

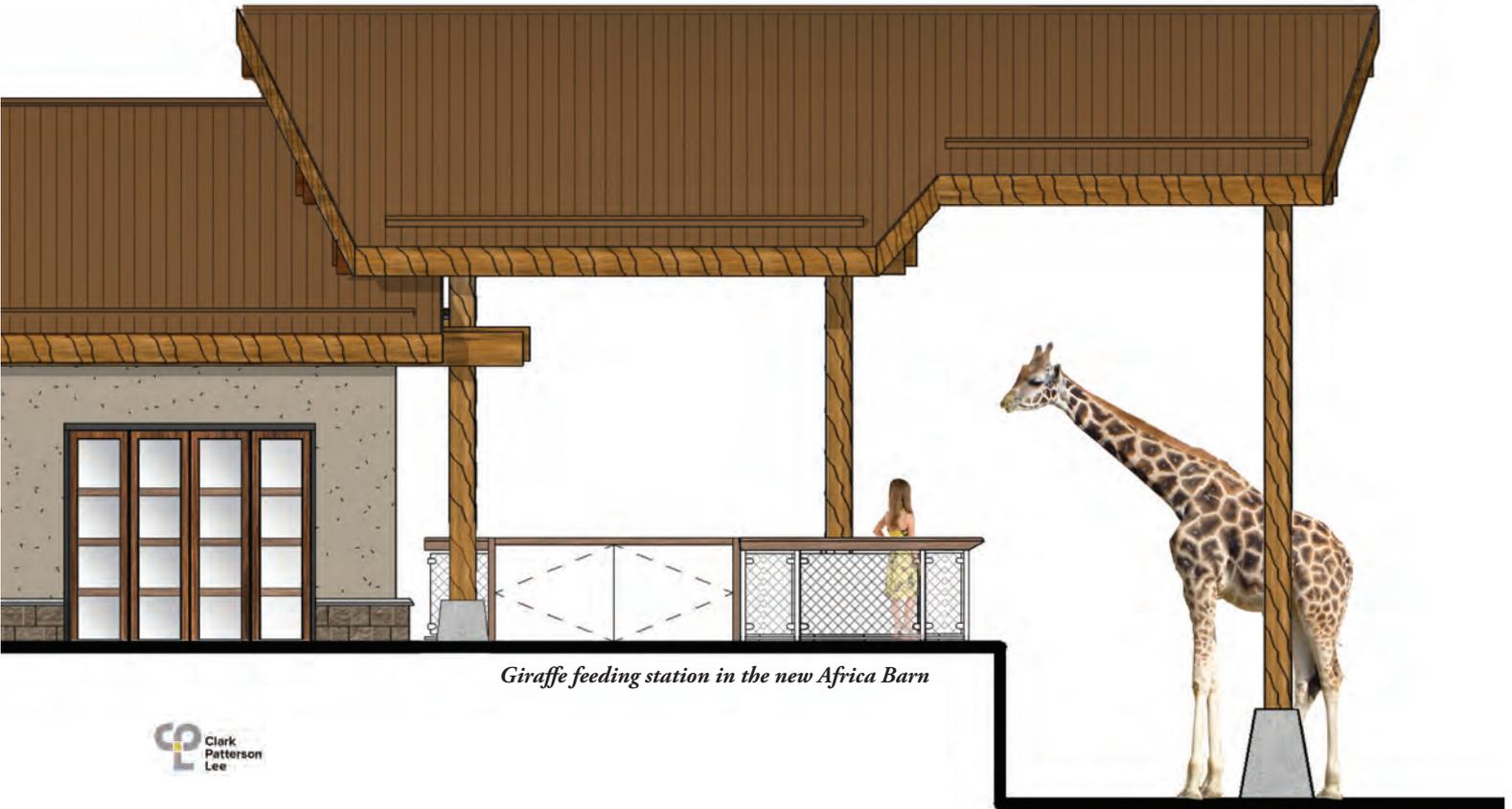
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## A Wild Design | 10



*Giraffe feeding station in the new Africa Barn*



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# A Wild Design

By: Amanda Koneski



*Giraffe feeding station in the new Africa Barn*

Site engineering can be fairly straightforward much of the time, however detailed it may be. But it's not often that engineers must consider the effects of cherry trees to a giraffe's diet, or the pH of local limestone to a rhinoceros's hooves.

Designing the \$13 million first phase renovations and expansion to the Seneca Park Zoo in Rochester, NY has proven to be a unique, wild venture for the architects and engineers working on this game-changing project for the County of Monroe (NY).

Norm Gardner, CPG, is a Principal Associate at Clark Patterson Lee (CPL) with nearly 28 years of experience. Before this project, he never shipped in granite from Massachusetts for the foot comfort of an African animal.

"We had to adapt our design to accommodate a different species," said Gardner, adding that the project has been the most fun challenge in his career.

