Hammerhead Utility Bridge to Carry Pipes and Electrical Raceways

The Simple Hammerhead Utility Bridge is a double-deck utility bridge that carries all pipes (up to 16" in diameter) and electrical raceways to and from the various pieces of mechanical and electrical equipment at the Carson Ice-Generation (100 MW) plant construction site in Elk Grove, California. This design concept features independently acting cantilevered supports with minimal intermediate framing that allows pipe and electrical raceways to be installed from the top and sides without obstruction. Pipe runs in excess of 100' in length can be welded on the ground and installed in one piece on the bridge, which eliminates much of the overhead welding required in conventional installations.

The utility bridge is made of 60 hammerhead supports, spaced 20' apart, supported on individual caissons and tied together by channel stringers with K-bracing for lateral stiffness. Each hammerhead support consists of a rectangular structural tube column with two levels of horizontal channel shaped members shop-welded to the flanges of the tube. Supports are constructed in two parts (one head and one stanchion) and field assembled with a bolted connection. All components are hot-dip galvanized after fabrication.

Contact: Mao Sen Lin---Not Current
Organization: Parsons Brinckerhoff
Address: 303 Second St.
            Suite 700 N
City: San Francisco
State/Province: CA
Postal Code: 94107-1317
Country: USA
Phone No: 415-243-4600
FAX: 415-243-9501
URL:
Email: