ENTRY FORM

DVASE
2017 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

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

Approximate construction cost of facility submitted:	$30 million
Name of Project:	The Beacon
Location of Project:	1527 Walnut Street, Philadelphia, PA
Date construction was completed (M/Y):	04/2017
Structural Design Firm:	The Harman Group, Inc.
Affiliation:	**All entries must be submitted by DVASE member firms or members.**
Architect:	DAS Architects
General Contractor:	Wellcraft Construction

Company Logo (insert .jpg in box below)

Important Notes:

- Please .pdf your completed entry form and email to bkoroncai@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.

The Beacon mixed-use development features a six-story overbuild of the Brown Brothers Harriman Co. building at the corner of 16th and Walnut in Philadelphia, as well as an adjacent 14-story addition. The 110,000 sf building will feature 98 apartments, and tenant amenities such as a fitness center, roof deck, catering kitchen and game room.

When approached to do the overbuild of the existing early 1900's building, the challenge was meeting code for lateral loads. Based on what could be viewed at the time, the columns, foundations and soil conditions were robust and tightly spaced (16' o.c.). It was decided to engage the adjacent 28' parcel and tie in a horizontal expansion that had sufficient capacity to support the lateral loads for the addition and the existing building. Heavy lateral loads boosted the steel tonnage for the addition to almost 20 psf.

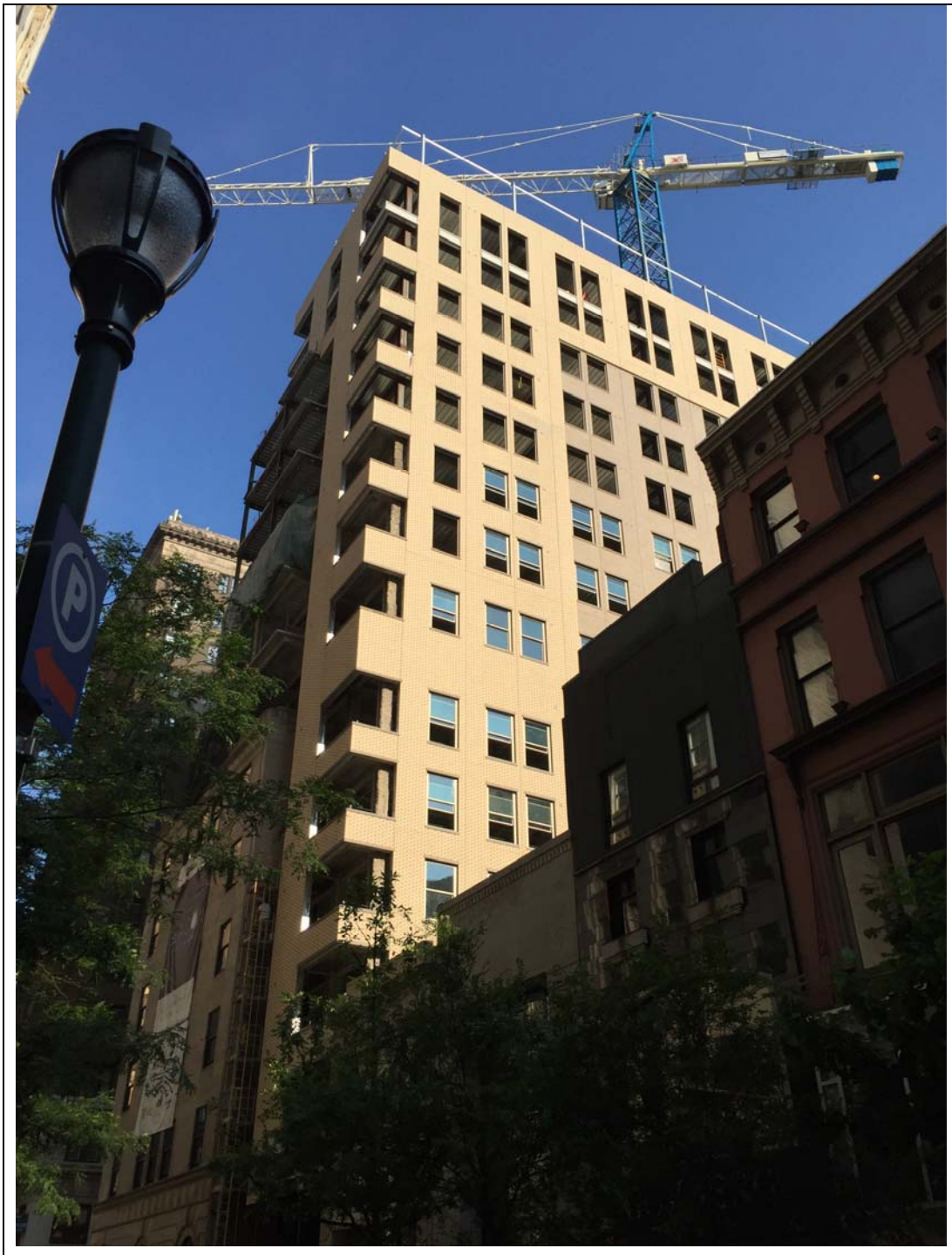
The existing building had built up riveted steel columns. After the tenant left the top floor, it was determined that the existing columns were significantly reduced in size at the top floor. The existing columns were then boxed in with steel plates to create tube columns to support the load. Additionally, due to the stepped existing column sizes, all existing splices were reinforced.