Gardner credits some of the success of the project so far to subconsultant WDM Architects, who specialize in zoological design. The firm has been instrumental in animal exhibit design and animal holding details, and has experience designing zoos all over the world. Throughout the renovation, both firms concentrated on the safety, happiness, and health of the animals.

"Phase one includes the construction of a brand-new Africa exhibit, a new home for animals including a snow leopard, rhinoceros, and orangutan, an aquarium and aviary, and a new-construction Café," explained Maria Mazurek, AIA, a CPL Architect managing the project.

Somewhat of the less glamorous phase, it will also cover demolishing old zoo buildings, abatement, and strict land use parameters.

"The expansion of the Seneca Park Zoo is one of the most highly anticipated projects in our community," said Cheryl Dinolfo, Monroe County Executive. "With new exhibits and educational opportunities on the horizon, Clark Patterson Lee is an integral partner in making our vision for the Zoo a reality. I could not be more excited for this expansion and I want to thank the design and construction team on the great work already underway."

The new Africa barn will be the largest building on site at a hefty 15,000 square feet, with two smaller adjacent buildings that will hold meal prep for the animals and a gift shop. The Zoo will welcome a giraffe summer of 2018, who will enjoy a custom enclosure

with imported sod, safe, edible trees, and a special feeding station where Zoo guests can hand-feed the giraffe.

After much flora and fauna research led by the expertise of subconsultants WDM Architects, Satchell Engineers, and Dixon Studios, CPL has designed the enclosures to look like natural animal habitats, with secret features that make the animals feel right at home. These include heated rocks, tucked-away caves for hiding and resting, water features including mini waterfalls and spray rocks, and decorative and themed retaining walls for safety. Designers also considered that many exhibits are to be year-round, so animal and human alike will be comfortable even during the colder winter months.

In replacement of the existing Eagle's Landing (the Zoo's modest food establishment), a two-level, 9,000 square foot Trail Side Café building will house a new restaurant with ample indoor and outdoor seating that will double as a banquet hall for special events, a new catering kitchen, and an entertainment zone outside near the playground.

"Seneca Park Zoo is looking at this project from a growth perspective," said Jason Streb, AIA, CPL Project Architect. "They are preparing for an increasing number of guests, not only as Zoo visitors, but guests to the restaurant and event center as well, keeping comfort and functionality in mind."

Besides animals, the Zoo will enjoy an addition of a trolley that will run from the current entrance to the extended north end, making it easier for guests to move around the linear park. This trolley will utilize existing roads, making little environmental and economic impact to the Zoo and the neighboring Seneca Park – a historic park designed by the famous American landscape architect Frederick Law Olmsted.



*Rendering of Planned Trailside Café*

CPL faced unique design challenges with this project. An unusually rainy summer softened already wet soil, creating stormwater management issues. Since the existing soils were unsuitable, several thousand cubic yards of good soil replaced the existing for a better foundation. Monroe County planted new sod, which will begin to naturally grow next spring.

The topography of the existing site was also a challenge. With the Zoo located on a hill, the new buildings had to be designed to work into the slope, not against it, to better utilize the space provided.

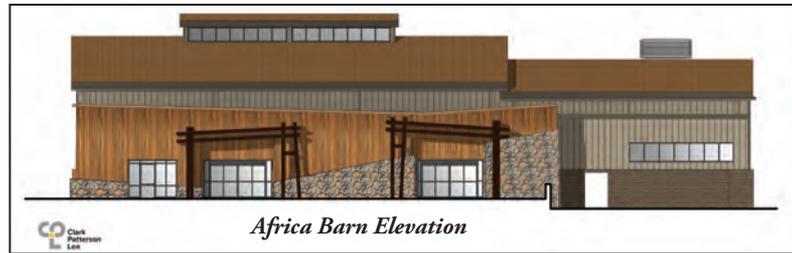
Gardner, Mazurek, and Streb all agree the most difficult part of the project was the long, narrow boundary of the Zoo. Designers took careful consideration of the park's boundaries to minimize disruption to not only Olmsted's park, but to the neighboring home owners as well. The firm plans to upgrade retaining walls across the zoo for added security and noise-diluting for those neighbors.

"We enjoyed getting acquainted with these unusual and interesting challenges and learning more about zoology," said Mazurek. "It's been a pleasure to work on this project, and I look forward to seeing how it turns out."

