



MEMORANDUM

DATE: January 11, 2008

TO: Silicon Valley Rapid Transit Policy Advisory Board (PAB)

FROM: Mark S. Robinson
Acting Chief Engineering and Construction Officer

SUBJECT: Silicon Valley Rapid Transit Project
Engineering Progress Report – December 2007

FOR INFORMATION ONLY

Engineering Activities:

The Project's 65% Engineering phase progressed with the design teams focusing on design development, geotechnical activities, third party utility relocation and engineering support agreements, and evaluating Value Engineering alternatives. As of the end of December 2007, 65% Engineering work is 51% complete with all major areas progressing as planned.

To facilitate management and reporting during the 65% Engineering phase, the Project has been organized into three geographic areas plus Project-Wide Systems. Design of the guideway, stations, campus facilities and parking structures from the end of the proposed Warm Springs extension to the East Tunnel Portal is included in the **Northern Area**. The **Central Area** design efforts include approximately five miles of tunnel guideway, three underground stations, campus facilities and parking structures from the East Tunnel Portal to the West Tunnel Portal. The **Western Area** includes design of the guideway, Yard & Shops facilities, Santa Clara Station, campus facilities and parking structure from the West Tunnel Portal to the end of the tail track. **Project-Wide Systems** is responsible for design of Project-wide train control, security, communications, and traction power systems.

Northern Area

The Guideway Design Team completed draft plans for the formal review of 95% designs for the C210 Berryessa Creek Crossing, Abel Street Retrofit, and UPRR Relocation package. 65% designs for the C202 Civil Construction Trade Zone to Sierra Lundy contract package were issued for review. The Team issued updated track charts for the Freight Railroad Relocation for use.

The Stations Design Team circulated draft plans for the formal review of the Stations 65% design package and issued cost trends for the new roadways and campus facilities at the Berryessa Station. Efforts continued on the development of designs and drawings for the Milpitas and Berryessa Stations with the Team completing an internal Design Integration review of the Berryessa designs in November.

Central Area

The Guideway Design Team issued review plans and 95% procurement documents for the Tunnel Boring Machine, Tunnel Liner and Tunnel Conveyor procurement packages. They completed a draft of the technical memorandum detailing recommended language for the tunnel subsurface easement requirements. The Team issued a memorandum detailing the recommended approach to the Trackwork design.

The Stations Design Team circulated draft plans for the formal review of the Stations 65% design package and issued cost trends for the new roadways and campus facilities at Alum Rock and Diridon/Arena Stations. Exhibits for confirmation of the architectural design themes for the Diridon/Arena and Downtown San Jose Stations were issued.

Western Area

The Yard & Shops Design Team issued a formal design review plan with interim plans and specification for the Yard & Shops Design-Build package. A workshop to guide the reviewers in the design review process was held December 6th. The Team also issued a draft detailed statement of work to be performed by the Design-Build contractor.

The Stations Design Team issued a draft template for the Santa Clara Station Design-Build contract bid-form. Efforts continued on the development of designs and drawings for the Santa Clara Station with the Team finalizing the architectural background details in November. The Team issued cost trends for the new roadways and campus facilities at Santa Clara Station.

Project Wide Systems

The Systems Design Team issued the interim design submittals for Train Control, Communication systems, and High Voltage Substation for review. The Team is finalizing the interim design review package for the Above Ground Radio System and plans to issue them for internal quality check in January. The Team continued to analyze the impacts on station ventilation by eliminating the third fan at the east mid-tunnel ventilation shaft.

Design Integration

The Design Integration Team outlined and documented requirements for the engineering phases for the FTA New Starts process. They met with the BART trackwork engineer to resolve discrepancies on the trackwork chart in the BART Facility Standards. The Design Development Board reviewed and approved two Design Development Memorandums. Efforts continued on the update of the Project Management Plan. The Team assembled latest FTA requirements for the Real Estate Acquisition and Management Plan.

