



Board Report

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Agenda Number: 40.

CONSTRUCTION COMMITTEE JUNE 15, 2017

SUBJECT: SUPPLEMENTAL ENGINEERING SERVICES (SES) CONSULTANT SERVICE CONTRACT

ACTION: AWARD PROFESSIONAL SERVICE CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to EXECUTE:

- A. a three-year cost plus fixed fee type contract for AE36687 with Mott MacDonald Group for Supplemental Engineering Services for Engineering Design of Rail and Highway Transportation Projects on a task order basis, plus two one-year options. The amount for the three years base contract is \$15,000,000 and the amount for the two one-year options is \$5,000,000 for a total contract value not to exceed \$20,000,000; subject to resolution of protest(s), if any; and
- B. individual Task Orders and changes within the Board approved contract amount.

ISSUE

Currently, Metro's staff engineers, architects and CADD designers in the Facilities Engineering Group are fully engaged in supporting our current Major Rail Transit Projects (Crenshaw, Regional connector and Purple Line sections 1, 2 and 3), Metro Capital Improvements projects (CIP) such as the Patsaouras Plaza project and the Willowbrook / Rosa Parks Station Improvement Project and the State of Good Repairs Projects (SOGR) such as the Metro Blue Line (MBL) Pedestrian Gates project, the MBL Signaling Rehabilitation and Operational Improvements project, the I-210 Barriers Replacement project and the Pershing Square Escalators Replacement project.

The passage of Measure M will add a considerable workload to the Facilities Engineering group with projects that are starting or that are completing design in the next five years such as the 96th Street Airport Metro Connector, the Goldline Foothill Extension to Claremont, the Orange Line BRT Improvements and the BRT Connector Orange / Red Line to the Gold Line, which all have groundbreakings within the next five years.

In addition, important motions by Board of Directors require considerable engineering work to evaluate the feasibility and develop conceptual alternative designs to validate engineering solutions for the projects called by the motions: This includes but is not limited to the MBL Wardlow Grade

Separation study, the MBL Washington/ Flower Wye Improvement or Grade Separation, and the Pico Station Grade Separation.

Our previous Supplemental Engineering Services (SES) contract has expired. This new SES will enable Metro the flexibility to supplement internal resources on an as-needed basis for the work detailed above, when we either do not have the sufficient capacity, or lack the particular expertise necessary to perform a particular specialty task in a timely manner. Metro Engineering staff does not possess the resources or technical skills to carry out certain specialized tasks such as Traffic Control Plans, Noise and Vibration Control or Corrosion Control. There is not currently a need for full-time resources for these specialties. Therefore, it is more efficient to use consultants on an as-needed basis.

DISCUSSION

Metro Engineering has developed this SES Contract to supplement Metro's engineering efforts. The SES consultant team shall be capable of supporting its engineering group's technical disciplines. This Contract will be issued for a term of three years with two one-year optional extensions for a maximum total duration of five years. The Procurement Summary for this Contract is included as Attachment A.

This Contract called for the proposers to demonstrate their capabilities and technical expertise listed in the Statement of Work for this RFP. The technical proficiencies required for this SES contract (PS8510-3002) are very comprehensive and include all engineering and specialties disciplines which Metro may require in support of its projects. These include the following:

General Services include:

1. Preliminary and Final Design of Transportation including Rail and Highway Projects.
2. Design Review Support & Coordination for CIP projects & other special projects.
3. Production of Project Status, Technical and Engineering Reports.
4. Design of Structures, Stations and Guideways.
5. Facilities/Systems Interface Coordination.
6. Surveying Services.
7. Cost Estimating.
8. Intra/Inter Disciplinary Coordination.
9. Scheduling and Cost Management for Task Orders.
10. Post Design Services including; Bid and Design Support during Construction.
11. Administrative Tasks associated with General Engineering Support Services.

Specific Rail Facilities and Third Party Utility Design Services include:

12. Engineering Services for Review and Approval of Metro Projects.
13. Development of Technical Specifications, Drawings and Reference Documents.
14. Engineering Services for support of Metro Rail Operations and Maintenance.
15. Land Surveying and Legal Description.
16. Potholing.
17. Geotechnical Services, Borings and Reports.
18. Civil & Utility Engineering.

