

ENTRY FORM



DVASE 2019 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

Buildings under \$5M		Buildings Over \$100M	x
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:	\$161.2 Million
Name of Project:	3675 Market Street
Location of Project:	Philadelphia, PA
Date construction was completed (M/Y):	November 2018
Structural Design Firm:	Keast & Hood
Affiliation:	All entries must be submitted by DVASE member firms or members.
Architect:	ZGF Architects
General Contractor:	Intech Construction

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.

3675 Market Street is the third building in a series of new construction projects that Keast & Hood has completed for Wexford Science & Technology and the University City Science Center. The new building is part of the UCity development. Included in the development is the extension of 37th Street through the site, linking Market and Warren Streets for pedestrian and automotive travel. The newly formed section of 37th street will reconnect the Powelton Village neighborhood to the University of Pennsylvania's campus. Creating an open thruway for residents and students. 3675 Market Street will serve as the new gateway and front door to the UCity site to the north.

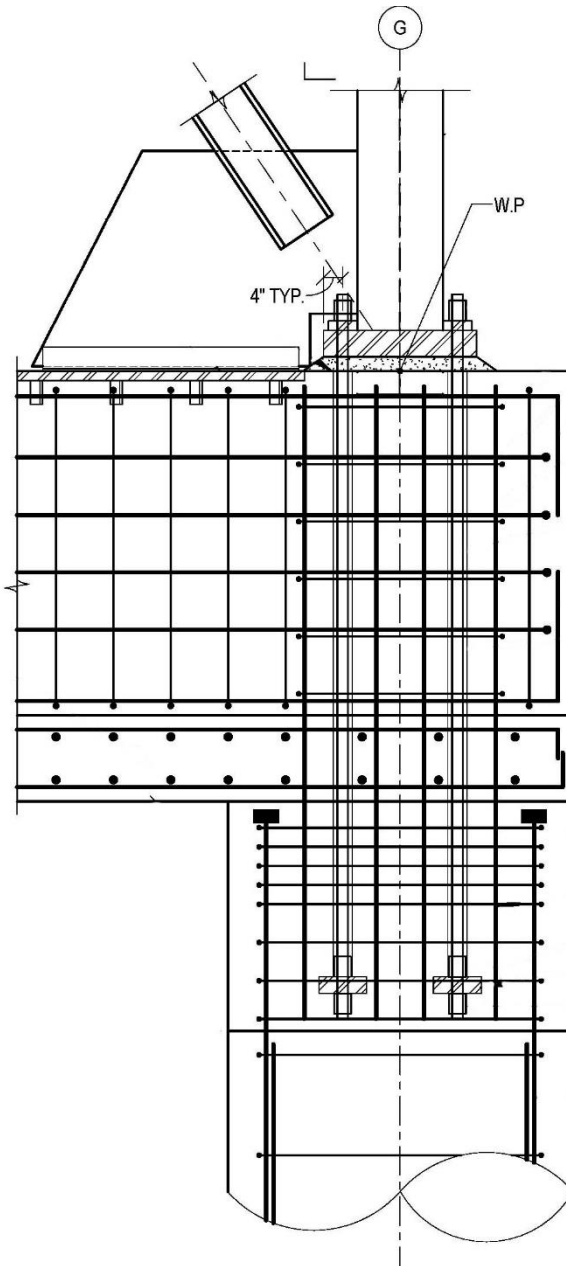
The new, 14 story tower contains approximately 370,000 RSF of office, laboratory, and commercial space with Cambridge Innovation Center (CIC) as the lead tenant. CIC's program includes two floors dedicated to the Quorum Collaboration, including a café area and meeting spaces. The structure needed to accommodate the large and open flexible spaces specified for the Quorum, as well as the space's high ceilings. A design highlight was the Quorum's tall point supported glass wall structure, which is free spanning and connects to the 3rd floor low roof terrace.

Structural scope for 3675 includes a steel framed, cantilevered structure with long cantilevers on four sides of the building to enable column-free spaces at the perimeter of the floor plates. Where the elevator core meets the building core, structural gymnastics were required to get the steel anchors bolts into caissons to allow for the concrete sub-contractor to continue construction of the building and allow for future construction tolerances in the structural steel.

