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26TH ANNUAL RECONSTRUCTION AWARDS | Platinum Award

Reviving Oakland's Uptown Showstopper

A public-private project breathes new life into a landmark movie palace and helps revitalize a dilapidated neighborhood.

PHOTO: THE KPA GROUP

The newly renovated Fox Oakland Theater is the centerpiece of a plan to revitalize the Uptown district and bring people back to downtoan Oakland. The theater had been boarded up since 1966.

By Dave Barista, Managing Editor

The story of the Fox Oakland Theater is like that of so many movie palaces of the early 20th century. Built in 1928 based on a Middle Eastern-influenced design by architect Charles Peter Weeks and engineer William Peyton Day, the 3,400-seat cinema flourished until the mid-1960s, when the trend toward smaller multiplex theaters took its toll on the Fox Oakland.

The theater closed in 1966 and dodged demolition several times before making the National Register of Historic Places in 1979. It would remain vacant and in shambles for nearly two decades.

In 1996, then-Mayor Jerry Brown—at the urging of a citizens group called the Friends of the Fox—designated the Fox Oakland Theater the centerpiece of a plan to revitalize the Uptown district and

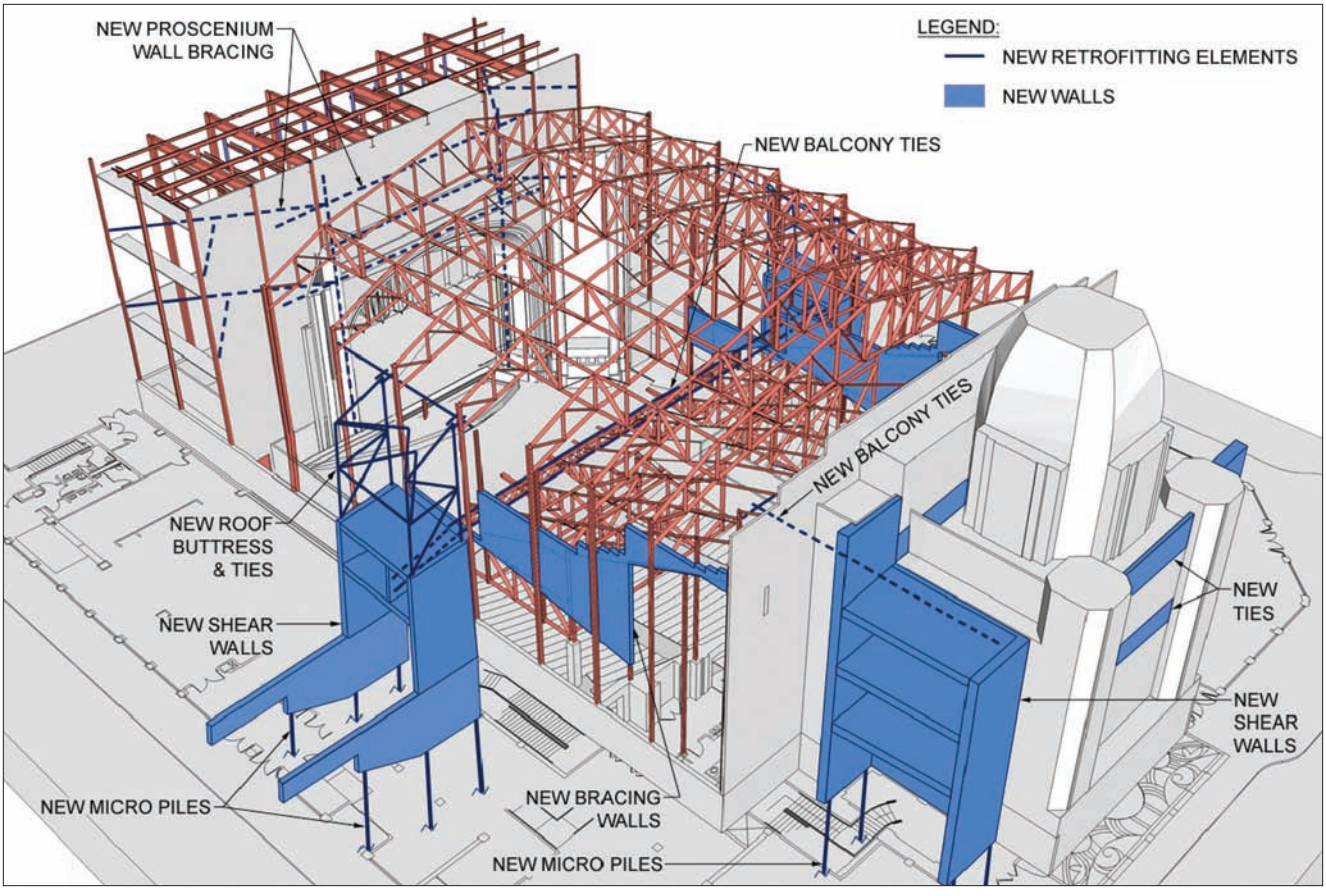

ILLUSTRATION: THE KPA GROUP

The Building Team used a series of braces, shear walls, reinforced slabs, and buttresses to stabilize both the new and existing structures without adversely impacting the visual grandeur of the theater.

bring people back to the city's core. The city purchased the building and, following several restoration projects between 1999 and 2001 to repair the roof and marquee, embarked on an all-out effort to modernize and transform the theater into world-class performing arts venue and dance school for the Oakland School for the Arts.

Key to the mayor's plan was a public-private funding approach proposed by local developer Phil Tagami that would help cover the $87 million price tag for the project, which included a complete restoration and seismic retrofit of the theater and construction of twin three-story wings for the dance school.

Tagami established both nonprofit and for-profit entities that could contribute funds to the project and benefit from available tax credits and grants. He also worked with city officials and the project's construction manager, Turner Construction, to involve as many local firms and minority- women-owned business enterprises as possible.

