SAIA'S 2025 INDUSTRIAL COLLABORATIVE

PROJECT OF THE YEAR

Gone without a trace:

SkyLine Scaffold and the demolition nobody saw coming

How SkyLine Scaffold navigated a protected wetland, a ticking clock, and 9 pounds of explosives to help bring down a 277-foot transmission tower on a California island — without leaving a trace

West Island sits in the Sacramento-San Joaquin Delta near Antioch, California, a narrow strip of protected wetland, cord grass, and marsh mud that has no road access, no heavy equipment staging area, and no room for the kind of large-scale industrial operations that normally accompany a demolition job. It is also home to a 277-foot decommissioned high-voltage transmission tower that Pacific Gas & Electric needed to bring down.

The project that followed was unlike almost anything the scaffold industry typically encounters. Getting to the island required boats. Getting equipment to the island required barges. Getting scaffold onto ground too soft for conventional bases required steel beams laid across existing concrete piers. And once the charges were set and the scaffold came d, the entire crew had four hours to clear the site before detonation.

SkyLine Scaffold, Inc., a Sacramento-based firm with more than five decades of industry experience, was brought in to solve the ▶

The demolition had to leave the surrounding marsh, wildlife and wetland intact and undamaged.

"The coolest thing was watching the controlled demolition from the staging area." David Johnson, SkyLine Scaffold

access challenge. Working alongside Silverado Contractors, Inc., Controlled Demolition, Inc. (CDI), and DH Charles Engineers, they had 10 days to pull it off.

WHY EXPLOSIVES WERE THE ONLY OPTION

When PG&E approached Silverado Contractors in spring 2024 about decommissioning Tower 320, the location made a conventional demolition approach essentially impossible.

The island's marshy terrain ruled out the use of standard heavy machinery. Cranes, excavators, and conventional rigging equipment would have no stable ground to work from, and the environmental restrictions surrounding the site made any significant ground disturbance a non-starter.

The island is a protected habitat. Several environmentally sensitive species call the Delta wetlands home, and the project team was operating under strict requirements to minimize disruption to the ecosystem.

Even the cord grass surrounding the tower had to be carefully removed by hand to create a usable work area, there was no question of bringing in heavy equipment to clear it.

Silverado enlisted Controlled Demolition Inc., one of the world's most experienced firms in explosive demolition, to design and execute the takedown. CDI's plan called for placing charges at carefully selected points within the lower 75 feet of the tower's steel framework, which would sever the structure's legs and direct the fall into a pre-prepared fall zone. To get the charges placed, they needed scaffold access at multiple elevations, and that's where SkyLine came in.

GETTING THERE

Before SkyLine could build anything, they had to figure out how to get their materials to a place that trucks couldn't reach. The logistics solution involved staging scaffold components at Pier 97 in San Francisco, loading them onto barges, and transporting them by water to West Island.

Once on the island, an excavator placed the scaffold racks on crane mats, temporary ground protection that allowed the crew to move equipment across terrain that would otherwise be impassable.

The SkyLine crew themselves made the crossing daily from Antioch Marina by boat, 10 workers commuting by water to a job site in the middle of a protected estuary. It set the tone for everything that followed: this project would require the team to adapt at every step. The softness of the marsh presented a specific engineering challenge for the scaffold bases. Standard base plates and mudsills would simply sink into the saturated

"Leveraging our relationship with DH Charles made the engineering happen in short order." David Johnson, SkyLine Scaffold

ground. The solution was to set steel beams directly on top of the existing concrete piers that had originally supported the tower, using the tower's own foundation infrastructure as the scaffold's footing. From those beams, the scaffold towers rose to provide access at the multiple elevations CDI had specified for charge placement.

TWO DAYS TO BUILD, FOUR HOURS TO CLEAR

CDI arrived on November 17, 2024, to begin modifying the tower's lower 75 feet for explosive placement. SkyLine's timeline was tight by any measure: two days to erect scaffold access to all necessary locations, and then, once the charges had been set – just four hours to dismantle everything and clear the site before detonation.

SkyLine sent in what David Johnson, their CEO, describes simply as their best. "This job was handled by our Heavy Hitter crew," he says. "We were able to mobilize in a short period of time with enough resources to ensure the project was completed as needed."

The scaffold served two distinct functions during the setup phase. First, it provided the elevated work platforms CDI needed to position the explosive charges, nine pounds of explosives in total, loaded into wooden boxes and placed inside the steel tower's structural cords at precisely determined points. Second, it created the staging area where CDI's team could work while wiring the charges together in the sequence required to direct the tower's fall.

That speed was only possible because of established working relationships between the project partners. "Leveraging our relationship with DH Charles made the engineering happen in short order," Johnson notes. With the scaffold design resolved quickly, SkyLine could focus on execution rather than waiting on approvals.

Once CDI had completed charge placement and wiring, SkyLine went back to work, this time in reverse, stripping the scaffold back down while the explosives remained in position on the tower. The four-hour window was not a suggestion. It was a hard deadline set by the demolition sequence, and the Heavy Hitter crew met it.

4:00 PM, NOVEMBER 21

The charges detonated at 4:00 PM on November 21, 2024. Tower 320 fell exactly as planned, landing in the designated fall zone on ground protection that had been laid specifically to limit environmental impact.

The 277-foot steel lattice structure, which had carried high-voltage electricity across the Delta for decades, came down in seconds, contained within the footprint the team had prepared for it.

The entire SkyLine scope, mobilization, barge logistics, scaffold erection, and dismantlement, was completed within 10 days. The project came in on budget and on schedule, with no safety incidents.

WHAT MADE IT WORK

Projects like the Tower 320 demolition succeed because the right partners were in place before anyone set foot on site. CDI brought the explosive expertise and the precision planning that determined exactly where scaffold access was needed and for how long.

Silverado managed the overall demolition program and coordinated the environmental compliance requirements that governed every aspect of the work. DH Charles Engineers provided the scaffold design, ensuring the system was properly specified for the unusual foundation conditions. And SkyLine brought the field execution, the crews, the logistics, and the willingness to problem-solve in real time on an island accessible only by boat.

For SkyLine, the project is representative of the kind of work the company has built its reputation on across Northern California and Nevada. Founded in 2005 by a team with roots in the industry going back to 1974, SkyLine has made a point of taking on jobs that other companies won't – dam work, mine access, projects where the constraints are unusual and the margin for error is small. The Tower 320 demolition fits squarely in that category.

When the tower came down, the SkyLine crew watched from the staging area alongside the rest of the project team. "The coolest thing," Johnson says, "was watching the controlled demolition from the staging area."

The scaffold went up in two days. It came down in four hours. The tower fell exactly where it was supposed to fall. The marsh, the wildlife, and the wetland around it were left intact. By any measure, the project was a success, and a reminder that some of the most demanding work in the access industry happens in places you'd never expect to find scaffold at all. ▶


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