

ENTRY FORM



DVASE 2021 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:	\$8M
Name of Project:	The Abbey Inn & Spa - Convent Renovation
Location of Project:	Peekskill, New York
Date construction was completed (M/Y):	12/20
Structural Design Firm:	Mulhern + Kulp Structural Engineering
Affiliation:	All entries must be submitted by DVASE member firms or members.
Architect:	John K. Karhu Architect, P.C.
General Contractor:	Ginsburg Development Companies, LLC

Company Logo (insert .jpg in box below)



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING

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p 215-646-8001 ▶ mulhernkulp.com

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 annual virtual presentation 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.

Constructed from 1872-1963, the Abbey Inn was originally home to a Convent and Chapel established by the Episcopal Sisters of Saint Mary. The nuns moved elsewhere in 2003, and plans were made for the Abbey and its Chapel to be converted into The Abbey Inn & Spa.

In late 2017, Mulhern & Kulp was contracted to perform an evaluation of the existing structure within the Abbey for this conversion. The existing structure consisted of 3-4 Stories of 30" Thick Rubble Masonry Exterior walls, 2x floor framing, interior wood bearing walls, and a stick-framed wood roof structure. After the initial evaluation, Mulhern & Kulp was tasked with developing the Structural CD's for the project which encompassed the repair/retrofit of the existing structure for code compliance, conformance to the new interior layout, and integration of multiple exterior additions.

The combination of bringing the existing structure up to code and strengthening it for the performance expected within an Inn & Spa provided many engineering challenges. The most difficult aspect was the constraint between the existing structure and the new interior wall layout. New bearing lines were created and tracked throughout the (4) story structure, few of which stacked from one floor to the next. Existing floor joists and beams required strengthening to carry these new offset loads from above down to the foundation.

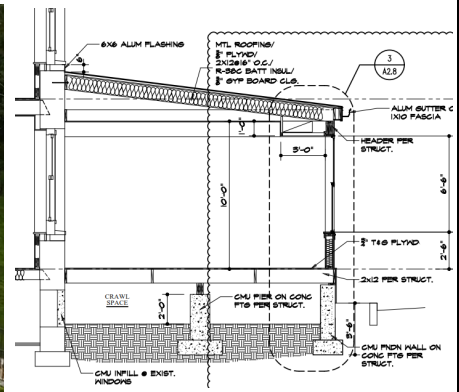
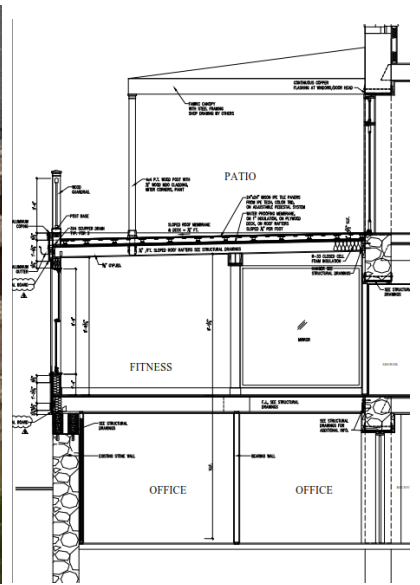
High bedrock located close to the underside of the existing floor joists within the crawlspaces limited the working space to pour any new foundations. Due to this constraint, the existing foundation was utilized to support all new framing within this region. Details on page #7 of this package highlight locations in which new steel structure was strategically located to land on existing foundations. The addition of an elevator & elevator pit adjacent to this area also required sequencing the under-pinning of the existing rubble masonry wall and in some cases the demolition of bedrock located close to the surface.

In addition to renovating the existing interior structure, there was an aspect of the project in which multiple exterior additions were added as shown on page #4 of this package. On the rear of the building a new covered dining room was built, and a new 2-story structure was built within the interior courtyard. The roof of the rear dining area was tied into the existing rubble masonry wall and the foundations tied directly into the bedrock itself with epoxy dowels. The courtyard addition involved demolishing an existing roof (first photo top left, page #4) and constructing new wood framed floor and roof deck structures which tied into the existing masonry walls. Providing new door openings to these spaces was another engineering challenge to properly sequence the temporary support and removal of the 30" masonry wall where required.

Mulhern + Kulp was proud to be a part of the design team which brought this historic structure back into the limelight, recently being named #3 on the "Top 10 Best New Hotels" List by USA Today.

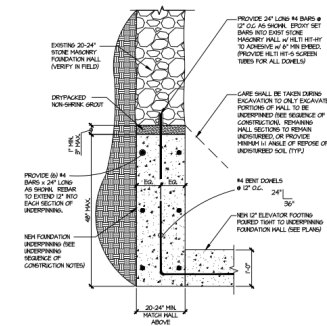
- The following 5 pages (maximum) can be used to portray your project to the awards committee through photos, renderings, sketches, plans, etc...











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:

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