

Loadbearing CMU: The Resilient and Cost Effective Solution

JK Masonry, Inc. has sought to demonstrate the cost effectiveness of using loadbearing CMU in lieu of competing materials for projects in west Michigan. The MIM met with Ben Knauf, project manager and estimator at JK Masonry, on site to discuss his strategy for promoting masonry in November. Ben has used his estimation background to show construction managers and school districts the cost savings that can be realized by using loadbearing CMU to provide a resilient and sustainable project. Ben and JK Masonry, Inc. go beyond submitting budget numbers for items shown in the bid documents and are always looking for opportunities to submit alternate pricing to increase masonry's share of a project.

One project of which JK Masonry, Inc. is the new K-5 elementary building for Tri County Schools in west Michigan. According to the Tri County Bond Update, "The new K-5 elementary building is part of a \$37 million bond, passed by voters in August 2019. The new school will centralize the district, putting all students, Kindergarten-12th grade, on one campus, increasing efficiency while also improving safety and traffic flow."

JK Masonry, Inc. submitted alternate pricing to the construction manager (Owen, Ames, and Kimble) on bid day who presented it to the school district and design team. The original bid only included interior loadbearing CMU, with the exterior envelope comprising precast concrete construction. JK Masonry, Inc. presented a voluntary alternate to replace the precast concrete with loadbearing CMU and ensured to include all of the bid items for proper cavity wall construction, such as wood blocking around openings, spray foam insulation, and cast-in-place

CMU lintels. The decision to switch to loadbearing CMU construction is estimated to have saved the school district between \$500,000 and \$750,000; and has shaved months off of the construction schedule.

A 20+ year member of the MIM, JK Masonry, Inc. was able to leverage their membership and raise awareness of the project's successful completion—saving the school district money and providing a beautiful new school.

The MIM was fortunate enough to have numerous members involved with the Tri County School project, including:

- JK Masonry, Inc.: Masonry Contractor
- Michigan Certified Concrete: Concrete Masonry Unit (CMU) Supplier
- Belden Brick & Supply: Brick Supplier
- MASONPRO: Masonry Accessories Supplier
- Wire Bond: Accessory Manufacturer
- Dailey Engineering, Inc.: Wall Bracing Engineer
- St. Mary's Cement: Cement Supplier
- JDH Engineering, Inc.: Structural Engineer