



Los Angeles County
Metropolitan
Transportation
Authority

SUBJECT: TUNNEL ADVISORY PANEL

ACTION: AWARD TWO FIVE-YEAR CONTRACTS TO THE MEMBERS OF THE TUNNEL ADVISORY PANEL IN THE AMOUNT NOT TO EXCEED \$1,167,826

One Gateway Plaza
Los Angeles, CA
90012

RECOMMENDATION

Authorize the Chief Executive Officer to:

- A. Execute Contract No. PS-2020-1051, a non-competitive contract with Dr. Eisenstein, for geotechnical and tunneling consulting as a member of the Tunnel Advisory Panel for the two year base contract in the amount not to exceed \$387,930;
- B. Exercise the three one-year options to Contract No. PS2020-1051 with Dr. Eisenstein in the amount not to exceed \$581,895 for a total five-year contract amount not to exceed \$969,826;
- C. Execute Contract No. PS-2020-1055, a non-competitive contract with Dr. Martin, for geotechnical and tunneling consulting as a member of the Tunnel Advisory Panel for the two year base contract in the amount not to exceed \$79,200; and
- D. Exercise the three one-year options to Contract PS-2020-1055 with Dr. Martin in the amount not to exceed \$118,800 for a total five-year contract amount not to exceed \$198,000.

213.922.6000

Mailing Address:

P.O. Box 194
Los Angeles, CA 90053

RATIONALE

The members of the Tunnel Advisory Panel's five-year contracts will expire at the end of April 2001. Over the past four and half years, the Tunnel Advisory Panel has afforded the MTA invaluable and foremost expertise on geotechnical analysis, quality control, engineering and construction design. Their efforts with regard to litigation and claims resolution have led to significant cost savings for the MTA. Furthermore, their expertise in geotechnical analysis and tunneling have been utilized in the finalization of the corridor studies for both Mid-Cities and East Side. Absent the work of the Tunnel Advisory Panel, solutions and options in these areas and in future transportation needs would have had a limited range of alternatives.

It is important that their services continue as we proactively move forward in identifying the transportation needs and challenges that Los Angeles County will face over next several years. We continue to make progress in areas of litigation,

Consent Decree for the Santa Monica groundwater compliance and monitoring and potential remedial measures necessary during the planning and construction phases.

In addition, the MTA Board has strongly supported the need for as-needed expertise in the field of geotechnical analysis, quality control, construction performance criteria and construction monitoring and data evaluation.

FINANCIAL IMPACT

Funding of \$40,000 for this service is included in the FY01 budget in cost center numbers 2020 and 4010 under project numbers 100001 and 405511. Since this is a multi-year contract, the cost center manager and Chief Operating Officer will be accountable for budgeting the cost in future years, including any option exercised.

ALTERNATIVES CONSIDERED

Staff considered issuing a competitive procurement for this service. A market survey was conducted by Procurement of peer transit agencies to ascertain availability of other leading specialists who have the expertise to perform all of the required services in support of MTA's ongoing and future projects. Based on the survey, several of the agencies hired consultants for specific areas in engineering and construction design. Other agencies used existing contractors/subcontractors to provide some of the services. There are sources available in individual areas needed by the MTA, however in all cases, not one firm provided the wide range of services that are necessary to the MTA and it does not appear that alternative sources exists that can perform all of these needed services.

BACKGROUND

The MTA Board established the Tunnel Advisory Panel in April 1996 in response to questions raised by Board members regarding the feasibility of tunneling in Los Angeles ground conditions. The Panel's role is to provide an objective, balanced and impartial view of planning, design and construction progress. They are responsible for advising MTA management on technical concepts and reviewing the consultant's implementation in planning, design, construction and environmentally sensitive protection.

During the last four and half years, the Tunnel Advisory Panel has provided crucial advice and guidance on a variety of issues affecting the Metro Red Line, Consent Decree Compliance, litigation support and the transit corridor projects. The Panel addressed issues dealing with design, design changes, contractual strategies, criteria for environmental protection and ground control, and technical aspects and impact of project suspension and dispute resolution.

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.

Dr. Eisenstein has been a consultant or advisor to over 100 projects in Canada, United States, England, France, Austria, Brazil, Egypt, South Africa, Spain, Morocco and Czechoslovakia on dams, foundations, deep excavations and tunnels. Some of the projects include Light Rail

Transit Subway in Edmonton, Canada; Light Rail Transit Tunnels in Calgary, Canada; Light Rail Transit Tunneling in Minneapolis; Eglinton Avenue Subway twin tunnels in Toronto, Canada; Channel Tunnel between Dover, U.K. and Calais, France; and the Hex River Railway tunnel in South Africa. In addition, he has published more than 100 papers in professional journals and conference proceedings on underground excavations and tunneling.

