

- **Owner:**
Sugar Valley Charter School
- **Services:**
 - Structural Design
 - Site Design
 - Land Development Submission
 - Construction Administration
- **Year Completed:**
2018

Sugar Valley Charter School Addition



Sugar Valley Charter School, Loganton, PA

Stahl Sheaffer provided the structural design, site engineering, land development submission, and construction administration for the redesign of the Sugar Valley Charter School facility located along East Main Street in the Borough of Loganton, Clinton County. The project included the construction of a 31,200-SF independent building addition with an associated parking area.

Stahl Sheaffer provided structural design and construction administration for the building addition to the existing school. Our team worked with the design architect to develop an economic building structure that met the demands of the architecture and occupant function. A combination of load bearing masonry, steel frame, and load bearing light-gauge framing supports a wood framed floor and roof system. A combination of wood shear walls and masonry shear walls were provided to resist the lateral loads on the structure. The site accommodated a three-level building with grade access to the “first” floor on the high side and walk-out to grade at the “ground” floor on the low side. A structural retaining wall stepped around the building perimeter to accommodate the grade change. Where the new construction connected with the existing building, a free-standing 4-hour firewall was required and as-designed by the architect was required to penetrate through the gable roof and extend beyond the building on each side. The

exposure to code-required wind loading increased the structural demand on the wall, which Stahl Sheaffer was able to meet by designing the wall as a cantilever section using doubly reinforced concrete masonry units.

Stahl Sheaffer provided site layout and grading, parking lot design and layout, stormwater management, Erosion and Sedimentation Control Plan, NPDES permit, site landscaping and site lighting to comply with ordinance requirements, and submission of the land development package. Construction administration was also included along with supplemental support for a temporary parking facility to manage the subcontractors.

