

**CAMINO REAL REGIONAL MOBILITY AUTHORITY
BOARD RESOLUTION**

WHEREAS, the City of El Paso (the City) and AECOM (formerly known as the URS Corporation) entered into an agreement dated May 15, 2012 for Preliminary Engineering and Environmental Assessment services on the El Paso Streetcar Project (the Project), which agreement was subsequently amended on September 11, 2012 to allow AECOM to provide Pre-Final, Final Design, Bidding and Construction Phases for the Project (collectively referred to herein as the Streetcar Agreements); and

WHEREAS, the CRRMA, City and AECOM executed an Assignment of Agreement for Professional Services on August 13, 2014 (the Assignment Agreement), which assigned the City's remaining rights, duties and obligations identified within the Streetcar Agreements to the CRRMA, for the further development of the Project; and

WHEREAS, the CRRMA and AECOM now desire to move the Project through the construction and testing phase, with AECOM providing certain construction activities necessary for the successful completion of the Project.

NOW, THEREFORE, BE IT RESOLVED BY THE CAMINO REAL REGIONAL MOBILITY AUTHORITY:

THAT the CRRMA's Executive Director is authorized to execute a Third Amendment of an Assigned Agreement for Professional Services with AECOM (formerly known as the URS Corporation), as it relates to the construction of the El Paso Streetcar Project.

PASSED AND APPROVED THIS 9TH DAY OF DECEMBER 2015.

**CAMINO REAL REGIONAL
MOBILITY AUTHORITY**

Joe D. Wardy, Vice Chair

ATTEST:

Susan A. Melendez, Board Secretary

APPROVED AS TO CONTENT:

Raymond L. Telles
Executive Director

THE STATE OF TEXAS)
)
COUNTY OF EL PASO)

**THIRD AMENDMENT OF
AN ASSIGNED AGREEMENT FOR
PROFESSIONAL SERVICES**

This Amendment in made this 9th day of December, 2015 by and between the **CAMINO REAL REGIONAL MOBILITY AUTHORITY (CRRMA)**, a regional mobility authority and political subdivision of the State of Texas, and **AECOM** (formerly known as the **URS CORPORATION**).

WHEREAS, the City of El Paso (City) and the URS Corporation (URS) entered into an agreement dated May 15, 2012 for Preliminary Engineering and Environmental Assessment services on the El Paso Streetcar Project (Project), which was subsequently amended on September 11, 2012 to allow URS to provide Pre-Final, Final Design, Bidding and Construction Phases for the Project (collectively referred to herein as the Streetcar Agreements); and

WHEREAS, the CRRMA, City and URS executed an Assignment of Agreement for Professional Services on August 13, 2014 (the Assignment Agreement), which assigned the City's remaining rights, duties and obligations identified within the Streetcar Agreements to the CRRMA, for the further development of the Project; and

WHEREAS, URS is now known as AECOM and the CRRMA and AECOM now desire to move the Project through the construction and testing phase, with AECOM providing those construction activities as more fully enumerated within this Amendment;

NOW, THEREFORE, in consideration of the mutual promises set forth in this Amendment and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the CRRMA and AECOM hereby agree as follows:

1. **Scope of Services.** The CRRMA authorizes AECOM to perform the services described within **ATTACHMENT A** to this Amendment.
2. **Payments to AECOM.** In exchange for the services identified in **ATTACHMENT A**, payments to AECOM shall be made in accordance with the fee estimate included here as **ATTACHMENT B**. Payments for such services shall not exceed **THREE MILLION SIX HUNDRED NINETY FIVE THOUSAND SEVEN HUNDRED EIGHTY THREE AND 00/100 DOLLARS (\$3,695,783.00)**.

This not to exceed amount is in addition to the \$124,659.00 earned by AECOM under the First Amendment to the Assigned Agreement. The not to exceed amount identified in this Third Amendment is also in addition to the compensation available within the Second Amendment to the Assigned Agreement; provided, however, that the not to exceed amount available to AECOM from the Second Amendment is hereby limited to \$3,250,000.00.

3. **Terms and Conditions.** All remaining terms and conditions of the Streetcar Agreements as assigned by the Assignment Agreement, except as previously or herein revised, shall remain in full force and effect; provided, however, that the provisions of this Amendment shall control in the event of any conflicts with the Streetcar Agreements, the Assignment Agreement or any amendments thereto.

WITNESS THE FOLLOWING SIGNATURES AND SEALS:

**CAMINO REAL REGIONAL
MOBILITY AUTHORITY**

Raymond L. Telles
Executive Director

AECOM

By: _____
Title: _____

El Paso Streetcar Project

Construction Phase Services

December 2, 2015

Attachment A "Scope of Work"

This scope of work includes services required for the construction phase of the El Paso Streetcar Project (Project) in El Paso, Texas. The services consist of the following overall areas of work:

- Design services during construction of infrastructure project improvements ,
- Engineering Services during remanufacture of the streetcar vehicles, and
- Completion of Implementation and Operations Program (IOP) documents,

herein referred to as "Construction Phase Services" or "Services".

Construction Phase Services for the El Paso Streetcar Project will be accomplished by URS Corporation, A Nevada Corporation, (Consultant) and the Camino Real Regional Mobility Authority's Construction Manager (CRRMA-CM). The services described below have been coordinated between the Consultant and the CRRMA-CM to provide a "blended" set of project services to the Camino Real Regional Mobility Authority (CRRMA).

Services by the Consultant include work in the following five general areas:

- Task 1: Engineer of Record (EOR) Design Services During Construction
 - Design Services During Construction (DSDC) as Engineer of Record and Architect of Record for the El Paso Streetcar Infrastructure Project
 - Coordination with CRRMA-CM, as the Construction Manager (CM) for the CRRMA.
 - Assist the CRRMA and CRRMA-CM with completion of Public agency and Private company agreements.
- Task 2: Construction Management Support Services
 - Field Engineering under the direction of the CRRMA-CM.
 - Assist the CRRMA-CM with managing the Project's Document Control System.
 - Support CRRMA-CM in Schedule Analysis for Construction.
 - Support CRRMA-CM in Risk Assessment and Claim Analysis.
 - Support CRRMA-CM in the Public Information Program.
- Task 3: Engineering Services for Vehicle Remanufacture
 - For remanufacture of the Streetcar vehicles,

- For Start Up, Testing, and Commissioning
- Task 4: Completion of Integration and Operations Program (IOP) manuals initiated during the Preconstruction Phase.
- Task 5: Support CRRMA-CM in System Integration & Testing

Work assumed to be performed by CRRMA-CM to include:

- Construction Management (CM) services for the Infrastructure Project
- Streetcar Project Overall Program Management
- Coordinate with the Consultant as the Engineer of Record (EOR)
- Infrastructure Project inspection services
- Office support & Project Office facilities
- Quality Assurance Services
- System Integration & Testing
- Risk Assessment and Claims Analysis
- Public Information Program
- Management of Start Up, Testing, and Commissioning

The following description of scope of work, and the fee proposal identified in Attachment B are based on reasonable project assumptions and a project budget value. The amount of actual support hours and direct costs needed to complete the project may be more or less than what is shown. If the actual level of work requires that more time and effort are expended on the project, and the budget is fully expended prior to completion of the project, additional funds would be necessary to continue project support efforts.

1. Engineer of Record (EOR) Design Services During Construction (DSDC),

1.1. Project Management Services for DSDC

1.1.1. Project Progress Reporting

the Consultant will provide direction and overall supervision of the DSDC Consultant team consisting of the Consultant and its project subconsultants. Oversee the allocation and delegation of all authorized work in accordance with the established work plan. Manage project DSDC to achieve uniformity and quality. Provide technical direction and monitor work activities. Conduct DSDC team progress and coordination meetings. Coordinate the input and output between the various Project disciplines. Identify and document issues, track action items and resolution efforts. Review the products developed in work tasks and recommend appropriate additions or corrections to CRRMA-CM. Prepare, implement and

maintain Project Execution Plan (PXP) during project life. Set-up project cost control within the Consultant's accounting system, document and create invoices to the CRRMA. Provide project administration to manage ongoing tasks.

