Engineering is using a construction technique that allows us to keep the concrete inside the 23 columns of the new Sixth Viaduct cool while they are being built. When cement is mixed with water to create concrete, the wet mixture generates heat. If this material isn’t kept cool enough during the setting process, cracks may develop. Cracks can also occur when the temperature on the outer portion of the column cools more quickly than the temperature inside.

To keep the concrete cool and at an even temperature we are running a system of tubes through the steel reinforcement cages of the columns. Chilled water is conveyed through the tubes, which absorbs the heat generated by the concrete, and then runs it back out where it is re-cooled and sent back inside the column. In addition, a thermal blanket is wrapped around the column to keep the outside of the structure from cooling too fast.

This process is used for large cast-in-place concrete structures like the Sixth Street Viaduct. The chilled water systems and thermal blankets will continue to be used for the other large concrete elements of the bridge throughout the remaining construction process. The Sixth Street Viaduct is expected to have a lifespan of more than 100 years.

The Bureau of Engineering and Council District 14 made history this month. For the first time, a community meeting was held entirely in Spanish. The meeting was part of the environmental review process for the Sixth Street PARC, the 12 acres of open and recreational space that is being built underneath the new viaduct. The meeting was held on May 11th at the Puente Learning Center and was attended by more than 50 people.

Although the City of Los Angeles always provides translation at meetings in multilingual communities - English is spoken and Spanish speakers wear headsets and listen to a simultaneous translator - this was the first time Spanish was the primary language and English speakers listened to a translator. The meeting was attended by more than 50 people.

We will be presenting the next phase of PARC design options to the community again in mid-summer.
Photo the Month - Giant Tube of Wire!

Construction worker inside the wire cage of one of the 23 columns that will support the new viaduct.

"LA This Week" Features Sixth Street Viaduct Project

Channel 35's "LA This Week" recently did a great feature segment on the Sixth Street Viaduct Project. Click here to watch.

About the Project

The Sixth Street Viaduct Replacement Project is a new, 3,500-foot long viaduct connecting Boyle Heights and the Arts District across the Los Angeles River. The original viaduct was built in 1932, but had significantly deteriorated due to "concrete cancer"; it was demolished in 2016. The new viaduct will have ten pairs of lit arches, bike lanes and wider sidewalks, along with stairway access and bike ramps connecting to 12 acres of recreational and open space under the bridge. The $482 million dollar project is the largest bridge project in the history of the city. The bridge is funded primarily through the Federal Highway Administration, with additional City support. The viaduct is expected to be completed by the end of 2020.

To stay involved, sign up for email or text updates at: www.sixthstreetviaduct.org/join_our_mailing_list

Stay Involved!

Follow us on Facebook (@sixstreetbridge), Twitter (@6thstviaduct) and Instagram (@6thstviaduct)

And check out our website at www.sixthstreetviaduct.org

The Bureau of Engineering is the City's lead agency for the planning, design and construction management of the City's public buildings and its public infrastructure. Engineering is also responsible for managing permitting for all construction that takes place in the public right-of-way, as well as managing the City's state-of-the-art online mapping system, NavigateLA. Engineering is committed to designing and building environmentally-sustainable projects that include extensive community input. Engineering projects and services support the City's goals of creating a prosperous, livable and safe city for all residents and businesses.