

Aric B. Heffelfinger

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OBJECTIVE

To obtain a full time position with a reputable structural engineering firm and attain a Professional Engineers license

EDUCATION

The Pennsylvania State University University Park, PA
Integrated Master/Bachelor of Architectural Engineering Fall 2001-Spring 2006
Five year professional degree – ABET accredited

- Cumulative GPA: **3.62**
- Major GPA: **3.82**

Passed Fundamentals of Engineering Exam October 2004

EMPLOYMENT

McLaren Engineering Group, NY Summer 2004, 2005

- Assisted senior engineer in multi-task site inspections, structural design and structural analysis for commercial, industrial and marine projects, some as large as \$900+ million
- Reviewed a variety of shop drawings for the structural support of connections, steel members, and foundations
- Developed construction schedule for legal document
- Worked with RAM, SAFE, ETABS, RISA 3D, Visual Analysis, AutoCAD, MS Office
- See attachment for specific projects

American Red Cross Certified Lifeguard/Counselor

- Girl Scouts of South Western Pennsylvania 1998-2001
- Days Inn 1998-2001

RELATED COURSES

Pre-stressed Concrete	Advanced Concrete
Advanced Steel	Design of Wood Structures
Indeterminate Analysis	Structural Analysis
Steel Connections	Design of Foundation Systems

ACTIVITIES & HONORS

Penn State Football Team Fall 2001-Spring 2004

- Required to attend practices, meetings, and film sessions approximately 25 hours per week
- Demonstrated the principles of discipline, respect, and honor as expected by Coach Joe Paterno

Academic Honors

- **Phi Alpha Epsilon, Φ AE** Spring 2005-Present
- The National Society of Collegiate Scholars Spring 2003-Present
- The Golden Key International Honor Society Spring 2003-Present

Community Service

- Seward Community Center Volunteer Summer 2002
- Special Olympics Volunteer 1998-2001
- Pennsylvania State University Penn Pal 2001-2002

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PROJECTS

Fordham Place

Performed a number of structural site inspections, both single handedly and along with senior engineer, to evaluate the structural conditions of the SEARS building in Bronx, New York. The 6 story building was constructed in the late 1920's and was used as an office building on the upper three floors while the lower three were occupied by SEARS. The structural components of the building, such as brick piers, concrete encased columns and beams, concrete slab on metal deck, and exterior brick walls, were inspected. Due to not having any existing plans, structural probes were used to determine the sizes, shapes and load capacities of the members. Assisted senior engineer designing a two story addition to the original building as well as attaching a 15 story office/retail building (Fordham Place) to the North side of the original building. Prepared a typical bay study comparing cost and ceiling to floor depth for a composite and non-composite construction and with 50 and 80 psf Live Loads. Construction for the 15 story addition is expected to begin in early 2006.

City of Yonkers

Performed a number of structural site inspections along with senior engineer to evaluate the structural conditions of numerous buildings for the City of Yonkers in Yonkers, NY. Prepared reports and repair recommendations and communicated with client on a consistent basis.

10 Saint Casimers – Inspected and proposed a structural solution to a 5 story brick façade building with the façade separating from main structural components of the building. Required client to tape off area just outside of building and also terminate use of the stairwell in which the problem existed. Also visually evaluated the condition of few cracked concrete beams and determined if they were adequate.

87 Nepperhan – Performed structural investigation of columns in order to determine current sizes and capacities to determine if they were adequate to carry the load of an additional mezzanine floor. Designed the additional floor addition that consisted of steel beams with composite metal deck supporting a concrete slab. Also designed unique welded/bolted connections for structural members.

Fire Engine 4 – Inspected current condition of outdoor concrete slab and proposed a solution of re-pouring the slab with a proper drainage route. Also performed load calculations for outdoor pavilion and determine if a previous design was adequate to carry loads. Modified previous design of pavilion to better avoid a drainage problem. This was done by running a curb alongside the pavilion to disallow any water from entering the pavilion.

Fire Engine 14 – Performed structural site investigation of roofing system and proposed designs for the addition of a rooftop air conditioning unit. The roof consisted of bar joist with concrete planks. First design was to distribute the weight over the concrete planks while taking advantage of a cmu block bearing wall. Another design support the unit with steel members that are framed into two bearing walls approximately 10 ft

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PROJECTS (cont)

Parking Garage Long Island

Performed structural site inspections along with senior engineer to evaluate the structural conditions of an existing parking garage, in Great Neck, New York. The building was constructed in 1911 and was well maintained until the 1960's at which time it was essentially abandoned. The structural components of the parking garage, such as steel columns encased in concrete, brick piers, concrete slab, metal deck, and steel beams were inspected. Also performed structural analysis of the roof trusses in order to develop a safe working load capacity. Assisted in preparing the report and repair recommendations.

Sloan Kettering Hoist Inspection

Assisted senior engineer at the site while performing site hoist inspections for the Memorial Sloan-Kettering research center in Manhattan, New York. This project consisted of visual inspections of two material and personnel hoists with platforms attached to the exterior frame of a 22-story building.

Firmenich Tank Foundation

Performed structural site inspection along with senior engineer to evaluate the structural condition of a slab on grade, in Jersey City, New Jersey. The slab initially supported 7 chemical tanks, approximately 175 kips a piece, and was evaluated to determine if it had the capacity to support another or if a redesign was needed. Assisted in preparing the report and repair recommendations.

Stevens Center of Art – Redesign of Duct Openings

Assisted senior engineer with site visit verifications of designed/modified duct openings of the steel beams for Stevens Center of Art in Hoboken, New Jersey. This project included design and modifications of floor beams for HVAC duct openings (total of 14 duct openings in the beams on the second, third and fourth floors) that were added to the scope of the project after the construction documents were released.

460 Broom Street, New York

Performed site inspection along with senior engineer to determine and evaluate the structural condition of a 5-story masonry building located in Manhattan, New York. The building is currently being used as a textile design office. The visual inspection included the basement level, lobby, all four floors, and the roof area. Assisted senior engineer in providing the structural report. Reviewed calculations and shop drawings for connection design under the supervision of a structural senior engineer as required by the project specifications. Connection designs were based on AISC specifications.

Pool Inspection – Lyndhurst

Performed a number of structural site inspections along with senior engineer to evaluate the structural conditions of the swimming pool building in Tarry Town, New York. The building was constructed in 1911 and was well maintained until the 1960's at which time it was essentially abandoned. The structural components of the building, such as roof trusses, steel support columns, exterior brick walls, tunnel roof framing around the pool perimeter, wood roof structure, and parapets were inspected. Also performed structural analysis of the roof trusses in order to develop a safe working load capacity. Assisted in preparing the report and repair recommendations.