

US95 / CC-215 Interchange

Las Vegas, Nevada

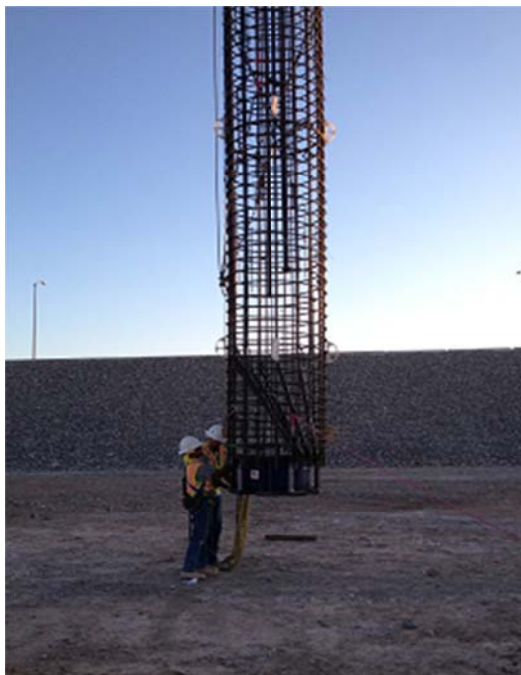


Shaft reinforcement with O-cell assembly.

O-cell® Testing of the US 95/CC 215 Interchange

The Nevada Department of Transportation's US 95 / CC 215 Northern Beltway Exchange is part of the \$525 million Northwest Corridor Improvements Project that will be completed in several phases over multiple years. Major elements of the Northern Beltway Exchange consist of two new ramps, including a 70-ft high, two-lane flyover bridge built with ten piers, as well as a collector-distributor road that will handle vehicles entering and exiting the interstate.

Once completed, the Northern Beltway will provide high occupancy vehicle (HOV) lanes in addition to greatly increasing capacity and safety. Designers also plan to incorporate images and patterns from the nearby Tule Springs fossil site, including a nearly full scale depiction of a Columbian mammoth.



Assembly readied for installation.

Project Info

Owner:	Nevada DOT
Client:	Hayward Baker
Prime:	
Designer:	
Project Cost:	\$225 - \$287 million
Est. End Date:	2017

Services Provided

- O-cell test design
- Assembly and Installation of O-cells and Instrumentation and Integration into Drilled Shafts
- SONICALIPER® profiling
- Testing, Analysis and Reporting of Load Test Results

Loadtest was utilized to provide testing experience and equipment on two drilled shafts to optimize the design parameters for the highway overpass. Testing was performed on both sides of the highway with each shaft being approximately 100 feet in length and 5 feet in diameter.

The load tests redefined the design parameters as well as increased the allowable design co-efficient provided by the LRFD method. Test loads exceeded 9,000 kips on both tests. Shaft profiles were taken of the drilled shafts using the SONICALIPER and strain gages were installed at multiple elevations to allow analysis of load transfer to different soil strata layers.