19. Drainage Design and Hydraulic Calculations.
20. Structural Engineering.
21. Bridges and Aerial Structure Design.
22. Tunnels, Trenches and Underground Station Design.
23. Track Work Engineering, Plan and Profile.
24. CPUC Grade Crossing Application including attendance to field diagnostic meetings.
25. Yard and Shop Rail Maintenance Facility Design.
26. Architectural Design.
27. Station Site Development.
28. Urban Design Integration.
29. Landscape Architecture.
30. Traffic Control Plans including Striping Drawings and Signal Drawings.
31. CADD and MicroStation Drawings.
32. BIM Services and Training.
33. Project Presentation including Three Dimensional Rendering.
34. Corrosion Control Measures and Cathodic Protection.
35. Value Engineering and Cost Reduction.
36. Noise and Vibration Analysis including Site Visits, Measurement and Mitigation.
37. Any other engineering or technical discipline not listed above that is ancillary to the Statement of Work and consistent with the general requirements of an approved Task Order.
38. HVAC design including HVAC and emergency ventilation.
39. Electrical Design.
40. Plumbing Design.
41. Fire Protection Design.

DETERMINATION OF SAFETY IMPACT

This SES Contract is not directly related to a specified safety issue. However, the services provided via this SES Contract will reduce Metro's dependency on limited internal resources and, thus, is generally in support of safety initiatives.

FINANCIAL IMPACT

As specific engineering design or support needs arise, task orders will be issued and funded from the associated project budget, upon approval by the responsible Project Manager.

Since this is a multi-year project, the Chief Program Management Officer, Project Managers and respective Cost Center Managers will be responsible for budgeting for costs of future task orders related to this contract.

IMPACT TO BUDGET

The funding for the task orders are provided by the specific project requiring the services. The source for these funds are in line with the respective projects' funding plans and fund sources may consist of federal and/or state grants as well as local funds. Many of the state of good repair projects

are funded with local funding sources that are eligible for rail and bus operations.

ALTERNATIVES CONSIDERED

- 1) Solicit qualifications proposals for each individual task when the requirement arises: This alternative is not recommended as it would require extensive additional staff time to process each individual task and would result in project delays due to the lead time required to complete each procurement cycle. Additionally, procuring services on a per-assignment basis would impose significant additional burden on the Engineering and Vendor/Contract Management departments.
- 2) Utilize existing engineering staff to provide the required technical support: This alternative is also not feasible as Metro's current engineering capacity is fully utilized to support the existing major, CIP and SOGR projects. Due to these commitments, it is anticipated that the current staff would be challenged to provide the necessary additional technical support required for the up-coming capital projects which will be under concurrent development. If this alternative were exercised, Metro would need to hire additional staff with expertise in several currently underrepresented disciplines to perform this work. Such an action is not practical nor cost-effective.

NEXT STEPS

Upon Board approval, staff will complete the process to award the contract. Specific task orders will then be issued on an as needed basis.

ATTACHMENTS

Attachment A: Procurement Summary
Attachment B: DEOD Summary

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Reviewed by:
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Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

SUPPLEMENTAL ENGINEERING SERVICES – RAIL FACILITIES AND 3RD PARTY SERVICES / CONTRACT NUMBER AE36687

1.	Contract Number: AE36687	
2.	Recommended Vendor: Mott MacDonald, LLC	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFP–A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: December 19, 2016	
	B. Advertised/Publicized: December 26, 2016	
	C. Pre-proposal/Pre-Bid Conference: December 28, 2016	
	D. Proposals/Bids Due: January 25, 2017	
	E. Pre-Qualification Completed: May 30, 2017	
	F. Conflict of Interest Form Submitted to Ethics: May 24, 2017	
	G. Protest Period End Date: May 19, 2017	
5.	Solicitations Picked up/Downloaded: 101	Bids/Proposals Received: 5
6.	Contract Administrator: Rafael Vasquez	Telephone Number: (213) 418-3036
7.	Project Manager: Aspet Davidian	Telephone Number: (213) 922-5258

A. Procurement Background

This Board Action is to approve the award of Contract No. AE36687, issued in support of Supplemental Engineering Services – Rail Facilities and 3rd party Services (SES). The scope of the Contract is to provide Engineering and Design including Final Design of Transportation projects which include rail and highway projects. Board approval of contract awards are subject to resolution of all properly submitted protests.

The RFP was issued in accordance with Metro's Acquisition Policy and California Government Code §4525 - 4529.

The contract is an Indefinite Delivery Indefinite Quantity type contract using Task Orders to release unique scopes of work and compensating the Consultant, at lump sum prices to the maximum extent possible, or as necessary on a cost reimbursable fixed fee basis for costs. The Contract period of performance is three base years plus two one year options.

One amendment was issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on January 12, 2017, to modify RFP requirements including General Certification Forms, Contractor Debarment, Suspension, Ineligibility and voluntary Exclusion Instructions.

