



## CASE STUDY

### Manchester Middle School

Richmond, Virginia

#### CHALLENGE

For years, Chesterfield County, Virginia, has seen a significant uptick in population. When faced with the issue of overcrowded schools, the Chesterfield County Public Schools School Board took a strategic look at costs and return on investments when discussing the concept of renovations vs. replacement schools. The School Board decided that the cost increase for a longer use cycle of a new school vs. the shorter life cycle costs of a renovation was a strategic investment and more cost effective decision that could save construction dollars in the future. Replacement schools also allowed for more equitable safer schools and more energy efficient schools for all end user stakeholders. As a result, the construction project schedule was modified to include new replacement schools to address overcrowding. Manchester Middle School is one of 11 new schools that MBP provided program and construction management support of the Chesterfield County new schools program funded by the 2013 \$300 million bond referendum.

Manchester Middle School is a multi-phased construction project that included 139,000 square feet of instructional space on two levels, demolition of the existing school, dedicated bus/faculty parking lots, multiple athletic fields/courts and site restoration. The overall project

budget was \$49.6 million and the base construction contract value was \$40 million.

#### SOLUTION

In early 2018, MBP identified three requirements for the successful completion and delivery of the school - early involvement with all key stakeholders, cost control, and documentation management.

MBP began leading coordination meetings with all stakeholders from schools, building officials, county procurement, parks and recreation, and VDOT to identify the enabling activities and milestones required to successfully open the new school in the summer of 2020. This early involvement created transparency, teamwork, and focus with the common goal of a successful project being delivered on time and within budget. Timely decisions were made, risks were identified early and prioritized, and processing and turnaround times were significantly reduced resulting in increased production and efficiencies across all departments and contractors. As a result, MBP was able to mitigate any potential delay claims (outside of weather) associated with the enabling, procurement, construction, and transition to operations phases of the project.

MBP also developed detailed change management logs to control costs. These were a critical component used by both MBP, procurement, the A/E, and contractor. The change management logs accurately tracked proposed change order requests, action items, responsibilities, revised contract values, and cost savings and avoidance. These logs were submitted as part of the supporting documentation to County Procurement for validation of change orders and monthly pay applications. The inclusion of these spreadsheets significantly reduced



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errors or resubmissions and decreased the timeframe from submission to receipt of payment.

In addition, MBP created and managed a SharePoint project management information system (PMIS) for documentation control. This system was used by the entire construction team throughout the life cycle of the project to track submittals, RFIs, potential change orders and change orders, reports, and site photos. Having a simple, consolidated, easily accessible platform created efficiencies within the team, reduced errors, and provided current information on the project status. Accessibility to real-time information allowed MBP to identify potential risks/issues and provide proactive responses and solutions with little or no project impact.

### RESULT

The multi-phased project opened as planned for the 2019-2020 school year. The certificate of occupancy was received July 31, 2020, sixteen days after the contract substantial completion date. This revised date

was due only to inclement weather in excess of the anticipated contract days. No delays were submitted for permitting, unforeseen conditions, lack of production due to the pandemic, utility relocations, or owner responsible activities. Prior to contract award MBP obtained environmental and building permits and began utility relocations and new service design. Throughout construction MBP worked diligently with the contractor to develop recovery schedules to minimize lost time.

MBP performed timely and detailed reviews of all proposed change orders to ensure scope and contract compliance resulting in a cost avoidance of \$180,000. MBP also led a value engineering charret resulting in \$323,000 of savings while retaining core program requirements. The total realized savings to the owner, including both the cost avoidance and savings amounts, was approximately \$500,000+. These efforts resulted in a 59% ROI for the owner on MBP's construction management services for the entire project.

**“It was a pleasure working with MBP's professional staff. The team was attentive to our needs, realistic and candid, and willing to make special efforts on our behalf to ensure that the finer details were achieved and that our quality expectations were met. CCPS appreciates the MBP Team's support in managing and delivering this state-of-the-art, high profile project and for doing their part to ensure that it will play an important role in the education, development and enrichment of our students, faculty and community in the years ahead.”**

- Scott A. Carson, Director of Construction, Chesterfield County Public Schools