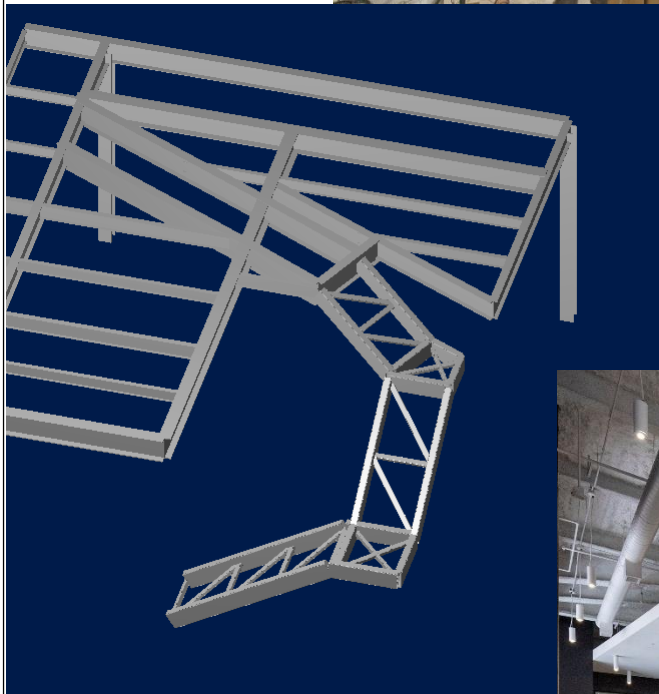
Key aspects of the structural design included:

- An independent, monumental stair that is comprised of structural steel wrapped in sheet rock. The 24 foot unsupported stair includes two landings. The bottom of the stair is supported on a drilled shaft and was located so that the stair had future adjustability in design.
- In the Quorum space, 40' spans in two directions with high pounds/SF.
- Caisson foundations, cast-in-place concrete first floor and a braced steel frame above.
- In order to achieve a column-free perimeter wall line, the structure cantilevers on three of the exterior sides of the building. Cantilever dimensions vary from 11'-0 to 19'-0. Cantilever grade beams were necessitated by the tight sight and proximity to the adjacent building on one side.
- The exterior includes insulated glass panels and an aluminum curtain wall system, as well as a modular green roof system.

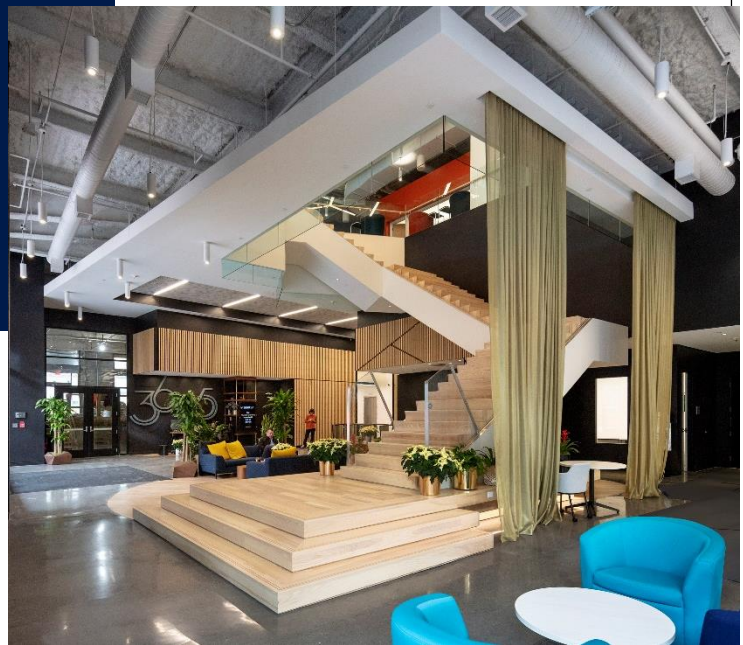
- The following 5 pages (maximum) can be used to portray your project to the awards committee through photos, renderings, sketches, plans, etc...