"I like how they involved so much of the local workforce," said Reconstruction Awards judge Matthew H. Johnson, PE, associate principal with Simpson Gumpertz & Heger, Waltham, Mass. "The team split the sub packages into small pieces so that virtually any local firm could work one of the projects."

To make this delivery approach feasible, the team had to obtain city council approval for a special contracting approach that permitted engaging multiple entities under a management structure. Such an approach is unusual in city projects, which normally are bid in a public, low-bid process that also involves

a claims and dispute component. In all, the project created 394 construction jobs, roughly half of which were performed by local workers.

The project scope encompassed 17 major components, including restoring the theater, stage, fly-loft, and supporting infrastructure; stabilizing the 60-foot-tall dome structure over the entrance; reconfiguring the theater floors, stage, orchestra pit, rigging, proscenium, and theater controls; adding theater power, lighting, sound, and air-conditioning systems; and constructing the twin 20,000-sf additions.

But it was the seismic retrofit efforts led by Oakland-based KPA Group that received the most praise from the Reconstruction Awards judges. They were particularly impressed with the Building Team's ability to stabilize both the new and existing structures without adversely impacting the visual grandeur of the theater. The effort involved devising multiple solutions (see diagram), including:

• Reducing the seismic demands on the main roof diaphragm by inserting new buttresses on each side of the roof mid-span of the diaphragm. These buttresses were also utilized to stabilize the farthest end of the cantilevered balcony structure, eliminating torsion and reducing the demand on the back of theater wall.

• Reinforcing the proscenium wall and the back-of-theater wall with shotcrete walls and steel framing. The new walls were placed behind existing heavily ornamented walls and are hidden from view.

• Stabilizing the dome structure with twin U-shaped walls constructed immediately to the north and south of the entrance structure and doweled into the existing walls. The new walls were then interconnected to each other and to the sides of the entrance structure at several levels, thereby boxing the entire dome and entrance building inside new well-reinforced walls designed for the entire lateral load of the dome and entrance structure under the dome.

