



2006
Design & Manufacturing
Excellence Award
Winners



Design Excellence – Residential

1708 River Oaks Boulevard

Architect:
Ed Eubanks/Eubanks
Group Architects

Cast Stone Manufacturer:
Siteworks, Inc.



DESIGN & MANUFACTURING EXCELLENCE WINNERS



What is the scope of the project?

The 1708 River Oaks Boulevard project was a renovation of a partially completed and abandoned private residence. Restoration required producing new cast stone that precisely matched the color and style of the existing weathered stone. Cast stone also provided a highly ornamented and lighter colored highlight surrounding a darker colored stone veneer.

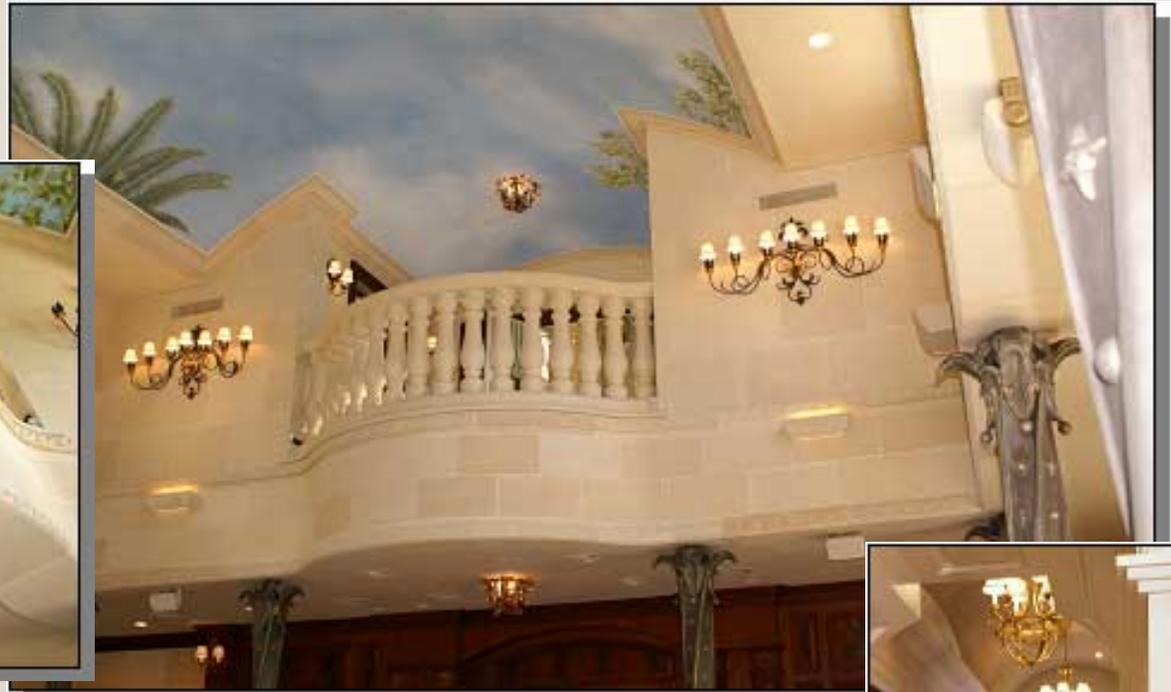




What is the role of Cast Stone?

Drawing its color and patterns from the existing weathered cast stone, the new cast stone ornamentation (including columns, pediments, balusters, niches, and banding) augmented the beauty of the existing cast stone pieces while adding elegance and grandeur to the residence. Additionally, cast stone pieces (niches, balustrades and barrel vault ceilings) were used to unite and harmonize the interior and exterior of this remarkable residence.





How was Cast Stone critical to the success of the project?

The Project's success rested principally on the new cast stone ornamentation providing the scale, beauty, and grandeur needed to complete and unify the residence's striking exterior and interior architecture, while blending seamlessly with the existing weathered cast stone's color and patterns. Cast Stone was a perfect solution for the many classical, yet highly intricate, designs and patterns. The result is a timeless, stately residence.





Design Excellence – Residential

Houser Residence

Architect:

Larry Eugene Boerder/
Boerder Architect A.IA

Cast Stone Manufacturer:
Advanced Cast Stone, Inc.