1.1.2. Quality Management Plan (QMP)

Prepare, update and manage the Project QMP for DSDC Services throughout the life of the project.

1.1.3. CADD Control

Provide CADD document control for DSDC. Manage project CADD records and provide oversight for CADD controls for information created during the work activity.

1.1.4. Manage other DSDC Consultants that are approved by the CRRMA but are not a part of a CRRMA contract such as the consultants that prepared Water, Waste

Water, and Central Business District Phase IV designs for inclusion in the Project Provide direction and overall project management for the other design consultants that contribute to the Project construction documents. Provide interdisciplinary coordination to integrate the work of other consultants into the contract plans. Coordinate the Project design with the other Consultants to achieve uniformity and quality. Provide technical direction and monitor work activities. Provide periodic program level updates to the Program Manager, CRRMA-CM, regarding the work.

1.2. Provide Design Services During Construction (DSDC)

1.2.1. Review Contract Requests for Information (RFIs)

the Consultant will promptly review and take appropriate action upon RFIs received from CRRMA-CM, such as questions, clarifications for the purpose of: (1) compliance with applicable laws, statutes, ordinances, codes, orders, rules and regulations; and (2) determining whether or not the work, when completed, will be in conformance with the design concept expressed in the Construction Contract Documents. the Consultant's action shall be taken with such reasonable promptness as to cause no delay in the work or in the Project schedule. the Consultant approval of a specific item shall not indicate approval of an assembly of which the item is a component. the Consultant shall maintain a record of RFIs and copies of Responses supplied to the CM. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Construction Contract Documents, the Consultant shall specify appropriate performance and design criteria that such services must satisfy.

Assumptions: The CRRMA-CM shall maintain a log of all Project RFIs, while the Consultant will maintain a log of all responses provided to the CRRMA-CM.

Deliverables: Log RFIs and copy of RFI and each response. Review of and response to RFIs provided to the Consultant by the CRRMA-CM.

1.2.2. Review Contract Submittals

the Consultant shall promptly review and take appropriate action upon the Contractor's submittals received from CRRMA-CM, such as shop drawings, product data and samples for the purpose of: (1) compliance with applicable laws, statutes, ordinances, codes, orders, rules and regulations; and (2) determining whether or not the work, when completed, will be in conformance with the design concept expressed in the sealed Construction Contract Documents. the Consultant's action shall be taken with such reasonable promptness as to cause no delay in the work or in the Project schedule. the Consultant's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

the Consultant shall maintain a record of submittals and copies of submittals supplied by the CRRMA-CM.

If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Construction Contract Documents, the Consultant shall specify appropriate performance and design criteria that such services must satisfy. Shop Drawings and other submittals related to the work designed or certified by the design professional retained by the Contractor shall bear such professional's written approval when submitted through CRRMA-CM to the Consultant.

Assumptions: CRRMA-CM will maintain the log of all Project submittals, while the Consultant will maintain a log of all materials provided to the Consultant by CRRMA-CM for review and comment.

Deliverables: Log of Project review documents. Review of and response to materials provided to the Consultant by CRRMA-CM.

1.2.3. Interdisciplinary Coordination and Management regarding the design of civil, architectural, systems, and vehicle requirements for the Project.

Provide Interdisciplinary coordination and management services as a part of the Project construction management team with CRRMA-CM. Duties will be as determined by the Consultant to be necessary for interdisciplinary coordination, and other duties as assigned by CRRMA-CM. Activities include, but are not limited to the following:

Coordinate and/or provide review and responses among disciplines to contractor submittals, including shop drawings.

Coordinate and/or provide review and responses among disciplines to contractor Requests for Information (RFI's).