On December 28, 2016, a pre-proposal conference was held with thirty-two (32) firms in attendance. A total of 5 proposals from the following firms were received on January 25, 2017:

1. Mott MacDonald, LLC;
2. HDR;
3. AECOM;
4. STV, Inc.; and
5. CH2M

B. Evaluation of Proposals/Bids

A Proposal Evaluation Team (PET) consisting of staff from Engineering Management and from Major Capital Project Engineering was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- | | |
|--|-----|
| • Experience and Capabilities of the Firms on the Consultant's Team | 30% |
| • Key Personnel's Skills and Experience | 30% |
| • Effectiveness of Management Plan | 20% |
| • Understanding of Work and Appropriateness of Approach For Implementation | 20% |

This is an Architect and Engineering (A&E), qualifications based procurement. Price cannot be and was not used as an evaluation factor as governed by California Government Code §4525 – 4529.

The evaluation criteria were appropriate and consistent with criteria developed for other, similar A&E solicitations.

During the week of March 16, 2017, the evaluation committee conducted oral presentations with the firms. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the evaluation committee's questions. In general, each team's presentation addressed the requirements of the RFP, the understanding of work approach, design experience and stressed each firm's commitment to the success of the project. Also highlighted were staffing plans, work plans, and perceived project issues. Each team was asked questions relative to each firm's qualifications and previous experience.

Qualifications Summary of Recommended Firm:

The evaluation performed by the PET, in accordance with evaluation criteria set forth in the RFP, determined Mott MacDonald, LLC as the most qualified firm to provide the required services.

Mott MacDonald, LLC has extensive experience with Metro “on call” contracts and have also done similar projects for other transit agencies. Their firm showed a good understanding of Metro’s processes and solutions to mitigate potential risks.

In addition to their project team, Mott MacDonald, LLC clearly demonstrated the integration of subcontractors and their Project Management Plan clearly defined communication and monitoring of subcontractors. This includes redundancy across roles to ensure availability and a high percentage of staff commitment. Mott MacDonald, LLC showed clear identification of opportunities to improve services through innovative approaches.

Mott MacDonald’s core personnel, consists of a highly qualified group of key staff and support personnel to address all tasks outlined in the Scope of Services with the ability to deploy staff to meet the needs of Metro’s Supplemental Engineering Services program. The proposal outlines how the consultant team will efficiently work collaboratively on Metro’s Supplemental Engineering Service related projects to ensure assigned tasks and projects are properly coordinated to meet the goals and objectives of Metro’s Supplemental Engineering Service program.

The PET ranked the proposals and assessed strengths, weaknesses and associated risks of each of the Proposers to determine the most qualified firm.

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	Mott MacDonald, LLC				
3	Experience and Capabilities of the Firms on the Consultant’s Team	89.33	30.00%	26.80	
4	Key Personnel’s Skills and Experience	90.33	30.00%	27.10	
5	Effectiveness of Management Plan	88.67	20.00%	17.73	
6	Understanding of Work and Appropriateness of Approach for Implementation	92.00	20.00%	18.40	
7	Total		100.00%	90.03	1

8	HDR				
9	Experience and Capabilities of the Firms on the Consultant's Team	91.67	30.00%	27.50	
10	Key Personnel's Skills and Experience	86.67	30.00%	26.00	
11	Effectiveness of Management Plan	87.00	20.00%	17.40	
12	Understanding of Work and Appropriateness of Approach for Implementation	90.67	20.00%	18.13	
13	Total		100.00%	89.03	2
14	AECOM				
15	Experience and Capabilities of the Firms on the Consultant's Team	85.33	30.00%	25.60	
16	Key Personnel's Skills and Experience	88.67	30.00%	26.60	
17	Effectiveness of Management Plan	84..33	20.00%	16.87	
18	Understanding of Work and Appropriateness of Approach for Implementation	92.00	20.00%	18.40	
19	Total		100.00%	87.47	3
20	STV				
21	Experience and Capabilities of the Firms on the Consultant's Team	83.67	30.00%	25.10	
22	Key Personnel's Skills and Experience	84.67	30.00%	25.40	
23	Effectiveness of Management Plan	85.33	20.00%	17.07	
24	Understanding of Work and Appropriateness of Approach for Implementation	87.67	20.00%	17.53	
25	Total		100.00%	85.10	4
26	CH2M				
27	Experience and Capabilities of the Firms on the Consultant's Team	84.67	30.00%	25.40	
28	Key Personnel's Skills and Experience	84.67	30.00%	25.40	
29	Effectiveness of Management Plan	85.33	20.00%	17.07	
30	Understanding of Work and Appropriateness of Approach for Implementation	84.33	20.00%	16.87	
31	Total		100.00%	84.74	5

C. Cost/Price Analysis

A cost analysis of labor rates, indirect rates and other costs was completed in accordance with Metro's Procurement Policies and Procedures to negotiate a fair and

reasonable price. The analysis includes among other things, (1) a comparison with similar firms offering the same services; (2) an analysis of audited rates and factors for labor, equipment and other prices that will comprise the rates upon which the Consultant will base its invoices, and (3) compliance with both the Federal Acquisition Regulation (FAR) guidelines and Generally Accepted Accounting Principles (GAAP). Metro negotiated and established direct labor rates plus provisional indirect rates and a fixed fee rate. The pricing for each task order will utilize the rates, plus the negotiated fixed fee factor, to establish a lump sum price or a not-to-exceed cost reimbursable amount plus a fixed fee.

