Protecting the Environment While We Work

The SFPUC has an extensive mitigation and monitoring program in place to protect any cultural and biological resources in the work area. All personnel on site receive special training to identify threatened and



endangered species, including the Salt Marsh Harvest Mouse (pictured), California Tiger Salamander, and several special-status shorebirds such as the California Clapper Rail. Special fencing has been installed around the perimeter of the site to keep these animals out of the work areas. Environmental inspectors and specialty biological monitors are also on site regularly to ensure compliance with the project's environmental mitigations measures, regulatory permits and other SFPUC best practices.

Need More Information?

If you have questions about the project, please call our 24-hour answer line: 800-571-6610 or e-mail us at baydivision@sfwater.org. For more information please visit our website at www.sfwater.org/baytunnel.



Communication and Public Outreach 1155 Market Street, 11th Floor San Francisco, CA 94103

Working Schedule

Current work hours are 6 a.m. to 2 a.m. on this project. Underground work is 20-hours a day due to project demands. Work is being monitored closely to ensure that noise and light are minimized. Construction is expected to be complete in 2015.



Construction Details

The Contract:		t
Contractor:	Michels/Jay Dee/ Coluccio Joint Venture	ν ι
Contract Value:	\$215.2M	F
Percent Complete:	33% as of Nov. 2011	r r
Notice To Proceed:	April 2010	5
Final Completion:	March 2015	I
The Tunnel and Shafts:		i E
Length:	5 Miles	
Diameter:	15ft excavated diameter	i
Tunnel Lining:	10in thick precast concrete segments 108in diameter steel pipe	(- i
Launch Shaft:	Menlo Park, CA 124ft finished depth 58ft inside diameter	
Receiving Shaft:	Newark, CA 86ft finished depth 28ft inside diameter	
The Tunnel Boring Machine (TBM):		
Diameter:	14Ft-11-5/10in (4.56m)	
Trailing Gear:	600Ft	
		4



Project Update

The complete 600 feet of trailing gear has been connected to the tunnel boring machine (TBM) and after rigorous testing, tunneling work will proceed on this five-mile-long tunnel. This will be the first tunnel under San Francisco Bay.

The final set up change in early December consisted of lowering pieces of the trailing gear into the tunnel and connecting them to the (TBM). The trailing gear includes the operating cabin with video monitors that maneuver the TBM more than 100ft away from the cutting head. The newly installed conveyor belt system will remove spoils from the tunnel and transport it into a hauling pit outside the shaft area.

In the spring 2012, the contractor will begin digging the retrieval shaft in the East Bay near Newark where the tunnel will connect to the new Bay Division regional water pipeline. At Newark, the project will use a "frozen shaft" construction method rather than a diaphragm wall construction as originally designed to better deal with environmental issues and other developments.

Construction materials, equipment and tools will continue to be lowered down into the shaft and transported by rail cars to the TBM inside the tunnel as the TBM advances.



The tunnel boring machine (TBM) was built by Hitachi Zosen (Hitz) Corporation in Osaka, Japan.



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THE 600FT TRAILING GEAR OF THE TBM HAVE BEEN SET UP

About:

The Bay Tunnel Project consists of a five-mile-long tunnel under the San Francisco Bay, passing through environmentallysensitive marshlands and mudflats, and a vertical shaft at each end of the tunnel.

The San Francisco Public Utilities Commission (SFPUC) delivers water from the Hetch Hetchy Reservoir in Yosemite National Park to 2.5 million people throughout the Bay Area. Many portions of the Hetch Hetchy System are aging and in need of upgrades. As part of its Water System Improvement Program, the SFPUC will be decommissioning its older pipelines where they cross the San Francisco Bay and replacing them with a new Bay Tunnel.



Nearly 1,000-ft of the five-mile-long Bay Tunnel have been completed, construction crews can still walk to the TBM. Later, cars that run on rail tracks will be lowered in to the tunnel to transport tools, material and workers when the tunnel extends further across the Bay.



The five-mile-long Bay Tunnel passes through environmentally-sensitive marshlands and mudflats on both sides of the San Francisco Bay.



Engineers from Hitachi Japan assisted the Bay Tunnel crew during the set-up of the first 200-ft of trailing gear.



(below) and then transports the spoils to a nearby pit.



The Vertical Conveyor System in blue (above) lifts the spoils from inside the tunnel to the conveyor belt