

# **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

Agenda Number: 35.

CONSTRUCTION COMMITTEE JULY 18, 2019

SUBJECT: SUPPLEMENTAL ENGINEERING SERVICES (SES) CONSULTANT SERVICE

CONTRACT

File #: 2019-0502, File Type: Contract

ACTION: AWARD PROFESSIONAL SERVICES CONTRACT

# RECOMMENDATION

AUTHORIZE the Chief Executive Officer to NEGOTIATE and EXECUTE:

- A. A three-year cost plus fixed fee type contract for AE59600 with HDR Engineering, Inc. for Supplemental Engineering Services for Engineering Design of Transit Rail Projects on a task order basis, plus two one-year options. The amount for the three-year base contract is \$50,000,000 and the amount for the two one-year options is \$20,000,000 for a total contract value not to exceed \$70,000,000; subject to resolution of protest(s), if any; and
- B. Individual Task Orders and modifications within the Board approved contract amount.

# **ISSUE**

Metro's staff engineers, architects and CADD designers in the Engineering Group are currently fully engaged supporting our current Major Rail Transit Projects (Crenshaw, Regional connector and Purple Line sections 1, 2 and 3), Metro Emergency Security Operations Center (ESOC), 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) Signaling Rehabilitation and Operational Improvements project, Metro Orange Line (MOL) Improvements and the I-210 Barriers Replacement project.

The passage of Measure M has added a considerable workload to the Metro Engineering group with projects that are starting or that are completing design in the next five years such as the Airport Metro Connector 96<sup>th</sup> Street Station (AMC), West Santa Ana Branch Transit Corridor, the Gold Line Foothill Extension to Claremont, 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 not limited to the MBL Wardlow Grade

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

# **BACKGROUND**

The funding limit for our existing Supplemental Engineering Services (SES) contract (Contract No. AE36687) has almost reached its limit. 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, in some cases, technical expertise to carry out certain specialized tasks such as Traffic Control Plans, three-dimensional nonlinear soils-structure interaction analysis, Noise and Vibration Control or Corrosion Control. There is not currently a need for full-time resources for these specific 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 (AE59600) 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 Transit Rail 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

Agenda Number: 35.

File #: 2019-0502, File Type: Contract

Agenda Number: 35.

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.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Supporting this recommendation supports Metro's strategic plan goal 1. By supporting the recommendation for HDR Engineering, Inc. to provide supplemental engineering services, the Board is supporting strategic plan goal 1 which promotes trip reliability, reduces trip disruptions as well as deliver of world-class transit service by ensuring our transit assets are in a state of good repair.

## **ALTERNATIVES CONSIDERED**

- 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

Prepared by: Androush Danielians, Executive Officer (213) 922-7598

Reviewed by: Debra Avila, Chief Vendor/Contract Management Officer (213) 418-3051 Richard F. Clarke, Chief Program Management Officer (213) 922-7557

## PROCUREMENT SUMMARY

# SUPPLEMENTAL ENGINEERING SERVICES (SES) / TRANSIT RAIL PROJECTS AE59600

1.	Contract Number: AE59600		
2.	Recommended Vendor: HDR Engineering, Inc.		
3.	Type of Procurement (check one): ☐ IFB ☐ RFP ☒ RFP-A&E		
	☐ Non-Competitive ☐ Modification ☐ Task Order		
4.	Procurement Dates:		
	A. Issued: February 5, 2019		
	B. Advertised/Publicized: February 7, 2019		
	C. Pre-Proposal Conference: February 15, 2019		
	D. Proposals Due: March 21, 2019		
	E. Pre-Qualification Completed: July 1, 2019		
	F. Conflict of Interest Form Submitted to Ethics: June 14, 2019		
	G. Protest Period End Date: Est. July 22, 2019		
5.	Solicitations Picked	Proposals Received:	
	up/Downloaded:		
	163	4	
6.	Contract Administrator:	Telephone Number:	
	Robert Romanowski	213-922-2633	
7.	Project Manager:	Telephone Number:	
	Hamid Mahramzadeh	213-922-7227	

# A. <u>Procurement Background</u>

This Board Action is to approve Contract No. AE59600 for Supplemental Engineering Services in support of Metro Engineering. Board approval of contract award is subject to resolution of any properly submitted protest.