Community Outreach:

The Community Outreach Team continued notification of pumping test activities to property owners, tenants and the general public via flyer drops, email notifications, site visits and stakeholder meetings with Santa Clara Street businesses and the San Jose Downtown Association.

The Team continued to address questions and concerns from the Coyote Creek Community regarding the BART tunnel alignment and creosote issues at the Santa Clara Street bridge. At a San Jose City Council member's request, the Team provided information concerning the issue prior to the City Council meeting on December 11.

The Team coordinated a Community Working Group to provide feedback on proposed ventilation facility locations, potential sites and architectural design. Follow up meetings are slated for January/February with this group and the general public.

Fire/Life/Safety:

The Fire/Life/Safety Team met with the Santa Clara and San Jose Fire Departments to discuss comments received during the workshop on station exiting in October. The Team also met with the Fremont Fire Department to review new access plans for emergency vehicles during construction at Mission Boulevard. Efforts to organize confined space rescue training for the fire department personnel continued.

Right-of-Way, Railroad & Third-Party Coordination:

Following VTA Board of Directors authorization to execute a Purchase and Sale Agreement for the acquisition of the property in Downtown San Jose known as the Mitchell Block, escrow was opened, negotiations held, and the sale completed on December 14, 2007 for this key downtown property.

VTA sold to BART for \$20.1 million, the northern most section of the UPRR Right-of-Way, which VTA had purchased from UPRR in 2002. BART will be using this Right-of-Way for the Warm Springs Extension Project.

The **Right-of-Way** Team continued to review title reports of properties impacted by the project. To date, about 120 requests for permit-to-enter for field activities that support engineering design have been received. Also, a total of 12 survey notifications have been received.

The **Railroad Coordination** Team continued planning for engineering fieldwork at the Northern and Western areas. Efforts continued on working solutions for severing the rail services to industries along the SVRT alignment in the Northern Area due to freight rail relocation.

The **Third Party Coordination** Team continued to review and refine draft third-party utility relocation and engineering support agreements with respective third parties. The Team continued to coordinate with design teams and public agencies, facilitating the development and approval of technical coordination memoranda.

Budget Status:

The current authorized budget for the SVRT Project through November 2007 is \$651.2 million and includes the Environmental, Conceptual, Preliminary and 65% Engineering Phases of project development and Right-of-Way acquisition. Approximately 51% of the approved budget has been incurred through November 2007, as shown on Table 1.

Table 1: SVRT Budget Report

(Status as of November 2007; \$ in millions)

Phase	Approved Budget	Incurred To-Date	% Incurred	Balance
Conceptual Engineering/EIR	\$45.2	\$44.4	99%	\$0.7
UPRR Right-of-Way ^{Note 1}	\$81.7	\$61.6	75%	\$20.1
Newhall Yard Property	\$38.4	\$38.4	100%	\$0
Early Right-of-Way Requirements	\$80.0	\$4.0	5%	\$76.0
UPRR Relocation	\$45.0	\$0.0	0%	\$45.0
Sub-total:	<u>\$290.3</u>	<u>\$149.1</u>	<u>51%</u>	<u>\$141.2</u>
Preliminary Engineering:				
Design Consultants	\$121.1	\$121.1	100%	\$0
VTA/BART	\$28.0	\$ 28.0	100%	\$0
65% Engineering				
Design Consultants	\$159.9	\$51.1	32%	\$ 108.8
VTA/BART	\$46.2	\$14.8	32%	\$ 31.4
Contingency	\$5.9	\$0.0	0%	\$ 5.9
Sub-total PE/65% Engineering:	<u>\$361.1</u>	<u>\$215.0</u>	<u>60%</u>	<u>\$146.1</u>
TOTALS	\$651.4	\$363.4	56%	\$288.0

Note 1 \$20.1 million balance generated from sale of Warm Springs Extension Right-of-Way to BART.