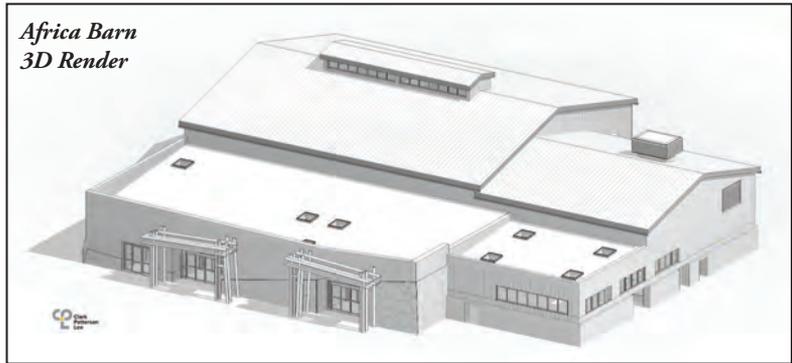
"This is an exciting project that will continue to advance the Zoo in its mission to inspire our community to connect, care for and conserve wildlife and wild places," said Larry Sorel, Zoo Director. "Working closely with talented design and construction professionals has given us the ability to translate our vision for the Zoo into the reality of habitats for the animals in our care and for the experiences we provide our guests."

Phase one will conclude late next summer, leading into the \$44 million phase two of the master planning process. Phase two will include a new, large tropic exhibit and a renovated main entrance with guest services, educational buildings, and much more.

"Seneca Park and Seneca Park Zoo are some of the best



Africa Barn Elevation



Africa Barn 3D Render

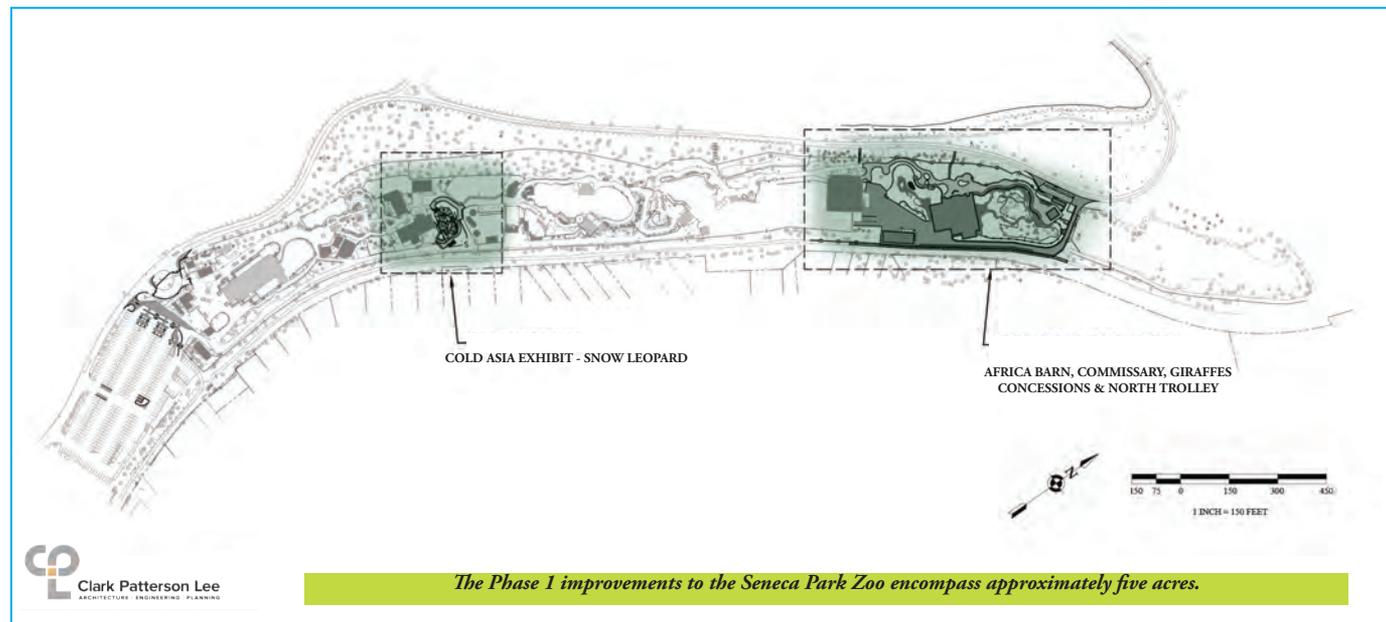
kept secrets in Rochester," said Gardner. "We hope this renovation will motivate people to reconnect with our parks, and benefit the community as well as the care and love of these wild animals."

"We are fortunate to work on many inspiring projects that enrich communities and make a genuine difference for residents. It's extremely rewarding to our entire team at CPL," said Todd Liebert, AIA - Clark Patterson Lee's CEO. □

Amanda Koneski is the Marketing Coordinator at Clark Patterson Lee

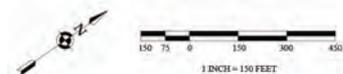
**DESIGN AND CONSTRUCTION TEAM:**

- Clark Patterson Lee
- LeChase Construction, LLC
- WDM Architects
- Satchell Engineers
- Dixon Studios



COLD ASIA EXHIBIT - SNOW LEOPARD

AFRICA BARN, COMMISSARY, GIRAFFES CONCESSIONS & NORTH TROLLEY



The Phase 1 improvements to the Seneca Park Zoo encompass approximately five acres.