The RFP was issued in accordance with Metro's Acquisition Policy and California Government Code §4525-4529.5 for Architectural and Engineering services. The contract type is a Cost Reimbursable, specifically a Cost Plus Fixed Fee.

Three (3) amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on February 26, 2019 extended the Proposal Due Date;
- Amendment No. 2, issued on March 11, 2019 extended the Proposal Due Date; and
- Amendment No. 3, issued on March 13, 2019 clarified various Submittal Requirements and Evaluation Criteria.

A total of four (4) proposals were received on March 21, 2019. Metro held a preproposal conference on February 15, 2019, with a total of forty-two (42) firms in attendance. Metro had representations from Risk Management, Ethics, Pre-Qualification, Engineering, and DEOD, to highlight the main elements of the RFP including the Disadvantaged Business Enterprise (DBE) goal of thirty percent (30%) of the Total Estimated Cost. A total of thirty-five (35) questions were received between the issuance of the solicitation and the RFP due date. All questions were addressed by issuance of a Question and Answer memorandum and the Amendments listed above.

On April 26, 2019, Metro held Oral Presentations with all four (4) proposing firms, at which time Metro received four (4) sealed cost proposals that remained unopened.

# B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Executive Office, Transit Project Delivery; Engineering Management; and Regional Rail, 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 Project Team
   30 percent
- Key Personnel's Skills and Experience
   25 percent
- Effectiveness of Management Plan 25 percent
- Understanding of Work and Appropriateness of Approach for Implementation 20 percent

The evaluation criteria are appropriate and consistent with criteria developed for other, similar Architect and Engineering (A&E) procurements. Several factors were considered when developing these weights, giving the greatest importance to the experience and capabilities of the firms on the consultant's project team, key personnel's skills and experience, and understanding of the work and appropriateness of the approach to implementing the work.

This is an A&E, qualifications based procurement; therefore, price cannot be used as an evaluation factor pursuant to state and federal law.

All appointed PET representatives reviewed a list of the Proposers and their subconsultants; none were aware of any actual or potential conflict of interest that may arise due to their participation in the evaluation of the Proposals. Each then completed and certified the Declaration of Confidentiality / No Conflict of Interest form.

After the PET completed an initial evaluation of the written proposals of the four (4) proposals received, all four (4) were determined to be within the competitive range.

All four proposers were invited to make oral presentations to the PET. The four (4) firms within the competitive range are listed below in alphabetical order:

- 1. HDR Engineering, Inc.
- 2. STV, Incorporated
- 3. Transit SES Partners (a Joint Venture of PacRim Engineering, Inc. and Mott MacDonald, LLC)
- 4. T.Y. Lin International

In general, each team's presentation addressed the requirements of the RFP, experience with all aspects of the required Scope of Work, and stressed each firm's commitment to the success of the project. Also highlighted were staffing plans, work plans, and perceived project issues.

The PET evaluated the capabilities of each proposer and its team of subconsultants, in accordance with the Evaluation Criteria in the RFP for the following subject areas and their relative importance: 1) experience and capabilities of the firms on the consultant's project team; 2) key personnel's skills and experience; 3) Effectiveness of Management Plan; and 4) Understanding of Work and Appropriateness of Approach for Implementation.

# **Qualifications Summary of Recommended Firm:**

The PET scored and ranked the proposals and assessed major strengths, weaknesses and associated risks of each of the Proposers to determine the most qualified firm. The evaluation performed by the PET determined HDR Engineering, Inc. as the most qualified firm to provide Supplemental Engineering Services / Transit Rail Projects, as provided in the RFP Scope of Work. What distinguished HDR Engineering, Inc. was they demonstrated, through their written proposal and oral presentation, their experience and capabilities are very good and exceeded the requirements of the RFP. HDR Engineering, Inc. also demonstrated an exceptionally thorough and comprehensive understanding of managing multiple task orders. The team is highly experienced in delivering similar projects with an excellent record in client satisfaction on similar projects around the U.S.