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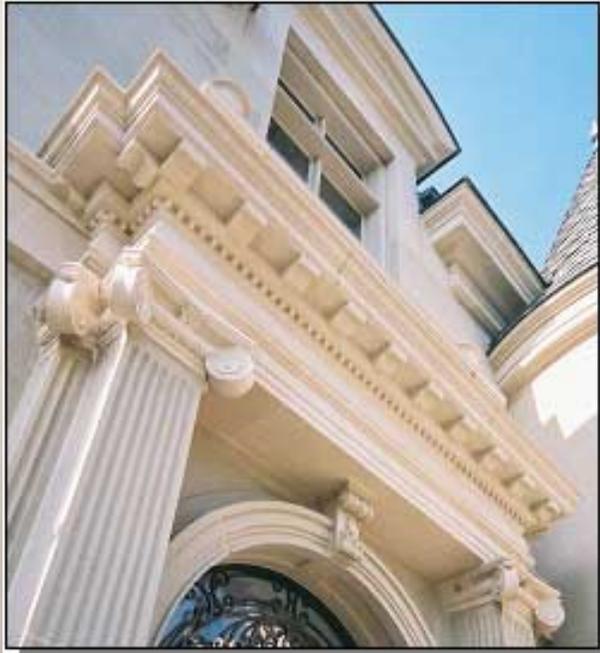


What is the scope
of the project?

This is a new residential project
located within a gated community
of houses of similar design.



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What is the role of Cast Stone?

This house was designed to use limestone veneer panels for the exterior walls and cast stone for all ornamental and decorative features. The cast stone was custom colored to closely match the limestone panels successfully blending the two materials. Architects and design professionals have complimented the project for the successful integration of both materials.





How was cast stone critical to the success of this project?

The architect's vision for the project was to create an ornate French townhouse within a generous but not unlimited budget. Cast stone was required to give the effect of carved material. Cast stone was used exclusively on all exterior elements in lieu of carved stone allowing for the project to stay within budget. The cast stone grand entry, entablature, and ornate panels achieved the design intent in a very successful and cost effective manner.