• Stabilizing existing brick walls by connecting the brick to a series of structural tubes epoxy bolted into the back of the walls. New steel channels were added to brick pilasters that, in turn, were integrated as part of the street-level façade of the new school buildings.

• Incorporating a series of horizontal steel tubes, shear walls, a horizontal steel diaphragm structure, and a reinforced slab on grade to stabilize the wraparound buildings.

"It was a good, clean job," said SGH's Johnson of. "I think they did the seismic retrofit intelligently." **BD+C**

PROJECT SUMMARY

Fox Oakland Theater Renovation & Seismic Retrofit
Oakland, Calif.

Building Team

Submitting firm: The KPA Group (structural engineer and architect)
Architects: ELS Architects, Starkweather/Bondy Architects, Architectural Dimensions
Electrical engineer: Morrow Meadows-Electrical
Mechanical engineer: Cal Air-HVAC
Construction manager: Turner Construction

General Information

Size: 145,000 gsf (105,000 sf renovated theater and support space, 40,000 sf new school)
Cost: $87 million
Construction time: June 2005 to February 2009
Delivery method: CM at risk

The KPA Group has also completed Seismic Retrofit designs for:

California Department of Veterans Affairs, Member Services Building, Seismic Retrofit, Yountville, CA
Police Administration Building Seismic Retrofit of Tower, Oakland, CA
Oakland Int'l Airport, Terminal 1 Seismic Retrofit, Oakland, CA
Fox Oakland Theater Seismic Retrofit, Oakland, CA
CSU San Jose, Student Union Seismic Retrofit (Concept), San Jose, CA
City of Richmond, City Hall Seismic Retrofit, Richmond, CA
City of Richmond, Hall of Justice Seismic Retrofit, Richmond, CA
City of Richmond, Auditorium Seismic Retrofit, Richmond, CA
California Maritime Academy, Seismic Retrofit of 11 Buildings, Vallejo, CA
Metropolitan Transportation Commission, MetroCenter Seismic Retrofit, Oakland, CA
Caltrans Headquarters, Annex I & II, Seismic Retrofit, Sacramento, CA
Capital Square Mall, Seismic Retrofit of 8 Buildings, San Jose, CA
City of Palo Alto, Fire Station #1, #2, #5 & #8 Seismic Retrofit, Palo Alto, CA
SFSU, Administration Building Seismic Retrofit, San Francisco, CA
SFSU, Hensill Hall Seismic Retrofit, San Francisco, CA.
Rotunda Building Seismic Retrofit, Oakland, CA
Chiron Facilities, Seismic Retrofit of 3 Buildings, Emeryville, CA
101 Howard Street, Folger Coffee Building, Seismic Retrofit, San Francisco, CA
Garr Building, Seismic Retrofit, Berkeley, CA
SFSU, Psychology Building Seismic Retrofit, San Francisco, CA
Courthouse Square, Seismic Retrofit, Hayward, CA
Allied Box Factory Seismic Retrofit, San Francisco, CA
City of San Francisco, Palace of Fine Arts/Exploratorium Seismic Retrofit, San Francisco, CA
54 Mint Street Seismic Retrofit, San Francisco, CA
Romberg Research Center Laboratory Seismic Retrofit, Tiburon, CA
Department of Veterans Affairs, Administration Buildings 64 & 65 Seismic Retrofit, Livermore, CA
City College of San Francisco, Cloud Hall Seismic Retrofit, San Francisco, CA
Martin Luther King Jr. High School (Old Merritt College), Seismic Retrofit, Oakland, CA
SFSU, Burk Education Building Remodel & Addition, San Francisco, CA
City of Palo Alto, College Terrace Library Seismic Retrofit, Palo Alto, CA
U.S. Navy, Computer Operations Building Seismic Retrofit, Mare Island, Vallejo, CA
Broadway Building Seismic Retrofit, Oakland, CA
Santa Clara County Fleet Maintenance Facility, San Jose, CA
Contra Costa County, Employment and Human Services Department, Antioch, CA

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