KTLA 5

KTLA Channel 5 recently relocated to Stage 6 at Sunset Bronson Studios in Hollywood, CA. Sunset Bronson Studios is listed as a Los Angeles Historic-Cultural Landmark. KTLA had broadcasted from Stages 7/8 since 1958, when the studio lot was called Warner Bros. Studios. This tenant improvement project included the renovation of Stage 6 and a portion of Building 16. KTLA's new 15,000 square foot facility includes the station's main news set, a secondary area for production, news center, control room, support facilities, and corporate offices.

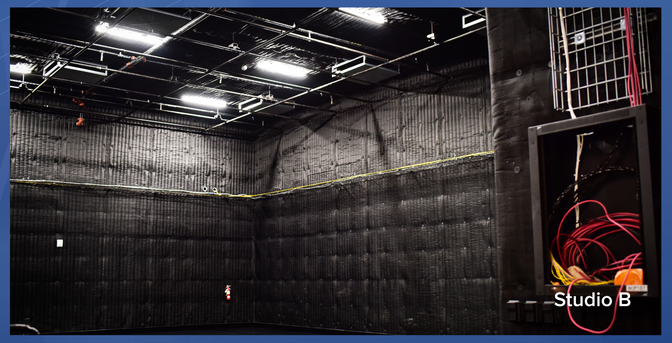
NEW STUDIOS || INVERTED SHEAR WALLS

The lateral force resisting system consisted of plywood sheathed diaphragm spanning between plywood sheathed "inverted" shear walls on four sides of each studio. The inverted shear walls were designed with steel collector beams at the top transferring the diaphragm shear loads to the inverted plywood sheathed shear wall.

One of the main design elements in the renovation of Stage 6 was the construction of two new "box-in-box" studios within the existing building. These provide acoustical separation from other spaces within the building and from the exterior of the building. Working closely with the City of Los Angeles the team developed complex yet efficient and innovative solutions for the construction of the new studios.

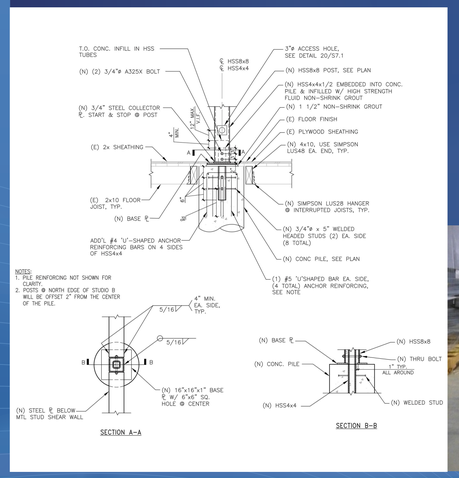
Studio A

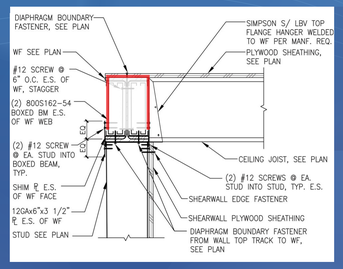
Studio A



Studio B

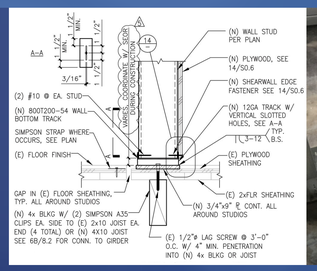
Due to design and constructability limitations, the design team came up with a creative solution for the connection of the HSS column at the ends of the hung shear wall to the pile foundation. A smaller HSS ("connector tube") with headed studs welded on all four faces was cast at the top of the pile. The larger steel column with a steel baseplate, that had a hole slightly larger than the connector tube, slid over the connector tube. The cavity in between the column and the connector tube was infilled with non-shrink grout and two through bolts were installed to connect the steel column to the connector tube. The collector shear plates were welded to the steel column base plate.

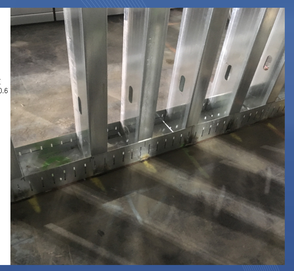




The wall framing was hung from the ceiling steel beams using continuous light gage steel saddle track to avoid adding gravity load on the existing raised floor framing.

At the base of the shear wall, the shear was transferred from the slip track to a continuous steel collector plate that connected to the pile foundations at each end of the shear wall.





STRUCTURAL FOCUS

SEAOC/ SEAOSC
2017 Excellence in Structural Engineering Awards

Structural Engineer: Structural Focus
Owner: Hudson Pacific Properties
Client: KTLA/ Tribune Media

Architect: Bastien and Associates
Contractor: Tectonics Construction