Anchor rods detail and
pictured during construction

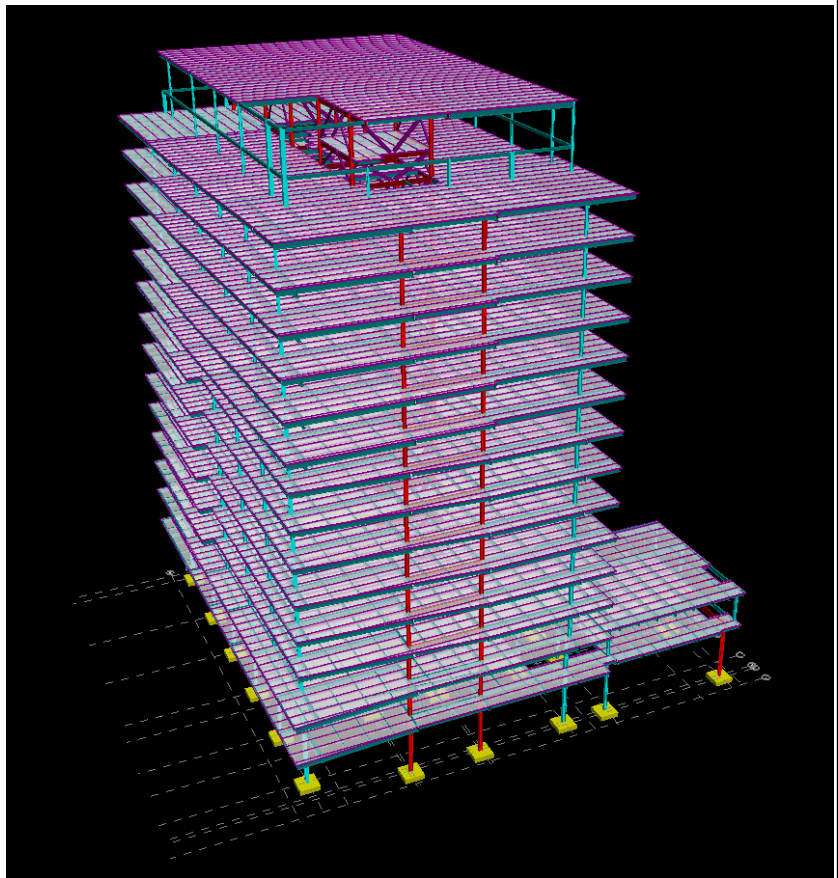


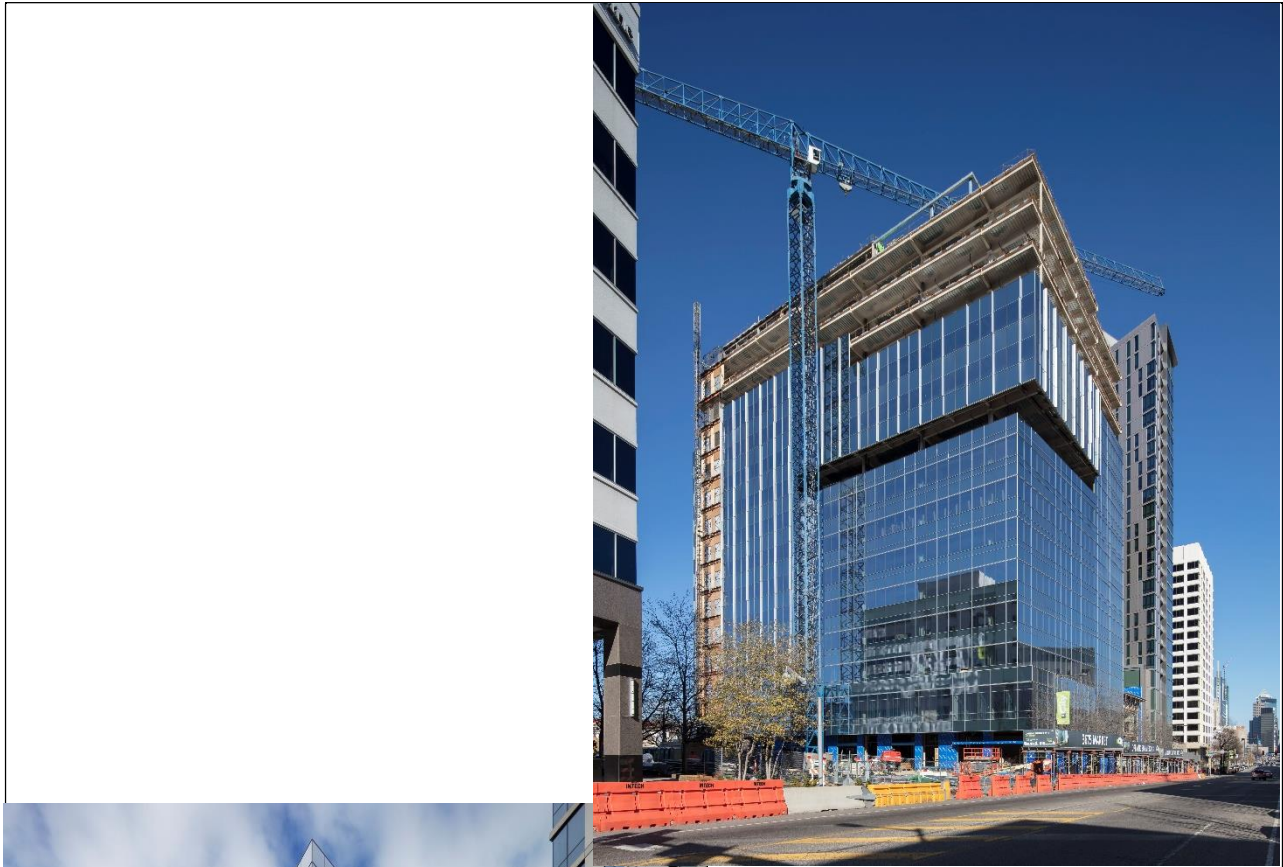
24 foot unsupported stair design





Large green roof and
building model capture





Above: Construction of 3675
Right: 3675 completed with
the two story Quorum Space
in the foreground.

3675 during construction and viewed from the North West.

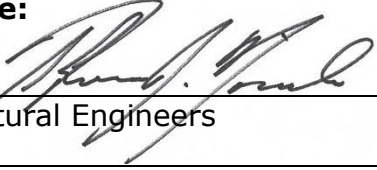


By signing, signatory agrees to the following and represents that he or she is authorized to sign for the structural design firm of record.

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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