Dr. Martin has been responsible for technical quality of major geotechnical engineering projects. He has provided technical oversight and review for projects related to foundation engineering, earth structures, earthquake engineering, offshore engineering and laboratory/institution testing. He has managed or directed geotechnical projects related to earth dams, power plants, port and harbor structures, pipelines, bridges, and offshore structures. In addition, has published over 70 papers in professional journals, conference proceedings, and technical articles in his related fields of expertise.

PROCUREMENT SUMMARY

Staff requested a Cost and Schedule Proposal from Dr. Eisenstein and Dr. Martin on February 5, 2001. Proposals were received from Dr. Eisenstein and Dr. Martin on February 12, 2001 and negotiated on March 7, 2001.

COST/PRICE ANALYSIS

EISENSTEIN - CONTRACT NO PS-2020-1051

	PROPOSED PRICE	RECOMMENDED PRICE	HISTORICAL PRICE
Base 2 Years	\$393,086	\$387,930	\$314,726
Option 3 Years	\$589,630	\$581,896	\$472,090
Total 5 Years	\$982,716	\$969,826	\$786,816
		PRICE VARIANCE	\$183,010

MARTIN - CONTRACT NO. PS-2020-1055

	PROPOSED PRICE	RECOMMENDED PRICE	HISTORICAL PRICE
Base 2 Years	\$ 79,200	\$ 79,200	\$ 88,000
Option 3 Years	\$118,800	\$118,800	\$132,000
Total 5 Years	\$198,000	\$198,000	\$220,000
		PRICE VARIANCE	\$22,000

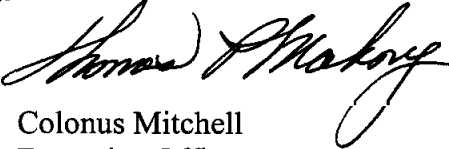
The recommended price of \$969,826 for Dr. Eisenstein and \$198,000 for Dr. Martin has been determined to be fair and reasonable based upon fact finding, clarification and price analysis performed by Procurement’s Cost/Price Analysis Unit and Management Audit Services (MASD). Both Dr. Eisenstein and Dr. Martin’s pricing is consistent with market pricing. The recommended price for Dr. Eisenstein resulted in a net reduction of \$12,890 from the original cost proposal of \$982,716. The increase in historical price variance for Dr. Eisenstein is due to an increase in the rates over the past five years and an increase to the number of days of service

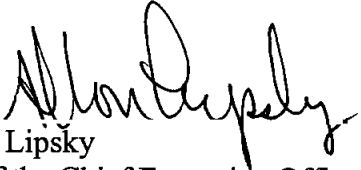
to be provided. The reduction in historical price variance for Dr. Martin is due to a decrease in the total number of days of service provided, although he has had an increase in rates over the past five years.

SMALL BUSINESS PARTICIPATION

The Small Business Diversity Unit of the MTA does not recommend a Disadvantaged Business Enterprise (DBE) participation goal for this procurement. The Small Business Diversity Unit explored subcontracting possibilities and determined that no other firms or individuals possess the background information and experience to successfully perform the wide-range of support services, such as geotechnical analysis, quality control, engineering and construction design, necessary to satisfy MTA's requirements for this project. However, pursuant to the DBE Program, if the awardee utilizes the services of subcontractors, the awardee is expected to afford maximum opportunities to DBE's in all subcontractor and supply services areas.

Attachment A – Description of Tunnel Advisory Panel services

For Colonus Mitchell

Colonus Mitchell
Executive Officer, Procurement


Allan G. Lipsky
Office of the Chief Executive Officer

ATTACHMENT A

DESCRIPTION OF SERVICE REQUIRED

The Tunnel Advisory Panel will provide the following tasks, activities and program elements:

- Advise and assist on and review the work of MTA staff and external consultants with planning, design, contracting and construction of East Side and Mid City Transit Corridor Projects, specifically in the area of underground sections of the rail or road tunnels. This includes, but not limited to, the following:
 - Transfer of “lessons learned” and past experience to these projects
 - Quality control
 - Geotechnical investigation
 - Detailed engineering design
 - Construction specifications
 - Construction performance criteria (ground movements, ground water control, etc.)
 - Construction monitoring and data evaluation
- Advise and assist MTA staff and external consultants on the Long Range Transportation Plan for future transportation needs involving underground construction
- Advise and assist MTA staff and external counsels in 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 the litigation.
- Assist MTA staff in continuation of groundwater monitoring in relation to compliance with the Consent Decree on the Santa Monica Mountain tunnels.
- 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 station during the initial operational phase.
- Under this Statement of Work, the Contractor shall provide professional services for the Tunnel Advisory Panel as required and as directed by the MTA Project Manager