Furthermore, this team demonstrated that it is versed in providing the Scope of Work related to this contract, and has the capabilities to provide staffing for the type of work that is required under this contract. HDR Engineering Inc. significantly exceeds the requirements of the three highest weighted criteria.

Firm	Average Score	Factor Weight	Weighted Score	Rank
HDR Engineering, Inc.				
Experience and Capabilities of the				
Firms on the Consultant's Project				
Team	91.06	30%	27.32	
Key Personnel's Skills and	00.40	050/	00.40	
Experience	88.40	25%	22.10	
Effectiveness of Management Plan	90.60	25%	22.65	
Understanding of Work and				
Appropriateness of Approach for	00.05	000/	40.05	
Implementation	90.25	20%	18.05	
Total		100.00%	90.12	1
Transit SES Partners (a Joint Venture of PacRim Engineering, Inc. and Mott MacDonald LLC)				
Experience and Capabilities of the Firms on the Consultant's Project Team	85.33	30%	25.60	
Key Personnel's Skills and Experience	85.56	25%	21.39	
Effectiveness of Management Plan	84.08	25%	21.02	
Understanding of Work and Appropriateness of Approach for Implementation	86.75	20%	17.35	
Total		100.00%	85.36	2
STV, Incorporated				
Experience and Capabilities of the				
Firms on the Consultant's Project	84.83	30%	25.45	
Team				
Key Personnel's Skills and	83.80	25%	20.95	
Experience			_0.00	
Effectiveness of Management Plan	84.40	25%	21.10	
Understanding of Work and Appropriateness of Approach for Implementation	87.25	20%	17.45	
Total		100.00%	84.95	3
T.Y. Lin International  Experience and Capabilities of the				
TEXPEDENCE AND CARABILITIES OF THE 1				
	1	00.000/	24.39	
Firms on the Consultant's Project	81.30	30.00% 1		
	81.30	30.00%	21.00	
Firms on the Consultant's Project Team	81.30 83.68	25.00%	20.92	
Firms on the Consultant's Project Team Key Personnel's Skills and Experience	83.68	25.00%	20.92	
Firms on the Consultant's Project Team Key Personnel's Skills and Experience  Effectiveness of Management Plan				
Firms on the Consultant's Project Team Key Personnel's Skills and Experience  Effectiveness of Management Plan Understanding of Work and	83.68	25.00%	20.92	
Firms on the Consultant's Project Team Key Personnel's Skills and Experience  Effectiveness of Management Plan	83.68	25.00%	20.92	

# C. Cost Analysis

The costs have been determined to be fair and reasonable based upon a cost analysis of direct labor rates, indirect rates and other direct costs completed in accordance with Metro's Procurement Policies and Procedures. The analysis includes, among other things, a comparison with similar firms; an analysis of rates and factors for labor, and other direct cost upon which the consultant will base its billings. Metro negotiated and established provisional indirect (overhead) rates, plus a fixed fee based on the total estimated cost for the contract term to compensate the consultant

Audits will be completed, where required, for those firms without a current applicable audit of their indirect cost rates, other factors, and exclusion of unallowable costs, in accordance with Federal Acquisition Regulation (FAR) Part 31. In order to prevent any unnecessary delay in contract award, provisional overhead rates have been established subject to Contract adjustments. 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 purpose rather than perform another audit.

Proposer Name	Proposal Amount	Metro ICE	Recommended NTE amount
HDR Engineering.	N/A <sup>(1)</sup>	\$69,291,681 <sup>(2)</sup>	\$50,000,000 <sup>(3)</sup>

<sup>&</sup>lt;sup>(1)</sup>A proposal amount is not applicable. This is a Cost Plus Fixed Fee (CPFF) Task Order Contract with no definable level of effort for the Scope of Work. Hourly labor rates, overhead rates, and fee were negotiated and determined to be fair and reasonable.