Design Excellence – Commercial

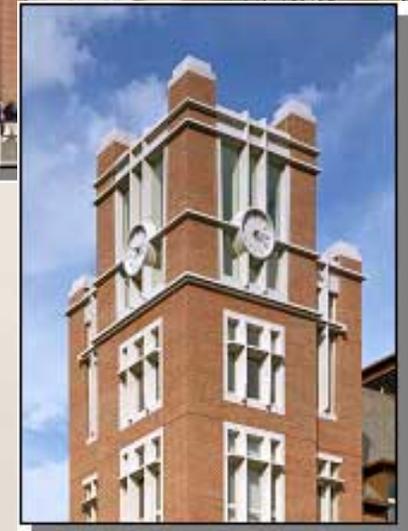
North Residential Village

Architect:
Goody Clancy

Cast Stone Manufacturer:
American Artstone



DESIGN & MANUFACTURING EXCELLENCE WINNERS



What is the scope of the project?
New seven building residential village

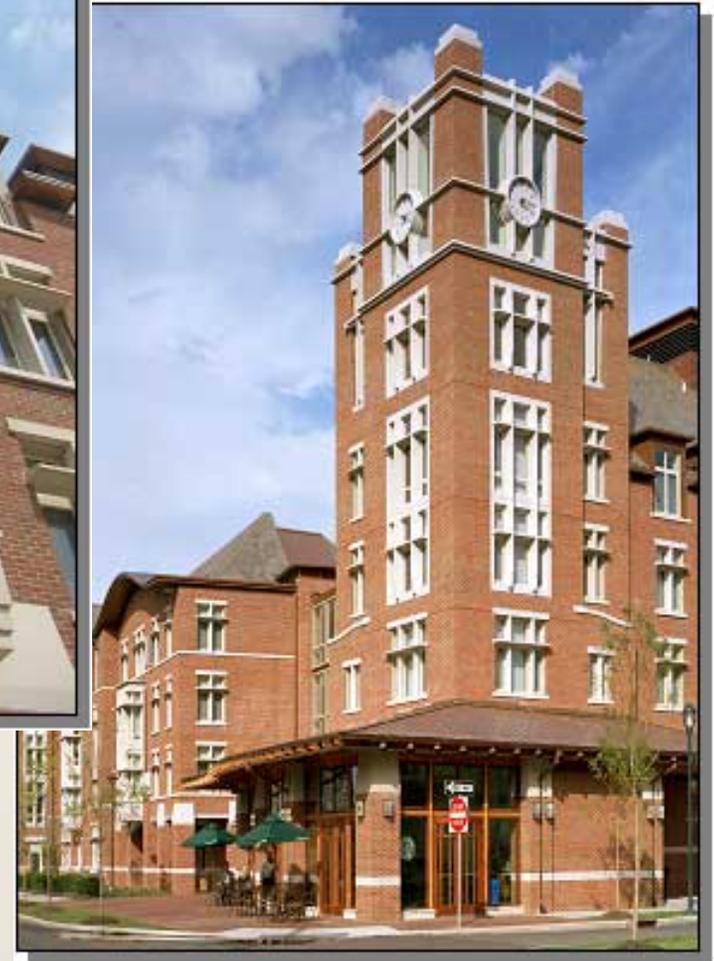


DESIGN & MANUFACTURING EXCELLENCE WINNERS

What is the role of Cast Stone?

“To give life to brick buildings.” We provided all window surrounds, bay window, clock tower, etc.

“Artstone developed a method of casting our tracery elements as screens or grilles and our bay windows as three-sided “bird cage” like elements.”



How was Cast Stone critical to the success of the project?

We simulated limestone. In traditional gothic and collegiate gothic buildings, limestone tracery elements are set into massive stone and brick walls and extend from the building's exterior all the way into the inside face of the wall. While very beautiful from the exterior, these stone elements create massive thermal bridges. We felt that if we could find a way to Precast these elements with steel reinforcing, they could be self-supporting and remain within the outer veneer layer of the cavity wall, thus minimizing thermal bridging while virtually floating in front of the wall plane.”

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Design Excellence – Commercial

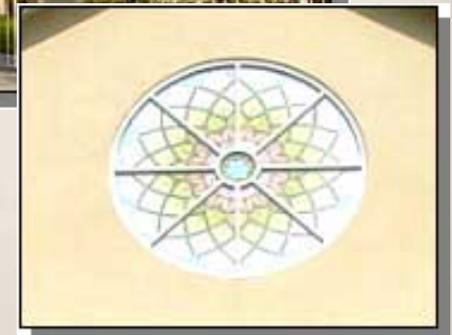
Century Exploration Building

Architect:
Ray Truitt/Truitt
Architectural Services

Cast Stone Manufacturer:
Siteworks, Inc.



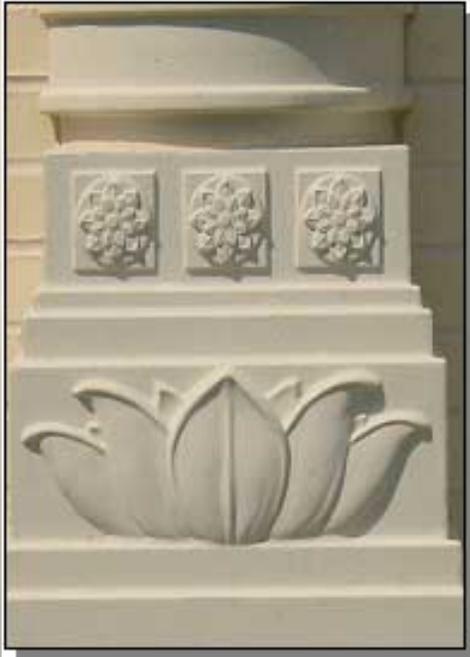
DESIGN & MANUFACTURING EXCELLENCE WINNERS



What is the scope of the project?

Maharishi Vedic Architecture is the modern revision of the ancient system of Vedic Architecture devised to bring peace, harmony, and success to life by aligning the living environment with natural law utilizing natural building materials, great precision, and proportionality. The Century Exploration building is considered by the owner to be “the most perfect example of Maharishi Vedic Architecture to date.”





What is the role of Cast Stone?