Conduct site visits for purposes of design clarification.

Assist construction inspection services as requested by CRRMA-CM.

Assist Management of Quality Assurance for construction as requested by CRRMA-CM.

Provide Field Engineering support as requested by CRRMA-CM.

Coordinate safety certification efforts and the preparation of final punch list as requested by CRRMA-CM.

Participate in Project Construction Management Team meetings as requested by CRRMA-CM. Support System Integration and Testing activities managed by CRRMA-CM in the areas of Vehicle Remanufacture, Traction Power System, Signaling & Train-Wayside Control, Track, and Civil Infrastructure.

1.2.4. Prepare Owner or Contractor Initiated Change Orders

No hours are budgeted under this task. Work under this task is assumed to only be performed only when included as a separately funded proposal for owner or contractor initiated change orders.

1.2.5. Prepare As-Built Drawings

the Consultant will include all information received from CRRMA-CM for inclusion in the record drawings. the Consultant will receive on the results of CRRMA-CM inspections to include the date or dates of acceptance and the date of final completion.

the Consultant will review for contract conformance, the written warranties and guarantees (affidavits, manuals of instruction for operation, and other closeout documents required of the Contractor(s)) received from the contractor and provided to the Consultant by CRRMA-CM.

the Consultant shall attend a final review of the Project with CRRMA-CM and appropriate Project Stakeholders to check conformance of the work with the requirements of the Construction Contract Documents.

Assumptions: the Consultant will assist CRRMA-CM with Project documentation generated or reviewed by the Consultant, at the conclusion of Construction activities.

Deliverables: Record drawings of the completed project using the information provided by CRRMA-CM.

2. Construction Management of Infrastructure Project

2.1. Field Engineer – Work to be performed by the Consultant at the direction of the CRRMA-CM. Coordinate project inspection activities and report to CRRMA-CM.

2.2. Schedule services.

- 2.2.1. Infrastructure Construction Project Schedule
 - Review and provide assessments of the contractor's Baseline Schedule. Review contractor's monthly Updates, including milestones and deliverables. Prepare quarterly written report on contractor's schedule. Report reviews to CRRMA-CM.
 - 2.2.2. Utility Coordination and Relocations
 - Receive and review project schedules from various utility companies, and prepare briefing memo to CRRMA-CM as needed.
 - 2.3. Assist with Risk Assessment and Claim as requested by CRRMA-CM
 - 2.4. Assist with Infrastructure Project Document Control as requested by CRRMA-CM
 - 2.5. Engineering Support to Public Information Manager as requested by CRRMA-CM
3. Engineering Services for Vehicle Remanufacture
- 3.1. Project Management for Vehicle Remanufacture
 - 3.1.1. Project Progress Reporting
 - 3.1.2. Quality Management Plan (QMP)
 - 3.1.3. Document Control
 - 3.1.4. Schedule Management
 - 3.1.5. Risk Assessment and Claim Analysis
 - 3.2. Provide Engineering Services during Vehicle Remanufacture
 - 3.2.1. Review submitted Design Review packages
 - 3.2.2. Review submitted test procedures
 - 3.2.3. Review Pilot Car "complete car" Test reports
 - 3.2.4. Prepare & maintain a PCC submittal log documenting the items reviewed
 - 3.2.5. Review Maintenance & Operations Manuals
 - 3.2.6. Review Maintenance and Operations training materials
 - 3.2.7. Review Contractor Invoices
 - 3.2.8. Travel no more than 5 times (2 days, one night) to the PCC Contractor facility
 - 3.2.9. Travel no more than 5 times (2 days, one night) to the El Paso Project site
 - 3.2.10. Overall Project Management of efforts described above

Assumptions: The following services are not included in this scope of work, but would be available under a separate work request.

