

In 1988, Hargreaves Associates started an 11-year long design and reconstruction of the Guadalupe River valley at San Jose. 20 years after the park's completion, with the most advanced technology of the 21st century, the HIVE recalls this nostalgia towards an ecological urban landscape and aims to provoke a futurist thinking towards urban environment, public open space and social infrastructure.

The HIVE, instead of erecting a solo piece of monument, intends to integrate and empower the site, and create a landmark as a whole. Formulated by 8010 modular hexagonal units, the arched structure runs across the Guadalupe River and overshadows the site in the most structurally ideal form. Each unit combines various urban facilities including solar panels, lighting, rain control and display screens, constructing a collective performance space under this archway at the center of San Jose. Utilizing reproducible modules and interlocking techniques, the HIVE reduces construction complexity to the minimal in order to achieve net zero carbon emission both during manufacturing and on-site assembling. Over 3000 solar panels installed at the exterior of each shell absorb heat energy and filter extra sunlight during daytime to reduce glare; energy is then transported into an internal projector and LED mirroring screens for multi-functional activities including concerts, fair and performances. Six micro-climate modifiers made up of rain diffusers, fog generators and acoustical detectors for birds were controlled by a sensor system which monitors brightness, temperature, humidity, precipitation and other natural factors. As the HIVE is rain-free, rain water is channeled through a systematic drainage system on the structure's skin into underground buffering containers which filter out sewage and converge into the Guadalupe River. Nevertheless, it desires to develop a prototype for future artificial environment controlled and operated by both humans and nature.

The HIVE, not just connects the two banks of the Guadalupe River but bonds the city to nature; it becomes a symbol of how the city bridges in-between the past, the present and future. Just as how the network of units draws a bridge above the river, it is a project which unites people from diverse culture and races, from all industries and interests to live and enjoy under one shell, within one nature. Constantly challenging the way humans perceive each other and our mutual relationship with the earth, the HIVE is a physical expression of the spirit of innovation at Silicon Valley.