Last but not least, during construction it was determined that the existing columns at the basement perimeter were embedded within the brick foundation wall. The porous material and water soaked soil rotted out 50% of the existing columns. The columns were immediately shored and reinforced one by one and encased in concrete down to the existing foundations.

Detailing of the connections between the existing and new columns was critical. Careful field dimensions limited any offset. The connecting details allowed for additional tolerances in the field taking any eccentric moments into the upper columns and into supporting girders.

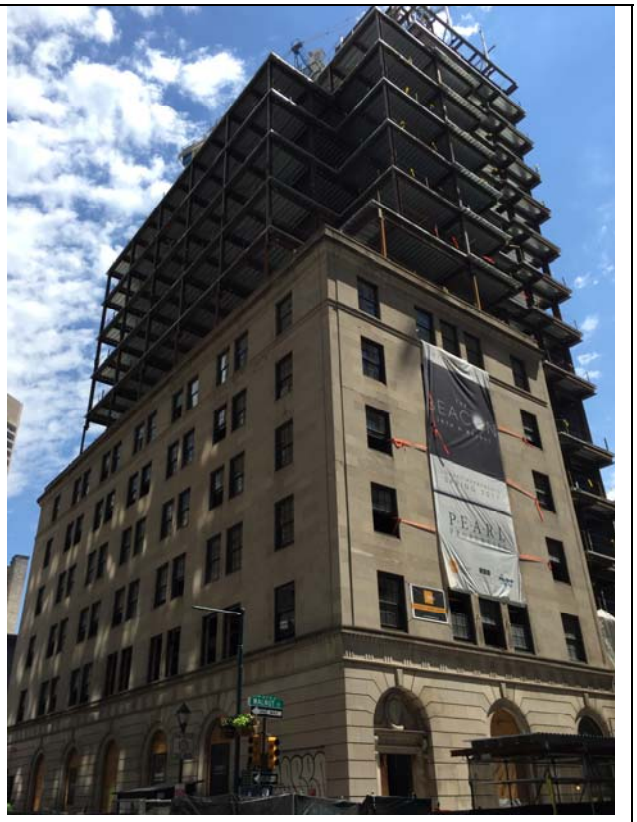
The project was extremely challenging and rewarding, resulting in newly found real estate at a highly visible and valuable city corner.

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



Extremely tight urban site with tower crane

Close surveying allowed for tight construction



Caisson drilling rig at the bottom of the


NEW
LUX
APTS
THE
BEACON
PEARL
TOP
PICKS

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 is granted 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: **Janis B. Vacca, PE, LEED AP**	**Signature:** 	**Date:** **4/17/17**

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