

ENTRY FORM



DVASE 2020 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

Buildings under \$5M		Buildings Over \$100M	
Buildings \$5M - \$15M	✓	Other Structures Under \$1M	
Buildings \$15M - \$40M		Other Structures Over \$1M	
Buildings \$40M - \$100M		Single Family Home	

Approximate construction cost of facility submitted:	Total Project Cost \$7,000,000
Name of Project:	Greene Street Friends School: Multipurpose Building
Location of Project:	5511 Greene Street Philadelphia, PA
Date construction was completed (M/Y):	August 2018
Structural Design Firm:	Thornton Tomasetti
Affiliation:	All entries must be submitted by DVASE member firms or members.
Architect:	DIGSAU
General Contractor:	W.S. Cumby

Company Logo (insert .jpg in box below)



Important Notes:

- Please .pdf your completed entry form and email to bsagusti@barrhorstman.com.
- Please also email separately 2-3 of the best .jpg images of your project, for the slide presentation at the May dinner and for the DVASE website. Include a brief (approx. 4 sentences) summary of the project for the DVASE Awards Presentation with this separate email.

- Provide a concise project description in the following box (one page maximum). Include the significant aspects of the project and their relationship to the judging criteria.

Greene Street Friends School is a Pre-K through 8th Grade school located in the Germantown neighborhood of Philadelphia. Founded in 1855, the campus previously encompassed classroom buildings on Greene Street and Armat Street, an administrative building on Schoolhouse Lane, exterior spaces and a half-acre field. In 2010, the school conducted a master plan to incorporate new program objectives including new space standards, renovation design options for all facilities, and a new physical education and performing arts facility. The new Multipurpose Building is based on recommendations of the plan and includes a ground level flexible space that accommodates a variety of programs including physical education, fine arts performances, all-school gatherings, special events and receptions. The facility also provides six new classrooms and two additional specialty classrooms with connections to the existing school building at each level.

At a Glance

- Three-story, multipurpose building
- 22,000 gross square feet
- Steel floor framing and braced frames, concrete on metal deck
- Long-span structure over gymnasium
- Backstage area with theater rigging and operable door to courtyard
- Sloped roof with bent beams
- Connection to existing school building with basement
- Outdoor wood stage
- New elevator in existing shaft

A Sampling of Significant Structural Features

Structural System – The structural system consists of composite steel beams at the classroom levels. Above the gymnasium, infill framing spans 50 feet and connects to heavy, 60-foot W40 girders, all of which were designed to strict vibration criteria. These girders support basketball hoops and an intricate acoustic ceiling below. Façade elements ranging from brick and aluminum storefronts to operable partitions and an outdoor rooftop terrace required several unique details throughout the project.

Sloped Roof – Portions of the north and south roofs slope sharply down at different angles to the third floor. To accommodate this, our roof design included sloped braced frames and W36 and W40 bent girders. These girders span the length of the building to provide flexible classroom space and allow for the column free gymnasium below. We used sloped, cold-formed metal framing to support the roof deck that ties the diaphragm together.

Existing Building – The new structure connects to the existing Aramat Street building at each level via expansion joints, where existing openings in the brick façade had to be expanded or infilled. New foundations extend deeper than the rest of the site at the interface to avoid loading the existing basement walls. The design also reuses a previously abandoned elevator shaft, which required a new pit with underpinning to accommodate a more modern, robust machine.

- The following 5 pages (maximum) can be used to portray your project to the awards committee through photos, renderings, sketches, plans, etc...



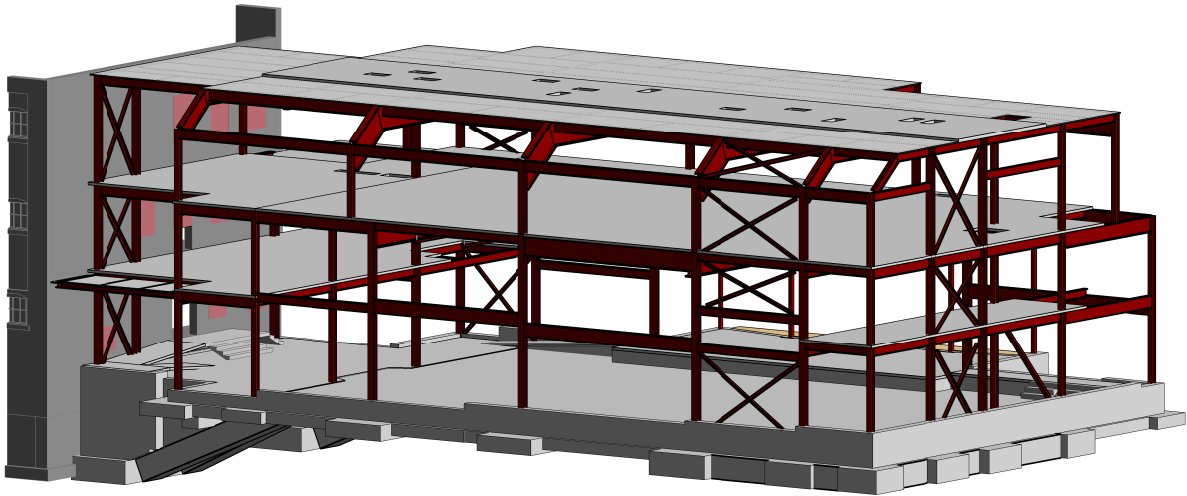
PHOTOS COURTESY OF DIGSAU





PHOTOS COURTESY OF DIGSAU





AXON VIEW OF REVIT MODEL



CONSTRUCTION PHOTOS - 2018



FORMER FACADE AT ARAMAT BUILDING



CONSTRUCTION PHOTOS - 2018





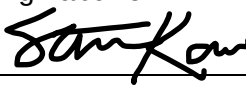
PHOTOS COURTESY OF DIGSAU

By signing, signatory agrees to the following and represents that he or she is authorized to sign for the structural design firm of record.

All entries become the property of DVASE and will not be returned. By entering, the entrant grants a royalty-free license to DVASE to use any copyrighted material submitted.

If selected as an award winner, you may be offered the opportunity to present your project at a DVASE breakfast seminar. Would you be willing to present to your colleagues? ☐ YES ☒ NO

Submitted by:

Print name: Stephen Kane, P.E.		Signature: 	Date: 3/19/20
Submitting Firm:	Thornton Tomasetti		
Mailing address:	1700 Market Street, Suite 1750 Philadelphia, PA 19103		
Telephone: 267-238-4030	Fax: 267-238-4001	Email: skane@thorntontomasetti.com	