

Upcoming Projects

CALIFORNIA

Alameda County

New Irvington Tunnel

Constructing a tunnel parallel to the existing Irvington Tunnel, in Alameda County, Calif., will allow the San Francisco Public Utilities Commission to decommission the Irvington Tunnel for inspection and rehabilitation to improve the water delivery reliability. Located between the Calaveras and Hayward Fault Zones, the mixed-face tunnel is made up of inter-bedded layers of sandstone and shale, with several smaller fault zones. Adding more complications, the tunnel offers 700 ft of cover and high hydrostatic head with potential water inflows up to 1,000 gpm.

An 18,200-ft long excavation is proposed with the installation of a 10-ft inside diameter concrete liner. There will also be construction of a new access road to the Irvington Portal and a new Portal within the piping manifold. Additional isolation valves and connections to the Bay Division Pipelines, originating from the Irvington Tunnel site, will also be installed. The total construction cost for the project is estimated at \$154 million. Bids are expected to be advertised in November 2009, with NTP expected in April 2010.

Berkeley-Orinda

The Caldecott Tunnel Project

The Caldecott Tunnel connects Alameda and Contra Costa Counties via state Route 24, and The Caldecott Improvement Project proposes to alleviate traffic congestion along Route 24 by constructing a fourth bore of the Caldecott Tunnel. The goals of the project are to improve mobility for motorists and emergency crews along State Route 24 via the Caldecott tunnels, reduce delays and improve travel times, eliminate the need for daily tunnel lane reversals and merges, enhance safety for the traveling public and Caltrans maintenance workers and respond to Regional Measure 2 and Contra Costa County Measure J.

The project is fully funded with a total production cost estimated at \$420 million.

It's proposed that excavation will be completed primarily by roadheader with around-the-clock activity from both sides. If the construction is limited to one side, the project's duration will be increased by 14 months, increased cost of \$45 million and increase risk for delays. A sound-isolating and absorbing temporary soundwall will need to

be built — 1,000 ft long and 35 to 40 ft high. The project bid has been advertised and bid opening was anticipated for August 2009.

DISTRICT OF COLUMBIA

Washington

DC WASA CSO Tunnels

As part of a long-term plan to control combined sewer overflows, the D.C. Water and Sewer Authority is planning to construct a series of tunnels to capture excess flow and convey it to the Blue Plains wastewater treatment plant. The major tunnel projects are: the Blue Plains Tunnel (23,600 ft of 23-ft diameter tunnel), the Anacostia River Tunnel (12,500 ft of 23-ft diameter tunnel), the NE Boundary Tunnel (17,500 ft of 23-ft diameter tunnel) and the NE Boundary Branch Tunnels (11,300 ft of 15-ft diameter tunnel).

The Blue Plans Tunnel will be the first to be bid. RFQs for the design-build contract will be accepted in early 2010, with construction anticipated for 2nd quarter 2011. Based on the results of the Blue Plains Tunnels, subsequent projects may also be let as design-build packages.

All work is scheduled for completion by 2025.

INDIANA

Indianapolis

Deep Rock Tunnel Connector

A key component of the City of Indianapolis' long-term, \$1.8 billion plan to reduce raw sewage overflows, the Deep Rock Tunnel Connector comprises 6.5 miles of 18.5-ft diameter sewer tunnel that will provide extra capacity. The project was originally designed as the Belmont-Southport Interplant Connect -- a shallow, soft ground tunnel that would have allowed the city to transfer flows from between two sewersheds and two treatment plants -- but was redesigned to increase capacity with the idea the Southport treatment plant could be expanded in the future. The project is expected to cost \$160 million. The project is expected to bid early 2011.

NEW JERSEY

North Bergen

THE Tunnel

The Federal Transit Administration (FTA) has committed \$3 billion to the tunnel connecting Secaucus, N.J., to midtown Manhattan rail hubs. The Port Authority of New York and New

Jersey followed suit and New Jersey Transit is committing about \$1.5 billion. The tunnel will be nearly 30,000 lf and 20-ft in diameter.

Extensive geotechnical investigation has been completed and officials have begun prequalifying contractors. Officials anticipate some 25 contracts awarded for the project. The project is scheduled for completion in 2017.

The project comprises three tunnel sections to be let as design-build contracts: the Manhattan Tunnels, the Palisades Tunnel and the Hudson River Tunnel. Contractor pre-qualification began on the Manhattan Tunnels with three contracting teams short-listed: Barnard/Judlau, Shea/Schiavone/Skanska and S.A. Healy/CCA Civil/Halmar International.

Bids are being received for the Palisades Tunnels contract through Dec. 2, 2009. The Palisades Tunnels will extend from the east face of the Tonnelle Avenue Underpass to the Hoboken access shaft. It includes an open cut to a portal structure at the west face of the Western Slope (Palisades) then turns into two TBM-bored tunnels that run through the Palisades hard rock to the Hoboken access shaft. The twin tunnels will be approximately 5,200 ft long, and will have a finished inside diameter of approximately 24.5 ft.

