ENTRY FORM



DVASE

2017 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

Buildings under \$2M		Buildings Over \$100M	
Buildings \$2M-\$10M	Х	Other Structures Under \$5M	
Buildings \$10M - \$30M		Other Structures Over \$5M	
Buildings \$30M - \$100M		Single Family Home	

Approximate construction cost of facility submitted:	\$12 million
Name of Project:	Metropolitan Lofts
Location of Project:	Morristown, NJ
Date construction was completed (M/Y):	In Progress
Structural Design Firm:	Mulhern and Kulp Structural Engineering
Affiliation:	All entries must be submitted by DVASE member firms or members.
Architect:	Marchetto Higgins Stieve
General Contractor:	Woodmont Properties

Company Logo (insert .jpg in box below)



Important Notes:

- Please .pdf your completed entry form and email to <u>bkoroncai@barrhorstman.com</u>.
- 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.

Mulhern and Kulp provided complete structural engineering services for this new five-story, 59-unit luxury mixed-used apartment building located in the heart of Morristown, NJ. The subject building includes four floors of residential units over a composite steel transfer level podium constructed over the ground level retail and amenity spaces. The residential floors comprise a structure that is a "U-shaped" building surrounding an elevated courtyard on three sides.

A significant complexity encountered with this project was the vicinity of an existing eight-level parking garage structure as well as the subject building's location to other existing structures and roadways. Approximately 30% of the proposed subject building is located over an existing drive aisle servicing the existing parking structure. Additionally, the intent of the developer was to utilize the previously constructed foundation structures that were placed for a cancelled building project on the property as had been stipulated that the garage and respective drive aisle remain in operation throughout the course of the new building project.

Furthermore, the locality of the site proved to be particularly problematic as it is located in downtown Morristown, New Jersey, having limited staging areas for a project such as this. To accommodate both the accessibility of the garage and the lack of staging area, it was decided that the project will be constructed in two phases. The initial phase (Phase 1) of the project involved the construction of the steel podium over the existing drive aisle. Substantial steel girders clear span the width of the drive aisle and allowing for unimpeded access to the existing garage. Once the steel framing and concrete deck was completed over the drive aisle, this would serve as a staging area for the remaining portions of construction (Phase 2).

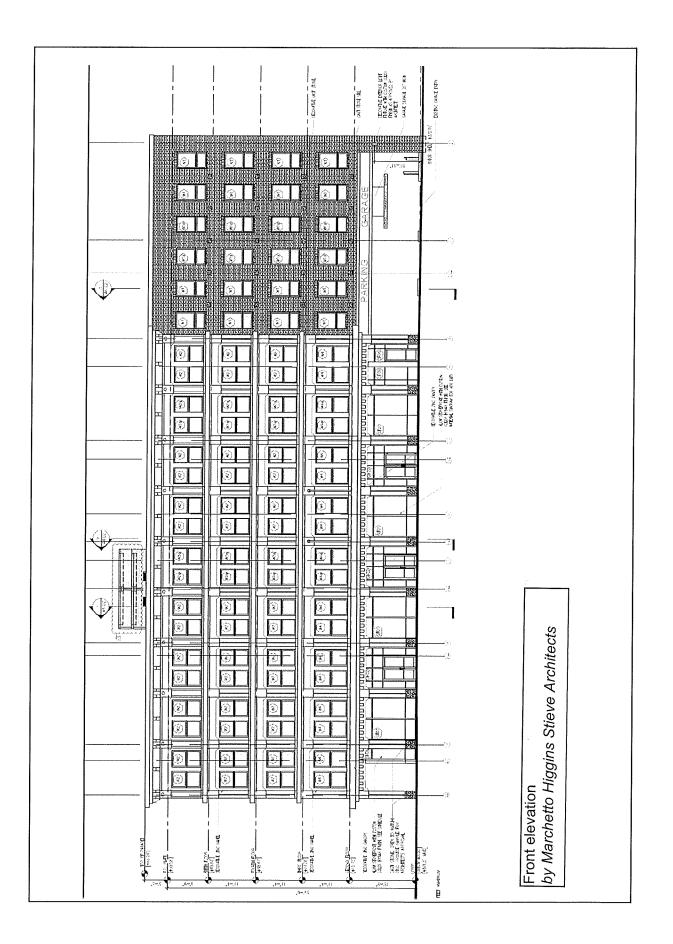
The phased construction of this project required the design team to analyze loading conditions that would not otherwise be required of the project for a conventionally-constructed building. For example, prior to the completion of Phase 2 in the project, several cantilevered beams constructed during Phase 1 required consideration of net uplift forces at several columns. This required footings and column connections to be appropriately designed to resist net tension forces.

As a result of our initial coordination with the developer, the project was is currently being realized and is proceeding without major impediments to the drive aisle access as well as having ample staging area that would otherwise have not been realized within this downtown district. • The following 5 pages (maximum) can be used to portray your project to the awards committee through photos, renderings, sketches, plans, etc...



**Rendering by Marchetto Higgins Stieve Architects





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? **XES I NO**

Submitted by:

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