An audit request has been submitted to the Metro Management Audit Services Department (MASD). In order to prevent any unnecessary delay in contract award, provisional rates will be established subject to retroactive adjustments upon completion of any necessary audits. In accordance with FTA Circular 4220.1.F, if an audit has been performed by any other cognizant agency within the last twelve month period, Metro will receive and accept that audit report for the above purposes rather than perform another audit.

D. Background on Recommended Contractor

The recommended firm, Mott MacDonald, was founded in 1902 as (Mott & Hay) and in 1996, Mott MacDonald and the Canadian company Hatch created a joint venture called Hatch Mott MacDonald in North America. In 2016, Hatch Mott MacDonald was divided into two separate businesses. Mott MacDonald pursues projects in the U.S., Canada and around the world. Mott MacDonald specializes in rail transit, tunnels, transportation and highways.

DEOD SUMMARY

**SUPPLEMENTAL ENGINEERING SERVICES (SES) CONSULTANT SERVICES
CONTRACT / AE36687**

A. Small Business Participation

The Diversity and Economic Opportunity Department established a 20% goal, inclusive of 17% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE) for this project. Mott MacDonald formed a team that included SBE and DVBE firms without schedules or specific dollar commitments prior to the establishment of this on-call contract and has committed to meeting the 17% SBE and 3% DVBE goals. Overall SBE/DVBE participation for the on-call Contract will be determined based on the aggregate of all Task Orders awarded.

Small Business Goal		17% SBE 3% DVBE	Small Business Commitment	17% SBE 3% DVBE
	SBE Subcontractors	Scope of Work	NAICS Codes	% Committed
1.	Anil Verma	Mechanical, Electrical, and Plumbing Engineering and Architecture Services	541330 - Engineering Services 541310 - Architecture Services	TBD
2.	Arellano Associates	Public Outreach, Communications, Stakeholder Engagement	541613 - Marketing Consulting Services 541820 - Public Relations Agencies	TBD
3.	BA Inc.	Utility Design Engineering	541330 - Engineering Services 541340 - Drafting Services 541690 - Other Scientific and Tech. Consulting	TBD
4.	Earth Mechanics	Geotechnical and Earthquake Engineering	541330 - Engineering Services 541380 - Testing Laboratories	TBD
5.	Engineering Solutions Services	Grant Writing, Structural Engineering	541330 - Engineering Services 541611 - Administrative Services	TBD
6.	Gibson Transportation	Transportation Engineering	541611 - Administrative Services 541618 - Other Management Consulting Services 561499 - All Other Business Support Services	TBD

7.	Lenax	Cost Estimating Services	541330 - Engineering Services 541310 - Architecture Services	TBD
8.	McLean & Shultz	Architectural, Structural, and Civil Engineering Design Services	237110 - Water and Sewer Line and Related Structures (Construction Management) 237310 - Highway, Street, and Bridge Const. (Construction Management) 541611 - Admin. Management and Gen. Consulting	TBD
9.	Morgner Construction Management	Construction Management Support Services, Pre-Construction Surveys	541330 - Engineering Services	TBD
10.	PacRim Engineering	Structural Design Support	541330 - Engineering Services 541370 - Surveying and Mapping Services	TBD
11.	Rail Surveyors Engineers	Rail Transit Engineering and Surveying	541620 - Environmental Consulting Services 541690 - Other Scientific and Tech. Consulting	TBD
12.	Terry Hayes and Associates	Environmental Services	541330 - Engineering Services 541618 - Other Management Consulting Services 541690 - Other Scientific and Tech. Consulting	TBD
13.	The Alliance Group	Utility Engineering Design, Coordination, Management, Third Party Coordination	541611 - Administrative Services	TBD
14.	The Solis Group	Project Controls: Scheduling and Document Control	541370 - Surveying and Mapping 541360 - Geophysical Surveying and Mapping 541330 - Engineering Services	TBD
15.	Wagner Engineering	Land Surveying, Mapping, and Right of Way Engineering	541370 - Surveying and Mapping 541360 - Geophysical Surveying and Mapping 541330 - Engineering Services	TBD
				17%

	DVBE Subcontractors	Scope of Work	NAICS Codes	% Committed
1.	MA Engineering	Civil Engineering Services	541330 - Engineering Services	TBD
Total DVBE Commitment				3%

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention is not applicable to this Contract.

C. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.