RHODE ISLAND

Providence

Narragansett Bay CSO

Near-Surface Interceptors

These two near-surface interceptors — the second phase of Providence's "Little Big Dig" — will run some 30,000 lf along the Woonasquatucket and the Seekonk rivers. Phase I of the Providence CSO project was commissioned on Nov. 13 and is comprised of 3 miles of storage tunnel between the Providence Place mall and Fields Point. The Phase I tunnel is designed to collect roughly 40 percent of the overflows that have plagued the city for more than 100 years, since the city combined its sanitary sewer lines with its stormwater lines. In the late 1970s, the EPA stepped in and ordered the city to clean up its overflows, which led, eventually, to the CSO project. Of the three final designs, the three-phase tunneled portioned was the most costly (estimated \$559 million) but was approved for its potential to make the upper Bay safe to swim and fish.

Phase II is scheduled to bid in 2009 with construction beginning in 2010.

Phase III, a second large tunnel, will follow approximately two years later.

TEXAS

Austin

Water Treatment Plant 4

The Austin Water Utility is moving forward in the construction of Water Treatment Plant 4, a new 300 mgd treatment facility that draws water from Lake Travis to augment the city's potable water system. The project includes three tunnel components, including a deep raw water intake tunnel to convey lake water to the plant. The contract for the raw water tunnel and pipeline is expected to be ready for bid by May 1, 2010. Additionally, two other tunnels – the Jollyville and Forest Ridge tunnels – are under design and will be built to convey treated water from the new plant to the existing system.

The Jollyville Tunnel project, still under design, consists of 35,000 ft of 84-in. ID treated water pipeline and three shafts. The tunnel segment comprises at least 25,000 ft of tunnel, but some excavated sections may be converted to tunnel. The tunnel alignment stretches through predominantly limestone at depths of approxi-

mately 150 ft. Black and Veatch is the designer for Austin Water Utility. The project is expected to bid 1st Quarter 2011.

CANADA

ONTARIO

Toronto

Toronto-York Spadina Subway Extension Project

The Toronto-York Spadina Subway Extension Project is a \$2.6 billion (CAN) project that would extend existing subway service 8.6 km (6.7 km of bored tunnel) from Downsview Station northwest through York University within the City of Toronto and north to the Vaughan Corporate Centre in the Regional Municipality of York. There are six stations sites currently planned.

In November 2008, Hatch Mott MacDonald was awarded the twin tunnel design contract. The Toronto Transit Commission has also awarded a contract to Lovat Inc. for four EPB TBMs. The project will be broken into two tunnel contracts via design-bid-build procurement. For information, visit www3.ttc.ca.

York

Southeast Connector Sewer

The Regional Municipality of York in the greater Toronto area is designing a 15-km (9.3-mile), 3-m (9.8-ft) diameter sanitary sewer tunnel. Hatch Mott MacDonald and AECOM have been retained for design of the project.

Construction will not begin until approval of the environmental assessment, which is anticipated to happen before the end of the year. The tunnel will be constructed using earth pressure balance tunnel boring machines and installed with pre-cast concrete segmental lining in a one-pass system. The majority of the tunnel will be through dense Newmarket till with some softer soils expected. The Regional Municipality of York is procuring four EPB TBMs and the concrete segments to be used for the project.

Construction is expected to start in January 2010 with completion by mid 2013. The cost estimate is \$500 million (CAN). Only pre-qualified contractors will be allowed to bid.

Keep us in the loop.
Send news of upcoming projects to
jrush@benjaminmedia.com.

Economies of Success: The Ease of Online Education

BENJAMIN
MEDIA™

Webinars

Date: Tuesday, Sept. 15, 2009
Time: 2 PM Eastern/11 AM Pacific
Cost: \$99 (includes log-in information)
Title: **What is the Real Value of Your Business?**

Ever wonder what your services and products are really worth? Using a custom Corporate Value Calculator Tool that will be provided to every participant, Brad Dawson, Managing Director of LTV Dynamics and *Utility Contractor* contributing writer, will show business owners how to determine their current business value and, by developing various growth scenarios, see the impact of those decisions on their business value. This webinar has been touted as one of the business owner's favorites!

Date: Tuesday, Oct. 20, 2009
Time: 2 PM Eastern/11 AM Pacific
Cost: \$99 (includes log-in information)
Title: **Predicting Your Business Future**

In this webinar, Brad Dawson, Managing Director of LTV Dynamics and *Utility Contractor* contributing writer, gazes into his crystal ball to provide participant with a clear explanation of the five phases of the natural business cycle and pinpoints the exact location their business is in with regards to this cycle. This information is used to predict the future activities of the business and, using the same logic, the cycle position and expectations of their competitors and customers.

Date: Wednesday, December 9 & Thursday, December 10, 2009
Time: 2 PM Eastern/11 AM Pacific
Cost: \$149 (includes log-in information for both days)
Title: **Asset Protection & Business Succession Strategies**

Business succession planning involves planning for the smooth continuation and success of a business from one generation to the next. The general statistics quoted by experts say that only 30 percent of the business will survive to the second generation and just 10 percent will survive to the third generation. Why? Dennis Zaverl, President of Zaverl Associates will share his 30 years experience of helping business successions succeed.

Benjamin Media's Educational Webinar Series focuses on timely issues affecting your business in today's uncertain world. For more information and registration, go to www.benjaminmedia.com/webinars

Presented by Benjamin Media Inc., publisher of