# D. Background on Recommended Contractor

The recommended firm, HDR Engineering, Inc., located in Los Angeles, has been in business for 46 years and is a leader in the delivery of rail transit projects.

The multidisciplinary team includes 29 subconsultants that have a vast knowledge and experience with Metro.

The Project Manager has managed engineering teams for 30 years. The Project Manager's commitment to this project will be 100% availability.

<sup>(2)</sup> Metro Independent Cost Estimate (ICE) for the three year base contract plus two one-year options. (3) The amount of \$50,000,000 is V/CM's extraction from the Independent Cost Estimate (ICE) for the three year base contract period.

#### **DEOD SUMMARY**

# SUPPLEMENT ENGINEERING SERVICES (SES)/TRANSIT RAIL PROJECTS AE59600

# A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 30% Disadvantaged Business Enterprise (DBE) goal for this Project. HDR Engineering, Inc. made a 30% DBE commitment for this Task Order Contract.

In response to a specific Task Order request with a defined scope of work, the prime consultant will be required to identify DBE subcontractor activity and actual dollar value commitments for that Task Order. Overall DBE achievement in meeting the commitment will be determined based on the cumulative DBE participation of all Task Orders awarded.

Upon issuance of task orders, DEOD will track DBE utilization and participation through its tracking and monitoring system to key stakeholders over the contract to ensure that all parties are actively tracking Small Business progress. Metro Project Managers and Contract Administrators will have access to reporting system to review cumulative DBE performance for the overall contract.

<b>Small Business</b>	30% DBE	Small Business	30% DBE
Goal		Commitment	

	DBE Subcontractors	Ethnicity	% Committed
1	Ambient Energy, Inc.	Non-Minority Female	TBD
2	Amheart Solutions	Asian-Pacific	TBD
3	Anil Verma Associates	Sub-Asian	TBD
4	Arellano Associates	Hispanic American	TBD
5	Auriga	Sub-Asian	TBD
6	BA, Inc.	African- American	TBD
7	Earth Mechanics, Inc.	Sub-Asian	TBD
8	FMG Architects	Hispanic American	TBD
9	FPL and Associates, Inc.	Asian-Pacific	TBD
10	Lenax Construction Services, Inc.	Non-Minority Female	TBD
11	MA Engineering	Hispanic American	TBD

12	Martini Drilling Corp.	Hispanic American	TBD
13	Rail Surveyors and Engineers. Inc.	Asian-Pacific	TBD
14	Suenram & Associates	Non-Minority Female	TBD
15	T&T Public Relations, Inc.	African American	TBD
16	Tatsumi and Partners, Inc.	Asian-Pacific	TBD
17	Ted Tokio Tanaka Architects	Asian-Pacific	TBD
18	Terry A. Hayes Associates, Inc.	African American	TBD
19	The Alliance Group Enterprise, Inc.	Asian-Pacific	TBD
20	V&A, Inc.	Hispanic- American	TBD
21	VN Tunnel and Underground, Inc.	Asian-Pacific	TBD
	Total DBE Commitment		30%

# B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy 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. <u>Project Labor Agreement/Construction Careers Policy</u>

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

# **Metro**



# File Summary

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File Number	Title	Current Status
2019-0502	Contract	Agenda Ready
	AUTHORIZE the Chief Executive Office	er to NEGOTIATE and EXECUTE:
	Design of Transit Rail Projects on options. The amount for the three the amount for the two one-year options.	be contract for AE59600 with HDR Engineering Services for Engineering a task order basis, plus two one-year eyear base contract is \$50,000,000 and otions is \$20,000,000 for a total contract subject to resolution of protest(s), if any;
	Individual Task Orders and modifice contract amount.	cations within the Board approved
	Introduced: 6/17/2019	Controlling Body: Construction Committee
	<b>Meeting Date:</b> 7/18/2019	Sponsor(s): Construction Committee
	Department: Engineering and Construction (E	Department)

