



EXECUTIVE MANAGEMENT AND AUDIT COMMITTEE
MARCH 18, 2004

SUBJECT: TUNNEL ADVISORY PANEL

**ACTION: FUND THE FOURTH CONTRACT YEAR TO THE TUNNEL ADVISORY PANEL
IN THE AMOUNT NOT TO EXCEED \$233,565**

RECOMMENDATION

Authorize the Chief Executive Officer to:

- A. Fund the fourth year of Contract No. PS-2020-1051, with Dr. Dan Eisenstein for geotechnical and tunneling consulting as a member of the Tunnel Advisory Panel in the amount not to exceed \$193,965 effective May 1, 2004; and
- B. Fund the fourth year of Contract No. PS-2020-1055, with Dr. Geoffrey Martin for geotechnical and tunneling consulting as a member of the Tunnel Advisory Panel in the amount not to exceed \$39,600 effective May 1, 2004.

RATIONALE

In June 2001, the MTA Board approved the five-year contractual agreement with the Tunnel Advisory Panel and directed staff to return to the Board each year for funding approval. Staff is recommending exercising the fourth year's funding.

As the MTA moves forward with the Metro Gold Line Eastside Extension, the Tunnel Advisory Panel is relied upon for providing expert advisement and review of the work of MTA staff and external consultants. With construction anticipated to begin in 2004, the Tunnel Advisory Panel will serve as a high-level technical advising source. They will provide critical oversight by participating and providing input analysis on the 1.8 miles of the twin bored tunnels for the Eastside extension beneath 1st Street between Gless Road and Lorena Street and on the construction of the underground stations. Specifically, Tunnel Advisory Panel is conducting review and formulation of the design and testing of the earth pressure balance tunnel boring machine, bid analysis on the 800 and 803 Eastside contracts, and project management strategy along the path of tunnel construction. When construction of the Eastside Extension proceeds, Tunnel Advisory Panel will provide review of the initial and ongoing construction monitoring of the ground movements and water control along the tunnel alignment. They will

be available to evaluate on the quality control of the tunnel segment, as it is tunnel bored, and provide feedback and advisement to facilitate the construction.

The Tunnel Advisory Panel will also continue to provide support for compliance under the terms of the Santa Monica Mountains Consent Decree. The consent decree is in force for five years after the completion of construction of the Metro Red Line Segment 3 tunnel through the Santa Monica Mountains. The tunnel was deemed completed after completion of the tunnel-grouting program in July 1999. MTA expects to issue related final reports and file them with the court around June 2004. The Tunnel Advisory Panel has retained the confidence of the Plaintiff, as the Tunnel Monitor; and is available to answer questions that may arise from the Plaintiff. Drs. Eisenstein and Martin provide ongoing review of geo-hydrological and biological information. They continue to review the environmental impacts of water drainage on springs, vegetation and animal life attributable to tunnel construction. Drs. Eisenstein and Martin are expected to prepare a final report on the Metro Red Line project and its impacts on the Santa Monica Mountains environment to meet the June closing schedule.

Further, the Tunnel Advisory Panel is providing review analysis of the tunneling alternative for the I-710 Long Beach Freeway Gap Closure. They are relied upon for expert advisement on the evaluation of the road tunnels. Tunnel Advisory Panel also facilitates assistance with public outreach efforts related to the tunnel assessment. They provide various presentations to community leaders of the affected cities on the road tunnel aspects and are available to answer questions that arise from these groups. Tunnel Advisory Panel will prepare a feasibility report on the capacity of the large road tunnels. They will also provide staff with review of the "I-710 to I-210" tunnel technical feasibility study and afford feedback to evaluate the tunnel configuration, the tunnel portal locations and seismic considerations, etc.

Both Drs. Eisenstein and Martin have unique understandings of Los Angeles County's ground conditions as well as having intimate knowledge of MTA's projects. They are recognized throughout the world as experts in the areas of geotechnical analysis, tunneling and deep excavation, earthquake engineering, and soil dynamics. It is important that their services continue as the MTA moves forward in identifying the transportation needs and challenges that Los Angeles County will face over the next several years.

IMPACT TO OTHER CONTRACTS

There are no impacts to other contracts.

FINANCIAL IMPACT

Funding for this service is included in the FY04 budget under cost center 2020, project numbers 100001, 800082, and 800088. Since this is a multi-year contract, the cost center analyst and Chief of Staff will be accountable for budgeting the cost in future years, including any option exercised.

ALTERNATIVES CONSIDERED

No alternatives were considered. These services are crucial to MTA transit projects. Any delay in these services would disrupt and/or postpone current ongoing critical projects. A market survey was conducted prior to the original contract award and was determined that there are no individuals and/or firms that can provide the wide range of services MTA requires. There are sources available in discrete areas, however in all cases, not one individual/firm can provide the wide range of services that is provided by our current Tunnel Advisory Panel.

ATTACHMENTS

A. Tunnel Advisory Panel Scope of Work

Prepared by: Geyner J. Paz, Administrative Analyst



Don Ott
Executive Office, Administration



Roger Snoble
Chief Executive Officer

ATTACHMENT A

MTA TUNNEL ADVISORY PANEL

DR. Z. D. EISENSTEIN

DR. G.R. MARTIN

SCOPE OF WORK

MAY 1, 2004 – APRIL 30, 2005

During the contract year (May 1, 2004 – April 30, 2005) the TAP members will provide the following tasks, activities and programs elements:

Metro Gold Line Eastside Extension

- Analysis of bids and proposed contract
- Transfer of “lessons learned” and past experience to these projects
- Quality control
- Construction control
- Construction performance criteria (ground movements, ground water control, etc.)
- Construction monitoring and data evaluation

Santa Monica Mountains Consent Decree

- Review of hydrological and biological data
- Final Consent Decree Compliance Report on Groundwater Impacts

I 710 Gap Closure

- Feasibility of tunneling alternative
- Cost Estimates
- Presentation to community leaders
- Preparation of data base for road tunnels
- Report on large tunnels

Ad Hoc Professional Services

- Ongoing advisory services to MTA planning and construction staff
- Advise and assist MTA staff with regular periodical maintenance reviews as well as with additional remedial measures, when and if needed on the existing tunnels and underground stations during and after the initial operational phase.
- Advise and assist MTA staff and external counsels in potential litigations related to disputes with contractors and third parties arising from construction activities on past

and current MTA tunnel projects, specifically on coordination of technical aspects of litigation.