







To: Pelham School Board

From: Chip McGee, Pelham School District

Gino Baroni, Trident Project Management

Mark Lee, Harriman Architects

Dave Mermelstein, Trident Project Management

Barret Salta, Bonnette Page and Stone

Re: Pelham Memorial School Building Project Challenges

Date: 11.17.21

As the Project Management Team for the Pelham Memorial School Renovations and Upgrade Project, we want to update the School Board about challenges we are facing and our strategies to address them.

## **Current Status**

The project is well underway. The full Project Management Team, including this group plus Deb Mahoney, Brian Sands, and Stacy Maghakian, meets weekly to review progress. The Building Committee meets monthly to advise the Project Management Team. As of today, all of the basic construction documents have been received from Harriman to Bonnette, Page and Stone (BP&S) including the mechanical, electrical and plumbing documents. BP&S has secured high-quality, experienced subcontractors for site work, foundations, and structural steel with foundation work underway for the new gymnasium and associated spaces. Despite site and infrastructure progress, the project is facing two significant challenges: schedule and budget.

## **Schedule**

The project timeline needs to be shifted back four months from a completion date of September 2023 to January 2024. The four month project delay has been caused by two issues.

1. The supply chain challenge for steel bar joists used in floor and roof assemblies pushed their delivery date out from 8 weeks to 12 months. The project management team determined the best course of action was to substitute structural steel framing for bar joists throughout the building with the exception of the new gymnasium. This change necessitated a re-engineering of the building's superstructure and foundation systems, which prolonged the production of construction drawings. The bar joist issue also delayed the scheduled completion of the new gym. The delay caused a cascade effect for the renovation of the current gym into the cafeteria and the current cafeteria into the

- library. While unfortunate, this was a decision made with costs and benefits in mind. This collectively delayed the project approximately two months.
- 2. The construction documents, which are now complete, were delayed for a variety of reasons. This includes staffing challenges with the architecture/engineering firm, the transition with the district's superintendent, and the relatively large number of interfaces with new construction and the older building. This collectively delayed the project approximately two months.

In addition, the sitework contractor shut down for more than a week due to COVID-19 among their crew.

## **Budget**

While competitive bidding is currently underway, the most recent cost estimate based on design development documents, a budget gap of \$4,744,866 over the approved \$26,995,000 hard costs budget. The budget gap was generated by two pressures.

- 1. All projects include a design development phase where plans and specifications are issued for pricing. This phase often includes design elements that are above and beyond the initial schematic and conceptual designs. Pricing in this phase includes both in-house efforts and selected subcontractor input. For any project like this, the design development phase includes elements that have not yet been bid in the marketplace. Additionally, the design elements have not been value engineered by the project management team to enable the community to get the same final project at a lower cost. For reference, the Pelham High School project was approximately \$2 million over budget compared to a total hard cost of \$22 million at the same stage. This issue accounts for about half of the \$4.7 million.
- 2. All construction projects are facing an unprecedented escalation in costs of materials since the GMP cost estimates were completed. According to Skanska USA, the building cost index has increased by 14% from 2020 to 2021. This is the result of limited product availability due to logistical crises with transportation and labor shortages. On a local level, Trident has witnessed a 20% overall cost increase on a different project they are managing. This is occurring on materials throughout the PMS project. Skanska USA reports national increases in costs from 2020 to 2021 including insulation +19.6%, stainless steel +31%, steel plate +178%, and gypsum +14%.

These two pressures have compounded each other to create a significant challenge.

## <u>Strategies</u>

The challenge we face with timeline and price escalation does not change the fact that the voters approved a project for a fully scoped renovation and upgrade of Pelham Memorial School with a Guaranteed Maximum Price of \$31.98 million. We have a five-fold path to address them.

- Budget and Timeline Subcommittee The Building Committee has formed a subcommittee of budget and timeline to advise the project management team on these issues.
- 2. Early Purchasing As subcontractors complete bids for portions of the work, BP&S and Trident will work closely with vendors to pre-purchase materials and store them offsite to avoid additional price escalation or delay.
- 3. Value Engineering The full project management team along with subcontractors will review the project to identify areas to streamline, substitute, and simplify construction without affecting the overall quality of the project. For example, custom millwork can be

- replaced with prefabricated units and standardizing window sizes. To date this has only been possible for site work.
- 4. Integrated Subcontractors BP&S will consider integrated subcontractors if they are able to provide the same service at lower cost.
- 5. Commitment to Improved Response Times: The engineers and design team at Harriman has demonstrated improved response time on submittals and document completion, which will allow for the possibility of making up lost time.

While this is not the position we hoped to be in at this stage of the project, we are working as a team to address it.