Drafter: fordo@metro.net

# **Metro**



# File Summary

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File Number	Title	Current Status
2019-0502	Contract	Agenda Ready
	AUTHORIZE the Chief Executive Office	er to NEGOTIATE and EXECUTE:
	Design of Transit Rail Projects on options. The amount for the three the amount for the two one-year options.	be contract for AE59600 with HDR Engineering Services for Engineering a task order basis, plus two one-year eyear base contract is \$50,000,000 and otions is \$20,000,000 for a total contract subject to resolution of protest(s), if any;
	Individual Task Orders and modifice contract amount.	cations within the Board approved
	Introduced: 6/17/2019	Controlling Body: Construction Committee
	<b>Meeting Date:</b> 7/18/2019	Sponsor(s): Construction Committee
	Department: Engineering and Construction (E	Department)

Drafter: fordo@metro.net



# **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #: 2019-0502, File Type: Contract Agenda Number: 35.

CONSTRUCTION COMMITTEE JULY 18, 2019

SUBJECT: SUPPLEMENTAL ENGINEERING SERVICES (SES) CONSULTANT SERVICE

CONTRACT

ACTION: AWARD PROFESSIONAL SERVICES CONTRACT

# RECOMMENDATION

AUTHORIZE the Chief Executive Officer to NEGOTIATE and EXECUTE:

- A. A three-year cost plus fixed fee type contract for AE59600 with HDR Engineering, Inc. for Supplemental Engineering Services for Engineering Design of Transit Rail Projects on a task order basis, plus two one-year options. The amount for the three-year base contract is \$50,000,000 and the amount for the two one-year options is \$20,000,000 for a total contract value not to exceed \$70,000,000; subject to resolution of protest(s), if any; and
- B. Individual Task Orders and modifications within the Board approved contract amount.

# **ISSUE**

Metro's staff engineers, architects and CADD designers in the Engineering Group are currently fully engaged supporting our current Major Rail Transit Projects (Crenshaw, Regional connector and Purple Line sections 1, 2 and 3), Metro Emergency Security Operations Center (ESOC), 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) Signaling Rehabilitation and Operational Improvements project, Metro Orange Line (MOL) Improvements and the I-210 Barriers Replacement project.

The passage of Measure M has added a considerable workload to the Metro Engineering group with projects that are starting or that are completing design in the next five years such as the Airport Metro Connector 96<sup>th</sup> Street Station (AMC), West Santa Ana Branch Transit Corridor, the Gold Line Foothill Extension to Claremont, 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 not limited to the MBL Wardlow Grade

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

# **BACKGROUND**

The funding limit for our existing Supplemental Engineering Services (SES) contract (Contract No. AE36687) has almost reached its limit. 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, in some cases, technical expertise to carry out certain specialized tasks such as Traffic Control Plans, three-dimensional nonlinear soils-structure interaction analysis, Noise and Vibration Control or Corrosion Control. There is not currently a need for full-time resources for these specific 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 (AE59600) 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 Transit Rail 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.
- 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

File #: 2019-0502, File Type: Contract

Agenda Number: 35.

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.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Supporting this recommendation supports Metro's strategic plan goal 1. By supporting the recommendation for HDR Engineering, Inc. to provide supplemental engineering services, the Board is supporting strategic plan goal 1 which promotes trip reliability, reduces trip disruptions as well as deliver of world-class transit service by ensuring our transit assets are in a state of good repair.

## **ALTERNATIVES CONSIDERED**

- 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

Prepared by: Androush Danielians, Executive Officer (213) 922-7598

Reviewed by: Debra Avila, Chief Vendor/Contract Management Officer (213) 418-3051 Richard F. Clarke, Chief Program Management Officer (213) 922-7557