- First Article Inspections (FAI).
- Qualification, Production, Complete Car or Pilot Car test witnessing.
- Production inspection services
- Systems Integration Testing support
- Review of Test reports/results, except for Pilot Car "complete car" test results

- "red line" or "as built" specifications
- Fleet Defect investigations and resolutions
- Vehicle Warranty support
- Fleet Reliability monitoring support

4. Completion of Integration and Operations Program (IOP) Documents

4.1. Project Management for IOP

- 4.1.1. Project Progress Reporting
- 4.1.2. Document Control
- 4.1.3. Schedule Management
- 4.1.4. Coordination with Sun Metro, City of El Paso, and others as needed.

4.2. Program Documents

4.2.1. Safety & Security Certification Plan

the Consultant will complete a Safety & Security Certification Plan from the prior working version developed during the Preconstruction Phase and include information during the construction phase services phase of the project.

4.2.2. Safety & Security Program Plan

the Consultant will complete a Safety & Security Program Plan from the prior working version developed during the Preconstruction Phase and include information during the construction phase services phase of the project.

4.2.3. Operations & Maintenance Plan

the Consultant will complete Operations & Maintenance Plan from the prior working version developed during the Preconstruction Phase and include information during the construction phase services phase of the project.

4.2.4. Start-up and Testing Plan

the Consultant will complete Start-Up and Testing Plan from the prior working version developed during the Preconstruction Phase and include information during the construction phase services phase of the project.

5. System Integration & Testing - Work described here to be performed by the Consultant in coordination with other work to be performed by CRRMA-CM.

5.1. Integration & Testing services performed by the Engineer of Record (EOR). Review and respond to Requests for Information (RFI) and coordinate with CRRMA-CM as the manager of this activity. Receive information from CRRMA-CM, review, and provide responses.

5.2. Engineering support for Vehicle Remanufacture and Delivery. Receive information from the Vehicle Remanufacturer, coordinate system integration and testing with CRRMA-CM as the overall manager for system integration & testing.

* Denotes Field OH Rate

Title:	Project Manager	Senior Field Engineer *	Professional Engineer	Senior Prof Engineer	Sr Document Controls	Proj Controls Spbst	EIT / CADD	Admin		
Rate:	\$ 206	\$ 154	\$ 130	\$ 187	\$ 104	\$ 96	\$ 85	\$ 60		
1. Engineer of Record DSDC										
1.1. Project Management										
1.1.1. Project Progress Reporting	60			120		120		60	360	\$ 49,920
1.1.2. Quality Management Plan	16			32				32	80	\$ 11,200
1.1.3. CADD Control	8		48	24			16	16	112	\$ 14,696
1.1.4. Manage Other DSDC Consultants	48			48					96	\$ 18,864
1.2. Provide Design Services During Construction									-	
1.2.1. Review Contract RFIs	208		520	416	520		416		2,080	\$ 277,680
1.2.2. Review Contract Submittals	208		520	520	520		416		2,184	\$ 297,128
1.2.3. Interdisciplinary Coord & Mgmt	130		416	416					962	\$ 158,652
1.2.4. Owner or Contractor Initiated Changes	-	-	-	-	-	-	-	-	-	\$ -
1.2.5. As-Built Drawings	52		208				416		676	\$ 73,112
Task 1 Totals:										
Labor Hours	730	0	1712	1576	1040	120	1264	108	6550	
Labor Costs	\$ 150,380	\$ -	\$ 222,560	\$ 294,712	\$ 108,160	\$ 11,520	\$ 107,440	\$ 6,480		\$ 901,252
2. Construction Mgmt of Infrastr Project										
2.1 Field Engineer		4160							4,160	\$ 640,640
2.2 Schedule Services				600				60	660	\$ 115,800
2.3 Assist with Risk Assessment				240					240	\$ 44,880
2.4 Engineering Support to Public Info Program	182			182			104		468	\$ 80,366
Task 2 Totals:										
Labor Hours	182	4160	0	1022	0	0	104	60	5528	
Labor Costs	\$ 37,492	\$ 640,640	\$ -	\$ 191,114	\$ -	\$ -	\$ 8,840	\$ 3,600		\$ 881,686
3. Engineering Services for Vehicle Remanufacture										
3.1 Project Mgmt for Vehicle Remanufacture										
3.1.1 Project Progress Reporting	38			60		60		60	218	\$ 28,408
3.1.2 Quality Management Plan	8			16				16	40	\$ 5,600
3.1.3 Document Controls	38				660				698	\$ 76,468
3.1.4 Schedule Management	38								38	\$ 7,828
3.1.5 Risk Assessment & Claim Analysis	38								38	\$ 7,828
3.2 Provide Engineering Services during Veh Remanufac	330			165					495	\$ 98,835
Task 3 Totals:										
Labor Hours	490	0	0	241	660	60	0	76	1527	
Labor Costs	\$ 100,940	\$ -	\$ -	\$ 45,067	\$ 68,640	\$ 5,760	\$ -	\$ 4,560		\$ 224,967

