

Belmont Middle School and High School: Complexity Squared

The Belmont Middle and High School sits just west of Boston, Massachusetts, so it seems fitting to consider what Massachusetts native John Quincy Adams once said, "Patience and perseverance have a magical effect before which difficulties disappear and obstacles vanish." For nearly four years, the Belmont School Project Team, led by Owner's Project Manager CHA Consulting, Inc. (CHA), has been practicing patience and perseverance with a side of persistence. When students walk through the doors of this fully complete school project next fall, it will indeed be magical.

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1.800.836.0817 www.chacompanies.com #thechaway In 2019, construction began on the \$295 million project consisting of an extensive, phased, and occupied renovation and the construction of an addition to include added facilities and incorporate grades seven and eight. The 445,100 SF project, with funding in collaboration with the Massachusetts School Building Authority, is being designed and constructed Net-Zero Ready and to U.S. Green Building Council (USGBC) LEED Ratings System LEED v4 BD+C: Schools certification specifications. The design includes 283 geothermal wells and a roof-top photovoltaic system with over 75,000 panels. The new school will also feature improved ADA accessibility, improved health and safety standards, video production space, makers spaces for robotics and engineering, and science labs. When complete, this school will be a shining example of the built environment students should be learning in to prepare them for a technological world.

Large school projects are always complex due to funding challenges, the heavy responsibility of being prudent with public funds, passionate stakeholder opinions, and the high-profile nature of these projects. The Belmont project took complexity to a new level. This project also involved intricate phasing with the additional complexity of students occupying spaces adjacent to construction. The phasing set out to do new construction first, with 9-12 students remaining in the existing structure until they could occupy new areas of the school. Once the 9-12 area of the school was finalized, high school students moved into the new 9-12 portion of the school for the start of the 2021-2022 school year.

"While this project did and continues present many challenges, they are offset by the reward of seeing students learning in their classrooms, performing in their theatre spaces, and enthusiastically gathering together throughout the building," said Owner's Project Manager Tom Gatzunis. "Chairing a municipal Building Committee with such a complex project has had its share of challenges, however, with the fantastic project team assembled for this project, I never doubted that we could deliver Belmont's vision of a 21st century school, an investment in our children for future generations of aspiring leaders, and we are delivering it on time and on budget," commented Building Committee Chair, Bill Lovallo.

With students occupying the new high school, demolition of the existing high school took place and then moved directly to the construction of the seventh and eighth-grade section of the school. All efforts were made to minimize disruption to school operations and to maintain safety and security for students, faculty, and staff. Phasing involved many moving pieces in addition to new construction, including the utilization of temporary walls, partitions and stairs, as well as temporary student drop-off areas and traffic patterns. In fact, all school operations needed to be considered and reevaluated as the project progressed.

The design and construction team also faced other pain points along the way, including environmental impacts, grade reconfigurations, modernization of existing facilities, and embedding sustainability into the project at every level, all while working to stay on schedule during a global pandemic which also brought unforeseen changes to the entire educational system.

The Belmont community has made a commitment to invest in the education of its children, and the building team involved has been committed to seeing it through in spite of the complexities and challenges they were presented with. With just a bit more patience and perseverance, September 2023 will be a magical moment for students, parents, and the community. No one will think about the foreseen and unforeseen obstacles that were part of the journey.

CHA Consulting, Inc. (CHA) serves as the Owner's Project Manager for the Town of Belmont for the expansion and renovations project. Skanska is the construction manager and Perkins & Will is the designer.



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