White marble, the designer's initial preference for the exterior ornamentation, was dismissed early in the project due to time and budget constraints. A unique mix of 60% crushed white marble and white Portland cement was developed which gave the desired color and met the architect's original concept while keeping the project within budget and on schedule. In addition to beautiful and detailed ornamentation, cast stone pilasters were innovatively used to conceal expansion joints and downspouts.





How was Cast Stone critical to the success of the project?

The project's success rested principally on the quality and detailing of the exterior ornamentation and the natural beauty of cast stone in achieving harmony in a natural setting. Ornaments include multiple columns, each with decorative base and capital; pilasters, entablature at the floor level of the second and third floors; balustrades; plinth; lotus panels; and keystones. These features are fundamentally dictated by the tenants of Vedic Architecture and were essential to the client.



Manufacturing Excellence – Commercial

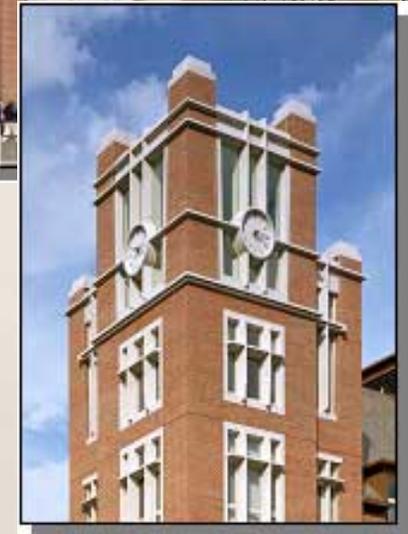
North Residential Village

Architect:
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Cast Stone Manufacturer:
American Artstone



DESIGN & MANUFACTURING EXCELLENCE WINNERS



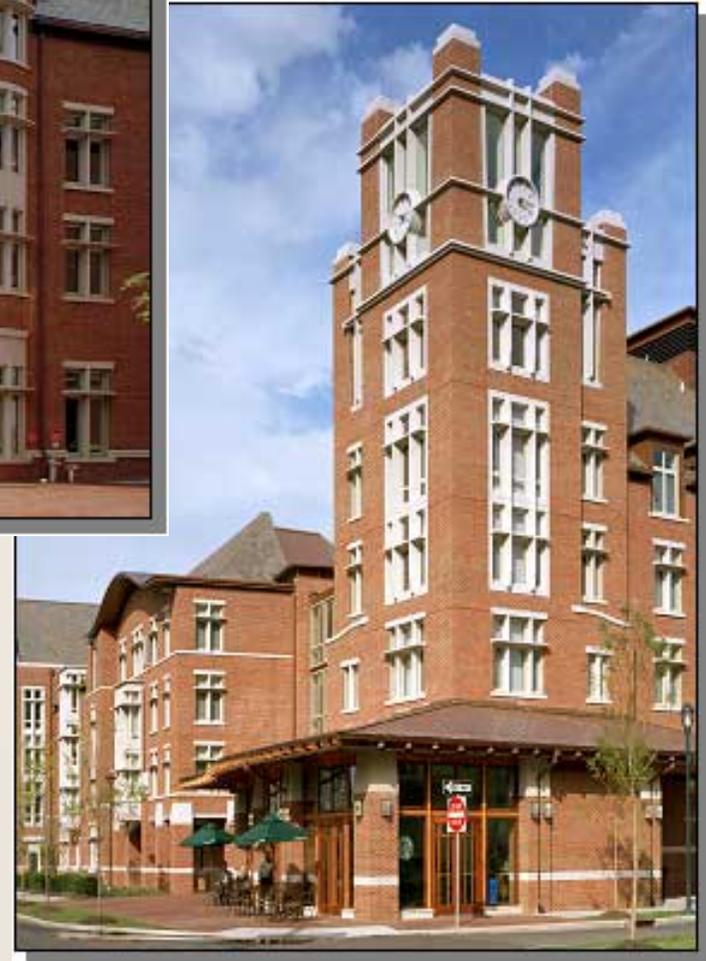
What is the scope of the project?

Our challenge was to manufacture window surrounds, radius window surrounds, bay windows, as well as caps for seven dormitories and ship to Cleveland, Ohio. The architect was set on creating a built in sun shade in every window unit. We had to argue many time to talk him out of narrowing this visor.