4. Completion of IOP Documents

4.1 Project Mgmt for IOP											
4.1.1 Project Progress Reporting	30			30		30			30		120 \$ 16,470
4.1.2 Document Controls					78						78 \$ 8,112
4.1.3 Schedule Management				130							130 \$ 24,310
4.1.4 Coord w/Sun Metro, COEP, & Others	78										78 \$ 16,068
4.2 Completion of Program Documents				156					156		312 \$ 38,532
Task 4 Totals:											
Labor Hours	108	0	0	316	78	30	0	186			718
Labor Costs	\$ 22,248	\$ -	\$ -	\$ 59,092	\$ 8,112	\$ 2,880	\$ -	\$ 11,160			\$ 103,492

5. Systems Integration & Testing

5.1 As Engr of Record (EOR) for Infr Proj				312	104						416 \$ 69,160
5.2 As Engr for Veh Remanufacture	52			104	104						260 \$ 40,976
Task 5 Totals:											
Labor Hours	52	0	0	416	208	0	0	0			676
Labor Costs	\$ 10,712	\$ -	\$ -	\$ 77,792	\$ 21,632	\$ -	\$ -	\$ -			\$ 110,136

0 \$ -

Total Labor Hours	1562	4160	1712	3571	1986	210	1368	430			14999
Total Labor Cost	\$ 321,772	\$ 640,640	\$ 222,560	\$ 667,777	\$ 206,544	\$ 20,160	\$ 116,280	\$ 25,800			\$ 2,221,533

Direct Costs	Quantity	Cost per	Total
Travel Costs			
Monthly Living Allowance (\$ Maltby)	30	4300	\$ 129,000
Project Mileage (other than \$ Maltby)	3000	0.55	\$ 1,650
Travel to El Paso (10 LTK, 15 URS)	25	1200	\$ 30,000
Travel to Brookville, PA (6 LTK, 2 URS)	8	2200	\$ 17,600
(Item)			\$ 2,000
Total Travel Costs			\$ 180,250

Subconsultants & Other Direct Costs	Quantity	Cost per	Total
LEED Enhanced Commissioning (thru Post Constr)			\$ 40,000
LTK Engineering Services - Vehicle Remanufacture			\$ 694,000
LTK DSDC Systems Services			\$ 257,000
Avidrez DSDC - MSF Services			\$ 85,000
Walter P Moore - DSDC - Traff, Signals, Signing, Striping & TCP			\$ 115,000
Moreno Cardenas - DSDC - Storm Drainage, sidewalks, driveways			\$ 52,000
Desert Elements - DSDC - Landscape			\$ 8,000
Frank Spencer & Assoc - DSDC - Land Survey & SUE			\$ 25,000
Julie Erickson Gereida - TX Accessibility Stds			\$ 2,000
Arias Engineering - Geotech grouting & foundations			\$ 14,000
Project Reproduction Services	1	2000	\$ 2,000
Total Subconsultants & Other Direct Costs			\$ 1,294,000
Total Direct Costs			\$ 1,474,250
Total			\$ 3,695,783