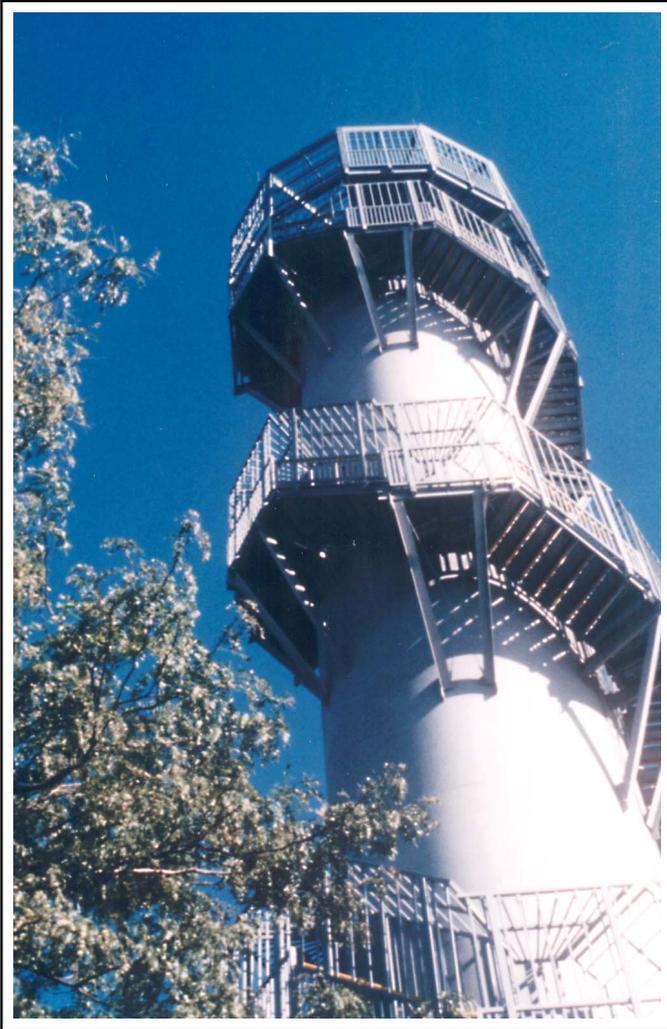


STRONGWELL

APPLICATION PROFILE



CORDOVA PARK OBSERVATION TOWER IS A WINNER!

The view from the top of the Cordova Park Observation Tower is impressive but to the engineering community the complex steel and FRP structure is pretty impressive itself! The Consulting Engineers Council of Iowa has just awarded this newly designed structure a 1st place (Grand Conceptor Award) in their 1999 Engineering Excellence Awards Competition.

An old stand-pipe tower for water storage, abandoned for over 15 years, was a neglected part of the beautiful Cordova Park at Red Rock Lake near Des Moines, Iowa. By designing spiral stairs to climb to the top, it was transformed into an observation tower that resembles a lighthouse - with a marvelous view of Red Rock Lake and the Des Moines River Valley. It is now the tallest public observation tower in the Midwest (you can see downtown Des Moines 35 miles away!)

Michael Vander Wert, P.E. with Calhoun-Burns and Assoc., West Des Moines, IA knew that he wanted the stairs to be fabricated from fiberglass. He and Dan Witcher, P.E., Strongwell's Chief Structural Engineer, worked together for over eight months to combine the FRP design with Calhoun-Burn's steel design for a complete design of the tower. A system of FRP spiral stairs and landings was designed to circle the stand-pipe tower with a lighthouse effect. Dan Witcher designed the composite stair treads, landing structures, stringers, handrail and cage system plus the platform, cage and roof on the top.

The FRP design from Strongwell was less expensive than either steel or aluminum alternatives. A feasibility study had shown that significantly more structural work to strengthen the tower shell would have been required with either steel or aluminum.

Due to the complexity of the fabrication, only bridge contractors bid on the construction. FRP from Strongwell was specified.

TECHNICAL DATA

Product:	Spiral Stairs and Landings
Process:	Pultrusion, Fiberglass Fabrication
Materials:	EXTREN® Series 525 fiberglass reinforced polyester, fire retardant
	Fabrications made from EXTREN® structural shapes: Fiberglass Stair Treads Landing Structures Stringers Handrail and Cage System Platform & Roof
For:	Cordova Park, Des Moines, Iowa

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