



BARBER & HOFFMAN, INC.
Consulting Engineers

PROJECT

New Belden Elementary School



Canton OH
\$6.4M



PROJECT DESCRIPTION:

The new school building was opened in January 2004 to replace the original school, which was named for Henry Seymour Belden who was the founder of Belden Brick Company.

ADDITIONAL PROJECT FACTS:

- The school consists of three wings.
- Roof structure is light-gauge metal trusses.
- Column-free cafeteria.

The school building layout resembles a T-shape. Two wings are dedicated to classroom space, and the third wing houses the gymnasium, cafeteria, and mechanical areas. The administration area is centrally located at the intersection of the T-shape. The stair exits are situated at the extreme end of each classroom wing.

The building structure is comprised of interior steel column and steel beam support with exterior masonry bearing walls for both gravity and lateral support. The floor construction is steel joists with metal deck and reinforced concrete slab. The roof structure over the classroom areas is light-gauge metal trusses that utilize both gable and hip roof framing. The structure over the column-free cafeteria is architecturally exposed structural steel. The gymnasium framing is structural steel trusses fabricated from WT shapes, and is also architecturally exposed. The trusses feature an offset ridgeline and also create gable ends for three sides of the gymnasium space.

