embodies Mustang Pride. It connects to the new student courtyard. The base of the stair can be used for performance or presentations, which is adjacent to the large student commons. Areas around the stair also include custom tile graphics featuring the Mustang mascot.

The metal and limestone rain screen systems provides superior building performance in a modern setting with natural tones that reflect the surrounding campus. The limestone color selection references the old campus brick color, while the red metal accents and fins reinforce the existing campus identity. The variation of the materials also helps to break the scale up and so the four-story building doesn't feel so tall.

Lots of glass features let in daylight and provide transparency within learning spaces. The new building's open spaces replaced former narrow corridors that felt cramped. The windows also reinforce the connection to the outdoors, which is the favorite part of the existing campus that the new Phase I building should continue to reinforce.

The existing school has several outdoor spaces, however, they were disjointed and did not fully support what the campus desired. They were connected by a covered walkway that remains today. The new outdoor spaces now have a variety of seating areas, covered shade, and surfaces for different activities. These outdoor spaces are very important to the students and the community. They are places to gather and connect.



How the Facility / Project...

...FITS WITHIN THE LARGER CONTEXT OF THE COMMUNITY

Memorial High School is a key hub in the community. Being located at the crossroads of residential and commercial development, the campus needs to blend into both.

With over 500 existing trees on campus Memorial High School honors the natural wooded, residential feeling. The campus is a destination hub in the community and is located at the intersection of two major roads. This required the project not only improve the traffic flow of the community but improve pedestrian safety of the students, all the while maintaining the feeling of a naturally wooded destination for the community.

As a result of the outdoor spaces, the trees, the improved traffic and pedestrian flow, and the gathering spaces in the new building, Memorial High School is a strong part of the community.

...INSPIRES AND MOTIVATES

MHS prepares its students for what comes next, be it college, the workplace, Technical Training 2 year college, 4 year college or military.

With its state-of-the-art science classrooms, MHS gives every student a chance to interact with this new addition right away, not just a specific subset of students.

The new Phase I building dining commons, science and math instructional spaces are utilized each day by every HS student on the campus.

This new facility, athletic enhancements and central outdoor courtyard has created an excitement and buzz within the campus and community.

The district and the community look forward to the next step in the realization of the master plan.

06 RESULTS OF THE PLANNING PROCESS & PROJECT



How the Project...

...ACHIEVES EDUCATIONAL GOALS & OBJECTIVES

MHS fosters a high-caliber academically performing student body with a high level of extra curricular participation. The new facility was designed to support this learning environment with cohesive and flexible spaces, outdoor courtyards, and state-of-the-art classrooms.

...ACHIEVES SCHOOL DISTRICT GOALS

MHS meets Spring Branch ISD's overall goal to provide a modern building and renovate existing areas using quality materials that align with the school's desired expression to serve the student body well into the future. The project meets this end with design components like the iconic central stair and student courtyard, providing an impressive welcome to its adaptable college-inspired space with a strong connection to the outdoors. The MHS replacement was an "on-site" construction project, meaning the project was completed is a phased approach, with the campus remaining active and operational during construction. This allowed the maximum investment in this comprehensive addition / renovation project as there was no transitional space available.

...ACHIEVES COMMUNITY GOALS

The new MHS building achieved consensus from the MPAT committee that the master plan was thoughtful in its approach of the current bond funded the project with the long term process of the future planning in mind. The master plan provides a clear road map for future planning efforts and future capital improvements.

Unintended Results & Achievements

The new flexible collaborative spaces outside the classroom was a new approach for staff more familiar with utilizing only lecture type classrooms. After seeing the students thrive in a collaborative environment, the staff have all embraced the areas and said they can't imagine not having them.

In addition, financial support from the MHS PTA and Booster Club provided several unplanned benefits. They brainstormed in collaboration with the design team and Spring Branch ISD, providing enhancements to take MHS to the next level. One example they funded included the addition of turf grass and a signature sculpture that enhanced the courtyard.

The community has embraced Phase 1 and there is excitement about the future.



"I was absolutely beside myself when I saw how well that turned out."

At the initial meetings all those years ago, the group talked about creating a campus-like feel like the students may find at a university. Well, the district and the architects sure delivered on that.

What they came up for the outdoor space is a fantastic compliment to the new facility, and the flow from the cafeteria through the outdoor space to the legacy buildings is seamless.

Spring Branch ISD has proven once again it is capable of designing and constructing a world class high school campus."

Former Mayor of Hedwig Village