What special molding or casting techniques were necessary to illustrate the Architect's concept on the project?

We developed a method of casting the bay windows as three separate three sided units that once on site were erected as one complete element. Each section was supported at four points directly off of the concrete structure. Window elements were then erected behind them at the inner face of the wall, minimizing thermal bridging.



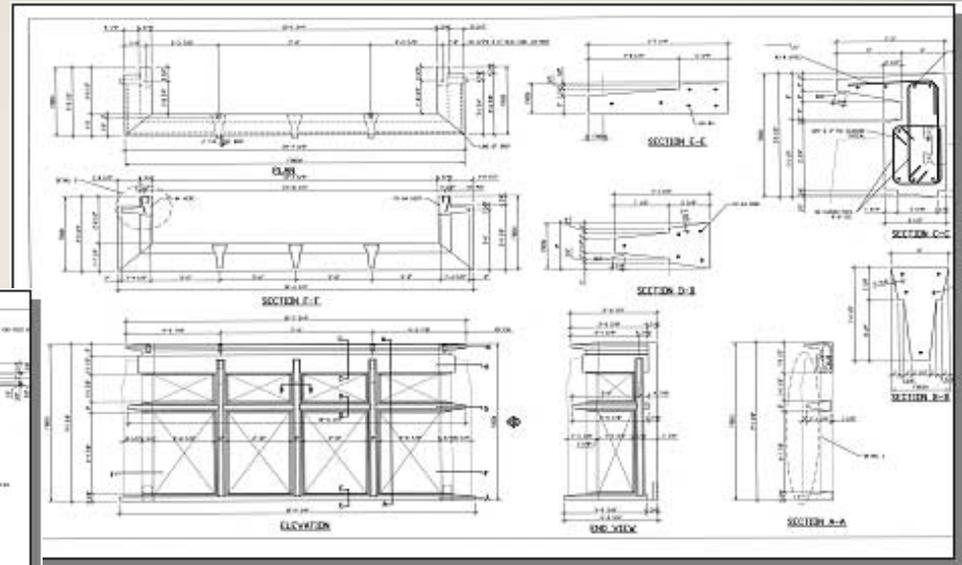
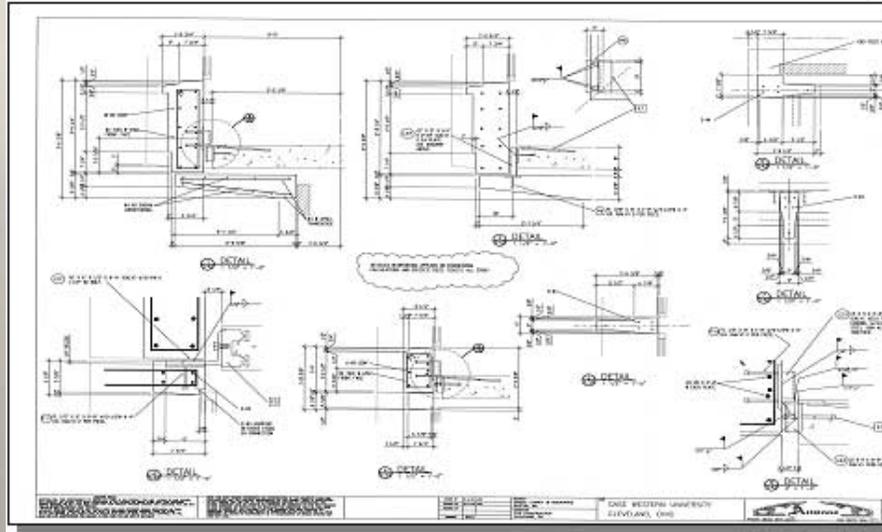


Degree of Difficulty

The three wide “Z” window was a true challenge.



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Were there unique project requirements that presented particular challenges and how were they met?

Because of lack of structural back up we were faced with building the pieces as self-supporting. It took out carpenter a full month to construct the mold. Once that was done it took a full day for the re-enforcing to be put in place. We could only pour 2-3 units per week, it took that time to re-assemble the mold.





