



BARBER & HOFFMAN, INC.
Consulting Engineers

PROJECT

New Worley Elementary School



Canton, OH
\$5.5M



PROJECT DESCRIPTION:

The new school, named for Daniel Worley, a superintendent of the Canton Public Schools during the 1860's, replaces an existing school built in 1918.

ADDITIONAL PROJECT FACTS:

- Architecturally exposed steel was used in the gymnasium.
- Except for the gymnasium roof, the rest of the building has light-gage metal roof trusses.
- Building has three wings.

The new school building has basically three wings: a west wing comprised of a single-story addition for kindergarten, arts and music, and administrative offices; a new gymnasium and a cafetorium in the north/central wing; and the main school building in the southern wing of the building. The west wing has slab-on-grade construction at the first floor level and exterior and interior load-bearing masonry walls to support the light-gage roof trusses that support the roof structure. The gymnasium area had a reinforced concrete slab on grade at the first level and 26'-0"-high, load-bearing masonry walls supporting the roof structure. The main school building has a slab on grade at the first level and 2 framed levels (second level and mezzanine/third level) with reinforced concrete slab on form metal deck supported on steel joists that bear on exterior load-bearing masonry walls/interior steel frame. Typically, the main building construction is comprised of exterior load-bearing masonry walls and interior steel frame (beams and columns).

Architecturally exposed steel was used in the gymnasium area to support the roof structure. This warranted greater attention to the steel design, layout, and appearance.

Except for the gymnasium roof, the rest of the school building has light-gage metal roof trusses framing the roof structure.

The light-gage metal roof trusses frame the roof structure around the mechanical room at the mezzanine level, and create the complex's sloped hip and gable roofs for the remaining portion of the school building. Approximately 48,000 square feet.

