

ENTRY FORM



DVASE 2018 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	X	Single Family Home	

Approximate construction cost of facility submitted:	\$50,000,000.00
Name of Project:	Miami Design District Museum Garage
Location of Project:	Miami, FL
Date construction was completed (M/Y):	Estimated April, 2018
Structural Design Firm:	Timothy Haahs & Associates, Inc.
Affiliation:	All entries must be submitted by DVASE member firms or members.
Architect:	Timothy Haahs & Associates, Inc.
General Contractor:	KVC Construction, Inc.

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.

TimHaahs provided full architectural and structural design, construction documentation, and construction administration for the Miami Design District Museum Parking Garage. TimHaahs services included design of the garage; vehicular circulation; parking layout; parking access control for different user types; structural system; integration of the base building structure with the façade framing that was designed by specialty engineers; and coordination of the façade designers with the base building and project documentation.

To complement the Miami Design District's dedication to the creative experience, the façades will provide an attractive connection between parking and the rest of the development with its vibrant designs; dramatic lighting; ground floor retail spaces; and restaurant to engage the pedestrian. By extending artistic elements into the parking areas, it allows an often overlooked experience within a development to make a significant contribution and further connect the development to the surrounding community. Extending such a concept into the development's parking facilities will provide visitors with a consistent interactive experience from the time they drive into the parking garages, throughout their visit, and to the time they arrive back at their vehicle to leave. It is a one-of-a-kind destination that combines the ideas of art, architecture, community, and culture together into one place.

During the design and construction phases, the project team faced numerous structural challenges. Approximately 1/3 of the project footprint already had deep foundations installed for a high-rise building. Particularly in the center portion of the high-rise structure footprint, 16" diameter auger case piles were closely spaced together and interfered with the initial foundation design that TimHaahs had prepared for the parking garage. After exploring alternate foundation options including mat foundation, the project team decided to stay with an 18" diameter auger cast pile foundation system. TimHaahs designed each pile cap so that the impact on the new foundation could be minimized.

To gain the number of parking spaces needed for our client, TimHaahs designed the parking garage with one full basement level. The basement slab was designed to resist hydrostatic pressure since the basement elevation was lower than the average ground water elevation. De-watering was required during the construction of the basement and ground tiers of the parking garage.

The superstructure consisted of post-tensioned concrete slabs, beams, and girders on all elevated tiers except for the ground tier, to avoid any potential structural damage that could be caused by future tenants in the retail spaces.

Due to the high-profile significance; the complexity of the facade design; and the design wind loads for the project location, sound facade connection design was a critical component to the project. TimHaahs was able to provide adequate connections for all facades while minimizing the impact to their aesthetics.

The project is still under construction and is targeted to be substantially completed in April of 2018.

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



<Aerial View of Existing Deep Foundation>



<Existing Deep Foundation>



<Post Tensioned System>



<Finished Superstructure>



<Parking Garage Facade>



<Slide & Spiral Stair>



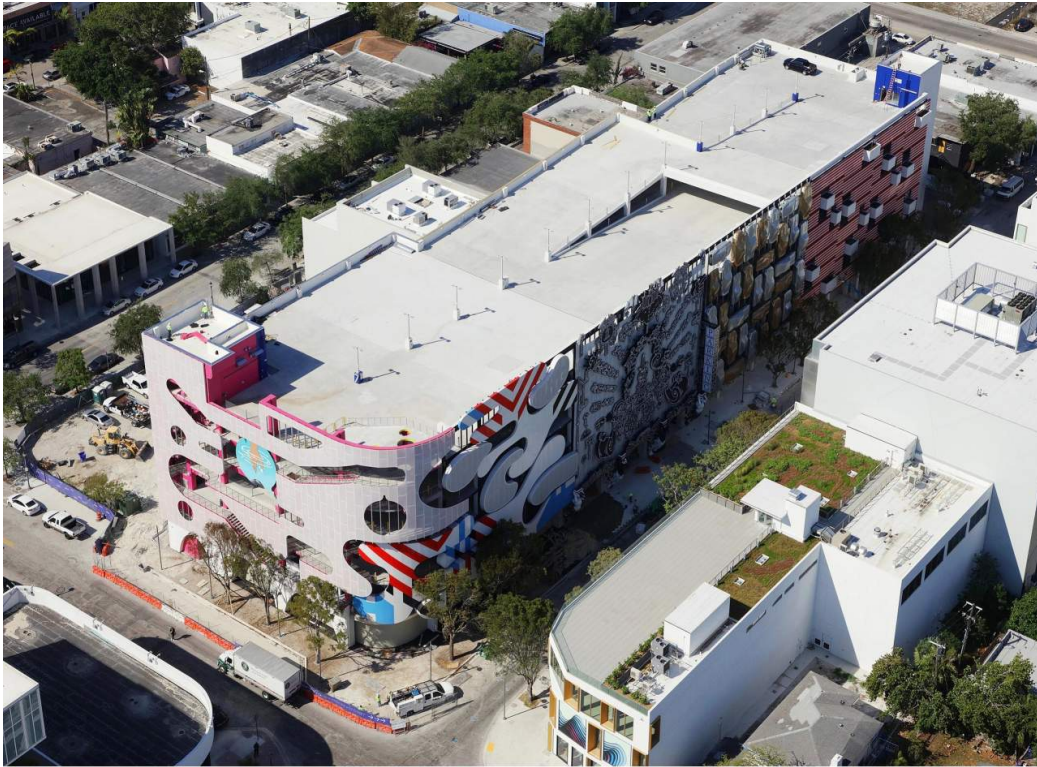
<Parking Garage Facade with hanging cars C.I.P. concrete planters>



<Parking Garage Facade>



<Parking Garage Facade>



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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