Manufacturing Excellence – Commercial

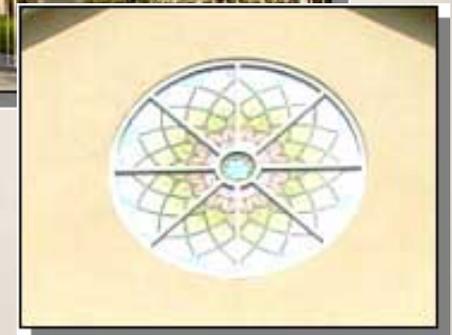
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The highly elaborate, multi-tiered pilaster capitals presented both mold making and demolding challenges. The client's requirement for right angles between each tier did not allow the use of normal draft. This was solved by constructing a mother-mold containing eight sub-molds.

A large number of "U", "L" and "W" shaped pieces without flat backs required significant extra care and sand back-filling. (See drawings.)



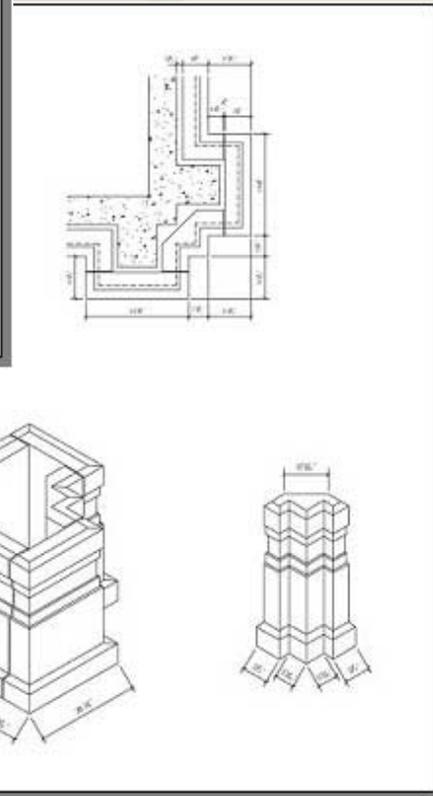
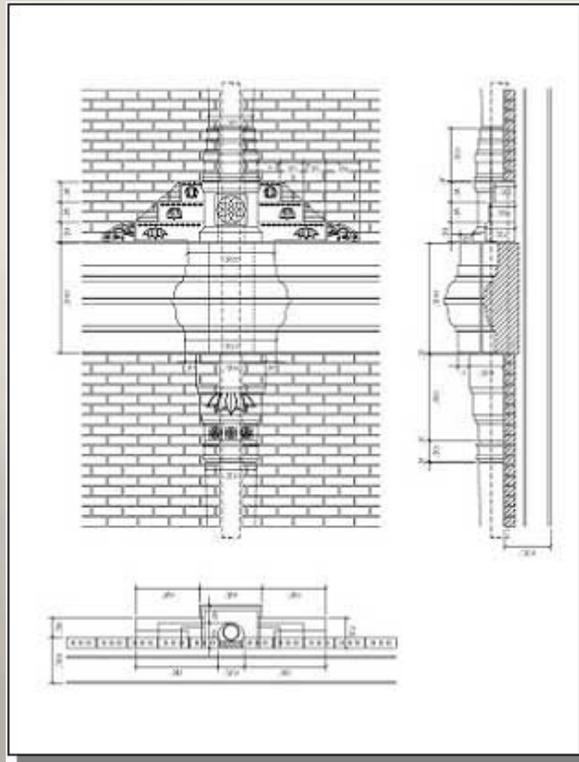


Degree of Difficulty

This project required a large number of intricate molds depicting different views and stages of the lotus. These details required great skill and countless hours in artwork, sculpting and mold making.



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Were there unique project requirements that presented particular challenges and how were they met?

White marble, the designer's first preference, was ruled out early in the project due to time and budget constraints. A new mix design of 60% crushed white marble was developed which gave the required color and met the architect's original concept.

We made, tamped, and tested 12 different mix designs ranging from 40% to 100% crushed white marble in three different sieve sizes. Although the final mix design met CSI specifications in both compressive strength and absorption, it contained far more fines than our standard mix design and was more difficult to tamp, especially because the project required a combination of large pieces and very fine detail.





Congratulations to
all of our winners!